

NUMBER 12

AMERICAN ACADEMY OF ACTUARIES

1986 JOURNAL



ANNUAL MEETING—SEPTEMBER 24, 1986
STATEMENTS RELEASED IN 1986

AMERICAN ACADEMY OF ACTUARIES

HEADQUARTERS
1720 I Street, N.W.
7th Floor
Washington, D.C. 20006
(202) 223-8196

MEMBERSHIP ADMINISTRATION

500 Park Boulevard
Itasca, Illinois 60143
(312) 773-4204

CONTENTS

BUSINESS SESSION

Annual Meeting of the American Academy of Actuaries September 24, 1986.....	1
--	---

1985 - 1986 ACADEMY YEAR MINUTES OF THE BOARD OF DIRECTORS

Meeting of December 4, 1985	14
Meeting of March 19, 1986	20
Meeting of June 9, 1986	28
Meeting of September 5, 1986.....	35

1985 FINANCIAL STATEMENTS 44

CALENDAR YEAR 1986 STAFF PROGRAM PLAN ANNUAL REPORT 48

1986 ACADEMY STATEMENTS

Summary of Statements.....	58
Text of Statements.....	72

BUSINESS SESSION

ANNUAL MEETING SAN ANTONIO, TEXAS SEPTEMBER 24, 1986

President Bartley L. Munson: Good morning! As president (for one more hour), it is my privilege to welcome you to this, the 21st Annual Meeting of the American Academy of Actuaries.

As you may be aware, the Academy rotates its annual meeting among our three sister U.S. actuarial organizations, and it is our good fortune to meet this year with the Conference of Actuaries in Public Practice. We have shared much with the Conference folks this past year. I've especially appreciated the warm relationship I've had with Bill Hartman, capped by the very sharing experience here at our joint annual meetings. The Academy's thanks, and mine personally, to you, Bill, your program committee, and the many others who have made this such a pleasant experience for all of us.

If once sets a precedent, and several times become a tradition, we may be part of at least the start of a trend here this morning. Whether it continues will be up to Pres Bassett. We will follow a format for this business session begun so successfully last year by Stan Hughey. Before conducting the election of Board members and passing the gavel to Pres, we will hear reports on the past year and plans for the next from each of the members of our Executive Committee and our executive director. They will necessarily -- and pleasantly! -- be brief. We know the order in which we'll speak and the general subject area of each; but other than that it should sound much like a typical Executive Committee meeting -- which is to say quite unrehearsed!

Please meet our Executive Committee: Pres Bassett, president-elect; Bob Dobson, secretary; Burt Jay, treasurer; our four vice presidents: Joe Brownlee, Carl Ohman, Ed Friend, and Jim MacGinnitie; John Fibiger, about to become president-elect; and Steve Kellison, Executive Director.

I'd encourage each of the Executive Committee members to comment on the reports of others' if you have something useful to add. Stay on your toes; I may ask you a question. And I'd also remind you that I have the watch and will be sure we're done on time.

With that, let me now call on Bob Dobson for a report of the secretary.

Secretary Robert H. Dobson: The secretary is responsible for the admissions process, which is handled by the Admissions Committee chaired by Jim Murphy, and assisted by Madaline Madden at the Academy office in Itasca, Illinois. Since our last annual meeting we have admitted 462 new members. Our total membership now stands at 8,408. Since the last annual meeting, the Executive Committee met five times and Board of Directors, four. The Executive Committee discusses items, and then passes them along to the Board of Directors for final action. The non-routine board actions are reported in The Actuarial Update, the issue immediately following each Board meeting. Last year for the first time we tried something different, the minutes of Board meetings were published in the Academy's journal. I haven't had a flood of questions on these minutes, but any questions will be welcomed at any time from the members. That concludes my report.

BUSINESS SESSION

Munson: Thank you, Bob. As his final official act as treasurer, before he moves to a two-year term as vice president, we'll now hear a report from Burt Jay.

Treasurer Burton D. Jay: Our audited financial report for 1985 was presented to the Budget and Finance Committee in May and then to the Board of Directors in June. We receive a clean opinion and a very favorable management letter from our independent accountants. We achieved an operating gain of \$132,169 on revenues of \$1,431,969 during 1985, leaving a fund balance of \$767,794 at year end. A summary of the 1985 financial statement will appear in the next edition of the journal.

The picture for 1986 does not look as rosy. We are currently projecting a loss of 88,000, due, in part, to increased Academy activities in areas such as the Interim Actuarial Standards Board (IASB) and government relations projects. Rent has increased with the move to the new quarters, and some new staff members have been added.

The board reviewed a preliminary draft of the 1987 budget at its September meeting, which indicated a projected loss of 172,000 if the current dues structure is maintained. The increase in the projected loss on this basis results from a continued anticipated increase in activities, such as the IASB, as well as normal inflationary increases in other items. The board concluded that, while our existing fund balance is adequate to absorb the projected 1986 loss, the trend should not be allowed to continue into 1987. A motion was therefore approved to increase the 1987 dues from \$135 to \$160, which produces a projected operating gain of \$20,000. It was noted that dues were increased to \$125 in 1980 and to \$135 in 1985 and, with the 1987 increase, would still represent an increase of less than the rate of inflation during that period.

The membership was informed in a recent edition of the The Actuarial Update that the board approved a new policy of not charging dues for members who are full-time students and earning no income from actuarial activities. A notice to this effect will be contained with the statement for 1987 dues to be mailed out in December. The dues policy for other categories will also be considered during the coming year.

Munson: Thank you, Burt.

Carl Ohman's portfolio consists of the committees on accreditation, qualification and communication. Considering the Academy's unique aspects of responsibility within the actuarial profession, you recognize the significant position these committees occupy. Carl.

Vice President Carl R. Ohman: As vice president, I am responsible for supervision of the committees on accreditation, qualifications and communications.

The Committee on Guides to Professional Conduct, chaired by Jack Turnquist, recently completed a total revision of the Academy's Guides and Opinions. During 1986, while major Academy attention was focused on actuarial standards of practice and establishment of the IASB, the primary concern of the Committee on Guides to Professional Conduct shifted to responding to

BUSINESS SESSION

questions concerning existing Guides and Opinions. As standards activity increases over the next year or so, it is expected that another round of revisions to the Guides and Opinions may become needed and that the Committee on Guides to Professional Conduct will again shift into high gear.

Implementation of the valuation actuary concept has continued to be a major concern of the Academy this year, and the need for qualification standards for the valuation actuary is a major focus for the Committee on Qualifications, chaired by Walter Rugland. Comments on the draft qualification standard that was exposed last year are being reviewed by the committee and a revised draft will be exposed before final adoption.

The Academy continues to play the leading role in public relations for the actuarial profession under the able guidance of Director of Public Information Erich Parker. The Academy's Public Relations Committee, chaired by Henry Siegel, oversees planning and review of our public relations program. Chairman Siegel also represented the Academy on a Joint Committee on Public Relations established last year to monitor and evaluate the public relations activities of the actuarial profession and, in fact, chaired the joint committee. The joint committee completed its assignment and submitted its report and recommendations to the Council of Presidents in June; it has now been discharged.

The Committee on Publications, chaired by Mavis Walters, is responsible for all Academy publications, again ably supported by Erich Parker and staff. Barry Watson continued his outstanding service as editor of The Actuarial Update this year, as did Silvio Ingui and Elizabeth Poston as editors of the Enrolled Actuaries Report. Other publications under the committee's oversight this year included the newly formatted 1986 Yearbook, which included the Directory of Members by Business or Other Affiliation, and the 1985 Journal.

State government relations continues to be a area of major focus for the Academy. In fact, state government relations is so central to the purpose and interests of the Academy that the board decided this year to assign direct responsibility for coordinating Academy state government relations to the Executive Committee and discharge the Government Relations Committee, which formerly had this assignment. The Executive Committee has been ably supported by General Counsel Gary Simms and his staff in its oversight of state government relations activity.

An important link in the Academy's state government relations effort is the Committee on Liaison with NAIC. Chaired by a member of the Executive Committee (currently myself), this committee provides ongoing, usually, non-technical, communications between leaders of the Academy and leaders of the NAIC. The committee works through the National Association of Insurance Commissioners' (NAIC) Technical Services (EX-5) Subcommittee, with formal presentations at each of the subcommittee meetings and informal participation in meetings of the subcommittee's actuarial task forces and other NAIC committees and task forces.

I served again this year as the Academy's liaison representative to the Society of Actuaries Education Policy Committee. That committee's major focus this year has been the flexible education and examination structure proposed in

BUSINESS SESSION

the White Paper of the Society's Future Education Methods Steering Committee. The Academy's Board has followed the flexible education study with considerable interest and directed its liaison representative to continue working closely with the Education Policy Committee on the developing concept.

I would like to thank those Academy members who served on the accreditation, qualification and communications committees and in other related assignments this year, and especially Executive Director Steve Kellison and the entire Academy staff whose dedicated support was so essential throughout the year. It has been a great pleasure for me to serve as vice president in such fine company.

Munson: Thank you, Carl. Joe Brownlee has supervised the Committee on Accounting and Financial Reporting. We continue to have heavy interface with the accounting profession. Joe, will you give us some highlights, please.

Vice President Harold J. Brownlee: The four committees assigned to me have all had a year of great activity, which will continue into 1987.

The Committee on Life Insurance Financial Reporting has been chaired by Allan Affleck. He is being succeeded at today's committee meeting in Chicago by Ed Silins. Among the issues with which they have been involved are these: (1) GAAP accounting for universal life insurance. A subcommittee met with the Financial Accounting Standards Board on this topic in August. (2) Valuation actuary. The committee keeps up with all the activity in this area. It is currently putting together a revision of Recommendation 7 and some other material for John Montgomery and his NAIC Life and Health Actuarial Task Force. It has also reviewed the New York valuation law for annuities and have studied the treatment of reinsurance in valuation of insurance liabilities.

The Committee on Property and Liability Insurance Financial Reporting is led by Steve Lowe. Among the issues they have been facing are a proposal for the accounting for fronting transactions, the need to monitor tax reform as it might apply to property and liability companies, and the need for a paper on the pros and cons of discounting those reserves which traditionally have not been discounted in financial statements. This last issue also has some interest for the Life Financial Reporting Committee.

The Committee on Pension Accounting continues to be chaired by Harper Garrett. Although they have not, for the first time in years, had to deal with FASB on the issues that finally resulted in FAS 87 and 88, they have had to work with the Governmental Accounting Standards Board (GASB) on developing a disclosure standard for accounting for public pension plans. The ongoing GASB project on recognition and measurement will continue to involve this committee for some time. In addition, now that we have FAS 87, a subcommittee is working with the American Institute of Certified Public Accountants (AICPA) to develop a standard confirmation letter for CPA firms to request actuarial data on pensions plans.

The Committee on Relations with Accountants, under the guidance of Adger Williams, met three times during the year, most recently last week in Bermuda. Each meeting was a joint meeting with the AICPA's Committee on

BUSINESS SESSION

Relations with Actuaries and devoted a great deal of time to updating the group on issues and committee work that intersect both professions. Among the many agenda items, some of which were discussed at length, are: (1) The standard confirmation letter referred to above, (2) The possibility of standard language for the actuarial opinion in pension reports, (3) Implementation of FAS 87, (4) GASB pension project, (5) Pension legislation, (6) FASB insurance project, (7) Discounting of claim reserves, (8) Margins for adverse deviation in claim experience, (9) Continuing Care Retirement Communities, and (10) AICPA Statement on Standards for Attestation Engagements.

This brief outline of the problems faced by these committees shows some of the variety of issues faced by our profession today. We are fortunate to have such capable and conscientious committee members and such dedicated and hard-working chairpersons. I have thoroughly enjoyed working with each of these people and happy to turn the responsibility over to Mavis Walfers, who today succeeds me as vice president.

Munson: Joe and Carl, we're going to miss the work and counsel of you both as you now complete your terms as vice president. I'm pleased you're both continuing to be involved in other capacities, however.

As the public interface organization of the profession, the Academy has many committees and volunteers working in the public arena. The Committees on Public Issues--Insurance are under the supervision of Jim MacGinnitie. Jim,

Vice President W. James MacGinnitie: Good morning. The committees for which I am responsible cover the public issues in the area of insurance and related topics. The past year has been one of considerable activity in these areas.

The Committee on Life Insurance, chaired by Gary Dahlman, has been active on several fronts. It submitted comments on the Federal Trade Commission (FTC) Report on Life Insurance. It also submitted comments on a proposal to utilize cash values, instead of policy reserves, in calculating insurers' federal income tax. It has monitored several issues at the NAIC level, including model regulations for universal life products and for modified guaranteed products.

The Committee on Property Casualty Issues, newly chaired this year by Al Beer, changed its name to reflect the fact that it deals with many non-insurance and self-insurance issues. With the considerable interest in the insurance crisis and tort reform at both the federal and state level, there have been many opportunities to provide information from an actuarial perspective to regulators, legislators, and other interested parties. The committee prepared a special statement for one state regulator, offered testimony before a Congressional committee, and represents the Academy on the NAIC Task Force on Legal Liability Insurance.

The Committee on Health, chaired by Paul Barnhart, was active at both the state and federal level. Federal issues regarding taxation, funding, effectiveness and efficiency of coverage and benefits, and access to coverage were dealt with. The Subcommittee on Health and Welfare Plans, under Tom Nelson's guidance, will become a full committee and will work with the Pension and Social Insurance group of committees during the coming years.

BUSINESS SESSION

The subcommittee on Liaison with the NAIC Accident and Health (B) Committee worked diligently on proposed valuation standards. The Academy exposed these proposed standards twice during the year for the NAIC. The first exposure generated a very large response of more than fifty comments, indicating the high level of interest in this area among Academy members and others.

The Continuing Care Retirement Community (CCRC) Committee under Dave Axene's leadership developed standards of practice, which became one of the first issued for exposure by the IASB. It also continued its work with the AICPA and with the Health Facilities Management Association, in both cases contributing major suggestions about proposed pronouncements. It has developed a wide network of contacts at the state level, where there is considerable activity in the regulation of this rapidly developing field. Al Powell will be the new chairperson of the CCRC committee.

AIDS was the major focus of the Risk Classification Committee, chaired by Claire Wolkoff. Understandably, this is an important and sensitive issue, and the committee's statement has received considerable attention. AIDS has also shown up in the valuation area, with some states considering a requirement that actuarial opinions deal explicitly with the cost of AIDS. The committee continued its work in the unisex area and also issued a statement dealing with blindness as a risk classification issue. Pat Scahill will chair this committee for the coming year.

In 1985 the Casualty Actuarial Society reversed its position regarding loss reserves opinion requirements at the state and NAIC levels. An Academy task force, chaired by Warren Cooper, has been monitoring activity at the NAIC level.

I'm sure that you will join me in expressing appreciation to the committee members and chairpersons for their efforts and accomplishments during the past year on behalf of the profession.

Munson: Thank you, Jim. The movement of Tom Nelson's subcommittee to a committee status and to the portfolio supervised by Ed Friend is an example of the Academy being a dynamic organization, changing our structure and deployment of our valuable volunteer resources in a way that reflects--and even anticipates--the changing public needs. We discussed this at length at our most recent Executive Committee meeting. Ed supervises the committees we have been calling the committees on public issues--pensions and social insurance. Ed, an update, please.

Vice President Edward H. Friend: The committees on public issues--pensions and social insurance, named as such, are now history, because the word pension has now been replaced by the words employee benefits. We have embraced the subcommittee, previously the Subcommittee on Health and Welfare Plans, which has been headed up by Tom Nelson and which, under Jim MacGinnitie's leadership functioned essentially as a full committee and has now been so identified as a full committee working under this category.

So there have been a restructuring of the committees here in that sense. During the past year there have been considerable contributions by so many people that it would be a long presentation to give you all their names. Let

BUSINESS SESSION

me focus on two, particularly. Norm Losk has contributed significantly as the leader of the Pension Committee with countless visits from this good state of Texas to Washington, D.C. to appear before the various committees of the Congress. He has been helped by Larry Zimpleman who, upon Norm's stepping down from his leadership position, will assume responsibility for the Pension Committee. Larry's Pension Committee complements Tom Nelson's Health and Welfare Planning Committee to create the employee benefits committees, which together with the Social Insurance Committee and the Committee on Services to Enrolled Actuaries round out my array of committees. During the past year, there has been considerable concern expressed by the Academy through its Pension Committee on possible liability for actuaries in the event of over funding. That has been one of the messages we have carried to Congress. During that period, there was some concern over perhaps a different perspective from those who service small plans than who that service large plans. As a result, under the auspices of the Pension Committee, there has been created a small plan subcommittee. We are taking one member of that small plan subcommittee and assigning him to each of the other committees, so that the voice of the small plan constituency is heard in all parent committee deliberations. We have broken up the Pension Committee, because of its massive tasks and numerous responsibilities, into two parts: one on funding and one on policy and design. The one on policy and design will embrace a new area this year and nonqualified plans and _____, which we believe will become a significant force, particularly in light of the tax legislation coming along and reducing tax brackets.

Munson: Thank you, Ed, for the report and for the initiative that moved us to stay current on some of these structuring matters.

I've asked Steve Kellison to share a few highlights with us from his more permanent perspective and from the Academy's Washington office, especially on our public statements. Steve, if you will.

Executive Director Stephen G. Kellison: As you have just heard in the reports of the four vice presidents, the Academy's public interface committees have been very active during the past year. If you pull it all together, during calendar year 1985 there were a total of forty-nine public statements submitted by the Academy, which is the highest number ever in one year. These covered a wide range of issues and can be classified as follows: 19 - Federal legislation, 12 - Federal regulation, 7 - NAIC, and 11 - Accounting profession.

This activity is continuing at roughly the same pace in 1986, as we have submitted twenty-nine statements during the first eight months of this year.

These statements are compiled each year in the Academy's journal, which all members receive. Also, government relations activity is summarized each month in the "Government Relations Watch," an insert in each monthly newsletter mailing. Finally, a checklist of statement appears in each monthly issue of The Actuarial Update. I encourage you to familiarize yourself with this wealth of material.

Government relations is not an easy challenge for our profession, given our small size and the relative complexity of much that we have to offer. Further, actuarial considerations are rarely isolated and are generally only

BUSINESS SESSION

subsets of broader issues. Despite these obstacles, I am firmly convinced that our input is often very constructive to decision-makers and that we have indeed made a difference, even though we may not always like the outcome of the political process. It is vital that the Academy continue to strengthen this activity, so that an actuarial perspective is heard in the public policy forums in this country.

It is impossible in the few moments available here today to adequately summarize all this activity. Let me just mention five issues very briefly.

(1) The tax bill. It will be months before the implications of the new tax bill are identified and understood. However, there are some real actuarial "sleepers" in this bill. As two quick examples, which are by no means complete, there is a new penalty tax for overfunding a pension plan, and there is a possible increase in the Alternate Minimum Tax for funding at higher than FAS 87 levels. Both of these provisions may provide real incentives for plan sponsors to fund at lower levels in the future.

(2) AIDS. The Academy Committee on Risk Classification prepared a major statement on AIDS during the past year which has generated significant media interest. This activity led to coverage for the Academy, in one fashion or another, in such newspapers as The New York Times, the Boston Globe, the Cleveland Plain Dealer, and the Des Moines Register.

(3) Liability insurance. No insurance issue has commanded more political and media interest this year than the liability insurance crisis. The actuarial profession is increasingly being asked to put a pricetag on various proposals for tort reform. The Committee on Property and Liability Insurance has a major challenge to deal with this highly complex and thorny issue.

(4) Health and welfare plans. No sooner has FASB completed work on FAS 87 and 88 than it has turned its attention to accounting for post-retirement health and welfare plans. This project may prove to be a more difficult project even than the pension project. Also, there is great interest in Washington in such plans. In response to these developments, the Academy has appointed a new Committee on Health and Welfare Plans, chaired by Thomas G. Nelson, which promises to be a very busy committee during the coming year.

(5) CCRC's. The work of our committee on Continuing Care Retirement Communities deserves special mention. Their effort in developing the major exposure draft on actuarial standards which you have received, in dealing with the accounting profession on accounting standards, and in commenting on a growing diversity of state legislative and regulatory proposals is nothing short of gargantuan. As a result, the actuarial voice is being heard and the actuarial role is being established in forums in which actuaries were largely unknown even a short year or two ago.

In closing, let me mention that during the past year we have issued two special supplements to the "Government Relations Watch" on state issues. The arena of state government relations is a difficult yet important one to our profession, particularly in view of an increasing array of special purpose actuarial opinions being imposed by the various states.

BUSINESS SESSION

Let me also mention that the Academy Board of Directors has recently approved the institution of a series of special service reports. These reports will be offered on a subscription basis to members in certain specialty areas. The purpose of these reports will be to provide subscribers with quick notification of actuarial components of developing public issues. We are excited about this new service, and you will be hearing more about it during the next few months as it is implemented.

Munson: There is one other person besides Steve at this table, as I indicated earlier, who is not yet a member of the Executive Committee. But John Fibiger is at the moment president-elect-elect; in a few minutes we will remove that last "elect." But more importantly at the moment, John is chairperson of our Interim Actuarial Standards Board. The bad news side to his election to president-elect is that we'll lose him from the IASB, where he's provided strong leadership this past year. John told me last night his report this morning on the IASB could be very brief, something like: "The IASB is doing well. And I quit." John, could you tell us a bit more?

IASB Chairperson John A. Fibiger: The IASB has been in existence for about a year now, and I really do believe we have been making very excellent progress. Obviously, starting something like this from scratch, we've had to set a lot of rules in progress. We've set a meeting schedule, quarterly on the second Friday of each quarter and that normally carries over to a Saturday meeting. Attendance on the part of the IASB members has been marvelous, and I would really like to thank these people who have worked so hard and diligently to make this a reality. Ron Bornhuetter has been the vice-chairman and the other members, Paul Barnhart, Ed Boynton, Jim Hickman, Barbara Lautzenheiser, Tom Murrin, George Swick and Jack Turnquist, who's managed also to find time to be a very effective and able member. We're divided into five operating committees: Life Insurance, under Walter Miller, Pensions, under Tom Levy, Casualty, Charles Bryan, Health, Ron Wolf, and Specialty, Jarvis Farley. The specialty committee deals with issues that don't fall into any one of the four previous groups or perhaps crosses a number of lines, as I think you can see from the draft standards on continuing care retirement communities, which has aspects of a number of areas of actuarial practice. We have four standards in process right now. We inherited one: a revision of Recommendation 8, Statement of Actuarial Opinion for Fire and Casualty Insurance Company Annual Statements. We've already promulgated three. One was from the Subcommittee on Dividends and Nonguaranteed Elements, and this was the standard of practice for the nonguaranteed elements. We already have standards in place for dividends for mutual life insurance companies and for dividends for stock life insurance companies. Then, in addition to Recommendation 8 and this one on nonguaranteed elements, we have two recent ones, one on continuing care retirement communities and the other, a response to FAS 87, has been put out by the Pension Committee. We are meeting in Boston on October 10 and 11, and we will touch on all of these. We are still a committee of the Academy so we will be recommending some, perhaps all, to the Academy Board of Directors for adoption as standards of practice. We're working on common formats for standards, and we're trying to consider whether we should request a monograph on foundations of actuarial practice, because we're finding that there are some different principles that apply depending upon the areas of practice. As I said, we're still interim. The profession has a couple of fundamental issues to deal with. Primarily, the question of governance, that is, shall this IASB, if it

BUSINESS SESSION

becomes a permanent board, be part of the Academy or shall it be independent. And obviously, clearly related to that are the issues of financing. I do believe we're off to a good start, I think the profession owes a great debt to the people who have worked on the standards and worked on reviewing them.

Munson: Thank you, John.

Pres Bassett will report to us a few items relating to two continuing education developments, with which he's been closely affiliated. Pres.

President-Elect Preston C. Bassett: I would like to report on the various continuing education activities going on within our profession at the present time. All of our organizations support continuing education and promote it in many ways. The meeting here in San Antonio this week is one of our most apparent efforts and a very successful one. Similar meetings are sponsored by each of the actuarial organizations. In addition, there are seminars, particularly by the Society of Actuaries, symposiums, tapes and video cassettes on important topics, reports on meetings, published papers, newsletters and local club meetings, to mention the more important sources of continuing education. Probably the most important to all of us is self study.

Recently there has been a movement toward recognition of actuaries who participate in formal continuing education programs. The Conference of Actuaries in Public Practice (CAPP) already has a recognition program in place, as you know. It is my understanding that the Society of Actuaries and the Casualty Actuarial Society will be continuing with their current programs, but will not be adopting a formal recognition program such as CAPP's. The Academy has this subject of recognition under study. A committee chaired by Daphne Bartlett will be making recommendations to the Academy Executive Committee and Board of Directors at their next meetings.

A significant study is underway affecting enrolled actuaries. Les Shapiro, Executive Director from the Joint Board for Enrollment of Actuaries, asked the actuarial profession to recommend a program of continuing education for enrolled actuaries. To this end, the Academy, the Conference of Actuaries in Public Practice, the Society of Actuaries and the American Society of Pension Actuaries each appointed two members to a task force to study the issue.

Les Shapiro appears to favor some form of a compulsory continuing education program along the lines of the volunteer programs now in place for members of CAPP and ASPA. However, before recommending a compulsory education program, the task force decided to look at other options as well, and I believe their final report will offer four alternatives:

- (1) Do nothing more than is now being done: that is, voluntary programs offered by the actuarial organizations;
 - (2) A compulsory periodic reexamination for all enrolled actuaries;
 - (3) A peer review committee to investigate complaints and perform selected audits; and
 - (4) A compulsory continuing education program for all enrolled actuaries.
- Which of the four options is appropriate depends to a large extent on what Les and the Joint Board hope to accomplish.

BUSINESS SESSION

The first question to answer is: "Is there really a problem? Are enrolled actuaries satisfactorily complying with the law? If the answer is yes, option 1 may be appropriate.

Is the objective to find individual enrolled actuaries who are not performing up to standard? If so, option 3 might be tried.

Does the Joint Board want to expand the knowledge of all enrolled actuaries? Options 2 and 4 could accomplish this.

The report of the task force is expected to review all four options presenting pros and cons, expected cost impact and feasibility. At this time it is uncertain whether or not the task force will make a specific recommendation. Their report is expected by year-end.

Munson: The subject of valuation actuary has been a major piece of the entire program here at our joint annual meetings. And with good reason. Though a lot has been covered, I thought Burt Jay, as chairman of the Joint Committee on Valuation Actuary, might have a word or two of overview or wrap-up to share.

Jay: Since I already gave a summary report of all of the valuation actuary activities on Monday, I will keep my remarks here very short. There has been a valuation actuary session during every time slot throughout this meeting, except for the general session.

The Joint Committee on the Valuation Actuary has maintained a written status report of all of the related articles for the past year. We plan to continue to update this report. I have also given oral reports on the subject at every board and Executive Committee meeting of both the Society of Actuaries and the Academy. Representatives on the Joint Committee of the Conference, the Casualty Actuarial Society and the Canadian Institute of Actuaries have also kept their respective organizations informed.

Those of you who have attended the sessions here can attest to the continuing high level of interest in that movement, as well as some divergence of opinion among practicing actuaries. I will predict that enough will happen during the coming year that CAPP could also fill up next year's annual meeting with valuation actuary topics and have all new material.

Munson: Thank you, Burt. It is my privilege to give a brief oral report on our Discipline Committee, on behalf of Harry Garber, its chair.

While the Committee on Discipline reports to the president, I want to echo what Bill Hartman said Monday morning. I do not know any more than the entire Board of Directors what that committee is engaged in at any time. It is a committee of hard working people with an extremely capable chairperson who take their responsibilities very seriously and conscientiously. That includes the confidentiality, which must be honored. And that's the first of six points I want to share with you.

Second, we, of course, work diligently to protect the rights of those against whom charges are brought. Gary Simms as general counsel has many functions as he works so closely with our discipline process, and one of them is

BUSINESS SESSION

to be sure this committee and our board, as cases are occasionally brought to our meetings for deliberation, behave appropriately with respect to the rights of those charged.

Third, the discipline process is alive and well. During the last fifteen months, three cases have been brought to our board for deliberation and action in executive session. In each case, and after a lengthy discussion, the board agreed with the recommendation of the Discipline Committee, resulting in one expulsion from membership in the Academy, one suspension (for the length of the member's parole), and one public reprimand. In each instance, the essence of the result was reported in following issue of The Actuarial Update.

That leads to the fourth point. As required by our bylaws, the board is apprised of the committee's case each six months, including the disposition of cases and new ones occurring since the last such report. The Actuarial Update then contains a summary of that report, and I encourage you to look for it in the next issue.

Fifth, we report in large part because we want our membership and, very importantly, our various publics to realize that we do indeed have a healthy discipline process. It is indeed one of the hallmarks of a true public-serving profession. And increasingly we are all recognizing that, practicing that, and our publics respect us for it and can more comfortably rely on our services.

Sixth and finally, I would observe that the discipline process goes hand in hand with another hallmark of a true profession, and that's the standards of practice area that John Fibiger has reported on this morning. As our professional actuarial associations struggle to obtain our own liability insurance, caught as we are in the common challenge today experienced by the entire country, we learn that there is a good news/bad news story in our growing maturity with both standards of practice and a discipline process. The bad news is that the existence of these functions in the Academy makes it more difficult to obtain adequate liability coverage. That is a real challenge for us. But, I prefer to look at the positive side of that. And that says to all of us that we are growing in our true professional maturity. It's evidence that standards of practice and discipline are indeed alive and well in the Academy. And that's the real message I want to leave with you, on behalf of Harry's committee.

Munson: This closes our series of short reports, on the past year and, somewhat, on what we may expect from the Academy in coming months. I want to thank each of the members of the Executive Committee, and Steve and John, for their reports—but much more importantly for their support and leadership in this past year. You've each made my year much easier and more enjoyable than it would have been without any one of you. You've each done a lot for the actuarial profession, through the Academy. I'll always remember our relationships and your help. And this word of thanks goes especially to you, Joe Brownlee and Carl Ohman, as the two members retiring from our Executive Committee.

At this point I call upon Stan Hughey, our immediate past president and vice chairperson of our Nominating Committee, to give the report on behalf of that committee. Stan.

BUSINESS SESSION

Past President M. Stanley Hughey: Mr. Chairman, on behalf of the nominating committee, I would like to review and announce and move nominating of certain individuals. This falls into two parts. In accordance with the procedures that have been established, the new officers for the Academy's coming year are elected at the board meeting just prior to the annual meeting. So the first part of my assignment is really an announcement. Bob Dobson will continue as secretary for another year. Dan McCarthy comes in as treasurer. Burt Jay becomes a vice president; Mavis Walters becomes a vice president. And finally, and most importantly, John Fibiger becomes president-elect. That then represents an announcement of the elected officers. The Board of Directors will be elected at this meeting and the nominating committee is pleased to place in nomination in alphabetic order, if you please, for three-year terms: Allan Affleck, Darrel Croot, Charles Farr, David Flynn, Harry Garber, Carl Honebein. Also to place in nomination for a one-year term, filling an unexpired term is Miles Gray. Mr. Chairman, on behalf of the nominating committee I would nominate these individuals to fill the indicated term as directors of the Academy and, if it is permitted, I would, placing them in nomination, move that they be elected.

Munson: Is there a second to that motion? Moved and seconded. All those in favor of the motion to elect those Stan has identified as the committee's nominees, please signify by saying, "Aye." Those opposed, "No." Thank you, Stan and Norm and the nominating committee. Our congratulations.

The one final duty I have as president, and our final minute at this Academy business session, is to call Pres Bassett forward.

Pres is a fellow who's been wandering around here at this meeting not knowing whether he's coming or going. You see he has two green ribbons. One says past president. The other says president-elect. The former, of course, refers to his role some years ago with the Conference. And the latter, I'm happy to say, we're now going to shorten.

Pres, it's my privilege to pass along to you this gavel symbolic of the Academy presidency. I know that past president ribbon and the many other experiences you've had stand you in an excellent position to lead us. I've enjoyed working with you this past year and look forward to a continuing relationship.

Pres, congratulations and best wishes.

1985-1986 MINUTES

MINUTES
BOARD OF DIRECTORS
Minutes of Meeting Held On
December 4, 1985

A meeting of the Board of Directors of the American Academy of Actuaries was held in Chicago, Illinois, at the Hyatt Regency O'Hare Hotel on December 4, 1985. The meeting was called to order by President Bart Munson at 8:40 a.m.

Present for all or part of the meeting were the following Board members: Preston Bassett, Wayne Fisher, Harper Garrett, Stanley Hughey, Burton Jay, Norman Losk, James MacGinnitie, Thomas Malloy, Daniel McCarthy, Bartley Munson, Carl Ohman, Leroy Parks, Jerome Scheibl, Richard Snader, Virgil Wagner and Benjamin Whiteley. Board members not present were: Robert Anker, Daphne Bartlett, Linda Bell, James Biggs, Harold Brownlee, Norman Crowder, Robert Dobson, Elsbeth Erbe, Edward Friend, Daniel Flaherty, Stewart Nagler and Jay Rippes.

Also present for all or part of the meeting were the following individuals who were not members of the Board: Willard Hartman, Stephen Kellison, Michael McMurray, Erich Parker, Cynthia Sharp, Gary Simms and Jack Turnquist.

Mr. Munson opened the meeting by welcoming new Board members and guests. In the absence of the Secretary, Carl Ohman was asked to record the minutes.

1. Minutes

Minutes of the October 8, 1985 meeting of the Board of Directors were approved after correcting a typo on page 7. Minutes of the November 4, 1985 meeting of the Executive Committee were distributed for the Board's information.

2. Secretary

The Secretary had nothing to report.

3. Treasurer

Burton Jay presented the third quarter 1985 Treasurer's report showing budgeted and actual income and disbursements for the nine months ending September 30, 1985, and also budgeted and current forecast for the full year 1985. Mr. Jay discussed details of the nine month report, and then presented a proposed budget for 1986 which had been reviewed by the Budget and Finance Committee and the Executive Committee, with their recommendations for adoption by the Board. After some discussion, the Board adopted the budget.

In the course of discussing the budget, it was noted that the Executive Committee had discussed reimbursement of expenses of the President and President-elect at its November 4 meeting and had agreed to recommend to the Board that the limit be removed on all out-of-pocket expenses. This will be submitted to the Board for approval as soon as a statement of the proposed

1985-1986 MINUTES

policy has been developed; however, the Board will be asked at that time to approve the new policy retroactive to the October 16, 1985 Annual Meeting.

Mr. Jay distributed an analysis of 1984 expenses by function and led a discussion both of details of the analysis and of the merits of such analyses on an ongoing basis.

Mr. Jay reported on waivers of dues that were approved by the Executive Committee on November 4, and asked the Board for approval of resignation requests from Debra L. Fulks, Arlie L. Huginin and Edward E. Zeiger. The Board approved the resignations.

Finally, Mr. Jay reported that only 46 members were dropped for non-payment of 1985 dues.

4. Standards of Practice

Mr. Munson gave a brief report on the Standards Organizing Committee (SOC) and the Interim Actuarial Standards Board (IASB). SOC and IASB held a joint meeting on October 30 in Washington; IASB has scheduled its first meeting alone January 9-10 in Florida.

5. Committee on Discipline

Gary Simms gave a brief oral report on current activities of the Committee on Discipline.

6. Relations with Accountants

Harper Garrett reported on the status of the Financial Accounting Standards Board's pension project; a final accounting statement is now expected by the end of 1985. Mr. Garrett also reported on recent Academy testimony before the Government Accounting Standards Board.

Tom Malloy reported on an error in the pension actuarial cost methods study published last April. The error, which affects portions of several volumes of the study, was discovered in September. The firm responsible for the calculations replaced the calculations when the error was discovered and FASB was notified of the error and furnished corrections. The Academy will now proceed to reprint those volumes that need to be corrected and provide them to the 140 purchasers of the study as soon as possible. The firm responsible for the calculations will be invited to share in the cost of reprinting; the balance of any cost will in effect be shared by the several sponsors of the project (out of the proceeds of the sale of the study). It was noted that the purchasers had not been notified as yet of the error and the board directed that this be done immediately.

Mr. Garrett gave an update on pension issues before the Joint Task Force with AICPA; Virgil Wagner gave a similar report on insurance issues, notably the CIA/CICA report.

1985-1986 MINUTES

7. Valuation Actuary

Burton Jay distributed a report prepared for presentation both at this meeting of the Academy Board and at the December 11 meeting of the SOA Executive Committee, summarizing recent activities of all the regulatory, industry and professional actuarial committees concerned with the role of the valuation actuary. Mr. Jay now chairs the reconstituted Joint Committee on the Valuation Actuary which is taking the lead role of coordination and liaison among the various committees involved. Mr. Jay led the Board through details of the report and the Board expressed satisfaction with the direction of the Joint Committee.

Mr. Jay's report noted that the AAA Committee on Life Insurance Financial Reporting Principles Recommendation 7 Task Force had suggested that work on Recommendation 7 be allowed to slow down because of pending adoption of the NAIC proposed interim guideline on more effective use of actuarial opinions. However, the Joint Committee's position was that work on redrafting Recommendation 7 should continue without delay. The Board agreed that there should be no slowing of work on Recommendation 7.

At this point, the President rearranged the order of items on the agenda to conform with travel schedules of certain Board members. The minutes, however, will follow the order indicated on the agenda.

8. Continuing Education Recognition

Mr. Munson called the Board's attention to a letter from Leslie Shapiro requesting each of the actuarial organizations to appoint two members to a task force to advise the Joint Board for the Enrollment of Actuaries on the subject of continuing education. It was noted that the Academy would undoubtedly comply with the request but that Board action was not needed.

Mr. Munson then led a discussion of the August 5, 1985 report of the Joint Task Force on Continuing Education Recognition, and of Gary Simms' November 26, 1985 memorandum to the Board on the Academy's options in this matter. After some discussion, Mr. Ohman moved that the Board (1) support the concept of continuing education recognition set forth in the joint task force report, and (2) authorize the President to appoint a task force charged with developing an Academy recognition program consistent with programs being considered by the other organizations but tailored to the specific requirements of the Academy, including a plan for implementing such program, to be submitted to the Board for approval at a later meeting. Motion seconded and carried.

9. NAIC Activities

Mr. Ohman reported on AAA/NAIC liaison activities in connection with the October meeting of the NAIC Life & Health Actuarial Task Force in New Orleans and plans to cover the December NAIC national meeting in Reno. There was also discussion of plans to hold the June, 1986 Board meeting during the NAIC national meeting in Boston and the opportunities that might offer for improved AAA/NAIC interface.

1985-1986 MINUTES

James MacGinnitie reported on the status of the Health Committee's paper on health insurance valuation standards authored by Paul Barnhart, and of other papers offering somewhat different views on the subject. He noted the need for a wider exposure of these documents before NAIC can act on them. After some discussion, Mr. Ohman moved that the Board authorize exposure as a discussion draft of the Barnhart paper accompanied by a cover memorandum describing the context within which this paper was written and with appropriate reference to the other papers and alternative views on the subject. Motion seconded and carried. It was noted that one or more of the authors expressing alternative views might be invited to prepare articles for Actuarial Update.

Mr. MacGinnitie reported on recent comments by Kansas Commissioner Fletcher Bell at a CAS meeting on casualty loss reserve opinions. Dick Snader reported on a proposed New Jersey regulation on loss reserve opinions now under consideration in that state.

Mr. Kellison reported on the status of the Academy's compilation of state requirements for special purpose statements of actuarial opinion.

10. Federal Issues

Norman Losk, chairperson of the Pension Committee, reported on the status of two pension actuarial issues in the current tax reform proposals and the recent controversy that arose when a Pension Committee memorandum outlining possible courses of action was circulated and misrepresented by parties outside the Academy as a statement of Academy position. A letter has been mailed to all Enrolled Actuaries clarifying what the Academy has done in this matter, what it has not done and what it intends to do. The Pension Committee is now working on a draft statement to be sent to the staff of the Joint Tax Committee opposing the proposed legislation in its present form and suggesting alternative methods of addressing the Joint Committee's concerns.

Mr. Munson reported (for Joe Brownlee) that the joint multiemployer plan data insufficiency study is going forward.

11. Committees

Mr. Munson reported on the status of committee staffing for 1986, 1985 committee reports and 1986 committee plans.

12. Joint Activities

Mr. Munson reported on plans for the Council of Presidents meeting the following week; also that there is nothing new to report on the history of the profession project.

Stan Hughey reported on his attendance at the British Institute's biennial dinner in November and his presentation to the Institute of a silver plate from the Academy, duly inscribed, plus a set of Academy mugs.

Copies of the 1986 Actuarial Calendar were distributed to the Board.

1985-1986 MINUTES

13. Meetings

Mr. MacGinnitie introduced Michael McMurray, chairperson of the Joint Program Committee for Casualty Loss Reserve Seminars, who distributed a written report on the 1985 CLRS in Kansas City and led a discussion of highlights of the report.

Cynthia Sharp discussed plans for the 1986 Enrolled Actuaries Meeting to be held in February.

Mr. Munson reported on discussion by the Council of Presidents in September on the possibility of a jointly sponsored health care meeting in 1987, noting that CAPP has indicated its desire to participate but that SOA is still uncommitted. Dan McCarthy moved that the Board authorize the President to commit the Academy to joint sponsorship of a health care meeting in 1987 provided SOA agrees to participate in the joint sponsorship. Motion was seconded. After some discussion, Mr. Ohman amended the motion to remove the requirement for SOA participation if AAA is to be a joint sponsor. The amendment was seconded, but defeated. The motion was then voted on and carried.

Mr. Hughey reported that planning is proceeding on the 1989 anniversary meeting. Mr. Jay asked about reimbursement for Academy staff work and Mr. Hughey replied that the Steering Committee has agreed that 1986 staff expenses should be charged to a special account for reimbursement from meeting funds. Reimbursement for 1987 and later staff expenses will be dealt with in due time.

14. Publications

Erich Parker reported that the December issue of Update will include a supplement on committee plans. Mr. Parker distributed a test page indicating the format of the 1986 Yearbook and reported that the Yearbook will be mailed on January 20.

15. Public Relations

Mr. Parker reported on recent public relations activities of the Academy staff.

16. Actuarial Arbitration

A December 4 memorandum by Gary Simms on "The Academy as an Arbitration Source" which was distributed to the Board before the meeting was referred to the Executive Committee for its consideration.

17. Operation Contact

Mr. Parker reported that this year's Operation Contact program will revolve around presentations by the President or other Executive Committee members, using a prepared speech with audio actualities to give verisimilitude, focusing on all Academy activities and what the Academy is doing for its publics.

1985-1986 MINUTES

Mr. Munson reported that the Academy continues to work with the program committees of the founding organizations to assure Academy presence at meetings of those organizations.

18. Staff Items

Mr. Kellison noted the third quarter staff report which had been distributed to the Board and that a 1986 staff plan would be developed later in December.

Mr. Kellison reported on the relocation of the Academy's office late in October and the open house in the new office on November 4.

Office staffing, listed under item 18 of the agenda, was covered in the discussion of standards earlier, item 4.

19. Future Meeting Schedule

Distributed to Board members before the meeting.

20. Other Reports or Business

None.

21. Adjournment

4:10 p.m.

(signed)

Carl R. Ohman

1985-1986 MINUTES

MINUTES
BOARD OF DIRECTORS
Minutes of Meeting Held on
March 19, 1986

A meeting of the Board of Directors of the American Academy of Actuaries was held in Washington, D.C., at the Sheraton Grand Hotel on March 19, 1986. The meeting was called to order by President Munson at 8:30 a.m.

Present for all or part of the meeting were the following Board members: Daphne D. Bartlett, Preston C. Bassett, James F. A. Biggs, Harold J. Brownlee, Robert H. Dobson, Elsbeth T. Erbe, Edward H. Friend, Daniel J. Flaherty, M. Stanley Hughey, Burton D. Jay, Norman S. Losk, W. James MacGinnitie, Thomas M. Malloy, Daniel J. McCarthy, Bartley L. Munson, Carl R. Ohman, Leroy B. Parks, Jr., Jay C. Ripps, Jerome A. Scheibl, Richard H. Snader, Virgil D. Wagner and Benjamin R. Whiteley.

Also present for the meeting were the following individuals who were not members of the Board: Willard A. Hartman, Harold G. Ingraham, Jr., Stephen G. Kellison, Erich Parker, Richard S. Robertson, Cynthia A. Sharp, Gary D. Simms and Jack M. Turnquist.

The following members were not present: Robert A. Anker, Linda L. Bell, A. Norman Crowder III, Wayne H. Fisher, Harper L. Garrett, Jr. and Stewart G. Nagler.

Mr. Munson welcomed Mr. Rippss, who was attending his first meeting as a member of the Board of Directors. He also welcomed Mr. Hartman and Mr. Turnquist representing the Conference of Actuaries in Public Practice and Mr. Ingraham and Mr. Robertson representing the Society of Actuaries. Mr. Munson noted that the President and President-Elect of the Casualty Actuarial Society would not be able to attend because of a scheduling conflict. Mr. Munson acknowledged and thanked those on the Board who had responded to his letter concerning attendance at Board of Directors meetings. He also thanked the Academy staff for mailing the agenda material earlier than normal.

1. Minutes

Minutes of the December 4, 1985 meeting of the Board of Directors were approved, subject to minor editorial changes. Minutes of the February 12, 1986 meeting of the Executive Committee were distributed for informational purposes.

2. Secretary

Upon motion duly made and seconded the Board approved reinstatements for the following four individuals: Robert J. Honkomp, Nancy Bezgin and Kenneth W. Smith.

1985-1986 MINUTES

3. Treasurer

Mr. Jay presented the fourth quarter 1985 Treasurer's Report. This report can be considered the staff final, but is still unaudited. He discussed the favorable deviations which included convention income for the Enrolled Actuaries Meeting and the Casualty Loss Reserve Seminar. Also, rent expense was down because of free rent received in connection with the office move. Temporary personnel fees were up because of the high turnover during the year, but this was partially offset by a lower pension cost. The largest deviation, however, was the budgeted expense for new programs, which was not spent. The net favorable deviation was \$101,000.

Mr. Jay then led a discussion on the proposed guidelines for President and President-Elect expense reimbursement. Upon motion duly made and seconded, the Board approved the proposed guidelines, retroactive to October 16, 1985, and subject to some changes, which the Treasurer was directed to make. A copy of the final version is attached to these minutes.

A financial management manual was distributed for information. Mr. Jay suggested that the Board keep this document as a reference. Mr. Jay asked for questions and several questions were raised and suggestions made concerning the document. These suggestions will be discussed at the May 19, 1986 meeting of the Budget and Finance Committee.

Upon motion duly made and seconded, the following waivers of dues and resignations were approved:

Waiver of Dues - William F. Dice, Richard L. Diemer, W. James Preble, James H. Sartain, John E. Smith, Chester Toren and W. B. Waugh;

Resignations - Gerald M. Brown, Alexander C. McCallum, Kathleen B. Moran, Dennis M. Morrissey, David E. Phillips and Charles A. Yardley.

It was noted that some of the individuals on the list may be eligible for waiver of dues. Mr. Jay will contact these individuals and suggest appropriate changes to their status.

4. Standards of Practice

Mr. Munson reported on the status of the Interim Actuarial Standards Board. The IASB had been discussed at a Council of Presidents meeting which had just concluded. Walter N. Miller has been named chairperson of the Life Operating Committee of the IASB. No chairperson has yet been named for the Speciality Operating Committee. There was a discussion of possible representation on the IASB by the American Society of Pension Actuaries. It is clear that there are no established seats or representation on the IASB. Members of the American Academy of Actuaries with various backgrounds will be encouraged to participate. However, in particular, an ASPA member who is also an Academy member may well be on the Pension Operating Committee. The IASB has been active, and recently took a mail ballot and voted to expose a proposed standard on dividends and other non-guaranteed elements.

1985-1986 MINUTES

Mr. Munson's report on the discussions at the Council of Presidents meeting led the Board to discuss the financing of the IASB. It was noted that the other actuarial organizations are in the process of budgeting for their 1987 fiscal years, so it is timely to decide on this issue. The Board moved, seconded and approved a motion to express its preference that the Academy continue to provide sole funding for the IASB through 1987. It was noted that the Academy is clearly responsible for standards, which led to some discussion of the accountability of the Actuarial Standards Board, once it is established.

Mr. Bassett reported on the status of the Pension Benefits Guarantee Corporation vs George B. Buck, Consulting Actuaries, Inc. settlement. The President of Buck has indicated a willingness to work with the IASB, but there is a need to clear this with the PBGC. We have not yet received such clearance.

5. Valuation Actuary

Mr. Jay led a discussion of the January 17, 1986 report of the Joint Committee on the Valuation Actuary. He noted that an updated report will probably be available by the next Board of Directors meeting.

Mr. Ohman reported on the NAIC aspects of the valuation actuary movement. The NAIC had met in San Francisco the previous week. Mr. Kellison reported that some of the discussion at the San Francisco NAIC meeting had centered upon the Academy's qualification structure. The NAIC appears unwilling to accept it as adequate. Further, the NAIC appears to be of the opinion that the actuarial report by a valuation actuary will be viewed as more important than the current statement of actuarial opinion. Mr. Jay noted that in his opinion the most important thing currently going on in relation to the valuation actuary was the formation of an ACLI task force on the subject. There is some controversy about life insurance companies' surplus being included in the actuary's report.

The Canadian Institute of Actuaries has a committee on the role of the valuation actuary in Canada. Apparently the concept is being taken further in Canada than in the U.S. in relation to marketing plans regarding future business and continued monitoring of business. Mr. Jay's joint committee intends to comment on the Canadian developments. The Board expressed some discomfort with the Canadian viewpoint, in that it may go too far in terms of the actuary's responsibility and therefore hinder the acceptance of the concept in the United States.

6. Staff Planning

The 1985 Staff Program Plan Annual Report and the Staff Program Plan for 1986 were reviewed and discussed. Mr. Rippa raised a question concerning the relation of the staff plan to any overall Academy plan. It was noted that the Academy does not have a formal plan and that the Committee on Planning deals with longer range issues. Mr. Rippa suggested that one of the priorities in such a plan should be further work on the actuarial opinions required by various states. A favorable opinion was expressed on the recent Government Relations Watch Special State Supplement Status Report.

1985-1986 MINUTES

7. Continuing Education Recognition

A joint task force has been created by Leslie S. Shapiro of the Joint Board for the Enrollment of Actuaries. This task force includes two representatives from each of four organizations. Mr. Bassett and Ms. Erbe are the Academy representatives. Mr. Bassett has been elected chairperson of this task force. There was some discussion of the thrust of this task force's work.

At the December, 1985 Board of Directors meeting, creation of an Academy task force on continuing education recognition was approved. Mr. Munson has appointed this task force, with Ms. Bartlett as chairperson. This task force plans to meet soon and will hope to report to the Board later this year.

Mr. Hartman reported on the status of continuing education recognition in the Conference of Actuaries in Public Practice. He noted that the vast majority of the Conference's members are active in continuing education and that it is expected of the profession by its various publics. Mr. Robertson reported that the Society of Actuaries places the emphasis on making continuing education available, rather than on the recognition issue. Mr. Snader reported that the Casualty Actuarial Society has discussed this subject, and is concerned about a couple of key issues. It was noted that the American Society of Pension Actuaries has a program in place.

8. Flexible Education

A "White Paper on a Flexible Education System for the Actuarial Profession," which has been distributed by the Society of Actuaries to its members, was given to the Board. Mr. Ohman is the Academy's liaison to the Society of Actuaries Education Policy Committee. Mr. Dobson also serves on that committee. This committee will meet again in May.

Upon motion moved, seconded and approved, the Board officially received the paper and instructed its liaison to continue to work with the Society of Actuaries Education Policy Committee on the flexible system. Mr. Ingraham noted that if the Society of Actuaries Board of Governors approves this system at its May meeting, implementation will be scheduled for 1987 and 1988. He noted that this may be optimistic.

9. Actuarial Arbitration

Mr. Simms led a discussion of a proposal for the Academy to submit a list of interested members to the American Arbitration Association for potential service as arbitrators. There was some discussion about the definition of a member in good standing. Upon motion made and seconded, the Board approved the concept, and specified that the program should be publicized in The Actuarial Update. Interested members will be asked to submit their names to the Academy office, which will in turn send the names to the American Arbitration Association with the agreement that any public sanctions on disciplinary matters will be passed along to the American Arbitration Association. Two negative votes were recorded on this issue.

1985-1986 MINUTES

10. Committees

The 1986 annual committee plans, which had been distributed, were discussed. It was noted that the Committee on Risk Classification had raised certain questions in its report. Mr. MacGinnitie stated that he had responded to these questions. This led to a discussion of the committee's position on the AIDS issue. Mr. Ohman noted that this issue is being discussed by the NAIC. It was mentioned that this subject has a great importance to the Academy. Because of this, the Board indicated its desire to receive an advance copy of the committee's statement on this subject and to be given some opportunity to react, if it could be done in a timely manner.

Mr. Hughey noted that the value of the committee plans varies widely. He expressed his opinion that the Board should be more actively involved in reviewing these plans. Mr. Friend stated that the Vice Presidents need more guidance from the President and President-Elect concerning the appropriate level of detail that should be in the committee plans. Mr. Kellison mentioned that the Committee Chairperson's Manual has a format for committee reports and plans. Mr. Munson suggested that this subject be discussed further at the May Executive Committee and June Board meetings in connection with timing changes on committee staffing.

11. Federal Issues

Mr. Losk reported on pension actuarial issues in the tax bill. He recapped the issues that led to a controversy earlier in the year. Currently his committee is considering what to do concerning the current tax bill. Mr. Simms noted that the actuarial issues are important to actuaries, but not to anyone else. He reviewed staff activities concerning the tax bill, which include contacting congressional staff members, contacting and coordinating with other organizations, preparing a letter to Senator Packwood, and preparing letters to all actuaries in Oregon encouraging them to write to Senator Packwood. An article will also appear in The Actuarial Update.

Mr. Brownlee discussed the status of the Multi-Employer Plan Data Sufficiency Task Force. This joint task force submitted its report to the Joint Board for the Enrollment of Actuaries in January, 1986. Mr. Brownlee then dismissed the task force. Mr. Brownlee noted that the report is not a standard, and should be referred to the standards writing bodies of each of the organizations. In particular, the Academy should refer this report to the IASB.

Mr. Simms discussed plans for the briefing on regulation and the legislative luncheon to be held on the following day. He noted that the scheduled attendance would make this the largest yet of the annual luncheons. The guest speaker is to be Representative Pete Stark of California.

12. NAIC and State Issues

Mr. Ohman reported that the Committee on Liaison with NAIC, which he chairs, had recently covered the NAIC San Francisco meeting.

Mr. MacGinnitie reported on the health valuation standards exposure. E. Paul Barnhart, chairperson of the Committee on Health and of the Subcommittee

1985-1986 MINUTES

on Liaison with NAIC Accident and Health (B) Committee, plans to ask the NAIC for a further extension of six months on this issue. Mr. MacGinnitie also noted that it has been suggested that this issue be referred to the IASB. Mr. Ohman stated that the Academy has performed an important role by exposing this issue, since the responses clearly indicate that a controversy exists.

Mr. MacGinnitie then reported on casualty loss reserve opinions. The NAIC has put this issue off until its June meeting. A list of states requiring such opinions, provided by the NAIC office, will be published in The Actuarial Update soon. It was noted that this list includes only states requiring opinions for the property and liability convention blank, and does not include states which require opinions for captives or self-insured programs. Mr. Scheibl will write a letter to the editor of The Actuarial Update to add states requiring such opinions.

The importance of forming a strategy with regard to state activities was mentioned. This has become even more important since the Government Relations Committee was discharged.

13. Publications

The proposal to modify the Yearbook production schedule will be postponed for a year at the request of the Society of Actuaries office, because of extra demands which are expected this year with the possible implementation of the flexible education system. The Journal will be printed this month and will be mailed with the April mailing of The Actuarial Update. A proposal made by Mr. Friend to add technical articles to the Enrolled Actuaries Report will be referred to the Committee on Publications. Mr. Bassett has made a suggestion concerning a magazine to represent the entire actuarial profession. The Society of Actuaries is considering a new publication, which may have some bearing on this proposal. Mr. Bassett and Mr. Parker will attend an upcoming meeting on the Society of Actuaries committee involved in this task.

14. Public Relations

Mr. Parker passed around a sample from his clips file. He noted that the article on Mr. Munson was not done by the Academy staff, but was very good. A recent radio spot was heard by 22.5 million people.

Mr. Munson reported on the Joint Committee on Public Relations. The committee has submitted a report to the Council of Presidents, which will be discussed at the Council's June meeting.

15. Relations with Accountants

Mr. Munson reported on a January meeting with the Financial Accounting Standards Board. Shortly after this meeting, an article appeared quoting an FASB board member as saying, "CPA's no longer need defer to actuaries." The accuracy of this will be checked with FASB, and a letter from Mr. Friend will appear in a future issue of The Actuarial Update.

1985-1986 MINUTES

The Academy has provided seven names to the FASB for a joint task force meeting. Mr. Brownlee will follow up on this and will report back to the Executive Committee in May.

The errors in the Pension Actuarial Cost Method Analysis have been corrected and communicated to purchasers of the analysis. The money spent by the Academy in correcting the error and communicating it will be reimbursed by the consulting firm which prepared the analysis.

16. Joint Activities

The American Society of Pension Actuaries has proposed periodic meetings with the Internal Revenue Service. These meetings would include representatives of the American Academy of Actuaries and the Conference of Actuaries in Public Practice. Both the Academy and the Conference have agreed to participate.

Mr. Munson referenced a letter which had been received from the British Institute of Actuaries thanking the Academy for the gift which had been presented for their 1985 Biennial Dinner.

17. Committee on Discipline

Mr. Simms led a discussion of a report from the Committee on Discipline which had been distributed. It was agreed that an article for The Actuarial Update should be prepared summarizing the committee's activities.

18. Liability Insurance

Mr. MacGinnitie reported that a joint committee on liability coverage for actuaries has met, but found no market available. Some companies were represented at the meeting, but had little to show. This committee will be updating a survey which the Conference of Actuaries in Public Practice did some time ago. This survey should be available in the middle of this year.

A memorandum by Mr. Simms concerning the Academy's liability insurance had previously been distributed to the Board. No action is recommended for the current time, but the limit of liability should be reviewed when the policy is renewed. This was referred to the Budget and Finance Committee.

A reference was made to a cover article in Time magazine on the general liability insurance situation. Mr. MacGinnitie will follow up on this with the Committee on Property and Liability Insurance.

19. Operation Contact

A list of meetings of actuarial clubs has been distributed. Mr. Munson will be making presentations at as many of these club meetings as possible.

20. Meetings

The 1986 Enrolled Actuaries Meeting was considered a success. The committee in charge of the meeting will report to the Executive Committee

1985-1986 MINUTES

in May and to the Board in June. The steering committee for the 1989 anniversary meeting was to meet on the following day.

21. Future Board and Executive Committee Meetings

A revised list of meetings, dates and places had been distributed. This revised list incorporates three changes, which were noted. Mr. Munson suggested that the Board consider an activity for the day after the September meeting. Academy staff will follow up on this to see if there is any interest. The June Board meeting will be held in conjunction with an NAIC meeting. The Board will be invited to the traditional Monday morning briefing session for Academy members in attendance at the NAIC meeting. This briefing session will be held between 7:45 a.m. and 9:00 a.m. The Board meeting will then begin at 9:15 a.m. There will not be a reception for the Board on Sunday evening, as that is the time of the main NAIC reception. The Academy will host a reception on Monday evening, however, and will invite certain NAIC members.

22. Other Reports and Business

There were none.

23. Adjournment

Mr. Munson adjourned the meeting at 4:45 p.m.

Respectfully submitted,

(signed)

Robert H. Dobson
Secretary
May 5, 1986, amended
October 7, 1986

1985-1986 MINUTES

MINUTES
BOARD OF DIRECTORS
Minutes of Meeting Held on
June 9, 1986

A meeting of the Board of Directors of the American Academy of Actuaries was held in Boston, Massachusetts, at the Marriott Copley Place on June 9, 1986. The meeting was called to order by President Munson at 9:30 a.m.

Present for all or part of the meeting were the following Board members: Daphne D. Bartlett, Preston C. Bassett, Linda L. Bell, James F. A. Biggs, Harold J. Brownlee, A. Norman Crowder, III, Robert H. Dobson, Elisabeth T. Erbe, Wayne H. Fisher, Edward H. Friend, M. Stanley Hughey, Burton D. Jay, Norman S. Losk, W. James MacGinnitie, Thomas M. Malloy, Daniel J. McCarthy, Bartley L. Munson, Stewart G. Nagler, Carl R. Ohman, Leroy B. Parks, Jr., Jay C. Ripps, Jerome A. Scheibl, Richard H. Snader and Benjamin R. Whiteley.

Also present for the meeting were the following individuals who were not members of the Board: John A. Fibiger, Willard A. Hartman, Harold G. Ingraham, Jr., Stephen G. Kellison, Erich Parker, Richard S. Robertson, Cynthia A. Sharp, Gary D. Simms and Jack M. Turnquist.

The following members were not present: Robert A. Anker, Daniel J. Flaherty, Harper L. Garrett, Jr. and Virgil D. Wagner.

Mr. Munson welcomed Mr. Hartman and Mr. Turnquist representing the Conference of Actuaries in Public Practice, Mr. Ingraham and Mr. Robertson representing the Society of Actuaries, and Mr. Fibiger of the Interim Actuarial Standards Board.

1. Minutes

Minutes of the March 19, 1985 meeting of the Board of Directors were approved as amended. Minutes of the May 20, 1986 meeting of the Executive Committee were distributed for informational purposes.

2. Secretary

Upon motion duly made and seconded, reinstatements were approved for Samuel H. Cox, Jr. and Susan G. Raney. Mr. Dobson reported that 309 new members were admitted during 1985, with an average processing time from receipt of the application through the President's welcome letter of 2.78 months. He commented that the admission process is in good shape.

3. Treasurer

Mr. Jay reported on a meeting of the Budget and Finance Committee which had been held in May. The Audit Subcommittee of the Budget and Finance Committee met with a representative of Main Hurdman, the Academy's auditors. This meeting was held in Executive Session. Mr. Scheibl reported on this meeting.

1985-1986 MINUTES

He noted that the absence of a management letter in connection with this year's audit was not an oversight. He said that the Audit Subcommittee had been assured that the auditors had nothing to recommend. The main differences in the financial statements resulting from the audit concern handling of various rent concessions and rearrangement of some of the items concerning the pension actuarial cost method analysis. The Audit Subcommittee did ask the auditor for recommendations concerning an appropriate size of the fund balance to be maintained by the Academy. At some point, maintenance of a large fund balance could present tax problems, but it was the auditor's opinion that the balance could go higher than it currently is without creating any problems.

Mr. Jay then reviewed other items which had been discussed at the Budget and Finance Committee meeting. One item discussed was the preliminary budget for 1987. This will be considered further in the fall, but it appears that a dues increase may be necessary in order to budget for a break-even year. Other items discussed included reinvestment of a certificate of deposit due to mature in July, an expense report by function, and the guidelines for President and President-Elect expense reimbursement.

Another item discussed by the Budget and Finance Committee and then later by the Executive Committee concerned waiver of dues for full time students. Upon motion duly made and seconded, the Board authorized waiver of dues for full time students receiving no income for actuarial activities. Mr. Jay noted that he will initiate an investigation of the overall waiver of dues policy in relation to the Academy's constituent organizations.

Expense reimbursement for the Interim Actuarial Standards Board was discussed. This issue has not yet been resolved.

The financial statement for the first quarter of 1986 was distributed. The new estimates for the full year are slightly more favorable than the original estimates.

Upon motion duly made and seconded, the following waiver of dues for 1986 retirement and resignations were approved:

Waiver of Dues - Lloyd G. Anderson, Russell R. Jensen, Robert M. Remick, Robert P. Robinson, Dale R. Summer and Edmund J. Wassell.

Resignations - David Schwartz, Harry M. Church and Anthony J. Wittman.

Mr. Jay noted that a new procedure is being followed in relation to resignations. If the individual is over retirement age, a letter is automatically being sent to see if waiver of dues for retirement might be appropriate rather than resignation.

4. Standards of Practice

Mr. Munson referred the Board to a memorandum which had been distributed on this subject. Mr. Fibiger noted a need to develop a procedure to have a more consistent format among various standards of practice. The need for consistency also applies to some professional issues.

1985-1986 MINUTES

Mr. Fibiger also commented on a discussion by the Council of President concerning whether standards should be handled exclusively by the Academy or by an independent board. Clearly, the Academy Board should discuss this further.

Mr. Bassett reported that he is still involved in trying to get the standards issue resulting from the PBGC vs. Buck lawsuit referred to the IASB. Mr. Bassett has put the request in writing and is waiting for a reply.

5. Valuation Actuary

Mr. Jay pointed out that a revised version of the joint committee report had been distributed to the Board. Mr. Jay reported on conversations he had with a representative of the NAIC, who stated that guideline 14 has been approved and will be in the next version of the Examiner's Handbook. It appears that 1990 may be the earliest possible date for a new standard valuation law to go along with the valuation actuary concept, however.

6. Organizational Structure

Mr. Munson reported that significant work has been done by Academy staff on suggested changes to the committee structure. This resulted from work done in connection with the staff plan in the spring. The Executive Committee had scheduled a special meeting for the next day to discuss this issue. Similarly, the Executive Committee will be doing further work on the Board of Directors orientation kit.

7. Continuing Education Recognition

Mr. Bassett reported on the status of the joint task force considering enrolled actuaries. The task force has developed a format, but has not yet developed the pro's and con's to include in its final report.

Ms. Bartlett reported on the status of the Academy Task Force on Continuing Education Recognition. The task force is working hard and hopes to get a report including recommendations to the Executive Committee soon. Ms. Bartlett emphasized that the subject is recognition -- the Academy does not intend to provide education.

8. Relations With Accountants

Mr. Parker reported that the June issue of The Actuarial Update will contain the letter received from Donald J. Kirk of the Financial Accounting Standards Board, as well as a reply prepared by Mr. Friend. The Board discussed this issue and expressed concern about the possible damage to the relationship between accountants and actuaries.

A final financial report on the pension actuarial cost method analysis had been distributed. The project, which was very important, turned out well financially.

1985-1986 MINUTES

9. Federal Issues

Mr. MacGinnitie reported that the AIDS paper was strengthened by the comments received from Board members. Mr. Parker noted that a release concerning this paper has gone out to newspapers and radio stations. He has received some response from this. Also, an editorial has been written for the New York Times. All of this has been done in conjunction with Claire L. Wolkoff, chairperson of the Committee on Risk Classification. Mr. Munson noted that the Board will be updated as information on this topic emerges. He thanked the Board members who commented on the paper for their help.

Mr. Friend referred the Board to a memorandum prepared by Mr. Simms on the Senate Finance Committee tax reform proposal. There was brief discussion of this issue.

Mr. Brownlee reported that the multi-employer plan data sufficiency report has been turned over to the IASB.

10. NAIC Issues

Mr. Ohman reported on the briefing session which had been held prior to the Board Meeting. Several Board members attended this session. He then distributed a report from the Academy's Committee on Liaison with the NAIC, which he chairs.

Mr. Ohman then led a discussion of the health valuation standards exposure. He noted that the prior exposure had performed a valuable communication function. The revisions which resulted from this exposure had been given to the NAIC on the prior day. Since this is a proposed minimum valuation standard, it is not appropriate for the Academy to take a position for or against the standard itself. The Committee on Health Subcommittee on Liaison with the NAIC has performed its appropriate function of providing technical advice. Upon motion duly made and seconded, and based upon a request from the NAIC, the Board voted to re-expose the proposed health valuation standard. A clear cover letter is to be prepared indicating that this is being done upon the request of the NAIC and that the final document will be an NAIC, rather than an Academy, document.

Mr. MacGinnitie reported that casualty loss reserve opinions will be discussed at the NAIC meeting which was being held the same week as the Board meeting. No action was requested of the Board.

11. Staff Items

The first quarter 1986 staff report was distributed for information. Ms. Sharp reported on a recruitment mailing which had been made. The Executive Committee plans to review the list of individuals in constituent organizations who are eligible to be, but are not, members of the Academy. Ms. Sharp also presented an analysis of Academy vs. ASPA vs. EA membership. Mr. Brownlee suggested that this information be reported on in The Actuarial Update.

1985-1986 MINUTES

12. Publications

Mr. Bassett led a discussion of a proposed magazine for the actuarial profession. The Board moved to express its opinion that his is worth exploring further, and authorized the President to appoint representatives to a joint task force.

Mr. Parker reported that the 1985 Journal has been mailed. It now includes the annual staff plan, the auditors report, and minutes of the Board of Directors meetings.

13. Public Relations

Mr. Munson reported on the report of the Joint Committee on Public Relations. After some discussion, the Board moved to receive the report of the Joint Committee on Public Relations, to thank the committee, and to recommend that it be discharged with thanks. The Board further directed the President and President-Elect to report to the Council of Presidents that the Academy Board supports recommendations 1 and 4 and opposes recommendations 2 and 3.

Mr. Parker then reported on Academy public relations activities. A syndicated news story on AIDS written in conjunction with Ms. Wolkoff, has been sent to 2,500 small newspapers. Mr. Parker then distributed a sample from his clips file.

14. Legal Items

Mr. Simms led a discussion of a request which had been received for assistance in litigation. Upon motion duly made and seconded, the Board agreed to positively respond to this request. Specifically, the Pension Committee and Committee on Risk Classification, under the direction and with the assistance of legal counsel, will poll Academy membership to attempt to ascertain when defined benefit plans actually converted to unisex tables. Further, the Academy will consider the submission of an amicus curiae brief at a later point in litigation, concerning the retroactivity of unisex requirements.

Mr. Simms noted that a status report on relations with the legal profession had been distributed to the Board. He also mentioned that the notification concerning actuarial arbitration in The Actuarial Update had resulted in about 20 responses thus far.

15. Discipline Case

The Board met in executive session to discuss a specific discipline case. Mr. McCarthy excused himself from the proceedings. The executive session thus consisted of 23 members of the Board of Directors and the legal counsel. Upon motion duly made and seconded, the Board approved the Committee on Discipline recommended settlement with Jerome H. Vance. Several abstentions were noted. This settlement will include public reprimand to be published in The Actuarial Update.

1985-1986 MINUTES

16. Discipline

Mr. Simms reported that the Committee on Discipline is working on a handbook. He expects nothing from the Committee on Discipline which will require Board action within the next six months or so.

The Board then discussed a complaint against the Board of Directors which had been received from a member. Mr. Munson noted that he had responded in writing to this complaint on May 27. After a great deal of discussion of the subject and of the complaint raised by the individual member, Mr. Bassett agreed to meet with the member and Mr. Munson agreed to send a follow-up letter.

17. Liability Insurance

There was nothing new to report concerning coverage for the Academy. Mr. MacGinnitie is pursuing the possibility of some companies sharing the risk on the Academy coverage. It was noted that the Conference of Actuaries in Public Practice is now without coverage. The Board was referred to a memorandum on the subject prepared by Mr. Simms. Committee chairpersons and new Board members should also be made aware of this situation. Board members were encouraged to review their own employer's liability coverage to see if it would apply to their activities with the Academy.

18. Operation Contact

A status report on this subject had been distributed.

19. Meetings

Status reports on the 1987 joint health meeting and the 1986 Annual Meeting had been distributed to the Board. Mr. Hughey reported that the Steering Committee and the Program Committee for the 1989 Anniversary Meeting have been functioning. Plans are for a two and a half day meeting. Academy staff is providing support through 1986, and the Academy will be reimbursed for this after the fact. No commitment for funding has been made beyond 1986.

20. Future Board Meetings

The dates and places for future meetings have been distributed.

21. Other Reports or Business

Mr. Crowder reported that the Nominating Committee has completed work on developing a slate of candidates for the officer positions. The committee is not quite done with the candidates for director.

1985-1986 MINUTES

22. Adjournment

Mr. Munson adjourned the meeting at 5:15 p.m.

Respectfully submitted,

(signed)

Robert H. Dobson
Secretary
July 16, 1986, amended August 26, 1986

1985-1986 MINUTES

MINUTES
BOARD OF DIRECTORS
Minutes of Meeting Held on
September 5, 1986

A meeting of the Board of Directors of the American Academy of Actuaries was held in Nashville, Tennessee, at the Opryland Hotel on September 5, 1986. The meeting was called to order by President Munson at 8:30 a.m.

Present for all or part of the meeting were the following Board members: Robert A. Anker, Daphne D. Bartlett, Preston C. Bassett, James F.A. Biggs, Harold J. Brownlee, Robert H. Dobson, Elsbeth T. Erbe, Daniel J. Flaherty, Edward H. Friend, Harper L. Garrett, Jr., M. Stanley Hughey, Burton D. Jay, Norman S. Losk, W. James MacGinnitie, Thomas M. Malloy, Daniel J. McCarthy, Bartley L. Munson, Carl R. Ohman, Leroy B. Parks, Jr., Jerome A. Scheibl, Richard H. Snader and Virgil D. Wagner.

Also present for the meeting were the following individuals who were not members of the Board: Darrel J. Croot, John A. Fibiger, Myles M. Gray, Willard A. Hartman, Harold G. Ingraham, Jr., Stephen G. Kellison, Roger N. Marietti, Erich Parker, Richard S. Robertson, Cynthia A. Sharp, Gary D. Simms and Jack M. Turnquist.

The following members were not present: Linda L. Bell, A. Norman Crowder, III, Wayne H. Fisher, Stewart G. Nagler, Jay C. Ripp and Benjamin R. Whiteley.

Mr. Munson welcomed Mr. Hartman and Mr. Turnquist representing the Conference of Actuaries in Public Practice and Mr. Ingraham and Mr. Robertson representing the Society of Actuaries. He noted that representatives of the Casualty Actuarial Society were unable to be in attendance.

1. Nominating Committee Report

After receiving the slate of officers recommended by the Nominating Committee, Mr. Bassett asked that the Board of Directors go into executive session. At this point all of the attendees who were not members of the Board of Directors left, as well as three Board of Directors members who were nominated for officership positions, namely Mr. Dobson, Mr. Jay and Mr. McCarthy. Upon reconvening, Mr. Bassett announced that the following individuals had been elected as officers of the Academy for the 1986/87 year:

John A. Fibiger	President-Elect
Burton D. Jay	Vice President
Mavis A. Walters	Vice President
Robert H. Dobson	Secretary
Daniel J. McCarthy	Treasurer

The Nominating Committee report identified the following six individuals as nominees for three year terms on the Board of Directors to be placed in nomination at the Annual Meeting of the Academy: Allan D. Affleck, Darrel J. Croot, Charles E. Farr, David P. Flynn, Harry D. Garber and Carlton W.

1985-1986 MINUTES

Honebein. In addition, Myles M. Gray was recommended as the nominee for a one year term, replacing Daniel J. McCarthy, who was elected Treasurer. Mr. Munson welcomed the two prospective Board members who were in attendance at the meeting.

2. Minutes

Upon motion duly made and seconded, the minutes for the June 9, 1986 Board of Directors meeting were approved. The June 10, 1986 and August 11 and 12, 1986 Executive Committee minutes were distributed for informational purposes.

3. Secretary

Upon motion duly made and seconded, the action of the Admissions Committee for reinstatement of the following individuals was affirmed: Gerald S. Kopel and Lawrence Williams.

Ms. Sharp presented an analysis of the recruitment mailing. Mr. Munson informed the board that certain members of the Executive Committee were to follow up with some of the employers of non-member actuaries. This will be discussed at the next Executive Committee meeting.

4. Treasurer

Mr. Jay presented the second quarter 1986 Treasurer's report. Several specific items were discussed. Income had exceeded budgeted levels while expenses were running below budget. Mr. Jay pointed out that the current estimate for the year is probably conservative.

Ms. Sharp reported that 900 out of 1200 square feet of office space available for sublease have in fact been rented.

Mr. Jay and Mr. McCarthy then reviewed the various items which had been discussed at the prior day's Budget and Finance Committee meeting. The most important of these items was the recommendation for dues for 1987. The Budget and Finance Committee recommended an increase from the current \$135 to \$165, with the possibility that this increase might suffice for three years. A motion was made and seconded to approve the recommendation of the Budget and Finance Committee. After some discussion of this issue, an amendment was made and seconded that the dues increase be \$20 rather than \$30 as originally stated. Following extensive discussion, this amendment was defeated by a vote of 11 to 10. At this point, an amendment was made and seconded that the dues increase be \$25. This amendment was passed. The amended motion was then passed with one dissenting vote noted.

Another item which had been discussed by the Budget and Finance Committee included the waiver of dues for full-time students. The member's status as of January 1 each year will determine whether the waiver is granted. The possibility of amending the bylaws to give the Board power to set policy with regard to all dues waivers was discussed. Mr. Simms is to report back to the Board on this subject at its December meeting.

1985-1986 MINUTES

The Budget and Finance Committee had also reviewed the current cash flow. The certificate of deposit which had matured will be reinvested.

Upon motion duly made and seconded, the resignation of Allan H. Miller was approved. Mr. Jay reported that this individual had no pending disciplinary charges.

5. Staff Options Paper on Committees

Mr. Kellison presented the staff options paper on committees. He pointed out that the paper was the result of a great deal of discussion by the Executive Committee. No action was required, but any comments were welcomed. Mr. Bassett mentioned that the overall result was increased responsibility for the Vice Presidents and other officers relating to committees. The goal is to get the officers much more involved with committees. One of the means of accomplishing this will be quarterly committee reports. Further, all committee chairpersons will be invited to the March Board meeting. Mr. Munson complimented the staff for the development of this paper and mentioned that the hardest part will be implementing the changes.

6. Committee Planning Process

Not many of the committee reports had been received. Officers were alerted to follow up on this. Officers were also asked to put together summaries of committee plans and to consider what the major issues of the coming year will be. A proposed committee progress report form had been distributed to the Board. It was suggested that the form ask that any recent correspondence or minutes from meetings be attached.

7. Committee Staffing

Mr. Bassett reported that a more aggressive approach was followed this year. In particular, the guideline on three year maximum committee membership is being enforced, though no more than one third of a committee would be rolled over as a result of enforcing this guideline. Also, committee sizes will be increased where necessary to accommodate as many of the volunteers as possible. A total of 94 volunteers were received from the article in The Actuarial Update. Those who are not chosen for committee service this year should at least be contacted.

8. Committee Chairpersons Manual

Mr. Kellison mentioned that committee membership will be rotating on September 24th this year. Therefore, anyone with comments on the committee chairpersons manual should get them to him within a week or so, so that he can have the manuals ready soon after the 24th. Mr. Biggs suggested an additional section concerning guidelines for making public statements. Mr. Munson responded that the guidelines were in the process of being reviewed. Significant changes are expected to result. In spite of this, the staff was advised to consider what can be put in the manual concerning public statements.

1985-1986 MINUTES

9. Board of Directors Orientation Kit

Mr. Kellison presented the Board of Directors orientation kit. He asked that any comments be directed to him as soon as possible. Ms. Bartlett suggested that a section about expectations from a Board member, presented in a less formal way than the duties of the Board member in the current draft, be added. Mr. Munson stated that this was a good idea, but that it may be too late to incorporate in this year's version of the kit.

10. Miscellaneous Committee Issues

Mr. Munson welcomed Mr. Marietti to the meeting. Mr. Marietti presented a report from the Joint Program Committee for Enrolled Actuaries Meeting. This report was well received by the Board. Mr. Munson asked Mr. Marietti to carry our support back to the committee and noted that this was a particularly hard-working committee.

Mr. MacGinnitie reported on a request which had been received from the Committee on Property and Liability Insurance to replace the word "insurance" in its title with the word "issues". This change and corresponding changes in the committee charge were recommended by the Executive Committee. Upon motion duly made and seconded, the changes were approved by the Board.

Mr. Dobson reported on the discharging of the Task Force on Taxation of Employee Benefit Plans. The Board added its thanks to the task force to those already received from the Executive Committee.

Mr. MacGinnitie then reported on an Executive Committee recommendation to make the Committee on Health Subcommittee on Health and Welfare Plans a full committee. Upon motion duly made and seconded, this change was approved. Mr. Friend noted that the new committee would be moved to report to a different Vice President and that the Vice President's section title would be changed in the Yearbook consistent with this.

Mr. Ohman reported on an Executive Committee recommendation to discharge the Special Committee on Pension Qualifications. This motion was seconded and approved and the committee was discharged with thanks.

11. Planning

Mr. Bassett reported that the Committee on Planning report has just been received and will be distributed. Wilbur H. Odell will be the new chairperson of this committee. The committee charge is also being changed to accommodate a more practical direction for the committee. In terms of short range plans, Mr. Bassett's article for The Actuarial Update described his plans for the coming year. Mr. Ingraham suggested that the activities of the Committee on Planning should be coordinated with the Society of Actuaries Planning Committee, especially with regard to the survey which they performed.

1985-1986 MINUTES

12. Government Relations

Mr. Munson reported that the Executive Committee has been considering the entire government relations program. Mr. Simms mentioned that this review received extensive discussion at the Executive Committee meeting, and was well characterized in the minutes of that meeting. Mr. Simms further reported that staff is interested in obtaining a computerized information system, but that word search capabilities have not yet been perfected. Staff intends to keep looking for such a system. The special service reports which had been discussed at a prior meeting will be starting within the next couple of months. The Board expressed some caution concerning this project, and emphasized that the actuarial aspects of the various proposals, regulations, and laws should be stressed.

Mr. Kellison then brought up the subject of special purpose actuarial opinions. He noted that this issue has been around a while, but that the Academy does not have the resources to handle it completely, important though it is. Mr. Munson reported that Mr. Friend had volunteered to help with the state government relations program. He has met with Mr. Simms and Christine E. Nickerson to discuss this subject. Mr. Friend commented that he considered this a very important area.

13. Federal Issues

Mr. Simms reported on five key issues in the Tax Reform Bill. First, the penalty tax on overfunding pension plans is still in the bill. Although this penalty will apparently be levied on the plan rather than on the actuary, it is still considered very negative. Second, book income is defined to include pension expense as defined in Financial Accounting Standard 87. Third, the rules for integration with social security have been changed considerably. Fourth, there are extensive non-discrimination provisions for retirement and other employee benefit plans. Finally, there is additional regulation of retiree health and welfare plans. He noted that the Academy is more proactive on this last issue than has been the practice in the past. A question was raised concerning the definition of actuary in relation to risk retention.

Mr. Bassett reported on third party certifications. Mr. Hartman referred the Board to the material which had been distributed on this subject. No one has yet contacted the Joint Board for the Enrollment of Actuaries about this.

Mr. Losk reported on an issue which had emerged from the regular meetings being held between the IRS and the American Society of Pension Actuaries and the Academy. This issue concerns master/prototype plans. It would be best if the profession could come up with an appropriate prototype, though it might be difficult.

14. NAIC and State Issues

Mr. MacGinnitie reported that a few additional comments have been received on the second exposure of the proposed health valuation standard. He further reported that the casualty loss reserve opinion issue had not been pushed at the June NAIC meeting.

1985-1986 MINUTES

Mr. Simms reported that the California requirement for independence was an emerging issue among the insurance industry. He mentioned that this is a good example of a state issue that the Academy should get involved in, because it affects anybody doing business in California. This may raise an issue concerning independence of valuation actuaries.

Mr. Munson reported that the NAIC Legal Liability Task Force has been staffing an industry advisory committee. Albert J. Beer, chairperson of the Committee on Property and Liability Issues, attended the first meeting of this advisory committee. He will continue to serve on the advisory committee if it does not turn into too big a task. The Casualty Actuarial Society has agreed with this appointment.

15. Valuation Actuary

No update had been prepared to the June report. Mr. Fibiger noted that the ACLI Board was voting that morning on the joint task force recommendations. Mr. Munson reported that Mr. Kellison will make brief remarks at the Valuation Actuary Symposium to be held in Washington, DC. Stephen R. Radcliffe invited Mr. Kellison to appear.

16. Standards of Practice

Mr. Fibiger reported on the July meeting of the IASB. Mr. Munson reported that the Standards Operating Committee had not had anything to do, since the IASB has not yet developed procedures for the SOC to evaluate. This will change soon, however.

Mr. Fibiger reported that an IASB subcommittee is drafting a proposed standard related to the PBGC vs. Buck lawsuit, but that this will be released to another party who will then publish it.

Mr. Munson reported that the IASB Nominating Committee has nominated Ronald L. Bornhuetter for chairperson of the IASB to replace Mr. Fibiger. This move is necessitated by Mr. Fibiger being elected President-Elect of the Academy. Upon motion duly made and seconded, the Board unanimously approved this nomination.

17. Liability Insurance

There was discussion of coverage alternatives for the Academy. Since it may take as many as eight more weeks to obtain a quotation from CNA, staff was directed to obtain the coverage which was offered by Chubb. The lack of anti-trust coverage presents a problem, however. Mr. Robertson mentioned that the Society of Actuaries is obtaining coverage from CNA similar to what they had before, but with higher rates.

Mr. MacGinnitie asked Mr. Simms to report on a survey concerning coverage for actuarial firms. Mr. Simms noted that 46% of those surveyed had responded. Of those that responded, 51.8% said they had no coverage currently. Over two thirds of the respondents were interested in some sort of coverage being made available through the profession. It had been agreed to move forward with this joint project. Tillinghast/TPF&C will be engaged to

1985-1986 MINUTES

do a search for available coverages. A final report will then be made to the Council of Presidents.

18. Continuing Education Recognition

Mr. Bassett reported on the joint task force considering continuing education recognition for Enrolled Actuaries. The task force anticipates the report will go to Leslie S. Shapiro prior to the end of the year. A report has been drafted except for the conclusion. Alternatives will be presented with various pros and cons.

Ms. Bartlett then reported on the status of the Academy task force. She had prepared a draft which she hoped represented the consensus of the task force. The task force plans to have a report to the Executive Committee within a couple of months. The task force charge was to develop a conceptual structure for a continuing education recognition program. Mr. Snader reported that the Casualty Actuarial Society has decided not to activate a program at the current time, but will be interested in the conclusions reached by the Academy. He urged the Academy not to adopt something that would force casualty actuaries to comply. Mr. Ingraham reported that no continuing education recognition is planned within the Society of Actuaries. It was noted that the Academy role is different than either of the learned societies, and that recognition is more important.

19. Relation with Accountants

Mr. Garrett reported that most of the activities with accountants have recently been related to Financial Accounting Standards 87 and 88. A subcommittee of three actuaries and three auditors had been formed and had held four meetings. Most of the work has been devoted to a standard confirmation letter from actuaries to auditors. This is possible for fairly standard cases under FAS 87. FAS 88 deals with terminations, however, so it cannot be completely standardized. The FASB staff is working on a set of questions and answers regarding FAS 87 and 88. A standard of practice was planned to be presented to the IASB in October. Thomas D. Levy chairs the Pension Committee of the IASB which is drafting the standard. Ms. Erbe commended this committee for their work. The Board will be asked in December to approve whatever standard is approved by the IASB in October.

The Government Accounting Standards Board will be addressing the same issues. This will represent the major thrust of the committee work over the next year or two. Mr. Fibiger pointed out that the GASB is not necessarily consistent with the FASB in the handling of issues.

Mr. Kellison reported that there are also some insurance accounting issues currently being discussed by the Financial Accounting Standards Board, notably accounting for universal life. The FASB disagrees with the Academy Committee on Life Insurance Financial Reporting and with the AICPA Insurance Committee. FASB is expected to issue an exposure draft soon. The Academy will comment on this draft.

More is expected to be coming from FASB regarding other benefits. The newly established full Committee on Health and Welfare Plans made a presentation to FASB and staff. The follow-up from this presentation has

1985-1986 MINUTES

been very helpful. Mr. Fibiger noted that a special advisory committee to FASB is being formed on this and asked for recommended names to serve on this committee.

Mr. Kellison noted that dealings with the AICPA and with FASB were two entirely different matters. Mr. Munson thanked Mr. Garrett, Mr. Levy, and others involved in this effort.

Mr. MacGinnitie noted that the discounting of casualty loss reserves is emerging as an issue again. This will be up to Stephen P. Lowe, who chairs the Property and Liability Insurance Financial Reporting Committee. Mr. Robertson pointed out that life people are also interested in the subject of discounting of reserves.

20. Staff Items

Mr. Kellison referred the Board to the second quarter staff report which was included in the packet which had been mailed. He pointed out that he would be happy to answer any questions.

A new portable exhibit was on display in the room. Mr. Parker pointed out that this will be used at the Annual Meeting and the Society of Actuaries Annual Meeting. The colors can be alternated and the copy can be changed. He noted that this was a deliverable mentioned in the staff plan for September. Mr. Parker asked for volunteers to participate in showing the exhibit at the Society of Actuaries meeting.

Mr. Munson reported that part of the fall process was performance and salary reviews for staff. Any Board members with comments are welcome to give them to Mr. Bassett and Mr. Munson.

21. Publications

Mr. Bassett noted there is nothing to report on the actuarial magazine at this time. Mr. Brownlee and Mr. Ohman have been named to a joint task force on this subject.

Mr. Parker reported that the EAR now has a full roster of associate editors.

22. Public Relations

Mr. Parker handed out copies from the clips book and a release on AIDS. He also handed out a radio script, which has been picked up by 301 stations in over 40 states. This translates to some 17.5 million listeners.

23. Discipline

The Board had received a semi-annual report from the Committee on Discipline. Some questions concerning this report were answered by Mr. Simms. Mr. Munson reported that it was his impression from his outreach to actuarial clubs that the membership seems to be supportive of a stronger stand on issues which are not directly actuarial. Mr. Simms noted that the discipline handbook should be available in the near future.

1985-1986 MINUTES

24. Legal Items

Mr. Simms reported that the request for assistance in litigation involved two cases. The case in Florida is under appeal, which has been expedited making it too late for the Academy to participate. The survey is still pending with the Pension Committee.

Mr. Simms further reported that the office had been flooded with volunteers for actuarial arbitration.

25. Operation Contact

This subject was not discussed.

26. Relations with ASPA

This subject was not discussed.

27. Meetings

Mr. Munson reported that the Executive Committee will be on the program at the Annual Meeting. Mr. Munson thanked the Conference of Actuaries in Public Practice for their cooperation concerning this meeting.

28. Future Board and Executive Committee Meetings

The dates and places for these meetings had been distributed.

29. History of the Academy

This document had been distributed to the Board for information.

30. Other Reports or Business

There were none.

31. Adjournment

Mr. Munson adjourned the meeting at 4:40 p.m. The Board applauded Mr. Munson upon completion of his Presidency.

Respectfully submitted,

(signed)

Robert H. Dobson
Secretary
October 7, 1986

1985 FINANCIAL STATEMENTS

1985 FINANCIAL STATEMENT

The following Balance Sheet and Statement of
Revenue and Expense for the period ending
12/31/85 are excerpts from the
audited financial statement.

1985 FINANCIAL STATEMENTS

AMERICAN ACADEMY OF ACTUARIES BALANCE SHEET December 31, 1985

<u>ASSETS</u>	<u>Total</u>
Current assets:	
Cash	\$ 125,059
Certificates of deposit	119,369
Money market funds	461,763
Accounts receivable	43,597
Accrued interest receivable	23,607
Due from (to) other funds	
Due from Casualty Actuarial Society	5,570
Prepaid Expenses	43,375
Deferred expenses	
Deposit	<u>3,500</u>
Total current assets	825,840
Certificates of deposit - long-term	498,568
Furniture, equipment and leasehold improvements (net of accumulated depreciation and amortization of \$72,052 and \$65,800)	<u>78,064</u>
	<u>\$ 1,402,472</u>
<u>LIABILITIES AND FUND BALANCES</u>	
Current liabilities:	
Accounts payable	\$ 137,432
Deferred membership dues revenue	328,170
Deferred rent credit	16,745
Deferred meeting revenue	115,722
Due to Conference of Actuaries in Public Practice	3,616
Due to Casualty Actuarial Society	1,536
Accrued expenses	<u>3,750</u>
Total current liabilities	606,971
Deferred rent credit - long-term	27,707
Fund balances	<u>767,794</u>
	<u>\$1,402,472</u>

1985 FINANCIAL STATEMENTS

AMERICAN ACADEMY OF ACTUARIES STATEMENT OF REVENUE AND EXPENSES Years Ended December 31, 1985

Revenue:	Total
Membership dues	\$ 977,265
Meeting registration fees	389,868
Exhibitors	20,950
Membership application fees	9,100
Interest	116,541
Administrative services	
Enrolled Actuaries Fund	#
Casualty Loss Reserve Seminar	#
Casualty Actuarial Society meetings	12,256
Enrolled Actuaries meeting distribution	#
Casualty Loss Reserve seminar distribution	#
Sales of FASB Study (net)	10,728
Recoveries on FASB Study	15,400
Other	27,037
	<u>1,579,145</u>
Expenses	<u>1,446,976</u>
Excess of revenues over expenses	\$ <u>132,169</u>

Eliminated in consolidation

1985 FINANCIAL STATEMENTS

AMERICAN ACADEMY OF ACTUARIES STATEMENT OF EXPENSES Year End December 31, 1985

Salaries	\$ 420,145
Employee insurance	22,639
Payroll taxes	29,884
Retirement plan	50,697
Temporary help and personnel fees	27,783
Rent	79,005
Telephone	13,375
Postage and freight	52,531
Travel and related expenses	56,949
Legislative luncheon	5,590
Committee meetings	27,035
President and President-elect travel	24,070
FASB study	17,100
General office supplies and equipment rental	33,931
Relocation of office	8,557
Printing	167,322
Personnel development	1,833
Service agreement	51,352
Audit and accounting	9,800
Insurance	6,719
Depreciation and amortization	19,697
Subscriptions and periodicals	6,230
Loss on disposal furniture and leasehold improvements	1,197
Public information consulting	11,371
Hotel services	144,581
Administrative services	#
Speakers	17,207
Exhibitors	13,473
Printing, postage and meeting materials	37,673
Registration processing	10,045
Promotion	4,997
Transcripts and recording	41,275
Other	5,968
Distribution of net revenue	
American Academy of Actuaries	#
Conference of Actuaries in Public Practice	25,409
Casualty Actuarial Society	1,536
	<u>\$ 1,446,976</u>

Eliminated in consolidation

1986 STAFF PROGRAM PLAN

AMERICAN ACADEMY OF ACTUARIES CALENDAR YEAR 1986 STAFF PROGRAM PLAN ANNUAL REPORT DECEMBER 31, 1986

1.0 INTRODUCTION

This report presents summary statements and accompanying milestone charts for the major accomplishments of Academy staff during calendar year 1986. Ongoing as well as anticipated and unanticipated significant activity is reported. Program elements are numbered to correspond with the numbering system of the 1986 Staff Program Plan. For quick reference, program elements that are highlighted with an asterisk indicate that a material change of some sort has occurred over what appeared in the staff program plan.

2.0 1986 PROGRAM ELEMENTS

The Academy's many and varied major activities fall under the general categories: Internal Communications (Section 2.1), External Communications (Section 2.2), Government Relations (Section 2.3), Legal Counsel (Section 2.4), Financial Management (Section 2.5), Membership Systems Administration (Section 2.6), General Administration (Section 2.7), Convention Management (Section 2.8), and Actuarial Standards (Section 2.9). They appear below.

2.1 Internal Communications

(1) Committee coordination and counsel by senior Academy staff is an ongoing function designed to assist committees in the fulfillment of their charges. At the beginning of the year, staff assisted in the establishment of committee agendas and monitored progress throughout the remainder of the year. Staff submitted a major options paper to the Executive Committee on committee staffing, governance, and planning, which formed the basis of discussions at several meetings of that committee. The Committee Chairperson's Manual was updated and redistributed.

* (2) During the year intra-profession liaison activities included attendance at Council of Presidents meetings; placement of speakers at seminars and meetings hosted by the Academy's founding organizations; the design, construction, and display of an Academy exhibit booth at select actuarial meetings nationwide; and public relations staff support provided to both the Casualty Actuarial Society and the Conference of Actuaries in Public Practice. In addition, staff expanded normal intra-professional liaison by speaking before a September meeting of the National Fraternal Congress.

(3) In excess of sixty-five percent of the nation's actuarial clubs heard presentations by the Academy's president or senior staff as part of Operation Contact.

(4) The Actuarial Update was published monthly throughout the year. The December issue included a Special Subject Supplement summarizing 1985-86 Academy year committee reports.

1986 STAFF PROGRAM PLAN

(5) The **Government Relations Watch** (GRW) was produced each month as scheduled. In response to a reader's suggestion, its format was slightly modified; changes from the preceding month's report are now highlighted in bold. The January and August editions included a special state supplement.

(6) The **Enrolled Actuaries Report** was published five times, as scheduled. During the year, four new associate editors were added to the masthead.

(7) The **1986 Yearbook** was published and distributed in January, as scheduled. For the first time, it appeared in an 8 1/2" x 11" format and incorporated the directory of members by business affiliation and a new section subdividing the membership by geographic location.

(8) The **1985 Journal**, a formal record of the Academy's official statements of the past year, was published and distributed during the first quarter, as scheduled. It included three new sections; annual staff plan, audited financial statements, and minutes of Board of Directors meetings.

(9) The **Issues Digest**, published in conjunction with the annual Washington Luncheon, was well-received by our outside audiences.

(10) The **Actuarial Calendar**, showing the dates and locations of actuarial and other related meetings, was updated and distributed to the Council of Presidents after each of its quarterly meetings. In addition, the decision was made to distribute each new calendar to the Academy Board of Directors in a separate mailing. The calendar's format was changed somewhat during the year in response to suggestions from the COP.

(11) **Official Academy pronouncements**, other than standards, during the year included: "Discussion Draft: NAIC Reserve Standards for Individual and Group Health Insurance Contracts" and "An Actuary's Guide to Compliance with Statement 87 of Financial Accounting Standards Board."

(12) The **Board of Directors Orientation Kit** was completed as scheduled, but distribution was delayed until October due to the addition of several items suggested by members of the Executive Committee and the Board of Directors.

(13) Academy leadership approved a staff proposal to initiate **special service reports** on January 1, 1987. Planning for the new membership service, which will alert subscribers to regulatory and legislative developments, was carried out during the fall. At this writing, our pre-publishing subscription roster includes more than 500 Academy members.

* (14) During the year, considerable staff support was provided to a joint task force considering the need and requirements for the publication of a profession-sponsored **actuarial magazine**.

1986 STAFF PROGRAM PLAN

2.2 External Communications

(1) The **general news campaign**, an issue-oriented, ongoing activity that encompasses the filing of news releases and features as well as the placement of news items in both the print and broadcast media, yielded stories on a variety of topics (AIDS and CCRCs, for example) in such news outlets as The New York Times, The Cleveland Plan Dealer, Miami News, The Des Moines Register, The Boston Globe, Best's Review, BNA Pension Reporter, National Underwriter, Employee Benefit Plan Review, the UPI and AP wires, national radio news syndicates RKO, NPR, and Mutual Radio News, as well as a number of talk-radio stations nationwide.

(2) As new members were admitted to the Academy throughout the year, **new member news releases** announcing the members' acceptance into the organization were prepared and distributed to their local newspapers.

(3) Three **syndicated news stories** entitled "AIDS May Affect Insurance Rates," "First Actuary Gets Mad and Gets Even," and "News for Senior Citizens" were written and distributed to 3,800 small daily and suburban weekly newspapers nationwide. Actual news clippings in hand indicate that each story was run by at least 400 newspapers.

(4) Three **radio spots** entitled "Test Yourself," "AIDS and Insurance," and "Beware of False Retirement Housing Promises," were prepared by staff and broadcast by, on average, 300 radio stations each.

(5) A story on Continuing Care Retirement Communities was distributed to several national periodicals for consideration as an unsolicited manuscript **magazine feature**. A commitment from Consumer Research was received to run the article as a feature story in a future edition.

(6) **Public relations networking**, an ongoing activity, continued. During this year, contacts were strengthened within the communications division of the National Association of Life Underwriters, the American Society of Association Executives, and press secretaries to a number of members of Congress.

2.3 Government Relations

(1) **Legislative monitoring**, the daily review of source documents and attendance at select Congressional hearings, resulted in the referral of a number of issues to Academy committees for comment. This work resulted in the submission of 16 statements on legislative issues by Academy representatives, as several issues (e.g. tax reform) resulted in the submission of multiple sets of comments.

(2) **Regulatory monitoring**, an ongoing function much like legislative monitoring, except in the regulatory arena, resulted in the referral of 20 specific matters to Academy committees. Eleven statements on regulatory issues were issued as a result of this activity, and several were pending as of the end of the year.

1986 STAFF PROGRAM PLAN

(3) The State Government Relations Program underwent extensive scrutiny and discussion by the Academy's leadership during 1986. It will continue to be a matter of thorough review during 1987. Staff activities during the year resulted in the issuance of four statements by Academy committees concerning issues of concern at the state level. A major focus for staff was support of the Committee on Continuing Care Retirement Communities. Other activities included support for the Committee on Risk Classification related to the issue of AIDS and insurance underwriting. Special purpose actuarial opinions were, again, a matter of interest and growing concern, and staff continued to compile a registry of such opinions. Mailings to state regulators and officials concerning Academy activities were undertaken as planned.

(4) Liaison with the NAIC, a critical component to the State Government Relations Program, continued to require significant staff support during 1986. Regular briefing sessions were conducted by staff at every major NAIC meeting. Moreover, staff initiated a "welcome wagon" program to new commissioners, advising them of the existence of the Academy and offering help on issues of actuarial significance. Staff was also involved in two NAIC-sponsored new commissioner training programs. A highlight of 1986 was a special Academy reception for members of the NAIC, held in conjunction with an Academy Board of Directors and a June NAIC meeting. The significance of NAIC activities can be measured by the fact that Academy committees submitted 12 statements to the NAIC during 1986.

(5) The search into computerized research information systems as a potential Academy resource was undertaken as planned during the year. Our research found that the state of the art now available is not appropriate for Academy purposes. Continued future monitoring of software advances will help to ascertain whether or not new systems will be more compatible with the requirements of the Academy's program.

* (6) The evolution of the valuation actuary concept includes a major government relations component. A significant amount of staff time was devoted to a legal analysis of the proposals, a new initiative not contemplated in the original staff plan. Support of other committees' activities also took place during 1986 to assist in valuation actuary developments. In addition, staff participated in a Society of Actuaries symposium on the valuation actuary during October.

(7) The annual Washington Briefing and Luncheon were held as scheduled, attracting their largest audiences - 35 and 100, respectively - to date. An updated version of the Government Relations Handbook was distributed to briefing attendees, and the Issues Digest was distributed to all.

(8) As part of special studies coordination, an activity designed to unearth opportunities for the Academy to offer in-depth advice and expertise, correction copies of the PACMA study were printed and distributed. In addition, two major new initiatives were the valuation of health and welfare plan benefits for purposes of new nondiscrimination rules under the 1986 tax revision was undertaken by a special task force of the Committee on Health and Welfare Plans and suggested revisions in the NAIC Universal Life Model Regulation was undertaken by a special task force of the Committee on Life Insurance.

1986 STAFF PROGRAM PLAN

(9) **Government relations networking**, the formation, maintenance, and use of Washington contacts to expand the scope of Academy involvement in issues of importance to the profession, continued as planned. Contacts were established with several new groups including the Heritage Foundation, coalitions involved in the liability insurance crisis, and groups concerned with tax reform matters. Staff continued to attend meetings of such groups as the APPWP, ERIC, the Chamber of Commerce, and the Washington Employee Benefits Forum.

(10) Staff presented a major **government relations status report** to the leadership as planned, sparking continued discussion and review of the program which continues at this time, with a referral of many related issues to the Committee on Planning. In this regard, staff will continue consultations with the Committee on Planning as requested.

(11) **Liaison with the AICPA** continued with staff representation at the three scheduled meetings in 1986. Special efforts were undertaken to confer with the new AICPA staff representative. In 1986, a total of five statements were submitted to the FASB and AICPA from Academy committees.

(12) Staff **liaison with FASB and GASB** during 1986 included attendance at our meeting in Stamford and involvement in exchanges of views between the IASB and FASB on matters relating to FASB's consideration and promulgation of FAS 87.

2.4 Legal Counsel

* (1) The **review of Academy pronouncements**, such as public statements, proposed bylaw changes, and committee minutes was an ongoing function throughout 1986. A new project was added mid-year: a compilation of all Academy policies adopted by the Board of Directors or the Executive Committee since the organization's inception. Originally scheduled for December, the project has been postponed until 1987, when the workproduct will be distributed to the Academy leadership. Staff also prepared material relating to a proposed bylaw amendment, which will be submitted to the membership for approval in early 1987.

(2) The continuing **antitrust compliance review** received additional emphasis and attention during 1986 due to the lapse of liability insurance for the Academy during June of the year. Special reviews of committee agendas and minutes were undertaken, as well as frequent communication with committee chairpersons.

* (3) **Support of the Committee on Discipline** was highlighted by the drafting of a new handbook on disciplinary procedures. Additional work will be required on the project in 1987. Staff undertook various reports to the Executive Committee and Board of Directors as part of this function, as well as support of individual members of the committee who are engaged in ongoing investigations of complaints currently before the committee.

1986 STAFF PROGRAM PLAN

(4) **In-house legal support** during 1986 was highlighted by review and drafting of various documents related to sublease tenants. Other major activities included review of applications for liability insurance and negotiation with underwriters to effectuate coverage.

(5) No legal briefs were submitted during 1986, although the potential for such submission (in a case involving the retroactive effect of the Norris decision) was seriously discussed.

(6) **Litigation monitoring and reporting**, an ongoing function, continued throughout 1986. Scrutiny of the PBGC v. Buck lawsuit was the year's highlight.

(7) There was no use of **outside legal counsel** during the year.

(8) **Relations with the legal profession**, an ongoing function, was highlighted this year by contacts with the American Bar Association, which resulted in joint sponsorship of an educational program on pension issues.

(9) **Legal networking** continued during 1986 as planned. It resulted in Academy participation in several coalitions of groups concerned with tax reform and liability insurance problems.

(10) Staff completed a survey on **professional liability insurance**. A related effort involved legal support for the Joint Committee on Errors and Omissions Insurance, a function that is expected to be enhanced during 1987.

* (11) **Actuarial arbitration** emerged as a new issue during 1986. Through contacts with the American Arbitration Association, staff was able to nominate more than 75 volunteers from the Academy for placement on the roster of potential arbitrators.

2.5 Financial Management

(1) During 1986, routine **accounting and reporting** functions were completed on schedule. These activities included financial records processing, monthly financial statements, disbursements, payroll, billing, internal control procedures, and production of four quarterly treasurer's reports.

(2) Under contract with applicable co-sponsoring organizations, staff provided **convention fund management services** for the Enrolled Actuaries Meeting (AAA/CAPP) and the Casualty Loss Reserve Seminar (AAA/CAS). Each of these convention funds is maintained as a separate entity with its own books, financial reports, budgets and policies.

(3) **Cash flow and investment management** activities for the year included investment of dues income received during the first quarter, implementation of the investment decisions made by the Budget and Finance Committee, and routine monitoring of account balances to maximize interest income. Cash flow projections were prepared during the year to assist the Budget and Finance Committee in making long-term investment decisions.

1986 STAFF PROGRAM PLAN

(4) As scheduled, the 1985 audit was performed in March 1986. During the second quarter, the audit report was reviewed by the Audit Subcommittee of the Budget and Finance Committee and received by the Board of Directors. The accompanying management letter outlined housekeeping recommendations, all of which have been implemented. Convention funds were also audited and included as part of this report.

* (5) The second annual **expense report by function** was completed this year. 1984 and 1985 audited expense figures were compared using the same five categories.

(6) **Budget and Finance Committee liaison**, a significant staff activity, included the preparation of numerous financial reports and 1987 draft budgets, as well as revisions to the Financial Management Manual.

2.6 Membership Systems Administration

(1) Routine maintenance of the membership data base included revisions resulting from new admissions, waivers, resignations, deaths, suspensions and expulsions. 1986 dues receipts were processed and recorded throughout the year, and 1987 dues notices were distributed in December.

(2) Member recruitment activities this year included congratulatory/invitation letters to new non-Academy members of founding organizations and enrolled actuaries. In April, a recruitment mailing went out to non-members, targeted according to actuarial specialty areas. In addition, a list of eligible members by company was distributed to the Board of Directors.

* (3) During 1986, staff received and processed 472 new applications; 520 new members were admitted to the Academy through its **admissions system**. Average processing time has held at a low 2.29 months. The application form was revised to include a question on felony convictions, in addition to some editorial and format changes.

(4) The **cross-membership statistics** report showing membership overlap among the Academy, ASPA, and enrolled actuaries was completed as planned.

(5) Staff monitored **continuing education recognition** program activities throughout the year. No actions were taken that required administrative systems or procedures.

2.7 General Administration

(1) Routine **personnel administration** activities have been performed as planned. A low level of turnover was experienced this year. New staff members were hired without disruption to on-going projects. Annual performance evaluations and salary reviews were completed as scheduled.

1986 STAFF PROGRAM PLAN

(2) Evaluation of office equipment requirements this year included additional review of the state of the art of in-house typesetting equipment and a survey concerning the need for telecopying equipment. A report concerning use by various divisions within the Academy office of a personal computer was identified for 1987.

(3) Routine word processing orientation and training, a new program this year, has been a successful, ongoing activity. Orientation sessions for new employees, together with periodic staff-wide word processing information sharing sessions have produced excellent results.

(4) Staff completed the sublease management activities planned for the year. The Academy Washington office has two subleases for two and five years; all space intended to be subleased is occupied.

(5) Staff wrote the 1985 Staff Program Plan Annual Report, the 1986 Staff Program Plan, and three 1986 quarterly reports during the year, as scheduled. In addition, staff planning and reporting activities included regular monthly meetings between the Executive Director and individual senior staff, as well as periodic senior staff meetings to discuss office-wide management.

* (6) The Employee Policies and Procedures Manual was reviewed and revised by staff and an updated version was distributed to all employees with a short delay.

(7) An actuarial reference resource was established this year to serve as the beginning of a reference library for the future.

* (8) Staff efforts to obtain Academy liability insurance resulted in securing officers and directors coverage effective September 15, 1986. Staff is continuing efforts to replace antitrust and other elements of the professional liability coverage cancelled during the second quarter.

2.8 Convention Management

(1) The 1986 Enrolled Actuaries Meeting and Exhibition, co-sponsored by the Academy and the Conference of Actuaries in Public Practice, was held February 12-14, 1986 in Washington, D.C. The meeting attracted approximately 1,400 pension professionals. For the second year, the exhibit facility provided attendee access to some 25 providers of products and/or services related to the practice of actuarial science in the pension field.

(2) The 1986 Casualty Loss Reserve Seminar, co-sponsored by the Academy and the Casualty Actuarial Society, was held in Washington, D.C. on September 29-30, attracting approximately 650 attendees, 250 more than anticipated.

(3) As planned, the 1986 Annual Meeting was held in San Antonio, Texas, in conjunction with the Conference of Actuaries in Public Practice.

1986 STAFF PROGRAM PLAN

(4) Pre-, during-, and post-event **meeting publicity** was carried out for the Enrolled Actuaries Meeting, the Casualty Loss Reserve Seminar, and the Academy's annual meeting. Publicity activities resulted in articles in trade journals and a radio news interview that was carried by three major national radio networks.

(5) As planned, staff provided convention management services in connection with the **Casualty Actuarial Society Spring Meeting** held in San Diego, California in May and that organization's **Annual Meeting** held in Nashville, Tennessee in November. Meetings publicity was provided on a trial basis.

(6) Staff support in connection with the **1989 Anniversary Meeting** included attendance at the March and October planning meetings, preparation of draft budgets and worksheets, and preparation of a proposal to the U.S. Postal Service for a commemorative stamp honoring the profession's 100th anniversary in North America, to be issued in 1989. In addition, a proposal for a commemorative postcard (in connection with the meeting) was submitted to the Postmaster General in August. Moreover, staff held preliminary discussions with a public relations firm concerning a slide presentation, publications, and entertainment.

(7) **Board of Directors, Executive Committee and committee meetings** were arranged by staff as required.

* (8) During the year, ongoing **evaluation of requirements and resources** identified several issues to receive attention. These issues included expansion of the Enrolled Actuaries Meeting to regional meetings, the possible addition of an exhibition to the CLRS, a CCRC seminar, and the rapidly increasing need for thorough documentation of convention management policies and procedures.

2.9 Actuarial Standards

(1) Staff handled the processing of **exposure drafts and final standards** during the year. There were a total of five exposure draft procedures in 1986. Also, staff began preliminary work on revising the Procedures for the Development of Standards of Practice, based on input from the IASB during its first year of operation.

(2) **Legal review** of all standards and proposals was undertaken as planned in 1986. Minutes and agendas were also scrutinized. At the request of the IASB's chairperson, staff now attends all meetings of the IASB, including its executive sessions.

(3) A **public relations program** for the IASB has evolved this year, its principal components being quarterly IASB reports in The Actuarial Update (which includes a schedule of future meetings) and a so-called Boxscore (which presents in summary fashion the status of standards in process all the way from early discussions through the exposure draft stage and final promulgation). Late in the year, preparations began to include an expanded Boxscore in every edition of The Update. In addition, a draft public relations plan outlining an array of other activities was distributed to members of both the SOC and the IASB for their consideration.

1986 STAFF PROGRAM PLAN

(4) During 1986, the IASB did not require staff assistance in the area of financial management planning. Staff has, however, maintained financial records in such a way that the 1986 data will be available whenever it is requested.

(5) Staff supported consideration of necessary standards research during the year. To date, however, the IASB has not undertaken specific standards-related research.

(6) Staffing for the actuarial standards activity took place with the hiring of an Actuarial Standards Coordinator early in the year. This addition, together with support from existing Academy staff, proved to be sufficient staff resources to handle this activity for the remainder of the year.

(7) A variety of administrative support services were provided to the IASB. Included were development and implementation of a coding system, scheduling meetings, preparation of agendas and minutes, submission of logo designs, development of a draft of a manual for operating committees, and a report on formats for standards.

3.0 MATERIAL CHANGES, DELAYS AND ADDITIONS

- 2.1 (2) Public relations support was provided the CAS and CAPP.
- 2.1 (14) Addition of staff support for the actuarial magazine.
- 2.3 (6) Addition of a legal analysis of valuation actuary proposals.
- 2.4 (1) The compilation of Academy policies was delayed into 1987.
- 2.4 (3) Addition of a target date for completion of draft Discipline Handbook.
- 2.4 (11) Addition of actuarial arbitration as a new issue.
- 2.5 (5) 1985 expense report by function was completed four months earlier than scheduled.
- 2.6 (3) Two month delay of application form revision.
- 2.7 (6) Revision of the Employee Policies and Procedures Manual delayed two months.
- 2.7 (8) A new project, Academy liability insurance, arose after the cancellation of the Academy's coverage.
- 2.8 (8) The development of a Convention Management Manual was deferred to 1987.

SUMMARY OF 1986 STATEMENTS

Each year's Journal includes the text of the statements released by the Academy during that year. The summary that follows provides background information, including cross-references to previous statements. Statements are assigned numbers by calendar year and order of release, e.g., 1986-1 is the first statement released during 1986.

The guidelines by which these statements are developed appear in the Academy's yearbook.

Index Code: 1986-1
To: Joint Board for the Enrollment of Actuaries
Date: General Accounting Office
Date: January 23, 1986
Length: 21 pages (pg. 72 - 92)
Concerning: Multiemployer plans
Background: This report deals with the subject of multiemployer plan data insufficiency. This report was the result of a request from the Executive Director of the Joint Board for the Enrollment of Actuaries for such a report. This request, in turn, was triggered by a report of the General Accounting Office entitled "Incomplete Participant Data Affect Reliability of Values Placed by Actuaries on Multiemployer Pension Plans" dated September 6, 1984 (GAO/HRD-84-38). This report suggested the need for a study to be done on this subject.
Drafters: The Joint Task Force on Multiemployer Plan Data Insufficiency, chaired by Harold J. Brownlee. This task force contained representatives appointed by the American Academy of Actuaries, the American Society of Pension Actuaries, the Conference of Actuaries in Public Practice, and the Society of Actuaries.

Index Code: 1986-2
To: Joint Committee on Taxation
Date: January 29, 1986
Length: 5 pages (pg. 93 - 97)
Concerning: Pension legislation
Background: This statement was sent to the Joint Committee on Taxation to comment on two proposals directly affecting the professional practice of actuaries being considered in the tax legislation before Congress. One proposal deals with the reasonableness of actuarial assumptions, while the other would impose penalties for the overstatement of pension liabilities.
Drafters: The Pension Committee, chaired by Norman S. Losk.

Index Code: 1986-3
To: Senate Committee on Finance
Date: January 31, 1986
Length: 1 page (pg. 98)
Concerning: Pension legislation

SUMMARY OF 1986 STATEMENTS

Background: This letter was sent to the Senate Committee on Finance to comment on a provision in H.R. 3838, passed by the House of Representatives, which would impose penalties for the overstatement of pension liabilities.

Drafters: Executive Director Stephen G. Kellison.

Index Code: 1986-4

To: American Institute of Certified Public Accountants

Date: February 6, 1986

Length: 2 pages (pg. 99 - 100)

Concerning: Reinsurance accounting and auditing

Background: This statement was submitted to the AICPA Reinsurance Auditing and Accounting Task Force in response to the AICPA discussion paper on "Fronting." This is the latest in a series of Academy statements on reinsurance accounting and auditing, the most recent of which was on August 22, 1984 (see statement 1984-24).

Drafters: The Committee on Property and Liability Insurance Financial Reporting, chaired by Stephen P. Lowe.

Index Code: 1986-5

To: Senate Committee on Finance

Date: February 10, 1986

Length: 3 pages (pg. 101 - 103)

Concerning: Taxation of employee benefits

Background: This statement was submitted to the Senate Committee on Finance to outline key health and welfare plan issues that should be addressed under the Technical Corrections Act to the Deficit Reduction Act of 1984. The Academy had previously submitted comments on this subject in 1985 (see statements 1985-15 and 1985-16).

Drafters: The Subcommittee on Health and Welfare Plans of the Committee on Health. The respective chairpersons are Thomas G. Nelson and E. Paul Barnhart.

Index Code: 1986-6

To: Senate Committee on Finance

Date: February 11, 1986

Length: 5 pages (pg. 104 - 108)

Concerning: Pension legislation

Background: This statement was submitted to the Subcommittee on Savings, Pensions and Investment Policy of the Senate Committee on Finance for the record of a hearing on the proposed Retirement Income Policy Act of 1985. The Academy had previously made preliminary comments on this bill as it was being introduced on September 25, 1985 and October 28, 1985 (see statements 1985-38 and 1985-43).

Drafters: The Subcommittee on Single Employer Plans of the Pension Committee. The respective chairpersons are Larry D. Zimpleman and Norman S. Losk.

SUMMARY OF 1986 STATEMENTS

Index Code:**1986-7****To:**

Healthcare Financial Management Association

Date:

February 26, 1986

Length:

8 pages (pg. 109 - 116)

Concerning:

Continuing care retirement communities

Background:

This material was submitted to the Healthcare Financial Management Association as a proposed appendix to their Exposure Draft on Accounting and Reporting Issues Related to Continuing Care Retirement Communities. The Academy had previously submitted comments on the Exposure Draft itself on November 18, 1985 (see statement 1985-47).

Drafters:

The Committee on Continuing Care Retirement Communities, chaired by David V. Axene.

Index Code:**1986-8****To:**

House Committee on Education and Labor

Date:

February 27, 1986

Length:

5 pages (pg. 117 - 121)

Concerning:

Pension legislation

Background:

This statement was submitted to the Subcommittee on Labor-Management Relations of the House Committee on Education and Labor for the record of a hearing on the proposed Retirement Income Policy Act of 1985. This statement is identical with one submitted to the Senate Committee on Finance on February 11, 1986 (see statement 1986-5).

Drafters:

The Subcommittee on Single Employer Plans of the Pension Committee. The respective chairpersons are Larry D. Zimpleman and Norman S. Losk.

Index Code:**1986-9****To:**

Senate Committee on Finance

Date:

March 11, 1986

Length:

7 pages (pg. 122 - 128)

Concerning:

Pension legislation

Background:

This statement was submitted to the Senate Committee on Finance on various retirement income issues contained in proposed tax legislation. The format of the statement is to address items contained in the bill which had previously been passed by the House of Representatives, H.R. 3838. A one-page executive summary of the statement is attached at the end.

Drafters:

The Subcommittee on Single Employer Plans of the Pension Committee. The respective chairpersons are Larry D. Zimpleman and Norman S. Losk.

Index Code:**1986-10****To:**

Internal Revenue Service

Date:

March 31, 1986

Length:

2 pages (pg. 129 - 130)

Concerning:

IRS Notice 86-3

SUMMARY OF 1986 STATEMENTS

Background: The letter was sent to the Internal Revenue Service requesting a reconsideration of the effective date of IRS Notice 86-3. This notice deals with the compliance schedule for plan amendments needed to comply with various laws enacted by Congress and related penalties for failure to comply with the implementation schedule.

Drafters: Executive Director Stephen G. Kellison in consultation with the Pension Committee, chaired by Norman S. Losk.

Index Code: 1986-11

To: Healthcare Financial Management Association

Date: April 7, 1986

Length: 4 pages (pg. 131 - 134)

Concerning: Continuing care retirement communities

Background: These editorial comments were submitted to the Healthcare Financial Management Association in response to a working revision to their Exposure Draft on Accounting and Reporting Issues Related to Continuing Care Retirement Communities. The Academy had previously submitted comments on the Exposure Draft on November 18, 1985 and February 26, 1986 (see statements 1985-47 and 1986-6).

Drafters: The Committee on Continuing Care Retirement Communities, chaired by David V. Axene.

Index Code: 1986-12

To: Joint Board for the Enrollment of Actuaries

Date: April 23, 1986

Length: 1 page (pg. 135)

Concerning: Reenrollment form

Background: This letter was submitted to the Joint Board for the Enrollment of Actuaries to suggest a change in the form used for reenrollment as an enrolled actuary concerning inquiries involving discipline.

Drafters: General Counsel Gary D. Simms.

Index Code: 1986-13

To: Congressman Don Ritter

Date: April 25, 1986

Length: 2 pages (pg. 136 - 137)

Concerning: Liability insurance

Background: This letter was submitted to Congressman Don Ritter in response to his request for comments on a proposed bill involving liability insurance which he was planning to introduce.

Drafters: Executive Director Stephen G. Kellison.

Index Code: 1986-14

To: House Committee on Ways and Means

Date: May 2, 1986

Length: 4 pages (pg. 138 - 141)

SUMMARY OF 1986 STATEMENTS

Concerning: Medicare
Background: This statement was submitted to the Subcommittee on Health of the House Committee on Ways and Means in response to a request for information on lessons for Medicare from the private sector.

Drafters: The Committee on Health, chaired by E. Paul Barnhart.

Index Code: 1986-15

To: Health Care Financing Administration

Date: May 5, 1986

Length: 2 pages (pg. 142 - 143)

Concerning: Medicare supplement policies

Background: This letter was sent to the Health Care Financing Administration to clarify a previous Academy statement made on August 30, 1983 (see statement 1983-29). The previous statement commented on a report entitled "Medigap - Study of Comparative Effectiveness of Various State Regulations."

Drafters: General Counsel Gary D. Simms in consultation with various individuals involved in the previous statement.

Index Code: 1986-16

To: Internal Revenue Service

Date: May 8, 1986

Length: 4 pages (pg. 144 - 147)

Concerning: Revision of actuarial tables

Background: This statement was submitted to the Internal Revenue Service in response to proposed regulations to adopt new unisex annuity tables under Section 72 of the Internal Revenue Code which appeared in the Federal Register on March 24, 1986 (51 FR 9978-10024). The Academy had held a meeting with IRS staff on this issue on November 30, 1983.

Drafters: Executive Director Stephen G. Kellison.

Index Code: 1986-17

To: Senate Committee on Finance

Date: May 14, 1986

Length: 5 pages (pg. 148 - 152)

Concerning: Taxation of employee benefits

Background: This statement was submitted to the Senate Committee on Finance in connection with prefunding postretirement health and welfare benefit plans.

Drafters: The Subcommittee on Health and Welfare Plans of the Committee on Health. The respective chairpersons are Thomas G. Nelson and E. Paul Barnhart. The statement was signed by William J. Miner on behalf of the Subcommittee.

Index Code: 1986-18

To: General distribution to a variety of audiences

Date: May 21, 1986

Length: 8 pages (pg. 153 - 160)

SUMMARY OF 1986 STATEMENTS

Concerning: Risk classification
Background: This statement is a white paper on the subject of risk classification and AIDS.
Drafters: The Committee on Risk Classification, chaired by Claire L. Wolkoff.

Index Code: 1986-19
To: NAIC Life and Health Actuarial (EX5) Task Force
Date: May 27, 1986
Length: 2 pages (plus attachments not included) (pg. 161 - 162)
Concerning: Health insurance reserve standards
Background: This report to the NAIC Life and Health Actuarial (EX5) Task Force concerns the development of health insurance reserve standards by the NAIC. The Academy distributed a discussion draft entitled "Health Insurance Reserve Standards for the NAIC" dated December 1985. The statement at hand was the submission of an analysis of the comments received together with a revised draft suggested for re-exposure. This second discussion draft was subsequently distributed by the Academy as "NAIC Reserve Standards for Individual and Group Health Insurance Contracts" dated July 1986. Neither of these two booklets appears as attachments to this statement, since both received general membership distribution.
Drafters: The Subcommittee on Liaison with NAIC Accident and Health (B) Committee of the Committee on Health, both chaired by E. Paul Barnhart.

Index Code: 1986-20
To: Senate Committee on Governmental Affairs
Date: May 30, 1986
Length: 3 pages (pg. 163 - 165)
Concerning: Actuarial employment in government
Background: This statement was submitted to the Subcommittee on Civil Service, Post Office and General Services of the Senate Committee on Governmental Affairs for the record of hearings on Civil Service rates of pay. The statement addresses recognition of actuaries in bills providing special treatment for certain types of federal employees.
Drafters: Executive Director Stephen G. Kellison.

Index Code: 1986-21
To: Pension Benefit Guaranty Corporation
Date: June 9, 1986
Length: 4 pages (pg. 166 - 169)
Concerning: Valuation of plan benefits
Background: This statement was submitted to the Pension Benefit Guaranty Corporation in response to proposed regulations on valuation of plan benefits in non-multiemployer plans which appeared in the Federal Register on March 25, 1986 (51 FR 10334-42).

SUMMARY OF 1986 STATEMENTS

Drafters: The Subcommittee on PBGC (Single Employer Plans) of the Pension Committee. The respective chairpersons are Darrel J. Croot and Norman S. Losk.

Index Code: 1986-22
To: NAIC Technical Services (EX5) Subcommittee
Date: June 11, 1986
Length: 2 pages (pg. 170 - 171)
Concerning: Actuarial liaison with the NAIC
Background: This statement was presented at a public meeting of the NAIC Technical Services (EX5) Subcommittee and summarizes a number of actuarial issues involving NAIC activities.
Drafters: The Committee on Liaison with NAIC, chaired by Carl R. Ohman.

Index Code: 1986-23
To: House Committee on Ways and Means
Date: June 24, 1986
Length: 7 pages (pg. 172 - 178)
Concerning: Pension legislation
Background: This testimony was presented at a public hearing of the Subcommittees on Oversight and Social Security of the House Committee on Ways and Means on underfunded pension plans.
Drafters: The Pension Committee, chaired by Norman S. Losk, who also presented the testimony at the public hearing.

Index Code: 1986-24
To: New Jersey Insurance Department
Date: July 24, 1986
Length: 7 pages (pg. 179 - 185)
Concerning: Liability insurance
Background: This statement was submitted to the New Jersey Insurance Department in response to a request for commentary and suggestions on the liability insurance crisis and related issues.
Drafters: The Committee on Property and Liability Insurance, chaired by Albert J. Beer.

Index Code: 1986-25
To: Senate Committee on Finance
House Committee on Ways and Means
Date: July 25, 1986
Length: 1 page (pg. 186)
Concerning: Pension legislation
Background: This letter was sent to Senate and House conferees on the Tax Reform Act of 1986 in connection with a provision which would impose penalties for the overstatement of pension liabilities. The Academy had previously commented twice on this issue in January 1986 (see statements 1986-2 and 1986-3).
Drafters: Executive Director Stephen G. Kellison.

SUMMARY OF 1986 STATEMENTS

Index Code:	1986-26
To:	House Committee on Ways and Means
Date:	July 29, 1986
Length:	4 pages (pg. 187 - 190)
Concerning:	Pension legislation
Background:	This supplementary statement was submitted to the Subcommittees on Oversight and Social Security of the House Committee on Ways and Means as additional input for the record of a hearing on underfunded pension plans. The prior testimony was presented at a public hearing on June 24, 1986 (see statement 1986-23).
Drafters:	The Pension Committee, chaired by Norman S. Losk.
Index Code:	1986-27
To:	Senate Committee on Finance
Date:	House Committee on Ways and Means
Length:	August 7, 1986
Concerning:	1 page (pg. 191)
Background:	Pension legislation
	This letter was sent to Senate and House conferees on the Tax Reform Act of 1986 in connection with a provision which would impose an alternative minimum tax on the difference between the contribution to the pension plan and FAS 87 pension expense.
Drafters:	Executive Director Stephen G. Kellison.
Index Code:	1986-28
To:	Financial Accounting Standards Board
Date:	August 25, 1986
Length:	7 pages (pg. 192 - 198)
Concerning:	Accounting for universal life
Background:	The two-page letter was sent to the Financial Accounting Standards Board following a meeting with the FASB and its staff on August 12, 1986 to discuss accounting for universal life. The tables and graphs following the two-page letter were handouts at the August 12, 1986 meeting. The Academy had previously commented to the FASB on this subject in 1984 and 1985 (see statements 1984-32 and 1985-14).
Drafters:	The Committee on Life Insurance Financial Reporting, chaired by Allan D. Affleck.
Index Code:	1986-29
To:	Joint Committee on Taxation
Date:	August 26, 1986
Length:	1 page (pg. 199)
Concerning:	Pension legislation
Background:	This letter was sent to the Joint Committee on Taxation in connection with a provision which would impose penalties for the overstatement of pension liabilities. The Academy had previously commented three times on this issue earlier in 1986 (see statements 1986-2, 1986-3, and 1986-25).
Drafters:	General Counsel Gary D. Simms.

SUMMARY OF 1986 STATEMENTS

Index Code: 1986-30
To: Washington Insurance Department
Date: September 19, 1986
Length: 3 pages (pg. 200 - 202)
Concerning: Risk classification
Background: This statement was submitted to the Washington Insurance Department in response to proposed regulations pertaining to AIDS.
Drafters: The Committee on Risk Classification, chaired by Claire L. Wolkoff.

Index Code: 1986-31
To: NAIC Life and Health Actuarial (EX5) Task Force
Date: September 29, 1986
Length: 17 pages (pg. 203 - 219)
Concerning: Health insurance reserve standards
Background: This report to the NAIC Life and Health Actuarial (EX5) Task Force contains final recommendations for health insurance reserve standards to be adopted by the NAIC. The Academy had previously distributed two discussion drafts of proposed reserve standards, the first in December 1985 and the second in July 1986. Neither of these two booklets appears as attachments to this statement, since both received general membership distribution. The Academy also submitted a prior statement on this matter to the NAIC on May 27, 1986 (see statement 1986-19).
Drafters: The Subcommittee on Liaison with NAIC Accident and Health (B) Committee of the Committee on Health, both chaired by E. Paul Barnhart.

Index Code: 1986-32
To: NAIC Life and Health Actuarial (EX5) Task Force
Date: September 29, 1986
Length: 6 pages (pg. 220 - 225)
Concerning: Health insurance rate filings
Background: This report to the NAIC Life and Health Actuarial (EX5) Task Force contains proposed revisions to the NAIC Guidelines for Filing of Rates for Individual Health Insurance Forms.
Drafters: The Subcommittee on Liaison with NAIC Accident and Health (B) Committee of the Committee on Health, both chaired by E. Paul Barnhart.

Index Code: 1986-33
To: House Committee on Energy and Commerce
Date: September 30, 1986
Length: 1 page (pg. 226)
Concerning: Liability insurance
Background: This letter was sent to the Subcommittee on Commerce, Transportation, and Tourism of the House Committee on Energy and Commerce in connection with the Risk Retention Act of 1986. This Act recognizes Academy membership in the

SUMMARY OF 1986 STATEMENTS

requirement for a statement of actuarial opinion for risk retention groups.

Drafters: Public Affairs Specialist Christine E. Nickerson.

Index Code: 1986-34

To: New Jersey Department of Health

Date: October 1, 1986

Length: 3 pages (pg. 227 -229)

Concerning: Health maintenance organizations

Backgrounds: This letter was sent to the New Jersey Department of Health in response to a memorandum from the Department dated August 18, 1986 concerning the certification of HMO rates by an actuary.

Drafters: General Counsel Gary D. Simms, in consultation with Lloyd F. Mathwick, chairperson of the Subcommittee on Alternate Delivery Systems of the Committee on Health, chaired by E. Paul Barnhart.

Index Code: 1986-35

To: Washington Insurance Department

Date: October 3, 1986

Length: 4 pages (pg. 230 - 233)

Concerning: Risk classification

Background: This supplementary statement was submitted to the Washington Insurance Department in response to proposed regulations pertaining to AIDS. The prior statement was submitted on September 19, 1986 (see statement 1986-30).

Drafters: Gary E. Dahlman, chairperson of the Committee on Life Insurance, in consultation with Claire L. Wolkoff, chairperson of the Committee on Risk Classification.

Index Code: 1986-36

To: Internal Revenue Service

Department of Labor

Pension Benefit Guaranty Corporation

Date: October 20, 1986

Length: 3 pages (pg. 234 - 236)

Concerning: Form 5500

Background: This statement was submitted to the Internal Revenue Service, the Department of Labor, and the Pension Benefit Guaranty Corporation in response to proposed changes in Form 5500 which appeared in the Federal Register on September 19, 1986 (51 FR 33500-33547).

Drafters: The Pension Committee, chaired by Larry D. Zimpleman.

Index Code: 1986-37

To: NAIC Blanks (EX4) Task Force

NAIC Market Conduct Surveillance (EX3) Task Force

NAIC Life Cost Disclosure (A) Task Force

Date: October 30, 1986

SUMMARY OF 1986 STATEMENTS

Length: 7 pages (pg. 237 - 243)
Concerning: Disclosure of non-guaranteed elements
Background: This package consists of three submissions on disclosure of non-guaranteed elements in life insurance and annuity contracts to three different task forces of the NAIC:
1. Proposed additional disclosure in the NAIC Life and Accident and Health Annual Statement Blank submitted to the Blanks (EX4) Task Force.
2. Proposed changes in the NAIC Model Rules Governing the Advertising of Life Insurance submitted to the Market Conduct Surveillance (EX3) Task Force.
3. Proposed changes in the NAIC Model Life Insurance Cost Disclosure Regulation submitted to the Life Cost Disclosure (A) Task Force.
These submissions are ancillary to the development of standards of practice in this area being handled concurrently by the Interim Actuarial Standards Board. The Academy had previously submitted proposed changes of a similar nature involving dividend disclosure to the NAIC in 1985 (see statement 1985-29).
Drafters: The Subcommittee on Dividends and Other Non-Guaranteed Elements, chaired by William T. Tozer.

Index Code: 1986-38
To: Financial Accounting Standards Board
Date: November 3, 1986
Length: 12 pages (pg. 244 - 255)
Concerning: Accounting for universal life
Background: This collection of materials was submitted to the Financial Accounting Standards Board in connection with its project on accounting for universal life. It supplements the prior Academy statement made on August 25, 1986 (see statement 1986-28).
Drafters: The Committee on Life Insurance Financial Reporting, chaired by Edward S. Silins.

Index Code: 1986-39
To: NAIC Loss Reserve Discounting (EX4) Study Group
Date: November 19, 1986
Length: 6 pages (pg. 256 - 261)
Concerning: Casualty loss reserves
Background: This testimony was presented at a public hearing held by the NAIC Loss Reserve Discounting (EX4) Study Group on the subject of discounting casualty loss reserves for statutory accounting purposes.
Drafters: The Committee on Property and Liability Insurance Financial Reporting, chaired by Stephen P. Lowe, who also presented the testimony at the public hearing.

Index Code: 1986-40
To: Financial Accounting Standards Board

SUMMARY OF 1986 STATEMENTS

Date: November 21, 1986
Length: 2 pages (pg. 262 - 263)
Concerning: Accounting for income taxes
Background: This statement was submitted to the Financial Accounting Standards Board in response to the Exposure Draft on Accounting for Income Taxes dated September 2, 1986.
Drafters: The Committee on Life Insurance Financial Reporting, chaired by Edward S. Silins.

Index Code: 1986-41
To: NAIC Life and Health Actuarial (EX5) Task Force
Date: November 21, 1986
Length: 57 pages (pg. 264 - 318)
Concerning: Health insurance reserve standards
Background: This report to the NAIC Life and Health Actuarial (EX5) Task Force contains final recommendations for health insurance reserve standards to be adopted by the NAIC. This is an expanded version of the proposal submitted on September 29, 1986 (see statement 1986-31) which contains supplementary material requested by the NAIC. However, the standards themselves are unchanged from those in the earlier report.
Drafters: The Subcommittee on Liaison with NAIC Accident and Health (B) Committee of the Committee on Health, both chaired by E. Paul Barnhart.

Index Code: 1986-42
To: General distribution to a variety of audiences
Date: November 24, 1986
Length: 5 pages (pg. 319 - 323)
Concerning: Liability insurance
Background: This statement is a white paper on the subject of estimating the impact of civil justice reforms on the cost of liability insurance.
Drafters: The Committee on Property and Liability Issues, chaired by Albert J. Beer.

Index Code: 1986-43
To: NAIC Life and Health Actuarial (EX5) Task Force
Date: November 25, 1986
Length: 18 pages (pg. 324 - 341)
Concerning: Universal life
Background: This preliminary report was submitted to the NAIC Life and Health Actuarial (EX5) Task Force in response to their request of the Academy to develop amendments to the valuation and nonforfeiture provisions in the NAIC Universal Life Insurance Model Regulation. It is intended to submit more extensive comments at a later date.
Drafters: The Universal Life Task Force of the Committee on Life Insurance. The respective chairpersons are Douglas C. Doll and Gary E. Dahlman.

SUMMARY OF 1986 STATEMENTS

Index Code: **1986-44**
To: NAIC Technical Services (EX5) Subcommittee
Date: December 10, 1986
Length: 30 pages (pg. 342 - 371)
Concerning: Actuarial liaison with the NAIC
Background: This statement was presented at a public meeting of the NAIC Technical Services (EX5) Subcommittee and summarizes a number of actuarial issues involving NAIC activities.
Drafters: Carl R. Ohman, on behalf of the Committee on Liaison with NAIC, chaired by Burton D. Jay.

Index Code: **1986-45**
To: Internal Revenue Service
Date: December 12, 1986
Length: 1 page (pg. 372)
Concerning: Taxation of insurance companies
Background: This letter was sent to the Internal Revenue Service in response to an IRS request for public comment on projects to implement the Tax Reform Act of 1986 contained in a news release dated October 23, 1986.
Drafters: The Committee on Property and Liability Insurance Financial Reporting, chaired by Stephen P. Lowe.

Index Code: **1986-46**
To: NAIC Blanks (EX4) Task Force
Date: December 17, 1986
Length: 4 pages (pg. 373 - 376)
Concerning: Disclosure of non-guaranteed elements
Background: This submission on disclosure of non-guaranteed elements in life insurance and annuity contracts was submitted to the NAIC Blanks (EX4) Task Force. It contains proposed additional disclosure in the NAIC Life and Accident and Health Annual Statement Blank. It is a reformatted version of a prior submission made on October 30, 1986 (see statement 1986-37).
Drafters: The Subcommittee on Dividends and Other Non-Guaranteed Elements, chaired by William T. Tozer.

Index Code: **1986-47**
To: Health Care Financing Administration
Date: December 23, 1986
Length: 4 pages (pg. 377 - 380)
Concerning: Health insurance
Background: This statement was submitted to the Health Care Financing Administration in response to a request for comments on long-term health care insurance policies which appeared in the Federal Register on November 5, 1986 (51 FR 40265).
Drafters: The Committee on Health, chaired by E. Paul Barnhart.

SUMMARY OF 1986 STATEMENTS

Index Code: 1986-48
To: General distribution to a variety of audiences
Date: December 31, 1986
Length: 11 pages (pg. 381 - 391)
Concerning: Accounting for pension plans
Background: This document is a reprint of a booklet entitled "An Actuary's Guide to Compliance with Statement of Financial Accounting Standards No. 87" published by the Academy in December 1986. Although this guide was developed by the Pension Committee of the IASB, it was decided not to release the document as an actuarial standard but rather as a resource document. It is being included in the Journal for permanent retention in the Academy literature. There was substantial dialogue with the Financial Accounting Standards Board in the development of this guide.
Drafters: The Pension Committee of the IASB, chaired by Thomas D. Levy.

STATEMENT 1986-1

REPORT OF THE JOINT TASK FORCE ON MULTIEMPLOYER PLAN DATA INSUFFICIENCY

January 23, 1986

Robert D. Krinsky
Joseph A. LoCicero
John A. MacDougall
Daniel F. McGinn
Craig A. Miller
Harvey Pasternack
Larry H. Weitzner

H. J. Brownlee, Chairman

INTRODUCTION

On September 6, 1984 the Comptroller General of the United States presented to the Congress a report entitled "Incomplete Participant Data Affect Reliability of Values Placed by Actuaries on Multiemployer Plans." The report was prepared by the General Accounting Office (GAO) in response to a requirement in the Multiemployer Pension Plan Amendments Act of 1980 (MPPAA).

The GAO report concluded that complete pension plan participant data (age, years of service, and gender) are crucial in determining actuarial values for pension plans. GAO found, however, that many multiemployer pension plans lack complete participant data, causing liabilities and costs of some plans to be under- or over-stated, sometimes by millions of dollars. Actuaries of plans in the GAO study usually disclosed the extent of missing participant data, but few indicated to what extent such omissions affected the accuracy of the actuarial valuations. GAO recommended that the Joint Board for the Enrollment of Actuaries -- a board appointed by the Secretaries of Labor and the Treasury which establishes standards and qualifications of actuaries who certify pension plan data -- promote action by and work in cooperation with the actuarial profession to develop criteria and standards for disclosing the potential effect of material amounts of missing participant data on the reliability of actuarial valuations.

Pursuant to directives from the Secretary of Labor and the Treasury, the Executive Director of the Joint Board arranged the appointment of a joint task force by the American Academy of Actuaries, the American Society of Pension Actuaries, the Conference of Actuaries in Public Practice and the Society of Actuaries. The task force first met on October 31, 1984. As discussions progressed, two questions emerged.

1. When participant data are missing, how does the actuary determine if the effect is material?

STATEMENT 1986-I

2. What disclosures should be made as to the effect of missing participant data?

This report is the result of its work. It is divided into the following sections.

1. Section I contains pertinent excerpts from the GAO report which identify the scope of the work of the task force. (Page 3)
2. Section II contains specific comments on the GAO report. (Page 14)
3. Section III addresses the various users of multiemployer plan actuarial reports. (Page 16)
4. Section IV discusses the meaning of materiality as applied to missing data and when disclosure is indicated. (Page 22)
5. Section V contains examples of language which might be used for disclosure in some hypothetical situations. (Page 27)
6. Section VI contains some comments on the nature of multiemployer plans. (Page 30)

Since the organizations appointing members to the task force did not delegate to the task force the authority to develop an official standard of actuarial practice which would be binding on their members, this report only represents the consensus of views of the task force members. The report has, however, been reviewed by many organization members other than those on the task force and comments received have been considered by the task force. Copies of the final report are being sent to the president of each of the organizations with a recommendation that the report be referred to any committees that set standards of practice. It is the belief of the task force that a standard of practice is needed that will apply to actuaries who work with multiemployer plans.

Section I: PERTINENT EXCERPTS FROM THE GAO REPORT

1. This section contains quotations from the GAO report. They have been chosen because they bear directly on the actuarial problems of incomplete participant data. They are presented in the order in which they appear on the report. These excerpts are shown here only to provide some of the flavor of the GAO report. A full understanding of that report and of the thrust of this report can only be obtained by reading the complete GAO report.
2. From page 1: The Employee Retirement Income Security Act of 1974 (ERISA) was the first comprehensive federal legislation regulating the private pension system. Because of concern that ERISA might not be adequate to prevent many financially troubled multiemployer defined benefit pension plans from terminating, the Congress passed the Multiemployer Pension Plan Amendments Act of 1980 (MPPAA). Multiemployer defined benefit pension plans are those which are established and maintained through collective bargaining agreements between employee representatives and more than one employer, and

STATEMENT 1986-1

generally provide benefits based on such factors as years of employment.

The main purposes of MPPAA were to protect participants' and beneficiaries' interests by strengthening the financial condition of multiemployer plans and to encourage their growth and maintenance. More specifically, MPPAA required increased funding for all plans, special funding for financially distressed plans, and continued funding of the plans by certain employers that withdraw.

3. From page ii: MPPAA requires GAO to study and report on its effects. Because of the complexities of the issues involved, GAO separated the study into segments by major functions and areas of concern which MPPAA was believed to affect. This report, which focuses on the development and reporting of actuarial information, is the third in a series of reports GAO is issuing on multiemployer pension plans.
4. From page iii: Without complete and accurate participant data, the actuary must make assumptions about the unknown participants characteristics. When these missing data are subsequently obtained, actuarial results can differ substantially from previous actuarial valuations. For example, when previously missing birthdates for 12,000 participants were obtained in one plan, the actuarial liability from one valuation to the next increased by about \$46 million. This means that this particular plan would need an additional \$46 million to meet its projected pension benefit obligations. A similar situation is another plan involving 1,700 participants caused a decrease in the actuarial liability of about \$20 million. In this case, the plan would need about \$20 million less than anticipated to meet projected pension benefit obligations.
5. From page vi: The American Academy of Actuaries and the Society of Actuaries recommend that the actuarial reports for pension plans -- the formal communication of the actuarial valuation -- indicate the extent to which any valuation is based on incomplete participant data and the associated probable effects on the accuracy of actuarial calculations. However, there is no guidance on when and how this should be done. Also, the Joint Board for the Enrollment of Actuaries requires that actuaries certified by the Joint Board clearly identify any "material inadequacies in data and the implications thereof" but does not define or provide criteria as to what is a "material inadequacy in data."

GAO found that for those 23 plans lacking complete data for over 20 percent of their active participants, the actuarial reports usually contained a statement to the effect that plan officials should make a greater effort to get the data. However, only 3 of these 23 reports, and only 5 reports on the 76 plans with missing data, included statements by the actuaries that the situation could affect the reliability of actuarial results, and none mentioned the extent of the potential effect in their certifications. The lack of such statements applied even in those instances where large amounts of participant data were missing and large dollar fluctuations in actuarial results occurred when previously missing data became available.

STATEMENT 1986-1

In addition, report statements regarding the lack of complete participant data were in the body of actuarial reports rather than in a summary or certification statement where material inadequacies would be highlighted.

The Executive Director of the Joint Board for the Enrollment of Actuaries expressed concern to GAO over the lack of statements on the potential effect of missing participant data on the reliability of actuarial results.

6. From page vii: GAO also recommends that the Secretaries direct the Joint Board for the Enrollment of Actuaries to promote action by and work in cooperation with the actuarial profession to develop appropriate criteria and standards for the disclosure of the potential effect of material amounts of missing participant data on the reliability of actuarial valuations.
7. From page vii: GAO received comments on this report from the Department of Labor and the Treasury, PBGC, IRS, the Joint Board for the Enrollment of Actuaries, the American Academy of Actuaries, and the Conference of Actuaries in Public Practice.

There was general agreement among the agencies and associations that participant data are crucial to the reliability of an actuarial valuation for a multiemployer pension plan. Further, they generally agreed that reliable actuarial valuations are necessary for the effective and efficient administration and regulation of multiemployer pension plan activities. There also was general agreement on GAO's recommendation to develop appropriate criteria and standards for the disclosure of the potential effect of material amounts of missing participant data on the reliability of actuarial valuations. Both actuarial associations emphasized the need for prompt implementation of this recommendation.

8. From page 5: Under ERISA, an actuarial valuation must be made of each plan at least once every 3 years. Actuarial valuations, among other things, are intended to determine (1) the financial condition of the plan, (2) the required annual employer contributions, and (3) if a pension plan is on track toward the goal of having sufficient assets to meet benefit payments as they fall due. This determination is performed by comparing estimated future benefit payments with available assets and future anticipated contributions. The basic mathematical technique that the actuary uses to make calculations is called an actuarial cost method. There are several such cost methods used for multiemployer pension plans, and each produces a different pattern of annual payments to pay for the promised benefits.

The results of these periodic valuations are presented in formal reports submitted to the pension plan board of trustees. According to generally accepted actuarial practices, an actuarial report should present results showing the current financial status and projections that give an insight into the future. Also, it should include suggestions/recommendations for timely action whenever needed. Generally, actuarial reports are used to:

STATEMENT 1986-1

- Provide information concerning the adequacy of employer contributions and substantiate their tax deductibility.
- Provide a description of emerging plan experience since the date of the prior valuation. Such experience will be used, in part, to justify changes in actuarial assumptions pertaining to future expected plan experience.
- Serve as a reference source for discussions throughout the year relating to the plan.
- Provide enough statistical information and other details to enable other knowledgeable independent persons to determine the reasonableness of the valuation results and the reasonableness of any recommendations made.

Since the passage of ERISA, the information presented in the actuarial valuation report has been expanded to meet various statutory requirements imposed by ERISA and MPPAA. For example, ERISA requires enrolled actuaries to certify to the actuarial information included in the plan's annual report to the government. The required certification follows:

"To the best of my knowledge, the information supplied in this schedule and on the accompanying statement, if any, is complete and accurate, and in my opinion the assumptions used in the aggregate (a) are reasonably related to the experience of the plan and to reasonable expectations, and (b) represent my best estimate of anticipated experience under the plan."

Although the above certification is required pursuant to ERISA to be included in the annual report to the government, the actuary is not required to certify in the actuarial valuation report to the plan trustees that the actuarial information or results are complete and accurate. However, many actuaries employed by firms providing actuarial services to multiemployer pension plans include the above or a similar certification statement in their reports.

9. From page 29: Labor also stated that its field enforcement personnel are not qualified to determine whether the data are sufficient or reasonable for plan valuation purposes. Therefore, these issues often will require referral to the national office, where the program has an extremely limited actuarial staff.

This statement implies that only actuaries can determine the adequacy of data for valuation purposes. It is true that actuaries have an educational background that emphasizes mathematics as they often use knowledge of algebra, probability, and statistics to define, analyze, and solve problems involving financial risk. This background is necessary to properly develop and understand the algebraic formulas used in the estimates and calculations to arrive at the actuarial results. However, this type of technical background is not necessary, in our opinion, to determine the sufficiency of factual participant data used in actuarial

STATEMENT 1986-1

calculations. The valuation reports frequently disclose the type of data required of and provided by plan officials to the actuary and the extent to which such data are missing. Further, during our review, we found that the plan actuary could be easily consulted.

Whether the participant data are sufficient or reasonable for actuarial valuation purposes relates to more than just the extent of its completeness. It also involves whether the various elements of data on the individual participants are adequate to make reasonably logical and reliable assumptions regarding the missing data. For example, we believe the participant data would be considered inadequate for the one plan in our sample where dates of birth were missing for 75 percent of the active participants because there would be a low probability that the known data for 25 percent of the participants is representative of all participants. On the other hand, participant data would probably be considered adequate for a plan with complete data on 99 percent of the participants.

10. From page 31: In view of our findings on incomplete participant data, we continue to believe Labor should issue regulations. However, we do agree with Labor that it is not necessary to describe specifically all types of data a plan must maintain. We also agree with the American Academy of Actuaries that a uniform level of data sufficiency should not be applied to all plans and that administrative feasibility and cost-benefit considerations should be part of the regulatory process. Accordingly, we believe the regulations should establish guidelines for the maintenance of sufficient participant data by pension plans to enable the actuary to arrive at reliable actuarial valuations rather than, as we initially proposed, establish standards for the maintenance of complete participant data by pension plans.
11. From page 35: Though apparently concerned with the amount of missing participant data, few actuaries included statements in the reports cautioning that the incomplete participant data could affect the reliability of the actuarial results being presented. Statements to this effect were even lacking in those instances discussed in chapter 2 where there were large changes in prior years' costs due to the collection of previously missing participant data.
12. From page 36: In interpreting and amplifying the guides of professional conduct for actuaries, the actuarial profession recognizes that the actuary's responsibilities in the pension field to a high degree involve considerations affecting the public interest. As such, the American Academy of Actuaries and the Society of Actuaries recommend the actuary give consideration to adequate and clear disclosure of pertinent facts and findings in actuarial reports. Regarding incomplete participant data, it is specifically recommended that the report indicate the extent to which a present value calculation is based on incomplete or unreported data, the probable effect on the accuracy of the calculation, and the adjustment made to correct for such incomplete or unreported data. The recommendations, however, are silent on when missing data are significant enough to warrant disclosing the potential effect and what constitutes adequate disclosure of the effect of missing

STATEMENT 1986-1

data. Thus, it appears that disclosure is left to the professional judgment of the actuary.

The Joint Board for the Enrollment of Actuaries, established by the Secretaries of Labor and the Treasury as required by section 3041 of ERISA, has published standards of performance for enrolled actuaries. One of the standards requires an enrolled actuary to include, in any report or certificate stating actuarial costs or liabilities, a statement or reference describing or clearly identifying any "material inadequacies in data and the implications thereof." This standard closely parallels the above recommendation of the actuarial associations. However, the standards do not define or provide any criteria as to what is a "material inadequacy in data" and how the implications are to be disclosed.

13. From page 37: The Executive Director of the Joint Board for the Enrollment of Actuaries informed us that the nature of various provisions of ERISA elevated the importance of the actuary and actuarial valuations. He also informed us that the Congress established the Joint Board to regulate the competency of actuaries with respect to pension plans subject to ERISA. Accordingly, the Joint Board estblished standards and qualifications for persons performing such actuarial services.

When informed of the matters discussed in this report, the Executive Director of the Joint Board expressed concern over the lack of statements in actuarial reports and/or the actuarial certifications regarding the potential effect of missing participant data on the reliability of actuarial information. He stated that possibly performance and/or report standards could be adopted, similar to those of the American Institute of Certified Public Accountants, whereby actuarial reports and certifications would be qualified under specific situations, e.g., large amounts of missing participant data. He said he would favor a joint task force to formulate any such standards because (1) the Joint Board is small with limited resources and (2) experience has shown such an approach as opposed to government regulations to be more effective and readily acceptable by members of any profession. He suggested that any task force could include members of the Joint Board, actuaries employed by IRS, enrolled actuaries from major private firms, and representatives of the various professional actuarial associations and societies.

14. From page 38: The establishment of professional standards and their enforcement has traditionally been the responsibility of the individual professions through the associations of their members, such as the American Bar Association and American Institute of Certified Public Accountants. Because of the uniqueness of the individual professions resulting from specialized training and experience and varying responsibilities to the public, we believe that it is appropriate for professions--including the actuarial profession--to establish their own standards.

Accordingly, because of the effects of missing participant data on actuarial computations as shown in chapter 2 of this report, we believe the actuarial profession should develop appropriate standards for the

STATEMENT 1986-1

disclosure of the potential effect of material inadequacies in participant data on the reliability of actuarial valuations. In the absence of such standards, there is no generally acceptable understanding as to what constitutes appropriate disclosure of the effect of missing participant data. For example, we believe the actuarial profession should consider the degree of disclosure needed. The question should be addressed as to whether

- a general disclosure is adequate, such as a statement in the certification that "If we (the actuary) had complete data instead of having to make assumptions about missing data, the results of this actuarial valuation could have been materially affected causing the pension cost to be higher or lower," or
- a more descriptive disclosure is possible, such as disclosing a range in the cost estimate that could occur as a result of missing participant data.

We recognize that, in the development of standards, absolute certainty is no more attainable a goal by the actuary than it is for any other professional endeavor. What is sought is a reasonable degree of assurance based on professional judgment. For example, materiality is a state of relative importance, and defining and establishing a standard as to what is a material inadequacy will require the exercise of collective professional judgment. Both quantitative and qualitative elements warrant consideration in the determination of materiality. We also recognize that overemphasize on disclosure can detract from the usefulness of an actuarial valuation by obscuring important elements with a mass of details. By utilizing collective experience and judgment, the actuarial profession should be able to develop adequate standards.

Although we believe the Joint Board should not be charged with the development of disclosure standards relating to actuarial valuations, the Joint Board has statutory responsibilities under ERISA which gives it an inherent interest in the development of such standards. Accordingly, we believe the Joint Board should use the information in this report and such other information as can be provided by IRS and the Department of Labor to promote action by and work in cooperation with the actuarial profession to develop actuarial disclosure standards.

Section II: COMMENTS ON GAO REPORT

1. The members of the Multiemployer Data Task Force take a serious view of the GAO report. However, we have some concerns with the methodology and conclusions of the GAO report in a number of important areas.
2. Perhaps the greatest concern relates to the question of the use of sampling or sampling techniques. The GAO draws its conclusions from using "random selection techniques to select 149 multiemployer pension plans with about 3.5 million participants from a universe of 1,924 plans with 8.3 million participants." The actuarial valuations of 6 of these plans with an unstated number of participants were not available for study. Therefore, the GAO drew its conclusions using information from

STATEMENT 1986-1

plans covering less than 8% of the universe of plans and 42% of participants.

3. Assuming that correct sampling techniques were used (although not described) and properly applied, it is appropriate to draw conclusions from such a small portion of the universe. Likewise, it is appropriate to base actuarial valuations on a population sample which is chosen by proper sampling techniques. Yet the GAO report does not seem to allow the possibility of sampling as an alternative to complete data. It does not comment on sampling techniques or the methodology and adequacy of assumptions made by the actuary. It does not comment on the difference in methods, or their suitability, that could be used if all service is known but dates of birth are missing vs. the methods that can be used when both age and service are missing. ERISA section 4213(b), however, states that the plan actuary can, for determining withdrawal liability in the absence of complete data, rely on the data available or on a sample which can reasonably be expected to be representative.
4. The GAO argues that actuaries should disclose the likely effects of missing data. We agree. On the other hand we agree with the Pension Benefit Guaranty Corporation (PBGC) comment that the GAO did not disclose in its report additional information which would have been helpful. For example, while we might all agree that a \$46 million understatement of liabilities is important, it is also important to know whether this is a problem that is likely to be correctable. In the example shown, it is possible (although not shown) that the \$46 million understatement is less than 5% of the liabilities and might very well be made up by a small adjustment in future contributions over the next 30 or 40 years or by gains from favorable actuarial experience in other areas in the current plan year.
5. The GAO report states that 67 or 47% of the plans studied had no missing data on active participants. Virtually all multiemployer plans have some missing data. The question of limiting the amount of unknown data is affected by:
 - a. nature of industry (transient vs. steady work)
 - b. quality and cost of administration
 - c. historical organizational relationships

We agree with the GAO conclusion that it is important to improve the quality of data and to disclose the effects of substantial missing data.

Section III: POTENTIAL USERS OF THE ACTUARY'S WORK PRODUCT

1. The purpose of this section is to examine the parties that constitute "users" of multiemployer actuarial work products which are dependent on participant data, and their intended uses for the information contained therein.
2. In the context of this report, the "actuary's work product" is defined as any calculations which involve actuarial liabilities. The most common

STATEMENT 1986-1

source of the results of such calculations is the actuarial valuation report. The "work product" will also by definition include such material as the actuary's determination of withdrawal liability, written or oral information he provides during the collective bargaining process with respect to the cost of the proposed benefit changes and any other communications presenting or dependent on actuarial liabilities.

3. The most frequent users of an actuary's work product are the trustees of the multiemployer pension plan. Section 103(a)(4)(A) of ERISA requires that an enrolled actuary be engaged by the trustees on behalf of the plan participants.
4. The trustees' principal uses of the actuary's work product include the following:
 - a. The trustees must ensure that the plan is being properly funded. In multiemployer plans, typically the contribution rates are set by the employer and union in the collective bargaining agreement and the benefit levels are set by the plan trustees. As a result the trustees must rely on the actuary's work product to determine if the contribution rates can support the benefit levels within the minimum and maximum funding constraints. The funding of the plan is monitored on a regular basis, primarily through the actuarial valuation report.
 - b. The trustees will rely on the actuary's work product to determine if and when improvements should be made to the benefits of the plan. Benefit improvements encompass the addition of new benefits, changes in eligibility for benefits, increases for pensioners and, most frequently, increases in plan benefit levels.
 - c. The trustees are responsible for allocating withdrawal liability for the plan. Sections 4202 and 4219 of ERISA, as amended by MPPAA, require that the trustees assess complete or partial withdrawal liability to any employer who triggers such a withdrawal. Section 4221(e) of ERISA, as amended by MPPAA, requires that the trustees provide withdrawal liability information or estimates to any contributing employer who makes such a request. The trustees must rely on the actuary's work product in order to carry out their fiduciary and legal obligations with respect to withdrawal liability.
 - d. Individuals who serve as trustees may also have other roles. For example, in addition to serving as a trustee, an individual may serve as an official of the union, as an employer or as an employee of the employer association. The actuary's work product will therefore frequently serve as the basis for reporting to these interested parties.
 - e. The trustees are also responsible for the investment of the plan's assets. Certain portions of the actuary's work product, either as contained in the annual valuation report or as separately prepared, may be used by the trustees as a source for making investment decisions. An example of this is a schedule of emerging benefit

STATEMENT 1986-1

payments which is the basis for projecting the expected cash flow of the trust. Such information may be necessary in order to know how much, if any, of the assets should be invested in short term obligations and how much may be invested in long term obligations. Trusts that invest so as to match asset and liability cash flows or use a partial or full immunization approach find this particularly important and normally will require a special work product from the actuary for this purpose.

- f. Trustees, as a group or on an individual basis, may rely on the actuary's work product as a useful source of general information for maintaining the plan and trust. For example, individual trustees are frequently interested in information such as funding ratios, average benefit payments, number of plan participants, average ages, average periods in the industry, distributions by various employers, etc. Such information may be of general interest to an individual trustee or may be used to design a benefit structure which more closely meets the needs of the plan participants.
5. A second category of user is the United States government. The following paragraphs comment briefly on the uses which specific government agencies have for the actuary's work product.
 - a. The Internal Revenue Service relies on the actuarial certifications in Schedule B of Form 5500, the actuarial valuation report and, in certain cases, special actuarial calculations prepared by the actuary to determine (i) that the minimum funding requirements have been met pursuant to Internal Revenue Code Section 412, and (ii) whether the maximum tax deductible contributions have been exceeded pursuant to Section 404 of the Code. The Service also relies on this information with respect to various other questions related to enforcement of the Code and other auditing functions.
 - b. Certain units of the Department of Labor use the actuary's work product primarily for statistical purposes, including the compilation of data on unfunded past service liabilities, benefit security ratios, etc. They may also use information prepared by the actuary in order to carry out various functions under ERISA and for support in litigation of certain cases.
 - c. The Pension Benefit Guaranty Corporation relies on actuarial certification of the sufficiency of assets to cover liabilities of terminating pension plans.
 - d. The General Accounting Office (GAO) uses the actuary's work product primarily for the purpose of gathering statistical data regarding multiemployer pension plans. This data serves as the basis of special studies and reports and, in many cases, forms the basis of Congressional action.
6. Plan participants are emerging as a new category of user of the actuary's work product. Plan participants have become more educated and increasingly sophisticated about their plans and benefits. As a

STATEMENT 1986-1

- result, some participants are analyzing the actuary's work product for a number of reasons, such as to compare plan assets to liabilities, to compare recommended and actual funding rates, and to examine withdrawl liability as a factor which may limit otherwise anticipated benefit or compensation increases.
7. The arbitrator has become an important user of the actuary's work product in two separate areas. These are discussed below.
- a. An arbitrator may be appointed to resolve a deadlock pursuant to Section 302(c)(5) of the Taft Hartley Act (29 USC 186(c)(5)). In these cases the solvency and cash flow of the fund is of considerable importance in many types of arbitration. For example, questions arise with respect to whether benefits can be increased, whether future service as distinguished from past service benefits should be increased, and what options should be allowed at what actuarial equivalents.
 - b. An arbitrator may be appointed to resolve a withdrawl liability dispute pursuant to Section 4221 of ERISA, as amended by MPPAA. The essence of many such disputes relates to the actuarial liabilities, which in turn are related to the accuracy of the calculations and the validity of the actuary's assumptions, including the data used and assumptions made with respect to that data. These cases have become more numerous as a result of the frequent application of MPPAA's provisions.
8. Contributing employers use the actuarial work product generated by the multiemployer pension plans for a number of purposes. Examples include assistance in collective bargaining, analysis of the actuarial soundness of a particular pension fund and assistance in estimating the withdrawl liability. Employers are also interested in reviewing the actuary's work product to determine the effect of certain emerging factors on pension funds. For example, employers may be interested to know how a fund is affected by the decline of an industry, an aging population, a growing ratio of retirees to active employees, or a diminution of hours or days worked, with respect to both the levels of contributions and the liabilities. In addition, many employers are now conducting comprehensive surveys of the multiemployer plans to which they contribute in order to analyze the assets and liabilities, cash flow, historical growth and fund performance, and future expectations. When planning for the sale or shutdown of a business unit, contributing employers may find an actuary's work product of interest in evaluating the attendant financial considerations. Financial disclosure requirements may become another reason for the contributing employer to examine the actuary's work product.
9. The labor organization or organizations involved in a plan parallel the contributing employers as a user of the actuary's work product. Labor's primary use of the work product relates to negotiations. In this respect, labor is generally reviewing the contributions and liabilities in connection with plan assets in order to make such determinations as the strength of the fund or the portion of the negotiation demands that should be related to increasing the contribution levels. Other purposes

STATEMENT 1986-1

for which the unions may use the actuary's work product range from (1) using statistical data to determine the average age of the work force and the number and percentage of the work force employed and unemployed, to (2) the solution of much more complicated actuarial problems. For example, there is a plan that has a special employer contribution due when the ratio of market value of assets to unit credit accrued liability falls below 50%. In this case the union uses the actuary's work product to determine when that contribution is due. While most negotiations involve levels of contributions, some also involve benefit levels. In the latter cases, the actuary's work product becomes even more important.

10. Another principal user of the actuary's work product is the financial community at large. MPPAA has had a substantial impact on an employer's financial obligation to the multiemployer plan. As a result, when contributing employers are attempting to sell securities or borrow money, the underwriters, lenders or other members of the financial community undertake a review of the actuarial report or other work product of the actuary for all multiemployer plans to which that employer contributes. This review is intended principally to identify withdrawal liabilities under MPPAA. It also is concerned with determination of the general strength of the fund, for instance, where it is reasonable to anticipate that contribution rates will increase in the future because the funding is weak.
11. Courts and adjudicative agencies (administrative law judges, etc.) will continue to become more frequent users of the actuary's work product as a result of more frequent legal proceedings involving multiemployer pension plans generated by MPPAA, as well as those generated by Part 4, Title I of ERISA, qualified domestic relations orders, and other reasons. In this respect the actuary may be required to testify and to justify the validity of his calculations, including the underlying data related thereto. Such testimony may frequently involve interrogatories, depositions and testimony in open court. In all of this testimony the validity of the data base is a key item.
12. Finally, other professionals and experts retained by the trustees of the multiemployer pension plan will use the actuary's work product in connection with their own areas of expertise. For example, the investment manager may examine the actuary's work product to project the future cash flow of the fund; the accountant may rely on the actuary to calculate the values of accrued benefits required by FASB No. 35 and counsel may examine the actuary's work product to determine actuarial values in many different situations, including the determination of withdrawal liability under MPPAA.

Section IV: MATERIALITY

1. This section discusses the application of the concept of materiality to actuarial aspects of missing data for multiemployer pension plans. Materiality is not easily defined. An actuary's assignment normally will suggest whether or not missing information would materially affect his or her work product. Generally a variation in an item is material if a knowledgeable user of the report would act differently or reach a

STATEMENT 1986-1

different conclusion if that variation were not present. When data are missing, assumptions must be made so as to provide financial values which approximate what the appropriate values would have been. If the assumptions prove reasonable, there is no material effect on the financial results.

2. The concept of materiality is frequently referred to in actuarial practice and literature. For example, Recommendation 9 of the Financial Reporting Recommendations and Interpretations of the American Academy of Actuaries deals with materiality with regard to the financial reporting of life insurance companies. In the Paper "Analysis of Approximate Valuation Methods", by E. Allen Arnold in Volume VII of the Transactions of the Society of Actuaries, the author states, "One might say that nearly all of the actuary's work consists of dealing with approximations." The assumptions and methods employed by the actuary to deal with approximations can have a material impact on the financial results.
3. An actuary is expected to pay scrupulous attention to professional standards in the selection of actuarial assumptions and methods, including the assumptions and methods used to deal with missing data. He must disclose significant information to those whose actions may be influenced by his actuarial opinions or findings. Under the concept of materiality, it is appropriate for the actuary to employ, without disclosure, approximate methods and procedures when the effect would be of little significance to a potential user of the actuary's work.
4. Disclosure is always necessary when dealing with missing data for multiemployer pension plans. At the very least disclosure would include, but would not necessarily be limited to, a statement of the amount of missing data and the assumptions and methods utilized to compensate for the missing data in the completion of the results. Additional disclosure is required if the use of reasonable alternative assumptions and methods would have had a material effect on the results.
5. Determining whether an item is material or not is a difficult professional judgment. In making that judgment, the actuary should consider the use of his work and its probable impact. The judgment involves quantitative as well as qualitative consideration. Although an attempt is made below to provide guidance to the actuary in making decisions as to each of these elements of the materiality judgment, it does not constitute a precise definition of materiality. In addition, the actuary should recognize that there are instances when either the quantity or nature of the missing data is so material that the data cannot be used and he must decline to complete the assignment without more complete data.
6. The following paragraphs comment briefly on quantitative concepts that the actuary may find useful in making his judgments as to materiality. In no case should the actuary regard any quantitative guidelines that are utilized as conclusive, but he may use them as a corroborating supplement to his judgment. Any quantitative guidelines should be regarded, at most, as raising a presumption which may be rebutted, in the actuary's judgment, by particular circumstances in the case.

STATEMENT 1986-1

7. As an example, an actuary may utilize a quantitative guideline as to the extent of missing data permissible in completing an actuarial report. This quantitative guideline alone should not necessarily be considered conclusive, but rather as a supplement to the actuary's judgment based upon his knowledge of the particular circumstances, including the distribution of the known data, the industry, location, etc. If the actuary determines that the amount of missing data in a particular instance is permissible, his disclosure could be limited to the amount of missing data and the assumptions made in regard to it.
8. The primary criteria for materiality applied by an actuary for an actuarial report on a multiemployer pension plan should be related to the specific nature of the report and the use to be made of the figures calculated. Section III of this report provides examples of the uses to which actuarial reports are put.

As examples of how the criteria for materiality may be related to the use to be made of the report, the following are offered.

- a. The criteria for missing data for a formal actuarial valuation may be more stringent than those for a report, produced on short notice and with adequate disclosure, showing the benefit levels that might be supported by various increases in employer contribution rates.
- b. For participants whose credited service is missing, an assumption for valuation purposes of a particular entry age (for example, age 25) may be appropriate, but this same assumption may be either appropriate or inappropriate in computing unfunded vested benefits for use in a withdrawal liability calculation.
- c. Where there is missing data among nonvested participants only, there would be no effect on a calculation of unfunded vested benefits, although the effect on the actuarial valuation might be material.
9. The magnitude of financial effect of a matter should be viewed in terms of both absolute and relative amounts. For instance, when the underlying figures are of significant absolute dollar amount, the materiality judgment should generally be related to percentage change. However, the percentage change consideration may not be appropriate when the underlying figures are a small dollar amount. When the dollar amount of change is very large, materiality may be implied for this reason alone.
10. The actuary must decide on the materiality of items for which he is responsible. Although he is not generally directly responsible for the underlying data, he is responsible both for the decision to use the data and for the assumptions and methods which convert that data into financial results. In making judgments on materiality, the actuary should consider whether the cumulative effect or the net effect of a number of items (including items which may be the responsibility of others) may be material even though each item individually may be

STATEMENT 1986-1

immaterial. As examples of such judgment, with no implication that materiality is limited to such examples, the following cases are offered:

- a. Missing dates of entry for participants joining the plan after its starting date and who are not eligible for past service are not material if accumulated plan service is available.
 - b. Missing data among new entrants with a low probability of receipt of benefits are not material because their costs represent a small portion of total costs. For those who survive to a point where the probability of receipt of benefits is substantial, the lack of data may have a material effect.
 - c. Missing data relating to dependents are not material where benefits to dependents represent a small portion of total cost and appropriate assumptions are used.
 - d. In predominantly male or female industries and areas, missing sex designations are not material where appropriate assumptions are used.
 - e. Plans with reciprocal pension provisions may have little or not data on service in reciprocating plans. A judgment as to materiality may have to be based on other factors such as anecdotal evidence or the recent history of retirements involving reciprocal pensions.
11. A stricter test for materiality should be applied to those items which have a continuing and pervasive effect on future reports of the multiemployer plan than to unusual and non-repetitive items. As an example of the latter, missing data of a group of participants who will in all likelihood not qualify for benefits is not material. This would occur if a small number of new participants are working on a project of limited duration requiring contributions to the plan. If this group is not anticipated to work in covered employment beyond that particular project's duration, they will never qualify for benefits and their missing data would not be considered material.
 12. In making a materiality judgment, the actuary should consider the cost of developing precise information, relative to the benefits to users of that information. Disclosure is indicated when, for cost reasons, approximations of significant items are made. An example would be where due to the size and geographic distribution of a group, complete data is not available. A scientific sampling of the group based upon properly administered statistical techniques will produce acceptable results at a cost which can be substantially below the cost of attempting to secure complete data.
 13. The actuary must make his judgment regarding materiality on the basis of information available at the time the judgment is made.

STATEMENT 1986-1

14. The actuary should consider including in the actuarial report a brief description of those circumstances where he made a close decision to treat an item or an aggregate or net of a number of items as not material.

Section V: DISCLOSURE LANGUAGE

1. An actuarial valuation statement should contain:
 - (a) A statement of the type and magnitude of unknown data.
 - (b) A statement as to the assumptions made with respect to the unknown data in the actuarial valuation.
 - (c) A statement as to the materiality of the unknown data.
2. The following paragraphs contain examples of language which might be used in certain situations. Other forms of disclosure should of course be developed to meet specific circumstances.
3. For example, an actuarial report could include the following:
 - (a) "Employees active during year ended (including _____ employees unknown as to age, service or both) . . .
....."
 - (b) In the section of the report on actuarial assumptions, a statement should be made as to the assumptions used for the missing data.
 - (c) "The valuation was based on the assumption that the plan was qualified for the year and on information supplied by the auditor with respect to contributions and assets and by the Plan Administrator with respect to the data required on employees and pensioners. We have not verified and customarily would not verify such information, but we have no reason to doubt its substantial accuracy. Adjustments for incomplete or apparently inconsistent data were made as described in the attached Exhibit _____. Such incomplete or apparently inconsistent data is not so numerous or substantial as to suggest that there may be material inaccuracies, and in my opinion, the valuation fairly discloses the financial condition of the plan."
 - (d) Data
This valuation was based on employee data furnished by _____. Non-retired participants were provided on an electronic tape and retired participants were provided on a separate listing. This data included _____ non-retired participants and _____ retired participants. Initially, the non-retired participants were divided into several groups, as follows:

STATEMENT 1986-1

	<u>Records with both date of birth and date of entry provided</u>	<u>Records missing either the date of birth, date of entry, or both</u>	<u>Total</u>
(i) Active participants who worked _____ hours or more during the preceding year			
(ii) Non-active non-vested participants with:			
1. 1 year break-in-service			
2. 2 years break-in-service			
3. 3 years break-in-service			
4. 4 years break-in-service			
5. 5 years break-in-service			
6. 6 years break-in-service			
7. 7 years break-in-service			
8. 8 years break-in-service			
9. 9 years break-in-service			
(iii) Non-active vested participants	—	—	—
(iv) <u>Total</u>			

It should be noted that of those records which did not contain complete information, the total credited service earned was _____, which represented an average of _____ years of credited service to the valuation date. For those _____ participants who were missing dates of birth or dates of entry, or both, those missing dates were assigned. If a date of entry was missing, then this date was estimated, based upon the number of credits earned through the valuation date. If a date of birth was missing, then this date was assigned to correspond with an age at entry of _____.

STATEMENT 1986-1

4. An alternative statement might be:

"Data provided for this valuation was based on a 5% sample for non-retired employees. Full data was available for retired employees. The 5% sample, which is described in an attachment, meets acceptable statistical criteria and, in my opinion, produces calculations which fairly disclose the position of the plan."

5. A different statement might be:

"Of the records on active participants, x% were missing date of birth. Over 90% of this group have fewer than 3 service credits, indicating that they are primarily short service individuals. Each one was assumed to have joined the plan at age 25 and his current age to be the sum of 25 and his service credits. On this basis the present value of future benefits for this group was less than 2% of the corresponding figure for all participants."

The final sentence in this statement might be replaced by:

"On this basis the present value of future benefits for this group was 9.5% of the corresponding figure for all active participants. If each participant with missing date of birth were assumed to have joined the plan at age 30 and his present age to be the sum of 30 and his service credits, the present value of future benefits for the group would have been 9.8% of the corresponding figure for all active participants."

Section VI: GENERAL COMMENTS ON MULTIELPLOYER PLANS

Multielmployer pension plans fall in a separate and unique category of pension plans. That they fill an important gap in the need to provide pension benefits can be shown by reviewing some of their characteristics. The only thing that all multielmployer plans seem to have in common is that they meet the ERISA definition. For each other characteristic there always seems to be a plan somewhere that is an exception. These exceptions are most often due to unusual circumstances facing a specific industry or situation.

1. Multielmployer plans are a direct consequence of collective bargaining. The first step in establishment of such a plan is a provision in the pertinent collective bargaining agreement for a specified contribution to a trust to provide pension benefits to the employees covered by the agreement. The trustees of the plan include representatives of both the employees and the employers. The trustees have responsibilities which are defined in ERISA.
2. The employees covered by multielmployer plans come primarily from two basic categories.
 - a. Small employers who have neither the staff nor the resources to set up their own pension plan. Joining with other employers to establish a trust fund managed through a joint board of employer and union trustees is often an effective means to provide retirement benefits for union-represented employees.

STATEMENT 1986-1

- b. Trades, crafts, or occupations in which there is a high degree of mobility among employees in a given industry and geographical area. The traditional single employer approach to providing retirement benefits would rarely result in meaningful pension benefits for these employees.
- 3. Benefits provided by multiemployer plans are most often related only to the credited service of the participant. There are, however, many notable exceptions to this general rule.
 - a. Maximum credited service. Some plans limit the credited service to some number of years such as 10, 20 or 30.
 - b. Variation by contribution rate. Some plans cover employees governed by different bargaining agreements. The number of collective bargaining agreements may run from two to more than 1,000. In those cases where the agreements do not all provide for the same contribution rate, benefits will normally be different for different contribution rates.
 - c. Variation by amount of contributions. Some plans relate benefits to the total contributions contributed on behalf of the employee or, in the case of those few plans that require employee contributions, to the total of such contributions.
 - d. Final average earnings. Some plans relate benefits to the average earnings over some period of time immediately preceding retirement.
 - e. Flat benefit. Some plans provide the same dollar amount of pension to each retiree.
 - f. Special variables. Some plans use variables that are unique to a particular industry or situation. Maritime plans, for example, may relate benefits to the type of ship, the watches stood, special arrangements as to vacation days, etc. Such plans often present especially difficult data problems.
 - g. Combinations. Plan benefits may be a combination of more than one of the above.
- 4. Contributions to multiemployer plans are most often based on a unit of work (hour, week, ton of coal mined, etc.). However, they may be based on other things. Since MPPAA, a source of income for some plans is payments of Withdrawal Liability from employers who no longer participate in the plan.
- 5. The Trustees of each plan are responsible for maintaining the balance between contributions paid to the plan and the benefits to be paid to the plan beneficiaries. In most plans, the contributions are set by the collective bargaining agreements. This means that the trustees must determine what benefit structure can be supported over the long term by the contributions to be received plus the investment income to be earned on plan assets less the expenses of administering the plan. In most

STATEMENT 1986-1

instances where the benefit structure is set by the collective bargaining agreement, the trustees reverse the process and determine what contribution flow is needed.

6. Many multiemployer plans enter into reciprocal agreements within the same industry. These generally protect employees who have service credits in more than one plan from the loss of the benefits associated with these credits. Thus, reciprocity provides a form of pension portability.

STATEMENT 1986-2

January 29, 1986

Mr. William M. Lieber
Pension Tax Counsel
Joint Committee on Taxation
1011 Longworth House Office Building
Washington, DC 20515

Dear Mr. Lieber:

Gary Simms, Christine Nickerson and I appreciate the time you and Elaine Church took to meet with us on Thursday, October 17, 1985. You will recall that our discussion focused on your proposals relative to:

1. Reasonableness of actuarial assumptions for defined benefit pension plans - Significant assumptions must be reasonable standing on their own.
2. Penalties for overstatement of pension deductions - A new penalty tax would be assessed with respect to overstatement of actuarial liabilities and deductible contribution amounts (presumably due to unreasonable actuarial assumptions).

You indicated that these proposals were designed to deter perceived abusive actuarial practices that tend to inflate tax deductions for contributions to very small defined benefit pension plans. We indicated on October 17 that if there are areas of "abuse," they should be targeted more specifically than is the case with these proposals. The purpose of this letter is to provide you with the Academy's analysis of this problem. Although proposal 1. is not contained in the tax reform bill recently passed by the House, our comments will also address that proposal.

L The Original Proposals

First, we should make clear the fact that the Academy opposes the two proposals described above. We believe that they will not only fail to target the small plan problem that you indicate exists, but will create additional problems.

Proposal 1. - Reasonableness of Actuarial Assumptions

The selection of actuarial assumptions is a complex task requiring a substantial understanding of the nature of a particular plan sponsor's labor pool and industrial characteristics and a substantial understanding of the impacts of actuarial assumptions on the results of actuarial work. An inappropriate set of actuarial assumptions in the case of any particular plan can result in accumulating assets too rapidly (which appears to be the concern your proposals are designed to address) or too slowly in the short-term.

Congress has delegated to the enrolled actuary considerable discretion in developing sets of actuarial assumptions for private, defined benefit pension plans (see Section 412(c)(3) of the Code). Given the complexity of this function, such discretion is appropriately placed.

STATEMENT 1986-2

Current law requires that the enrolled actuary use "actuarial assumptions and methods which, in the aggregate, are reasonable (taking into account the experience of the plan and reasonable expectations) and which, in combination, offer the actuary's best estimate of anticipated experience under the plan."

The Internal Revenue Service (IRS) has attempted to develop techniques to test actuarial assumptions for reasonableness in the aggregate. This effort has led to the development of a set of actuarial audit guidelines. These guidelines are complex; they are also flawed. Development of these guidelines has been a major effort for IRS. This effort would pale against the effort required to develop and enforce a set of legal requirements for reasonableness of individual assumptions.

If execution by the IRS of such regulatory authority over the assumption selection process is to be appropriately sensitive to the specific environments in which individual plans operate, an intricate system of regulations and procedural processes (including appeal procedures) must be instituted. In order to maintain such a system, a substantial increase in legal, actuarial, and other professional staff would be required by the IRS. The result, we believe, would be a substantial and ongoing increase in the cost of regulatory operations and the establishment of complex regulations and procedures that will not serve to improve the overall quality of actuarial work in the pension area.

At our meeting, you indicated a substantial concern regarding the lack of growth in the private defined benefit pension area. We certainly share your concern. The complexity of regulations and frequent changes in regulatory requirements contribute to the climate of uncertainty surrounding these plans. Any substantial new regulatory system will certainly aggravate this problem.

Proposal 2. - Penalty for Overstatement of Pension Deductions

This proposal would add a special penalty tax for overstatement of tax deductions for pension contributions. Whether assessed against actuaries or plan sponsors, this is an unworkable arrangement.

In order to determine the amount of such an overstatement, a means would need to be developed to determine the "appropriate" maximum deductions. Neither the tax reform bill nor the committee report addresses this problem. Such a determination entails not only assumptions but actuarial methods as well. The determination in each case of the amount of the appropriate deduction for a pension is a very difficult one, if done properly. A good faith effort by the IRS to calculate such contribution levels for each plan would represent a gigantic work load. Such an effort would not serve to improve the quality of actuarial work performed for retirement plans; it would serve only to further complicate the process.

It is very important, in attempting to resolve any perceived problem in the funding of qualified benefit pension plans, to ensure that the "cure" does not create other problems which may be as severe as the original "disease." For example the special tax penalty on "overfunded plans" could discourage proper funding of plans and lower the level of funding. Thus, in attempting to resolve

STATEMENT 1986-2

an issue dealing with perceived excessive deductions, additional problems could be created for the Pension Benefit Guaranty Corporation (PBGC) when plans subject to Title IV of ERISA are terminated.

In summary, the Academy believes that the proposals cited on page 1 of this letter not only fail to satisfactorily address your concerns, but would instead create additional burdens for the IRS and plan sponsors which would serve only to make defined benefit pension plans less attractive to such sponsors.

II. Mechanisms Currently in Place Should Be Given a Chance to Work

There are a number of items currently in place that affect the funding of the small plans. For example:

- A. Section 415 - This section of the Internal Revenue Code constrains the amount of benefit which can be accrued under a qualified retirement plan. Such plans are not allowed to fund for benefits in excess of the current limit, even if the individual involved is expected to retire after indexing resumes in 1988.
- B. Section 416 - This section provides for special minimum benefit accruals and vesting requirements for plans which are "top-heavy." In addition, pay levels recognized for determination of benefits of key employees are limited. Since most small plans are top-heavy, this is another constraint on benefit levels and, hence, funding levels for such plans.
- C. IRS Actuarial Audit Guidelines - In late 1984, the IRS announced a set of guidelines for use by its field agents in the initial review of defined benefit pension plans in the tax audit process (see page 2). The purpose of these guidelines is to test the actuarial basis used to determine both minimum contribution levels under Section 412 of the Code and maximum tax deductions under Section 404 of the Code. While these guidelines are seriously flawed, they target, among other areas, the very "abuse" with which you are concerned.

We suggest that changes in the provisions of Section 415 enacted in 1982 and 1984, the enactment of the top-heavy plan provisions in 1982, and the commencement of use of the IRS audit guidelines in 1985 have been enacted or established, in part, to deal with the problems that your proposals are to address. With these new items only recently put in place, their impact on the perceived abuse is not yet known. We suggest that it is premature, at this point, to enact additional remedies directed to the same problem.

III. Abuse

As we indicated earlier, the actuarial profession has been delegated considerable professional discretion by the Congress in developing contribution levels for qualified defined pension plans. We are convinced that the vast majority of actuaries use that discretion properly and with considerable professional skill. Any abuse of that discretion is a serious problem for the entire actuarial profession. Among other things, it creates in the minds of responsible policy makers and regulators concerns regarding a need to restrict the prerogatives of all actuaries. The Academy strongly

STATEMENT 1986-2

believes that those practitioners who abuse their prerogatives should be dealt with appropriately; those who do not should not suffer for those who do.

There are mechanisms in place which are designed to deal with such abuse. For one, the Academy has an active Discipline Committee which is responsible for hearing cases involving allegations of actuarial misconduct and dispensing appropriate justice in such cases. The Joint Board for the Enrollment of Actuaries deals with similar cases involving enrolled actuaries. It has authority to suspend or revoke the enrollment of any actuary who abuses the privilege of enrollment.

If you believe that these mechanisms do not reach all abuse, we would appreciate the opportunity to work with you to ensure that such mechanisms perform the functions they were designed to perform.

Again, the Academy strongly believes that abusive practices should be dealt with and should not be allowed to impair, in the vast majority of cases, the appropriate exercise of the actuarial discretion intended by Congress.

IV. Professional Standards for Actuaries

The Academy has believed, since its inception, that development of standards of practice in all actuarial areas is one of its most important functions. Recently, this activity has been intensified and further formalized with the establishment of an Interim Actuarial Standards Board (IASB). It is intended that this body will exist for about three years and will pave the way for a permanent Actuarial Standards Board.

The IASB was formally placed in existence by the Academy Board of Directors on October 8, 1985. It is charged with responsibility for development of standards of practice for actuaries in all practice areas, including pensions.

The review and update of actuarial standards in the pension area is one of the priorities of the IASB. While we cannot commit the IASB to any particular timetable, we believe that the results of its work will become visible within a reasonable amount of time.

V. Summary

1. The Academy **opposes** proposals 1. and 2. as described on page 1 of this letter. We understand that the primary purpose of these proposals is to deter "abusive" actuarial practices, particularly in the small pension plan area.
2. The Academy believes that enactment of these proposals would require substantial activity by the IRS which is not currently required. This activity will result in increased budget requirements for the IRS and complexity for taxpayers, without prospect for meaningful improvement in the quality of actuarial work being done in the pension area. We believe that these measures do not reasonably address the concerns you raised in our meeting of October 17, 1985. The additional regulatory burdens involved can only serve to make the establishment and maintenance of defined benefit pension plans more difficult. Termination of such plans would be further encouraged.

STATEMENT 1986-2

3. There are mechanisms in existence to address your concerns. There has been much recent legislative and regulatory activity in this area. Additional legislation at this time is at least premature.
4. Abuse of the prerogatives delegated to the enrolled actuary by Congress is of great concern to the actuarial profession. There are mechanisms designed to deal with such abuse. If they are not working, we would be anxious to work with you in perfecting those mechanisms and more actively applying them.
5. The Academy has treated standards of practice as a priority for the profession. This effort is intensifying with establishment of the IASB. Standards of practice in the pension area will be reviewed by the IASB.

We believe that we share with you a common goal: the strengthening of the private pension system in the United States. We look forward to working with you in future efforts to achieve our common objective.

Sincerely,

(signed)

Norman S. Losk, Chairman
Pension Committee

STATEMENT 1986-3

January 31, 1986

The Honorable Bob Packwood
Chairman, Senate Committee on Finance
219 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Packwood:

The American Academy of Actuaries includes within its ranks more than 80% of all enrolled actuaries. We would like to bring to your active consideration a provision of H.R. 3838 that, as adopted by the House, would impose a penalty tax against pension plans when actuarial liabilities and deductible contribution amounts are "overstated," presumably as a result of unreasonable actuarial assumptions. The Academy strongly opposes this provision for the reasons set forth below:

- The bill contains no definition of the word "overstated," and the accompanying committee report offers little guidance. This absence of a clear definition would increase uncertainty and could easily lead to litigation.
- The proposal, as originally drafted, applied directly to the plan actuary, but was modified to apply to the plan sponsors. This change is of little significance, since any plan so taxed would seek restitution from the plan actuary. This will exacerbate the liability insurance problem faced by actuaries and increase actuarial fees for all plans.
- With a wide array of enforcement tools already at its disposal, the Internal Revenue Service does not need the hypothetical leverage the new penalty would offer. Administering the nebulous concept of "overstated" liabilities would add to IRS compliance costs as well.
- Penalizing alleged overfunding would have the inevitable result of encouraging underfunding of pension obligations, which is antithetical to the intent of ERISA. This would add to the strain on the already limited resources of the PBGC.
- The proposal would have little, if any, impact on the revenue neutrality of the tax reform measure as a whole.

In closing, we note that this proposal was adopted by the Ways and Means Committee without the benefit of public discussion. In addition, given your committee's schedule, it appears unlikely that public debate on this measure will be possible. Hence this letter. We are eager to discuss this matter with you or your staff at your convenience.

Sincerely,

(signed)

Stephen G. Kellison

STATEMENT 1986-4

February 6, 1986

Mr. John E. Hart
Accounting Standards Division
American Institute of Certified Public Accountants
1211 Avenue of the Americas
New York, New York 10036-8775

RE: FILE 3164 - FRONTING

Dear Mr. Hart:

Thank you for the opportunity to review the October 2, 1985 draft on "Fronting" that is under consideration by the AICPA Reinsurance Auditing and Accounting Task Force. Members of both the American Academy of Actuaries' Committee on Life Insurance Financial Reporting, and Committee on Property and Liability Financial Reporting have reviewed the draft; their comments have been incorporated herein.

The draft takes the position that, in a fronting arrangement, the fronting company is providing a service that is administrative in nature. We disagree with this position. While the fronting company does customarily provide administrative services in the areas of policy writing and claim handling, these services are ancillary to the true purpose of the contract. (Indeed, these services could be purchased separately without the need for fronting.) Clearly, fronting is employed for other reasons and purposes; principally the use of the licenses, surplus, and financial strength of the fronting company by the fronted company. These uses suggest that it would be wrong to minimize the financial risks to the fronting company, as the draft does in the introductory paragraph on the first page.

In the draft, fronting is defined as "an arrangement whereby an insurer issues a policy while simultaneously having a prearranged agreement with another insurer who will assume all of the underwriting risk relating to such policy." This definition is too broad in that it encompasses situations that (we believe) are not intended for inclusion. Below are examples of circumstances that we would not characterize as fronting, but which would be included in the above definition.

- Many companies employ inter-company pooling agreements between affiliates, under which one company cedes 100% of the business to another company, and receives in return a fixed percentage of the pooled result. Rather than being classified as a primary insurer, the draft definition implies that such a company should be classified as engaging in (a) fronting and (b) reinsurance.
- There are a variety of residual market mechanisms, such as the Massachusetts Automobile Reinsurance Facility, which would be characterized as fronting under the proposed definition. In a similar vein, there are a variety of private pools and associations that also do not issue policies directly because they are not an insurance company. In these situations a participating member issues the policies on behalf of the pool, and cedes the risk to the pool. The pool then cedes

STATEMENT 1986-4

proportional shares of the risk to participating members. These programs could also be characterized as fronting under the draft definition.

- In order to offer a full array of products some companies have arrangements with others, under which certain risky products are routinely ceded to another company. For example, a company might have an arrangement under which all of its umbrella liability policies are ceded to a particular reinsurer. Such an arrangement would be characterized as fronting under the draft definition. However, in this situation the reinsurer is accomodating the primary insurer; in a typical fronting arrangement the reverse would be the case.
- In the normal course of business, and particularly in the specialty lines, underwriters arrange their reinsurance prior to writing a direct insurance contract. It is the responsibility of the underwriter to decide not only which risks to write directly, but also which risks or portions of risks to retain. Under the circumstances the underwriter may on occasion find it advantageous to cede 100% of certain risks. Should such a facultative placement, if arranged in advance, be characterized as fronting?

In addition to the question of whether the circumstances enumerated above should be included within the definition of fronting, there is the issue of materiality. With many companies the amounts of business involved would clearly not justify the segmentation of this business for financial reporting purposes.

Finally, we believe that, in addition to the present discussion of accounting in the issues section, the issue of disclosure should be discussed. While disclosure is addressed briefly in the advisory conclusions, the issue of contingent liabilities can be of great concern, and should therefore be addressed regardless of the method of accounting selected. For companies that are heavily involved in fronting, the contingent liabilities can be very material; users of the financial statements should be able to ascertain the magnitude of these liabilities so that they can judge whether the company has the capacity to absorb the financial risks that it has taken on. The present discussion appears to consider the issue only as it bears on the accounting, and not in relation to disclosure.

Thank you for the opportunity to comment. We would certainly appreciate being informed of your further progress on this project.

Sincerely,

(signed)

Stephen P. Lowe, Chairman
AAA Committee on Property and Liability
Financial Reporting

STATEMENT 1986-5

February 10, 1986

Ms. Anne Moran
Tax Counsel
Committee on Finance
219 Dirksen Office Building
Washington, D.C. 20510

Dear Anne:

Thank you for meeting with us on behalf of the American Academy of Actuaries. We felt that the meeting was productive and hope more will follow. You asked that we send you a letter to outline key welfare plan issues that should be addressed under the DEFRA Technical Corrections Act (TCA).

The key issues include the following:

- The Blue Book indicated that the new VEBA rules for integrating long-term disability (LTD) plans should become effective only after regulations are issued. We suggest that this be formalized in the TCA because of the lack of clarity of the new rules.
- The requirements are not clear in a situation where one plan has two segments; a funded segment that is nondiscriminatory and an unfunded segment that is discriminatory. A company that includes both segments under one plan should not be treated more harshly than a company that uses two separate plans. This inequity can be avoided by applying the rules separately to the funded and unfunded portions of the plan. This issue includes VEBA discrimination rules and 419 and 461 deduction rules.
- The DEFRA funding limitation is based on the comparison of assets and liabilities as of the end of the fiscal year. However, a fluctuation in market values could cause a company inadvertently to overfund. The company may not receive the trustee's report on the market value of assets until a month or two after the end of the fiscal year. We suggest that the TCA allow the company to choose one of the following approaches:
 - Use an actuarial value of assets that reflects -- but need not equal -- the market value. As an example, the actuarial value of assets at the end of the year might equal the actuarial value at the beginning of the year plus contributions less disbursements plus estimated investment income (at the valuation interest rate). If the actuarial value differs from market by more than 10%, an adjustment of half the difference would be made to the actuarial value.
 - Use the market value as of a date not earlier than six months preceding the fiscal year end. Adjustments for contributions, disbursements and interest would be made to establish the year-end asset value. It may be practical to use a period shorter than six months, but anything less than three months would cause problems.
- The TCA should clarify a few issues concerning funding for long-term disability plans. DEFRA does not allow funding for short duration LTD

STATEMENT 1986-5

claims (unless they are considered short-term disability benefits). Funding should, however, be allowed for the actuarially estimated present value of long duration claims that have not yet been approved. Consider the following example:

Company XYZ has an insured long-term disability plan. Benefits begin after 12 months of disablement. Annual premiums are \$1,000,000, financed equally by employer and employee contributions.

The insurance company imposes a premium rate increase. Instead, the company chooses to self-insure the plan and fund it through a VEBA effective 1/1/87. The company's actuary estimates that the incurred cost of the plan is \$1,000,000 per year.

Because of the 12-month benefit qualification period, there will be no approved claims during 1987. It seems inappropriate to disallow a tax deduction for an employer contribution in 1987. Under a worst case interpretation, unrelated business income tax would apply even if the only contributions in 1987 were employee contributions. This too seems inappropriate.

- Many companies continue medical coverage for disabled employees. Just as funding is permitted for the disability income benefit, should funding not be permitted for the medical premiums that apply for this period of disability?
- Insurance companies routinely reserve for the commitment to provide life insurance coverage for disabled participants. VEBA's should also be permitted to fund for this liability.
- A significant number of employers maintain employee-pay-all plans, especially for long-term disability. In any given year, the actual cost of the benefits will be more or less than the employee contributions. If actual cost is greater — i.e., an actuarial loss occurs — the DEFRA funding limitation is satisfied. If an actuarial gain occurs, however, the fund assets will exceed the benefit liabilities. Since there are no employer contributions, there is no reduction in the employer's tax deduction. Unrelated business Income Tax is the problem. It is generally not practical to give refunds to participants because the cost of distribution is so large relative to the amount of plan surplus. We suggest that this unintended fund surplus is not the type that would concern Congress. We therefore feel that an exemption from UBIT should apply for employee-pay-all plans. It may be appropriate, however, to have some limit on the excess of assets over plan liabilities.
- The application of the excise tax on discriminatory benefits is too broad. The intent is to discourage the payment of discriminatory benefits using tax-favored funding arrangements. The excise tax should apply only to payments from a welfare benefit fund -- not those made directly from the employer. Note that such discriminatory benefits result in taxable income to the recipient — comparable to direct compensation.

STATEMENT 1986-5

- The conference report suggests that some employers take double credit for Social Security in integrating retirement and disability plans. The conference report fails to recognize, however, that the retirement plan integrates with the Social Security old age benefit, whereas the disability plan integrates with the Social Security disability benefit. Only with defined contribution retirement plans is the "double integration" concern valid.

We appreciate this opportunity. The American Academy of Actuaries is prepared to work with you in the future as you feel we can be productive.

Sincerely,

(signed)

**Richard Ostuw,
Member, Subcommittee on Health & Welfare Plans
American Academy of Actuaries**

STATEMENT 1986-6

STATEMENT ON THE RETIREMENT INCOME POLICY ACT OF 1985 FROM THE AMERICAN ACADEMY OF ACTUARIES TO THE SENATE FINANCE SUBCOMMITTEE ON SAVINGS, PENSIONS AND INVESTMENT POLICY

February 11, 1986

The American Academy of Actuaries appreciates the opportunity to provide comments to the subcommittee on this very important piece of legislation.

Background

The Academy is a professional association of over 8,000 actuaries involved in all areas of specialization within the actuarial profession. Included within our members are approximately 85% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable percentages of actuaries providing actuarial services for other employee benefit plans such as life, health and disability plans. As a national organization of actuaries, the Academy is unique in that it includes actuaries with expertise in all areas of actuarial specialization.

With respect to government relations, the Academy views its role as a provider of information and actuarial analysis in order that policy decisions may be made with informed judgment. It is our belief that the training and experience of Academy members allows for a unique understanding of current practices in employee benefits. It is our intention to communicate that understanding in ways that assist public policymakers.

National Retirement Income Policy

The Academy is very encouraged to see a clearer delineation of a national retirement income policy in Section 2 of the Retirement Income Policy Act (RIPA). As the Academy has said in previous statements, we believe that our nation needs a retirement income policy which continues to encourage the existence of a vital, dynamic private pension system. Contemplated changes in tax policy should be measured against this policy to reduce the risk of adoption of legislation which produces short term enhancement of tax receipts if the legislation also has long term detrimental effects on benefit security.

The Academy supports fully each of the ten elements identified in RIPA as forming our national retirement income policy. We have publicly advocated many of these ideas in our written and oral testimony before Congress. We urge that each of the changes contemplated by RIPA be examined against this policy.

Retirement Income Policy Act of 1985

1. Since 1980, there have been five major pieces of legislation which affect retirement plans. These are the Deficit Reduction Act, the Economic Recovery Tax Act, the Multiemployer Pension Plan Amendment Act, the Retirement Equity Act and the Tax Equity and Fiscal Responsibility Act. The delayed effective date of RIPA will help plan administrators.

STATEMENT 1986-6

This will allow time for existing plans to achieve some measure of stability, since many of the recent legislative changes have yet to make their full impact felt. We believe that it would be preferable if a moratorium were placed on the introduction of any future legislation affecting retirement plans for a period of at least two years. During that time, thorough studies could be undertaken of the entire pension area. We would be happy to assist the Congress and their staffs in conducting these studies and measuring the results against the national retirement income policy set by RIPA. The results would enable legislation to be drafted when its impact was understood. As an alternative to a legislative moratorium, we would suggest that future pension legislation not carry an effective date that is sooner than the effective date of the provisions of RIPA.

2. We are aware of many pension plans that permit distributions earlier than age fifty-nine and one-half either in income or lump sum form. We recognize that such provisions might lead to some abuse and to the endangering of retirement income security. However, the availability of benefits earlier than age fifty-nine and one-half and in lump sum form can be a substantial benefit to pensioners. We would suggest that the existing rules on benefit distributions be retained for "retirement plans." IRC Section 411(d)(6) prohibits the removal of the lump sum cash option or the availability of benefits before age fifty-nine and one-half for benefits accrued to date. If the restrictive benefit distribution rules of RIPA are to be imposed, then some grandfathering should be allowed for benefits accrued to the effective date of RIPA.
3. The current coverage requirements for qualified pension plans are complex. However, the proposed changes under RIPA may not represent an overall improvement. In particular, current tax law permits the exclusion from defined benefit plans of employees who are hired within five years of normal retirement age. The actual cost of providing defined benefit pensions increases as the age of hire increases. The current provision protects plan sponsors from the heavy financial burden that would be imposed if employees hired within five years of normal retirement date had to be included in defined benefit pension plans. This protects the hiring of older employees and thus promotes the spirit of ADEA. We believe that this provision should not be changed without evidence that it would help coverage and employment of older Americans. If the current rule is retained, we also recommend that employees hired within five years of normal retirement date be allowed to participate in a "non-retirement plan" even if they are excluded from a "retirement plan." We also anticipate that there will be practical problems with "allowable subdivisions" that may be in totally different lines of business and, therefore, require different plan types and contribution levels to be competitive.

While the proposed coverage provisions are more mechanical than those under current law, they appear to permit discrimination against employees earning more than the Social Security wage base. We do not understand why such discrimination would be beneficial, since those employees have the same need for benefit coverage and retirement

STATEMENT 1986-6

income security as employees who happen to earn below the Social Security wage base.

4. One of the key provisions of RIPA is the requirement for "substantial" retirement plan coverage before a non-retirement plan can be adopted. It appears that the adequacy of the plan is measured in terms of career average pay (although the requirement for defined benefit plans needs to be clarified). Many current retirement plans do not express benefits as a function of either career pay or average final pay. Calculations will need to be made to determine whether these plans meet the definition of "substantial." We believe it would be a good idea to investigate further the impact of these requirements before they are adopted.

The combination of Social Security and a "substantial" retirement plan produces disproportionately high benefits for lower paid employees (combined income is about 80% of final salary). Perhaps a lower contribution or accrual requirement (such as .4% times years of service for defined benefit plans and 2% of pay for defined contribution plans) and/or a limit on the number of years of service (such as 25) would be appropriate.

We are also concerned that neither measure of adequacy explicitly reflects the impact of inflation between the date of termination of service and the time period over which benefits are paid. A benefit which appears adequate at retirement may be depleted through the impact of inflation, even if the inflation proofing of Social Security continues and does provide a cushion. The impact of inflation on the adequacy of retirement income is as significant as other matters addressed in RIPA. It has a direct bearing on several of these. A thorough investigation of this issue prior to enactment of any adequacy/coverage-related pension legislation would be helpful. This might begin with an examination of recent experience in other countries, notably in the United Kingdom.

5. The current vesting standards reflect a philosophy that retirement benefits are a reward for long service. The reduction under RIPA to five years for retirement plans would appear to represent a fundamental change in that philosophy to one of granting a benefit to virtually every employee. We are unable to comment on whether the existing or proposed philosophy should be incorporated in legislation. We suggest, however, that if the current ten-year standard is to be tightened, then a nonarbitrary period should be chosen. Whether that period is five years, or as short as one year or as long as eight or nine years, its choice should be made after a clear understanding of the impact of such a change. There is no fundamental reason why the vesting standards should be more stringent for non-retirement plans than for retirement plans. Both have the same need for benefit security. While it is clear that employees covered by pension plans will be able to change jobs more frequently with less detriment to their pension benefits, the administrative cost may rise substantially and employers may refrain from starting pension plans if the vesting provisions appear to be burdensome. The goal should be to add to the delivery of meaningful benefits to employees without incurring more administrative cost.

STATEMENT 1986-6

6. Tying the Section 415 maximum limits on pension benefits and contributions to the Social Security wage and tax base has a good deal of merit, provided that the taxable wage base is not substantially restructured. This would provide for a reasonable increase in these limits as inflation erodes the value of the Section 415 dollar limits. This will ultimately add to the retirement income security of many participants because of the funding requirements of qualified plans. Because of the present static (or even reducing) Section 415 limits, excess benefits will be provided in unfunded, non-qualified plans to a growing proportion of higher paid employees. This is not to the advantage of plan participants and runs counter to many of the elements of the national retirement income policy specified in RIPA.
7. Section 131 contains requirements for integration with OASDI. Some additional changes in this area may be needed.
 - a. It may be appropriate to expand the bill's defined contribution provisions to put a maximum on the spread between the above-and-below contribution percentage. We suggest that the spread be set at the then current OASDI contribution rate for each future year.
 - b. The bill should clarify how retirement and non-retirement plans in combination should be integrated. If the retirement plan meets the substantial coverage and integration rules, can the non-retirement plan also be integrated? If so, how?
 - c. The rules for offset integration appear to favor lower paid employees, since Social Security is tilted in their favor. Limiting the offset to a maximum of 50% of the accrued benefit (without the offset) can end up providing over-adequate benefits to lower paid employees in order to provide adequate benefits for higher-paid. The alternative of allowing a maximum offset of 50% of the Social Security benefit may be more appropriate. This treats all salary levels more equitably.
8. RIPA also proposes several changes in the way the maximum on benefits and contributions (Section 415 limits) is determined. Since these limits do not have actuarial implications, per se, the Academy has no particular position on the changes. However, we would make a couple of observations on the proposed rules:
 - a. A grandfather clause will be needed to handle benefits accrued under defined benefit plans which exceed any new, lower Section 415 limits.
 - b. Reducing the Section 415 limits even further runs counter to many of the elements of the national retirement income policy expressed in Section 2 of RIPA. Reducing these limits does affect rank and file employees as well as higher paid employees, since owners will not provide a greater benefit (as a percentage of compensation) for the rank and file than for the higher paid. This forces many of these benefits outside a qualified plan into unfunded, deferred compensation plans. Not only are these benefits less secure, they are also often provided in a more discriminatory way. For example,

STATEMENT 1986-6

a nonqualified plan may be used to make the benefits of top management whole in relation to their pay and service, while other higher paid employees who are not part of top management, may have no nonqualified plan and receive a benefit equal to the dollar limit for qualified plans.

- c. Eliminating the Section 415(e) combined plan limit for all plans except for top-heavy plans again seems to run counter to the national retirement income policy. Most of these top-heavy plans cover smaller employers whose employees have the same need for benefit adequacy as the employees of larger employers.

Conclusion

The Academy would like to thank the subcommittee for the opportunity to provide written testimony on RIPA. We would also like to thank the staff for the opportunity to work with them through the development stages of this bill.

We recognize that Congress has several other major complex pieces of proposed legislation to consider and that these may have detrimental effects on RIPA through incorporating pension-related sections and through reducing the time available for consideration of RIPA. We urge that Section 2 of RIPA be passed into law at the earliest possible date, even if no other provisions of RIPA are enacted in the near future.

American Academy of Actuaries

Pension Committee
Norman S. Losk, Chairperson

Subcommittee on Single Employer Plans
Larry D Zimpleman, Chairperson

Dennis J. Graf
Jan R. Harrington
Jeffrey F. Hartmann
Albert L. Hess
Allan B. Keith
Brian W. Kruse
F. Jay Lingo
David L. Lively
John B. Thompson

STATEMENT 1986-7

February 26, 1986

Ronald R. Kovener
Vice President
Healthcare Financial Management Association
1050 17th Street, N.W.
Suite 510
Washington, DC 20036

RE: Actuarial Appendix

Dear Ron:

Enclosed is our draft appendix for your review. As a committee we have developed this to help in the overall drafting of the appendix. I understand that you have a meeting later this week, and I wanted to get this to you. We are open to any suggestions you might have.

In addition, I believe one of our committee members, Jarvis Farley, wrote you a letter regarding your February 14 amended exposure draft. Jarvis' comments should be considered comments from our committee. We are substantially in agreement with his comments.

I apologize for the delay in getting this to you, but it was unavoidable. Please give me a call to discuss our approach further.

Sincerely,

(signed)

David V. Axene
Chairman, CCRC Committee

STATEMENT 1986-7

APPENDIX

I. Introduction

A. Projection of CCRC Resident Survivorship

Accurate CCRC financial reporting relies upon realistic projections of CCRC resident survivorship. CCRC survivorship projections can be completed using basic actuarial formulas. Actual applications of these concepts are frequently quite complex. The illustrations included in this Appendix have intentionally been simplified.

B. Termination of or Change in Residency Status

Survivorship projections require clear identification of the events which terminate or change the residency status, including the estimation of the probability of occurrence of each event. These probabilities are called rates of termination or termination rates. Examples of termination include death, permanent or temporary transfer to health center, permanent move out of CCRC, move to different apartment, etc. Each of these items and others affect survivorship projections.

Rates of termination or change in status can be estimated. These rates are identified by the type of termination or status change. For example, termination by death is reflected using a mortality rate. A transfer to the health center is reflecting using a morbidity rate. A permanent move out of the CCRC complex is reflected using a withdrawal rate. Other changes in status can be reflected or projected using other termination rates.

Each of these rates is calculated and can be expressed in a similar manner. The generally accepted actuarial nomenclature for these rates is:

$$t^q_x^i$$

where q implies a rate of termination,

- i is the cause of termination or status change,
- t identifies the time period during which the rate applies (i.e., 1 implies the next year), and
- x identifies the age or other risk characteristic of the person.

Significant variations in these rates by additional risk characteristics results in further distinctions. For example, separate rates by sex are common.

These rates are nothing more than the probability a particular event will occur (i.e., termination of survivorship event). A termination rate can be calculated as follows:

STATEMENT 1986-7

$$tq_x^i = \frac{\text{number terminating from cause } i}{\text{number that potentially could terminate from cause } i}$$

where both the numerator and denominator are determined for a span of time length t , and for a homogeneous risk category x .

The above calculation can be estimated from historical data. The selection of rates for survivorship projections requires consideration of factors potentially causing future experience to differ from observed historical experience. For example, a change in health status will likely affect both future mortality rates and morbidity rates. Most calculations are based upon annual time periods (i.e., $t = 1$).

The complement of a termination rate is the survivorship rate, tP_x . It is calculated as:

$$tP_x = 1 - tq_x$$

For annual time periods, tP_x can be simplified by using the symbol p_x . The symbol p_x can be described as the probability a current resident in a given status will still be a resident, in the same status, one year from now, or the probability that a current resident will survive in the same status for one year.

C. Types of Survivorship Rates

Since these rates apply to an individual in a particular status, it is very important that all potential statuses be identified. Mortality rates for apartment residents are much different than for health center residents.

The last survivor of married or joint apartment residents will occupy an apartment longer than a single resident (i.e. their joint lifetime is longer). The probability of survivorship is greater for the joint residents, than for a single resident. One resident can transfer to the health center and the other remain in the apartment. This complication can be readily recognized using joint and last survivor termination rates. These reflect the probability of termination or survivorship for the multiple person group. Joint and last survivor termination rates can be approximated using a formula recognizing the individual characteristics of each resident.

II. Application of Survivorship Rates

There are several applications of these survivorship rates. One application is life expectancy. Life expectancy is uniquely determined from the termination or survivorship rate. The formula for life expectancy is:

$$e_x = 1P_x + 2P_x + 3P_x + 4P_x + \dots$$

$$= \sum_{t=1}^{\infty} tP_x$$

STATEMENT 1986-7

It is the sum of all of the probabilities of survivorship. The $t p_x$ values can be calculated as the product of successive p_x 's

$$(i.e., 2 p_x = p_x \cdot p_{x+1}).$$

This sample application of survivorship rates does not reflect the time value of money. As a result it is not extremely helpful in evaluating CCRC financial calculations.

The time value of money can be incorporated to determine another useful application, the annuity function. The present value of \$1 per month payable to or by someone for the remainder of their life is a useful extension of life expectancy.

$$a_x = \$1 \cdot v^1 \cdot {}_1 p_x + \$1 \cdot v^2 \cdot {}_2 p_x + \$1 \cdot v^3 \cdot {}_3 p_x + \dots \\ = \$1 \cdot \sum_{t=1}^{\infty} v^t \cdot {}_t p_x$$

Extensions of this particular calculation are very useful in projecting both costs and revenues in a CCRC setting.

III. Population Projections

A. Actuarial Assumptions

Simplified examples have been presented using the following assumptions. These include only population assumptions and mortality assumptions. They do not include any assumption related to transfer to a health center or mortality in a health center. These enhancements are required in an actual analysis.

1. Current Residents

<u>Resident</u>	<u>Current Age</u>
A	90
B	92
C	96
D	96
E	98

2. Mortality Rate Assumption

<u>Attained Age</u>	<u>Illustrative Mortality Rate (q_x)</u>	<u>Mortality Table X</u>			$S_x = \frac{1}{t} p_t$	$e_x = \frac{s_x}{p_{x-1}}$
		<u>Survivorship Rate (p_x)</u>	$x = 90$	p_t		
90	.00350	.99650	.99650		6.06846	6.06847
91	.00800	.99200	.98853		5.07196	5.08978
92	.01500	.98500	.97370		4.08343	4.13083
93	.03500	.96500	.93962		3.10973	3.16566
94	.08000	.92000	.86445		2.17011	2.30957
95	.20000	.80000	.69156		1.30566	1.51040
96	.40000	.60000	.41494		.61410	.88800
97	.60000	.40000	.16597		.19916	.48000
98	.80000	.20000	.03319		.03319	.20000
99	1.00000	.00000	.00000		.00000	.00000

(1) Product Function for various ages

STATEMENT 1986-7

B. Projected CCRC Population

A summary of current residents and the mortality table with its calculated values can be used to project future residents. This example is based on the assumed residential status. In projecting the population of a CCRC, it is necessary to recognize that each individual either continues in their current status or terminates or transfers to another status. The use of mortality rates gives the appearance of partial person terminations. Actually this approach is evaluating the probability of survivorship from one period to the next, and the approach reasonably estimates the survival pattern of a group of residents.

Table 1

Resident	Current Age	Projected Population in Year:				
		19X0	19X1	19X2	19X3	19X4
A	90	1.000	.997	.989 ⁽¹⁾	.974	.940
B	92	1.000	.985	.951	.874	.700
C	96	1.000	.600	.240	.048 ⁽²⁾	.000
D	96	1.000	.600	.240	.048	.000
E	98	1.000	.400	.000	.000	.000
Total		5.000	3.582	2.420	1.944	1.640

(1) $.99650 \times .99200 = .98853$

(2) $.60000 \times .40000 \times .20000 = .04800$

Multiple termination rates can be used to project both the number of apartment residents, and also the population in the health center. According to the illustrative mortality table, the 96-year-old resident had a life expectancy of .888, however, this person affected the population projection in all but one of the first five years. This phenomenon develops since the life expectancy does not reduce by one year each year. In the case of the 96-year-old, the .888 years are spread out over three years.

IV. Financial Projections

A. Present Value of Future Residential Costs

Assuming a current annual cost of \$10,000 for each resident, 6% annual inflation, 7% annual interest rate, and only termination from death per the previous mortality table, we can develop a model evaluating the present value of future costs. The example requires the projection be extended until all current residents are terminated.

STATEMENT 1986-7

Table 2
Present Value of Future Costs

<u>Year</u>	<u># of Residents</u>	<u>Projected Cost Per Resident</u>	<u>Projected Cost</u>	<u>Discount Factor</u>	<u>P.V. of Future Cost</u>
19X0	5,000	\$10,000	\$ 50,000	.935	\$ 46,750
19X1	3,582	10,600	37,969	.873	33,147
19X2	2,420	11,236	27,191	.816	22,188
19X3	1,944	11,910	23,153	.763	17,666
19X4	1,640	12,625	20,705	.713	14,763
19X5	1,284	13,382	17,182	.666	11,444
19X6	.860	14,185	12,199	.623	7,600
19X7	.449	15,036	6,751	.582	3,929
19X8	.166	15,938	2,646	.544	1,439
19X9	.033	16,895	558	.508	283
Total	17,378		\$198,354		\$159,209

This calculation requires the annual cost per resident at time of calculation. Frequently, only overall operating costs are known at time of evaluation. If this is the case, a similar development can be used where the column showing the number of residents is divided by the initial number of residents. The projected cost column would be a direct input item rather than projected from the cost per resident.

The liability for future health center services can be calculated in a similar manner. This liability is nothing more than the present value of future health center costs. In the situation where future health center services are guaranteed to CCRC residents without additional fees, a calculation similar to Table 2 is required. The project health center population is projected by applying morbidity rates to the projected resident population, and mortality rates to the health center population. The health center population is increased by future transfers and decreased by future deaths. The present value of these services would be calculated as in Table 2 using the health center population. This liability could be added to other liabilities to determine the total liability for future service.

B. Present Value of Future Revenue

For an existing group of residents, the form of calculation shown in Table 2 can be used to estimate the present value of future monthly fee revenues. Current residents are projected using survivorship functions to determine future residents by year, including those in the health center as well as those in residential status. Entry fees are projected from current levels using anticipation of periodic increase. An interest discount rate consistent with that used for the cost calculations is applied to the product of residents and revenue per resident in each year to determine the present value of future revenues of that year. The present values are summed to determine the total

STATEMENT 1986-7

present value of future monthly revenues for the current group of residents.

C. Generalized Financial Equation

A primary objective of accurate financial reporting is the appropriate matching of revenues and costs or expenses. This objective can be described by the simple equation shown below:

$$PV(R_1 + R_2 + R_3 + \dots) = PV(E_1 + E_2 + E_3 + \dots) + PV(M_1 + M_2 + M_3 + \dots)$$

where R_i is the projected revenue in year i
 E_i is the projected expense in year i
 M_i is the projected margin in year i

This can be further simplified as follows:

$$R = E + M$$

As long as the present value of Revenue is greater than or equal to the present value of Expenses, a positive margin develops.

Using reasonable estimates for a projected population, projected expense levels, and projected revenues, accurate financial statements at any point in time can be developed. This basic formula can be used to project all financial aspects of a CCRC. The rest of this Appendix will describe how this can be done.

D. Determination of CCRC Liabilities

A generally accepted actuarial formula to estimate an outstanding liability is as follows:

$$\text{Liability} = \begin{aligned} &\text{Present Value of Future Guarantees} \\ &\text{less Present Value of Future Revenues} \end{aligned}$$

In the CCRC application, the liability at any point in time refers to the net financial value of the guarantees promised to current residents. This can be calculated as the difference between the value of future guarantees and the present value of future monthly fees for those guarantees. To remain financially viable over the long term, a CCRC must have real assets in excess of this liability at any point in time. If the assets are less than the liability, the plan is underfunded. Continued on this basis, insolvency is inevitable.

Appropriate calculation of these liabilities automatically establishes the appropriate amount of funds required to provide guaranteed services to current residents. The change in liability from one year to the next automatically determines what portion of the current year fees must be retained to meet guarantees in future years. The excess can be released into current earnings if all future liabilities are covered by these liability calculations. The important item is the change in reserve from one year to the next.

STATEMENT 1986-7

This corresponds to the amortization of fees. The amount amortized in year 19X1 can be calculated as follows:

$$\text{Amortization in year 19X1} = \text{19X1 Entry Fees}$$

$$\text{less (19X1 Liability - } \\ \text{19X0 Liability)}$$

$$= \text{19X1 Entry Fees}$$

$$\text{less Increase in 19X1 Liability}$$

In the situation an alternate fee amortization approach is used, a liability adjustment must be considered which first evaluates an appropriate liability change using the above methodology and adjusts it for the amortization amount. This "two-step" approach can be reduced to a single step using the above approach.

E. Determining or Testing Fee Structures

Fee structures can be readily estimated (i.e., priced or tested) once the above calculations are completed. For an individual resident, a financially sound fee structure can be determined using the following modification of the generalized financial equation:

Entry Fee	=	P.V. of Future Resident costs
plus P.V. of future monthly fees		plus P.V. of Health Center costs
plus P.V. of future Health Center revenues		plus P.V. of other CCRC-related costs

These calculations must reflect refundable entry fees and provision for funding the replacement of the fixed plant. An infinite number of entry fee/monthly fee combinations can satisfy this equation. For a "given" entry fee and cost projection, monthly fees can be derived. The lower the entry fee for a given cost structure, the higher the monthly fees. This can be used to calculate a fee schedule, test an existing fee schedule, determine the extent of current deficit, establish fee schedule correction strategy, etc.

To the extent that the actual entry fee exceeds this value, a surplus or redundancy exists. If the actual entry fee is less than this value, the entry fee has been underpriced. In the case of underpriced entrance fees, financial statements should accurately evaluate future costs, and reflect a cost adjusted entry fee amortization approach. The liability approach described above automatically reflects this.

STATEMENT 1986-8

STATEMENT ON THE RETIREMENT INCOME POLICY ACT OF 1985 FROM THE SUBCOMMITTEE ON SINGLE EMPLOYER PLANS AMERICAN ACADEMY OF ACTUARIES TO THE LABOR-MANAGEMENT RELATIONS SUBCOMMITTEE OF THE HOUSE EDUCATION AND LABOR COMMITTEE

February 27, 1986

The Subcommittee on Single Employer Plans of the American Academy of Actuaries appreciates the opportunity to provide comments to the subcommittee on this very important piece of legislation.

Background

The Academy is a professional association of over 8,000 actuaries involved in all areas of specialization within the actuarial profession. Included within our members are approximately 85% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable percentages of actuaries providing actuarial services for other employee benefit plans such as life, health and disability plans. As a national organization of actuaries, the Academy is unique in that it includes actuaries with expertise in all areas of actuarial specialization.

With respect to government relations, the Academy views its role as a provider of information and actuarial analysis in order that policy decisions may be made with informed judgment. It is our belief that the training and experience of Academy members allows for a unique understanding of current practices in employee benefits. It is our intention to communicate that understanding in ways that assist public policymakers.

National Retirement Income Policy

The Academy is very encouraged to see a clearer delineation of a national retirement income policy in Section 2 of the Retirement Income Policy Act (RIPA). As the Academy has said in previous statements, we believe that our nation needs a retirement income policy which continues to encourage the existence of a vital, dynamic private pension system. Contemplated changes in tax policy should be measured against this policy to reduce the risk of adoption of legislation which produces short term enhancement of tax receipts if the legislation also has long term detrimental effects on benefit security.

The Academy supports fully each of the ten elements identified in RIPA as forming our national retirement income policy. We have publicly advocated many of these ideas in our written and oral testimony before Congress. We urge that each of the changes contemplated by RIPA be examined against this policy.

Retirement Income Policy Act of 1985

1. Since 1980, there have been five major pieces of legislation which affect retirement plans. These are the Deficit Reduction Act, the Economic Recovery Tax Act, the Multiemployer Pension Plan Amendment Act, the Retirement Equity Act and the Tax Equity and Fiscal Responsibility Act. The delayed effective date of RIPA will help plan administrators.

STATEMENT 1986-8

This will allow time for existing plans to achieve some measure of stability, since many of the recent legislative changes have yet to make their full impact felt. We believe that it would be preferable if a moratorium were placed on the introduction of any future legislation affecting retirement plans for a period of at least two years. During that time, thorough studies could be undertaken of the entire pension area. We would be happy to assist the Congress and their staffs in conducting these studies and measuring the results against the national retirement income policy set by RIPA. The results would enable legislation to be drafted when its impact was understood. As an alternative to a legislative moratorium, we would suggest that future pension legislation not carry an effective date that is sooner than the effective date of the provisions of RIPA.

2. We are aware of many pension plans that permit distributions earlier than age fifty-nine and one-half either in income or lump sum form. We recognize that such provisions might lead to some abuse and to the endangering of retirement income security. However, the availability of benefits earlier than age fifty-nine and one-half and in lump sum form can be a substantial benefit to pensioners. We would suggest that the existing rules on benefit distributions be retained for "retirement plans." IRC Section 411(d)(6) prohibits the removal of the lump sum cash option or the availability of benefits before age fifty-nine and one-half for benefits accrued to date. If the restrictive benefit distribution rules of RIPA are to be imposed, then some grandfathering should be allowed for benefits accrued to the effective date of RIPA.
3. The current coverage requirements for qualified pension plans are complex. However, the proposed changes under RIPA may not represent an overall improvement. In particular, current tax law permits the exclusion from defined benefit plans of employees who are hired within five years of normal retirement age. The actual cost of providing defined benefit pensions increases as the age of hire increases. The current provision protects plan sponsors from the heavy financial burden that would be imposed if employees hired within five years of normal retirement date had to be included in defined benefit pension plans. This protects the hiring of older employees and thus promotes the spirit of ADEA. We believe that this provision should not be changed without evidence that it would help coverage and employment of older Americans. If the current rule is retained, we also recommend that employees hired within five years of normal retirement date be allowed to participate in a "non-retirement plan" even if they are excluded from a "retirement plan." We also anticipate that there will be practical problems with "allowable subdivisions" that may be in totally different lines of business and, therefore, require different plan types and contribution levels to be competitive.

While the proposed coverage provisions are more mechanical than those under current law, they appear to permit discrimination against employees earning more than the Social Security wage base. We do not understand why such discrimination would be beneficial, since those employees have the same need for benefit coverage and retirement

STATEMENT 1986-8

income security as employees who happen to earn below the Social Security wage base.

4. One of the key provisions of RIPA is the requirement for "substantial" retirement plan coverage before a non-retirement plan can be adopted. It appears that the adequacy of the plan is measured in terms of career average pay (although the requirement for defined benefit plans needs to be clarified). Many current retirement plans do not express benefits as a function of either career pay or average final pay. Calculations will need to be made to determine whether these plans meet the definition of "substantial." We believe it would be a good idea to investigate further the impact of these requirements before they are adopted.

The combination of Social Security and a "substantial" retirement plan produces disproportionately high benefits for lower paid employees (combined income is about 80% of final salary). Perhaps a lower contribution or accrual requirement (such as .4% times years of service for defined benefit plans and 2% of pay for defined contribution plans) and/or a limit on the number of years of service (such as 25) would be appropriate.

We are also concerned that neither measure of adequacy explicitly reflects the impact of inflation between the date of termination of service and the time period over which benefits are paid. A benefit which appears adequate at retirement may be depleted through the impact of inflation, even if the inflation proofing of Social Security continues and does provide a cushion. The impact of inflation on the adequacy of retirement income is as significant as other matters addressed in RIPA. It has a direct bearing on several of these. A thorough investigation of this issue prior to enactment of any adequacy/coverage-related pension legislation would be helpful. This might begin with an examination of recent experience in other countries, notably in the United Kingdom.

5. The current vesting standards reflect a philosophy that retirement benefits are a reward for long service. The reduction under RIPA to five years for retirement plans would appear to represent a fundamental change in that philosophy to one of granting a benefit to virtually every employee. We are unable to comment on whether the existing or proposed philosophy should be incorporated in legislation. We suggest, however, that if the current ten-year standard is to be tightened, then a nonarbitrary period should be chosen. Whether that period is five years, or as short as one year or as long as eight or nine years, its choice should be made after a clear understanding of the impact of such a change. There is no fundamental reason why the vesting standards should be more stringent for non-retirement plans than for retirement plans. Both have the same need for benefit security. While it is clear that employees covered by pension plans will be able to change jobs more frequently with less detriment to their pension benefits, the administrative cost may rise substantially and employers may refrain from starting pension plans if the vesting provisions appear to be burdensome. The goal should be to add to the delivery of meaningful benefits to employees without incurring more administrative cost.

STATEMENT 1986-8

6. Tying the Section 415 maximum limits on pension benefits and contributions to the Social Security wage and tax base has a good deal of merit, provided that the taxable wage base is not substantially restructured. This would provide for a reasonable increase in these limits as inflation erodes the value of the Section 415 dollar limits. This will ultimately add to the retirement income security of many participants because of the funding requirements of qualified plans. Because of the present static (or even reducing) Section 415 limits, excess benefits will be provided in unfunded, non-qualified plans to a growing proportion of higher paid employees. This is not to the advantage of plan participants and runs counter to many of the elements of the national retirement income policy specified in RIPA.
7. Section 131 contains requirements for integration with OASDI. Some additional changes in this area may be needed.
 - a. It may be appropriate to expand the bill's defined contribution provisions to put a maximum on the spread between the above-and-below contribution percentage. We suggest that the spread be set at the then current OASDI contribution rate for each future year.
 - b. The bill should clarify how retirement and non-retirement plans in combination should be integrated. If the retirement plan meets the substantial coverage and integration rules, can the non-retirement plan also be integrated? If so, how?
 - c. The rules for offset integration appear to favor lower paid employees, since Social Security is tilted in their favor. Limiting the offset to a maximum of 50% of the accrued benefit (without the offset) can end up providing over-adequate benefits to lower paid employees in order to provide adequate benefits for higher-paid. The alternative of allowing a maximum offset of 50% of the Social Security benefit may be more appropriate. This treats all salary levels more equitably.
8. RIPA also proposes several changes in the way the maximum on benefits and contributions (Section 415 limits) is determined. Since these limits do not have actuarial implications, per se, the Academy has no particular position on the changes. However, we would make a couple of observations on the proposed rules:
 - a. A grandfather clause will be needed to handle benefits accrued under defined benefit plans which exceed any new, lower Section 415 limits.
 - b. Reducing the Section 415 limits even further runs counter to many of the elements of the national retirement income policy expressed in Section 2 of RIPA. Reducing these limits does affect rank and file employees as well as higher paid employees, since owners will not provide a greater benefit (as a percentage of compensation) for the rank and file than for the higher paid. This forces many of these benefits outside a qualified plan into unfunded, deferred compensation plans. Not only are these benefits less secure, they are also often provided in a more discriminatory way. For example,

STATEMENT 1986-8

- a nonqualified plan may be used to make the benefits of top management whole in relation to their pay and service, while other higher paid employees who are not part of top management, may have no nonqualified plan and receive a benefit equal to the dollar limit for qualified plans.
- c. Eliminating the Section 415(e) combined plan limit for all plans except for top-heavy plans again seems to run counter to the national retirement income policy. Most of these top-heavy plans cover smaller employers whose employees have the same need for benefit adequacy as the employees of larger employers.

Conclusion

The Academy would like to thank the subcommittee for the opportunity to provide written testimony on RIPA. We would also like to thank the staff for the opportunity to work with them through the development stages of this bill.

We recognize that Congress has several other major complex pieces of proposed legislation to consider and that these may have detrimental effects on RIPA through incorporating pension-related sections and through reducing the time available for consideration of RIPA. We urge that Section 2 of RIPA be passed into law at the earliest possible date, even if no other provisions of RIPA are enacted in the near future.

American Academy of Actuaries

Pension Committee

Norman S. Losk, Chairperson

Subcommittee on Single Employer Plans

Larry D Zimpleman, Chairperson

Dennis J. Graf
Jan R. Harrington
Jeffrey F. Hartmann
Albert L. Hess
Allan B. Keith
Brian W. Kruse
F. Jay Lingo
David L. Lively
John B. Thompson

STATEMENT 1986-9

March 11, 1986

The Honorable Bob Packwood
Chairman, Committee on Finance
United States Senate
Washington, DC 20515

Dear Senator Packwood:

As your committee begins active consideration and markup of a tax reform bill, we would like to offer some comments on retirement income issues. The Academy has been following the debate on tax reform proposals for over a year. In analyzing various proposals and preparing statements for members of Congress and their staffs, we have previously confined our discussion specifically to actuarial issues. However, because of the far-reaching scope of sections of the House passed bill (H.R. 3838) dealing with retirement plans, we believe it impossible to discuss actuarial issues without also commenting on general issues of retirement plan coverage, benefit security, incentive to save, and so on. We believe that our work as consultants to thousands of retirement plans (both large and small) allows us to critically analyze the retirement plan implications of the proposals contained in H.R. 3838.

It is encouraging to us that a proposal has been introduced during this session of Congress that outlines a set of national retirement income policy goals; we refer to the Retirement Income Policy Act of 1985 (RIPA). The Academy has long called for a clearer delineation of national retirement income policy. It is helpful to focus on the stated goals of RIPA and consider the changes to retirement plans that H.R. 3838 would necessitate. Some of these goals are:

1. Retirement benefits from OASDI should be supplemented with benefits provided from employer-financed retirement plans.
2. The current voluntary system of employer-sponsored retirement plans should be retained; and the growth and development of these plans should be encouraged.
3. Employer sponsored retirement plans should be sufficiently flexible to deliver adequate retirement benefits to workers with a variety of career patterns.
4. Although elective approaches to retirement savings may be useful in supplementing employer-financed retirement benefits, public policy should be developed with the recognition that employer-financed retirement programs can be more effective in delivering benefits to a broad cross-section of the population.

Title XI, Section A, of H.R. 3838 makes major changes in the operation of cash or deferred profit-sharing plans -- the so-called 401(k) plans. While there has been a great deal of discussion of the specific changes suggested by H.R. 3838, our comments are of a more general nature and relate back to the national retirement income goals expressed in RIPA. If the 401(k) changes proposed in H.R. 3838 are made, they will have a severe and chilling effect on new 401(k) plan formations, as well as on existing 401(k) plans. While it has been suggested that the current limits are overly generous and allow abuses,

STATEMENT 1986-9

the fact is that these plans cover millions of American workers (both low-paid and high-paid) and, for the first time, help individuals to generate significant savings for retirement and not rely primarily on Social Security or other government programs for retirement income.

Our specific comments on the 401(k) provisions are:

1. A better method is needed to coordinate IRA deferrals and tax sheltered annuity deferrals with elective deferrals under 401(k) plans. The first dollar offset of these deferrals is too harsh and does not encourage individuals to establish their own savings programs (outside an employer-sponsored program) for retirement.
2. The proposed changes in the 401(k) nondiscrimination tests represent a fundamental misunderstanding of the effect of the changes. If the rules are made more severe (as proposed) the effect will not be to deliver greater benefit amounts to lower-paid and younger workers, but rather will cut back on the contributions for this group. In some cases, plans will be terminated and contributions will cease entirely. Congress must recognize that in a voluntary private pension system, should there be any hope of covering other employees, sufficient incentives must exist for higher-paid employees to participate. The present 401(k) nondiscrimination rules strike a good balance between requiring broad coverage for all and retaining sufficient incentive for higher-paid.
3. The changes proposed by H.R. 3838 in the definition of highly paid employees and in the discrimination tests will require substantial redesign for most 401(k) plans. Many of these will be smaller plans having a 401(k) plan as the primary retirement vehicle. We have done an analysis of nine small 401(k) plans (ranging from eight to sixty-five employees). Of these nine plans, the highest average deferral of the high-paid one-third is just over 7%. Under the proposed new definitions of the prohibited group and the new 401(k) tests, seven of the nine plans would fail. This would mean either redesign of the plans or termination.
4. Excluding tax-exempt and government entities from having 401(k) plans represents the same fundamental misunderstanding of the private pension system. Some present programs (such as Section 403(b)) have had mediocre success because there is insufficient employer incentive. 401(k) plans have created the employer incentive necessary to achieve a broad coverage of workers in non-profit and government entities. If these firms are not allowed to utilize Section 401(k), the result will not be to stimulate the other programs, but rather to remove altogether these employees from coverage. The long-term economic implications of relying on government financed programs is known.
5. Making the rules for employer matching contributions more stringent will have the tendency to remove these contributions from 401(k) plans. Sponsors may be forced to provide these contributions to higher-paid employees in other ways, such as non-qualified deferred compensation programs.

Title XI, Section B, of H.R. 3838 proposes changes in the current rules for integrating employer-sponsored pension plans with Social Security. Section 2

STATEMENT 1986-9

deals with plans that are integrated using either the so-called "excess benefit" method or the "offset" method. In both cases, H.R. 3838 would limit recognition of total Social Security benefits that could be taken into account to a ratio based on the number of years of potential service (based on age at hire) to forty. For example, for a plan participant hired at age forty-five, the recognition of Social Security under the excess or offset method would be limited to 20/40 of the amounts allowed under Revenue Ruling 71-446.

The stated reason for the change is to preclude an employer's taking into account Social Security benefits earned with prior employers in order to reduce the employee's plan benefits. As a general working rule, we support this idea. However, pension plan integration is an extremely complicated issue. If the rules proposed by H.R. 3838 were adopted, the practical effect would be to reduce benefits for most employees rather than to increase them (as contemplated under the H.R. 3838 changes).

Consider some examples: Take an excess benefit formula of 10% of pay up to the Social Security wage base, plus 47% of pay above that level. Current law requires that this benefit must be accrued on a ratable basis over at least fifteen years of service. If an employee will have less than fifteen years of service at normal retirement, the plan formula is reduced proportionately. If H.R. 3838 is adopted, this prorating would be based on forty years of service rather than fifteen years of service.

This table summarizes the effect of this change for a plan having a benefit formula that is 10% of final average pay up to the Social Security wage base, plus $47\frac{1}{2}\%$ of final average pay in excess of the Social Security wage base (\$42,000 in 1986):

<u>Years of Service With Employer</u>	<u>Old Benefit</u>	<u>New Benefit</u>
0-15 Years	(2/3% of pay to SSWB + 3.16% of pay in excess) x years of service	(.25% of pay to SSWB + 1.19% of pay in excess) x years of service
15-40 Years	10% of pay to SSWB + $47\frac{1}{2}\%$ of excess	Same as above
More than Forty Years	Same as above	10% of pay to SSWB + $47\frac{1}{2}\%$ of excess

If you compare the old and new benefits, you will find that the new benefit using the rules of H.R. 3838 will always be less than the old benefit for employees with less than forty years of service; this would be nearly all employees.

Now consider an offset formula. Suppose a plan formula that is presently using the maximum offset of $83\frac{1}{3}\%$. For example, assume the benefit formula is 60% of final pay less $83\frac{1}{2}\%$ of primary Social Security at age sixty-five. Normal retirement age is sixty-five. The formula reduces benefits proportionately for those with less than fifteen years of service. Analyzing the changes proposed by H.R. 3838 is more difficult for an offset formula

STATEMENT 1986-9

because it involves projecting Social Security benefits for future years. Consider three levels of salaries in 1985: low paid (\$10,000), average paid (\$16,000) and high paid (\$40,000). The projected Social Security benefit expressed as a percentage of final pay for someone currently aged 46-50 is:

- Low paid--50% of pay.
- Average paid--42% of pay.
- High paid--25% of pay.

Using these estimates of Social Security allows the calculation of benefits payable at normal retirement age (sixty-five) under the current integration rules and the rules proposed by H.R. 3838. In each case, the numbers shown in the table represent the plan's benefit amount expressed as a percentage of final pay.

Current Rules

<u>Years of Service</u>	<u>Low</u>	<u>Average</u>	<u>High</u>
10	12.22%	16.67%	26.11%
15	18.33	25.00	39.17
25	18.33	25.00	39.17
40	18.33	25.00	39.17

Proposed Rules

<u>Years of Service</u>	<u>Low</u>	<u>Average</u>	<u>High</u>
10	4.58%	6.25%	9.79%
15	6.88	9.38	14.69
25	11.46	15.63	24.48
40	18.33	25.00	39.17

The results for the offset formula are identical to the results under the excess benefit formula. Employees who have less than forty years of service with the employer at normal retirement will receive less under the rules proposed by H.R. 3838 than would be provided under the current rules.

If the members of Congress or their staffs believe that the current rules for excess benefit or offset plan formulas are not achieving the desired social objectives, we would be happy to assist in developing more acceptable alternatives. For example, limiting the offset amount to something less than 83 1/3% or the excess percentage to 37 1/2% would do a better job of meeting the objections noted in the committee reports than prorating the amounts over forty years. We hope the Congress will continue to recognize the need to integrate private pension plans with Social Security in order to achieve reasonably comparable levels of retirement income for different salary amounts.

Similarly, Section B.4., dealing with forfeitures out of money purchase plans, is a step towards more rational plan design. Not only will this proposal create

STATEMENT 1986-9

uniformity among all types of defined contribution plans, but it will add to the benefit earned by lower-paid employees.

Title XI, Section C, proposes to develop new uniform rules for the distribution of benefits under a qualified plan. In general, we view this as a welcomed step towards simplicity and consistency. This change is also in line with our belief that plan assets should be used for retirement purposes rather than as amounts that are passed on the next generation at death.

The elimination of capital gains treatment for pre-1974 contributions and special ten-year averaging for lump sum distributions will affect a large number of plans now in existence. Our major concern is that the elimination of these rules will make employer-sponsored plans less attractive to a portion of the total universe of plan sponsors. This means there will be some erosion of the private pension system. While the elimination of capital gains treatment and changes in special ten-year averaging would help on an overall basis to broaden the tax base and lower tax rates, the effect on private pension plans would be lessened by extending the transition period. For example, a ten-year transition period would be more acceptable than the proposed six-year period for capital gains. There will be a disruption to many plans, since retirement plans are long-term in nature and have been designed for time periods exceeding the transitional periods.

Section D.1. of H.R. 3838 calls for a reduction in the Section 415 limits (the current maximum limits on qualified plan benefits or contributions) of approximately 15%. The only apparent justification for this reduction is to decrease qualified plan benefits for higher-paid employees. The practical effect, however, would be to reduce benefits for rank and file as well as higher-paid employees. Plan sponsors would not provide a benefit (expressed as a percentage of pay) greater for rank and file employees than for higher-paid employees. In order to maintain benefits at the same percentage of compensation, each reduction in the Section 415 dollar limits means a cut in benefits for all employees.

For some firms, the reduction in Section 415 dollar limits would be even more severe for rank and file employees. Benefits that are lost for higher-paid employees may be made up by non-qualified Section 415 excess benefit plans. Since these plans are non-qualified, the benefits may be provided in any way the employer desires. Typically, these plans cover only highly-compensated employees. We are disturbed by tax policy that continues to reduce these limits, resulting in lower benefits for the rank and file.

There is another more subtle effect that would also result from lowering the Section 415 limits. Current IRS regulations limit the enrolled actuary to the current year's Section 415 limit for purposes of calculating the funding requirements under Section 412 of the Internal Revenue Code. For example, in performing an actuarial valuation for the 1985 plan year, the enrolled actuary cannot use a projected annual benefit greater than \$90,000. If H.R. 3838 is adopted, this limit would be reduced to \$75,000.

Most defined benefit plans have a benefit formula that is based on a final average salary. This requires a projection by the enrolled actuary of the final average salary in order to determine the projected benefit amount (if a projected actuarial cost method is used). The continued erosion of the Section

STATEMENT 1986-9

415 limits means that more and more employees' projected benefits are above the current 415 limit and thus have the funding of their benefit limited. In the long term, this will undermine the benefit security of all plan participants. This is especially true as current law calls for a scheduled increase in Section 415 limits based on changes in cost of living beginning in 1988. We hope that Congress will address this problem and provide some type of relief.

We are encouraged by the proposal to index the dollar limits for increases in CPI, beginning in 1988. This is a necessary step if the private pension system is to protect employees against the effects of inflation.

Section D.2. of H.R. 3838 would impose new limits on deductible contributions to combinations of defined benefit and defined contribution plans. We believe a better approach to this type of problem is not to limit deductions, per se, but rather deal with the problem through benefit limits (Section 415 limits). If the benefits do not exceed what is considered to be the maximum benefit by public policy, there should be no need to limit deductions. Those situations where deductions exceed the 25% of payroll limit are often those where the plan sponsor has started the plan relatively late in the career of some employees, leaving a short time to fund the benefits. If benefits are not considered to be excessive, it does not make sense to penalize the employer who is making an attempt to provide for the welfare of his employees near retirement. The only issue involved here is the timing of the deductions, and it would not seem to be good retirement policy to preclude the employer from deducting the necessary amount.

Finally, and perhaps most importantly, we are adamantly opposed to Section E.3. of H.R. 3838 dealing with the overstatement of pension liabilities. Our position on this issue was clearly explained in a letter sent to you and members of the Senate Finance Committee by Stephen Kellison, the Academy's Executive Director, on February 5. His letter is self-explanatory and conclusive. We reiterate our opposition to any provision of this kind and hope that any consideration of this provision will include public discussion so that we may fully explain our position.

In summary, the retirement plan implications of H.R. 3838 would have a negative effect on the private pension system. While some of its provisions are commendable (such as simplifying rules on distributions), the overall effect would be to undermine many of the employer-sponsored programs now in place that are designed to ensure the self-sufficiency of retired employees.

We appreciate your consideration of our comments. We would welcome the chance to meet with the members of the Senate Finance Committee to discuss our concerns. The private pension system has proved that it works, and as the baby boom generation moves through to retirement, we believe it is more important than ever to keep employer-sponsored programs secure.

Sincerely,

(signed)

Norman S. Losk, Chairperson
Academy Pension Committee

(signed)

Larry D. Zimpleman, Chairperson
Subcommittee on Single Employer Plans

STATEMENT 1986-9

**EXECUTIVE SUMMARY OF ATTACHED LETTER TO
SENATOR PACKWOOD
ON RETIREMENT PLAN IMPLICATIONS OF H.R. 3838**

Due to the length of our comments, we have prepared a summary of our key concerns:

- The introduction of the Retirement Income Policy Act of 1985 (RIPA) is a positive development. Pension changes contemplated in H.R. 3838 should be measured against the policy goals of RIPA.
- The changes contemplated in H.R. 3838 with regard to 401(k) plans are in large part contrary to the policy goals of RIPA, and would reduce the availability of such plans to rank and file participants.
- The changes in Social Security integration rules, which appear to be intended to increase benefits to employees who work for more than one employer during their working lives, would ironically serve to reduce benefits for most employees.
- The proposed changes to Section 415 limits would be more severely felt by rank and file participants than by the higher-paid, especially for participants in plans that base benefits on final average salary.
- Instead of placing new limitations on deductible contributions to combination defined benefit and defined contribution plans, it would be more appropriate to deal with the perceived problem through benefit limits.
- We strongly oppose the institution of a penalty against plan sponsors for the overstatement of pension liabilities.
- Also addressed in our comments are issues relating to forfeitures from money purchase plans, the proposed uniform distribution rules, and the capital gains treatment of pre-1974 contributions.

STATEMENT 1986-10

March 31, 1986

The Honorable Roscoe L. Egger, Jr.
Commissioner of Internal Revenue
1111 Constitution Avenue, NW
Room 3000
Washington, DC 20224

Dear Commissioner Egger:

On behalf of the American Academy of Actuaries, we wish to register with you our views and concerns on a matter of significant importance to our members, namely the publication if IRS Notice 86-3.

The Academy is a professional association of more than 8,000 actuaries in the United States, and includes within its membership more than 85% of all actuaries enrolled under ERISA. While we usually restrict our comments to more technical actuarial matters, it is our view that the issuance of Notice 86-3 is not only of great importance to enrolled actuaries in their professional capacities, but also is indicative of a more fundamental problem in the regulation of pension matters in general. That is, the overwhelming burdin of legislative and regulatory changes makes it less likely that new plans will be established, or that existing plans will be continued.

We note that in the instant case, regulations of a highly complex nature have been promulgated long after the passage of the enabling legislation. The substantial changes required by TEFRA, DEFRA, REA were cumulative, and arose over a period of time during which anticipated changes had to be altered in light of even newer legislative and regulatory modifications.

Compounding this burden, IRS mandated that changes in TEFRA would be processed only in conjunction with changes required by REA. While the deadlines for TEFRA regulatory amendments had been extended on several occasions (due in no small part to the delay in their promulgations by IRS), the administrative decision to couple them with REA requirements for approval was surprising to the pension community, which had come to rely on more reasonable implementation schedule from IRS.

Despite good faith efforts in the face of such an overwhelming challenge, some plans have been unable to comply with the IRS implementation schedule. The penalties associated with noncompliance, while labeled as "relief" by the IRS, instead are tantamount to retroactive sanction of plan sponsors and in turn of enrolled actuaries. In making these comments, we do not underestimate or trivialize the task set before the IRS employees charged with promulgating appropriate regulations under the new, complex legislation. We do, however, believe that IRS has underestimated the difficulties inherent in modifying existing plans as a result of these new regulatory requirements. We submit that this course of action has not been in

STATEMENT 1986-10

the best interests of the private pension system in the United States. We therefore urge immediate reconsideration of the effective date of Notice 86-3, and the establishment of a reasonable prospective effective date.

Sincerely yours,

(signed)

Stephen G. Kellison
Executive Director

STATEMENT 1986-11

**AMERICAN ACADEMY OF ACTUARIES
COMMENTS TO
HEALTHCARE FINANCIAL MANAGEMENT ASSOCIATION
ON
CONTINUING CARE RETIREMENT COMMUNITIES
STATEMENT DRAFT**

APRIL 7, 1986

- page 1, line 32 - "part of a growing industry serving important needs of our nation's elderly"
- line 43 - "called a life care"
- line 44 - "communities, continuing care facilities"
- line 45 - "residential care communities"
- line 46 - "centers"
- page 2, line 15 - "due to the longer period of service to occupancy by" (DH)
- page 3, line 10 - "was unable to find little" - ref. Winklevooss and Powell's "Continuing Care Retirement Communities: An Imperical, Financial and Legal Analysis" and paper by David Hewitt.
- line 42 - "service residency and require recognition of an" (DH)
- page 4, line 32 - "arrangements have has decreased in recent"
- page 5, lines 1-4 - These lines should make clear that this is in recognition of present value of future fees. (JF)
- line 21 - Reference may be made to : "Life Table Estimation and Financial Evaluation for California Life Care Homes. Prepared by Robert Berry and Brent Weaver of Teknekron Research, Inc. for the Office of Life Care Programs, Department of Social Services, California (June 1980). However, it should be noted that a table is no substitute for the individual judgment of a qualified actuary. (DH, JF, AP)
- line 26 - It should be noted that actuaries are qualified professionals. (JF)
- line 32 - "and is are not intended"
- line 34 - "life expectancy estimated remaining lives data should" (DH)
- page 6, line 7 - "a refund of the entire all or a portion of the advance fee"
- lines 17-20 - This statement appears to say that liability may be reduced because it may be resold, however, the fact that cash used

STATEMENT 1986-11

to make future refund may come from future cash received through the future sale of contract does not diminish the present liability. New entrance fee has bearing on cash flow, not on present liability. (JF)

page 8, line 15 - Typed insert states it may be unnecessary to amortize advance feed separately from recognition of the change in the liability of future services and refers to discussion in next section -- this is not adequately discussed in the next section. (JF)

The document needs to recognize the alternative treatment of valuing all assets and all liabilities rather than a portion of the assets and a portion of the liabilities -- the one-step as opposed to two-step approach. This simpler alternative was discussed at the Academy meeting in New York. (JF)

line 16-17 - "The liability for future services is the **excess of the present value of the excess of** the CCRC's obligation to provide future services to current residents over the present value of future related revenue." (JF)

lines 21-22 - "When the present value of future related revenue exceeds the present value of the obligation for future services" (JF)

line 35 - "(which is net of **present value of . . .**)" (JF)

page 9, lines 29-30 - "and other factors that change the amount of **future costs and future revenue to be received**" (JF)

line 31-34 - The typed insert looks at the present day discount rate only, it must consider the future period. See Statement of Actuarial Standards Relating to CCRCs, Paragraph 8.17 - 8.22 (attached). (JF)

page 10, line 3 - "being served **and on current estimates of future costs.**" (JF)

line 17 - (written insert) "The present value of advance fees paid by **current residents** for which future refund is probable" (JF)

line 22 - (written insert) "Unamortized **non-refundable** advance fees are a **non-current liability.**" (JF)

line 27 - "current residents over the present value of related future revenue" (JF)

page 11 lines 26-32 - Delete lines 26, 27, 28, and 29. Change lines 30, 31 and 32 to read: "the actuarial **methods and assumptions** used to amortize advance fees and to calculate the liability for future service, and **for refundable entry fees**" (JF)

STATEMENT 1986-11

Section titled "Illustrations"

page 13 "Section 1 A. A table of estimated remaining lives

A table of estimated remaining lives for the residents of a CCRC showing expected future years service of survival for current residents might be prepared in the following way. While this illustration shows future years of service survival by individual,"

page 14 Second paragraph - "A summary of current residents and the table of estimated lives with its calculated values can be used to project future years of service to survival of current residents."

page 16 "2. Amortization of Advance Fees" --- Insert the following statement after this heading:

"The following illustrations are offered to convey the principles involved, but the group approach shown will tend to overstate current amortization. An issue not addressed in these illustrations is how to handle two lives for whom a single advance fee is paid. It is advisable to seek the advice of an actuary who is familiar with CCRCs." (DH)

STATEMENT 1986-11

Attachment

8.14 RECOMMENDATION 21. MORBIDITY -- PERMANENT TRANSFERS. Morbidity for permanent transfers is measured by the rate of permanent transfer of residents from independent living units to the health center and by the rate of mortality among those so transferred. In selecting morbidity assumptions the actuary should take into account the CCRC's practices in making such permanent transfers.

8.15 RECOMMENDATION 22. MORBIDITY -- TEMPORARY TRANSFERS. Separate provision must be made to reflect the costs of temporary use of the health center by active residents, i.e., residents who have not been permanently assigned to the health center.

8.16 RECOMMENDATION 23. WITHDRAWALS. The attrition of current residents of a CCRC is affected by withdrawals as well as by mortality, and the projection of the number of present residents expected to be in each occupancy status in future years (cf. paragraph 5.3 (i)) requires the use of a withdrawal assumption. (Cf. paragraphs 6.6 and 6.7)

8.17 RECOMMENDATION 24. INTEREST. The interest assumptions used in valuing assets should be properly related to the interest assumptions used in valuing liabilities, and ordinarily will be the same. (Cf. paragraph 8.22.)

8.18 RECOMMENDATION 25. RELATION BETWEEN ASSUMPTIONS FOR INTEREST AND INFLATION. Assumptions as to interest and inflation rates should be reasonably related and should be based on expectations over the full terms of the contracts with present residents, and not simply on current rates. The excess of the assumed interest rate over the assumed inflation rate should be related to the real interest rate which may be expected over the contracts' terms. (Cf. paragraphs 8.5 and 8.6.) The rates may, if the actuary deems it appropriate, vary for different future years. If relatively high rates of inflation are assumed for any period the actuary should consider what is likely to be a reasonable relationship between interest rates and inflation rates in such a period.

8.19 RECOMMENDATION 26. RELATION BETWEEN ASSUMPTIONS FOR INFLATION AND INCREASES IN PERIODIC FEES. The assumption as to future changes in periodic fees (used in the comprehensive approach) should be related to the inflation assumption. Unless the CCRC's balance sheet shows a deficit, the assumption for such changes is likely to reflect closely the assumed inflation rate. The correction of a deficit in the balance sheet is likely to involve additional increases in the periodic fees. In such cases the assumption as to future changes in periodic fees will be greater than the assumed inflation rate (Cf. paragraphs 5.2, 6.7, 6.9, 8.16, 9.3, and 13.10.)

STATEMENT 1986-12

April 23, 1986

Leslie Shapiro
Director of Practice
Executive Director, Joint Board for the
Enrollment of Actuaries
Internal Revenue Service
Department of the Treasury
Washington, DC 20024

Dear Les:

As a follow up to our conversation last month, I am inquiring as to the status of the change contemplated for the Enrolled Actuary reenrollment form. Specifically, I recall your stating that the question relating to disciplinary investigations by actuarial bodies might be altered.

As you will remember, our concern at the Academy is that the present wording of the question is unduly broad. Given the fact that the Academy's discipline process can be initiated anonymously, or by individuals with a particular axe to grind, Academy members may be "contacted" by a member of the Academy's Committee on Discipline in order to clarify questions prior to the rejection of a complaint. Yet, the current wording of the question on the form would require a positive response even in such innocent circumstances.

We hope that this small irritation can be eliminated. We suggest that an alternative such as the following would be more appropriate:

"Have you been disciplined by any professional actuarial body since the issuance of your enrollment? (If "Yes", attach statement giving details.)"

I would be happy to discuss this matter with you more fully at your convenience.

Sincerely,

(signed)

Gary D. Simms
General Counsel

STATEMENT 1986-13

April 25, 1986

The Honorable Don Ritter
U.S. House of Representatives
2447 Rayburn House Office Building
Washington, DC 20515

Dear Representative Ritter:

The American Academy of Actuaries very much appreciates the opportunity to comment on your professional liability insurance bill in draft form. It is our understanding that you hope to introduce this legislation early next week; therefore, in the interest of time, our comments will be somewhat general. Normally, the Academy's Committee on Property and Liability Insurance would review such draft legislation in depth; given the time constraints, this has not yet occurred, and my comments here should therefore be considered preliminary in nature. We hope to continue working with you, including testifying at any hearings on this issue.

The scarcity and costliness of today's professional liability insurance is a problem for many professions, even the actuarial profession. Many of our own members are having difficulty obtaining errors and omissions insurance. (Indeed, the Academy, itself, is having some difficulty in this area.) The issues surrounding the liability insurance crunch are complex. The resolution of this problem does not, in our judgment, rest with tort reform alone. We believe that any global attempt to resolve this problem must also include the following: (1) a program to educate the public as to who ultimately pays for excessive or unfounded claims, (2) better policing of professionals by themselves or appropriate regulatory agencies, and (3) the adoption of sound underwriting practices by property and liability insurance companies; in particular, a closer adherence to actuarial opinion in setting rates and reserves.

In examining your proposal, we would make a specific recommendation with regard to the language of the provision relating to the payment of future damages and the scheduling for such payments.

The purpose of Section 3(d)(1) is to require structured settlements for damage awards in excess of \$100,000. The intent of Subsection (B) under this section appears to go further and require that such structured settlements be spread out over the remaining lifetime of the injured party. If, in fact, this is the intent of Subsection (B), we believe that the same objective can be achieved with clearer, less complicated language. In particular, subsections (i) and (ii) are needlessly complex in attempting to deal with the situations in which individuals "die too soon" or "live too long" in relation to their life expectancy. As long as the courts are required to spread out the payments over the remaining lifetime of the injured party in a relatively level pattern, the bill will achieve its objective. For example, the purchase of a life annuity, as provided in Subsection (C), automatically achieves this result without all the adjustments specified in (B)(i) and (B)(ii).

Given the opportunity, we would be pleased to address at length a number of the insurance-related issues that contribute significantly to the liability

STATEMENT 1986-13

insurance problem. They include: (1) the cyclical nature of the United States property and liability insurance industry for the past several decades; (2) underwriting based on investment return rather than a realistic assessment of risk; (3) various state and federal legislative actions that have significantly expanded the scope of coverage offered under traditional liability insurance contracts; and (4) the doctrine of joint and several liability, resulting in a number of cases where any one of the involved parties may be declared liable for all damages regardless of the degree of negligence.

I hope these preliminary comments are helpful to you at this juncture. Please feel free to contact me if you have any questions, or if we can be of further assistance.

Sincerely,

(signed)

Stephen G. Kellison

STATEMENT 1986-14

**STATEMENT SUBMITTED TO
THE SUBCOMMITTEE ON HEALTH,
COMMITTEE ON WAYS AND MEANS,
U.S. HOUSE OF REPRESENTATIVES**

**ON BEHALF OF THE
COMMITTEE ON HEALTH OF THE
AMERICAN ACADEMY OF ACTUARIES**

MAY 2, 1986

This statement is submitted in response to the request for information issued on March 19, 1986 by the Honorable Fortney H. (Pete) Stark, Chairman of the Subcommittee on Health, on the subject: "Lessons for Medicare from the Private Sector: Opportunities and Problems".

PURPOSE

The American Academy of Actuaries ("Academy") appreciates the opportunity to respond to the request for information issued by Chairman Stark. This document contains comments on the actuarial aspects of three subjects relevant to the Chairman's request: (1) health promotion and preventive strategies in relation to age; (2) examples of actual experiments in these areas under insured health care plans; and (3) issues of cost and financial ethics with respect to preventive benefits provided under such plans.

BACKGROUND

The Academy is a professional association of over 8,000 actuaries involved in all areas of specialization within the actuarial profession. Included within our membership are approximately 85% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable high percentages of actuaries specializing in actuarial services for other employee and individual enrollment coverages such as life, health and disability programs. As a national organization of actuaries, the Academy is unique in that its membership consists of actuaries with expertise in all areas of actuarial specialization.

The Academy does not advocate any position on major public policy issues which are not actuarial in nature. The Academy views its role in the government relations arena as providing objective information and actuarial analysis to public policy decision-makers, so that policy decisions can be made with informed judgment. It is our belief that the training and experience of Academy members provides for a unique understanding of current and potential practices in health care financing. Our intention is to communicate that understanding in ways that will assist your Subcommittee and policy decision-makers generally.

STATEMENT 1986-14

COMMENTS

1. Health Promotion and Preventive Strategies in Relation to Age.

While the subject is directed specifically toward the Medicare program, it is important, even though obvious, to emphasize that promotion of good health and strategies of disease prevention and cost containment and reduction need to be directed to all ages, from the prenatal on up. Had we Americans been more aware of the importance of this fact over the past half century, perhaps our Medicare bill could have been half of what it is. Fortunately, this awareness has been spreading and increasing dramatically during just the past decade, and this bodes well indeed for the general health status of Americans.

It is equally important to emphasize, however, that there is evidently no age so advanced that measures of health promotion, disease prevention and cost containment cannot still be effective, even if these have been neglected throughout all of earlier life. Abundant case histories and examples have come to light in proof of this. No one is ever "too old", because of age alone. Almost any individual who is not already in the far advanced stages of presumably incurable or degenerative disease can still benefit from serious efforts toward health improvement.

Our comments, accordingly, we believe to be relevant to all ages of Americans, but also specifically relevant to our senior citizens covered under Medicare - and to future senior citizens who WILL be covered under Medicare.

2. Examples of Actual Experiments under Insured Health Care Plans.

There have been quite a number of experiments directed toward health promotion, disease prevention and cost containment under all kinds of health care plans. Among the most significant or widespread have been:

- a. Extension of coverage to "preventive" expenses, such as coverage of annual physical check-ups and the like.
- b. Cash payments to persons who have contributed to reductions in plan or benefit costs in various ways:
 - (1) Cash refunds to persons who have not utilized plan benefits over stated periods, such as one year.
 - (2) Cash payments to persons who achieve specific economies in medical care or treatments for example, cash payments to participants who have listed surgical procedures performed on an outpatient basis as an alternative to more expensive inpatient care and recovery.
 - (3) Sharing of a percentage of charges billed in error, with claimants who self-audit their bills and discover overcharges.
- c. Premium discounts to "preferred risks", as determined by habits relating to use, or rather non-use, of tobacco or alcohol, and by other characteristics such as height and weight, blood pressure, etc.
- d. Renewal premium reclassification, involving renewal discounts or surcharges based on benefit utilization or continuing health evidence.
- e. "Total care" programs, such as those frequently offered by health maintenance organizations.

STATEMENT 1986-14

These several kinds of experiments have led to varying degrees of apparent success or failure, in any particular case. Most of them involve some measure of offsetting disadvantage. For example, b(1) above (payment of cash refunds for non-utilization) raises the question of the extent to which those receiving refunds have maintained better health; or whether they are simply not submitting claims for benefits; or else, more seriously, are not seeking medical care they need for the sake of qualifying for the refund. The author of this Statement has had considerable experience with "return of premium" individual health care or disability policies. The experience shows that, without question, claim experience is more favorable, that is, total claims are lower, in the presence of the cash refund feature. But just what this may prove is another question. All we really know is that claim experience is lower, under such plans.

The author has more recently had experience with a program of type d, above, involving renewal premium reclassification. This program, which became implemented as of January 1, 1985, seems to be showing considerable promise, but considerable time is needed before apparent results can be evaluated. The program is in use by a large voluntary association in the State of Illinois, with more than 100,000 subscribing members and their dependents. It is known as the Illinois Health Improvement Association, and , true to its name, has seriously endeavored to develop incentives among its members toward better health. The latest incentive has been the adoption of a renewal premium reclassification system, based BOTH upon a subscriber's benefit utilization of the health care plan during the preceding year or years and also upon a subscriber's continuing or resubmitted evidence of good health. Several "tiers" of premium rate levels are provided for, ranging from 70% of the "standard" premium level, up to about 150% of the "standard" premium level.

The premium reclassification system is now in its second year of operation and appears to be performing well. The total cost of the program appears to have stabilized, after going through several earlier years of severe cost escalation and attendant loss of participants, all of whom are voluntary members paying 100% of their own plan premiums. At the same time, it has been found that high and consistent statistical correlation appears to continue over time throughout the several tiers of rate classification: high costs and rates of utilization tend to continue among the increased rating tiers, while low costs and rates of utilization tend to continue among the reduced rating tiers. This phenomenon helps to keep the healthier risks in the program, and also indicates that the reclassification system is broadly equitable, over time.

Premium reclassification programs of this kind are, however, also prone to criticism. One significant criticism comes from among those who move "up the ladder" to the 150% of standard level. Some ask, "What is insurance for? We had claims, or our health has deteriorated. So now we pay more. Insurance should pool the experience of everyone: the healthy should help to pay for the medical expenses of the unhealthy." This "pooling" concept actually remains in the program, however, though in a modified form: those who have had no expenses at all, or who are in the most superb health, still pay minimum premiums at a rate of 70% of "standard" and therefore still subsidize those who have high or frequent claims. Experiments at promoting better health, and incentives to that end, appear to be needed and we hope to have the opportunity to see how effective this one will eventually prove to be.

STATEMENT 1986-14

In the final section of this Statement, comment will be made concerning plans of type a, coverage of preventive expenses.

3. Issues of Cost and Financial Ethics with Respect to Preventive Benefits.

There have been many experiments seeking to incorporate coverage of preventive expenses. The simplest example is perhaps a plan benefit provision that provides payment for one regular physical check-up annually; e.g., up to \$50 or \$75 allowable each year for this.

This can present a problem as to cost: the amount by which the premium must be increased to include the preventive benefit. Ideally, one would hope that every member of the plan would utilize the benefit and get the check-up. But if this goal is realized, the additional premium to pay for, say, a \$75 annual physical, must exceed \$75, due to administrative expenses, state premium taxes and so on. The resulting question, then, is whether it is financially appropriate to charge more, by way of premiums, than the members would pay on their own for annual check-ups. Some State insurance departments refuse to approve these preventive features, for this reason. In theory, the LONG TERM objective of providing the preventive benefits is a healthier group, so that eventually premiums will be lower, not higher.

But it is hard to realize that objective, because another principle of the marketplace gets in the way: competition. At the outset, plans with liberal preventive benefits have great trouble competing in price with other plans that do not contain such provisions.

This is one of several reasons why the Illinois Health Improvement Association instituted its premium reclassification program instead. Members have to pay for their own physical check-ups. But if this leads to their qualification for a renewal premium discount, they realize a direct financial benefit for their attention to their health, a premium savings that can rapidly exceed whatever price they paid themselves for preventive medicine.

So various experiments have been tried and continue to be tried. Those of us in the Academy of Actuaries who have specialized experience and knowledge in this broad area would be glad to share this ongoing experience and knowledge with your Subcommittee and staff to the extent possible and in whatever manner would aid your objectives toward better health promotion and cost savings.

Respectfully,

(signed)

E. Paul Barnhart, Chairman
Committee on Health
American Academy of Actuaries

STATEMENT 1986-15

May 5, 1986

Mr. Bartlett Fleming
Acting Deputy Administrator
Health Care Financing Administration
Room 310G, Hubert Humphrey Building
200 Independence Avenue, SW
Washington, DC 20201

Re: Clarification of Comments
Medigap: Study of Comparative Effectiveness of Various State Regulations
Contract No. HCFA-500-81-0500

Hand Delivered

Dear Mr. Fleming:

On August 30, 1983, the American Academy of Actuaries Task Force on Medicare Supplement Study submitted comments to you concerning "Medigap: Study of Comparative Effectiveness of Various State Regulations" (Contract No. HCFA-500-81-0500). A copy of those comments is attached to this memorandum. We understand that this study is nearing completion and submission to the Secretary of Health and Human Services.

The purpose of this additional correspondence is to make sure that no inaccurate conclusions are drawn with respect to our comments made in the August 30, 1983 letter. We have learned from several attendees at meetings with HCFA personnel that HCFA officials have implied that our Task Force's comments constitute an endorsement of the specific methodology and the results of the study itself.

In order to avoid potential embarrassment either to HCFA or to the Academy, please allow me to reiterate the qualifications to our comments which appeared in that letter:

"The study was conducted for the primary purpose of comparing the relative effectiveness of state regulations as they applied to supplemental health insurance marketed to Medicare beneficiaries. The report cautions the reader about the difficulty in assessing the comparative effectiveness of state regulations. This would seem to limit the validity of using data from the report for pricing or as a direct source of data for regulation or legislation. This is particularly true of the values developed for comparison of benefit, costs and premiums in the analysis of Value of Policy and Budget Protection concepts." (emphasis added)

Based upon our comments, it would be inaccurate to state that the Academy endorses either the particular methodology or the results of the study. This is particularly true with respect to conclusions drawn in the study in the areas of Value of Policy and Budget Protection. Further, it should be understood that our comments did not constitute an endorsement of the assumptions utilized. This is highly relevant with consideration as to the use of general population data in lieu of insured population data, a point we stressed orally in 1983

STATEMENT 1986-15

discussions with individuals working on the project at that time. We wish to make clear that our August 30, 1983 letter did not endorse the use of general population data as a basis of comparison in this context.

We stress that our purpose here is to avoid possible misinterpretation of our earlier comments. To the extent that our comments may have been misinterpreted, we regret that our comments were not more clearly articulated. We believe, as we stated during 1983 conversations that the study is valuable in the formation of various hypotheses which can then be tested against fully appropriate data.

Thank you for your consideration. We look forward to working closely with HCFA in the future on matters of mutual interest and concern.

Sincerely,

(signed)

Gary D. Simms
General Counsel

STATEMENT 1986-16

May 8, 1986

Commissioner of Internal Revenue
1111 Constitution Avenue, N.W.
Washington, D.C. 20224

Attention: CC:LR:T (LR-19-80)

RE: Proposed Regulations on Unisex Annuity Tables

Dear Sir:

The purpose of this letter is to comment on the proposed regulations relating to the proposed new unisex annuity tables for use in the calculations required under Section 72 of the Internal Revenue Code (IRC). These proposed regulations appeared in the Federal Register on March 24, 1986 (51 FR 9978-10024).

By way of background, the American Academy of Actuaries ("Academy") is a professional organization of over 8,000 qualified actuaries who practice in all areas of specialization - life and health insurance, property and liability insurance, and pensions and employee benefit plans. The Academy deals with public policy issues involving actuarial considerations. The proposed regulations in question do involve substantial actuarial content.

Our comments are offered in six broad categories:

1. Need to update tables

We applaud the Internal Revenue Service (IRS) for proposing a much more current mortality table for use under Section 72. Calculations under this section today are based on the 1937 Standard Annuity Table which is quite obsolete.

In the past the Academy has testified as to the need to keep tables current in other areas of the IRC as well. In particular, we testified on updating the table for the taxation of group term life insurance in 1983 and the tables for valuing annuities, life estates, term for years, remainders, and reversions in 1984.

The use of actuarial tables to compute certain values required in the tax code is quite appropriate, but may appear arcane or even obscure to many taxpayers. Maximum credibility will be achieved if taxpayers perceive that the tables are based on current experience rather than tables that are obsolete. Such credibility should be a public policy objective of the IRS.

This is not an insignificant point, since the IRS has been very slow to update all these tables in the past. In the case of Section 72, the current tables were first adopted on a temporary basis in 1954 and on a permanent basis in 1956, some 30 years ago! We would encourage the IRS to periodically review all actuarial tables in use throughout the IRC every few years. This will ensure that the tables are kept current in perception as well as in fact.

STATEMENT 1986-16

2. Source of data

Anytime a new mortality table is to be adopted it is important to base it on underlying data that is as relevant for the population to which it is to be applied as feasible. In this case, the data source used is the 1983 Experience Table underlying the 1983 Table "a" developed by the Society of Actuaries, an actuarial organization closely affiliated with the Academy. We believe that this basic data source is appropriate for the purpose at hand; and, further, we are not aware of any alternate data source that would be as relevant as the one used.

In the Supplementary Information section of the proposed regulations the IRS expressed interest in data "on the mortality experience of taxpayers receiving amounts to which Section 72 applies" (see p. 9979, column 1). We are not aware of any feasible way to conduct such a study directly, since the IRS itself would be the only source of which taxpayers fall under Section 72.

However, many of the individual lives contained in the 1983 Experience Table would fall under Section 72 for tax purposes. There does not appear to be any reason to suspect that their mortality differs materially from others in the data who do not come under Section 72.

3. Unisex tables

The Academy does not take any position on the change from gender-based tables to unisex tables. There are undoubtedly public policy considerations involved in the IRS intention to make such a change.

However, we would stress that such public policy considerations are not actuarial in nature. From the actuarial viewpoint the difference in mortality experience between males and females is substantial and indisputable. Moreover, throughout this century the differential has been widening, not narrowing, and no reversal of this trend is evident.

The use of unisex mortality tables rather than gender-based mortality tables will result in less accurate tables being used for both sexes than would otherwise be the case. This inaccuracy will be significantly greater for single life annuities than for joint and survivor annuities. The IRS needs to weigh this loss of accuracy against the other public policy issues involved.

4. Weighting by gender

The proposed regulations construct the unisex tables by weighting the underlying male and female experience using the gender mix contained in the underlying data. Although this is an objective standard to use, we are not convinced that it is the best alternative.

One problem is that there is no necessary relationship between the gender-mix of data in this particular mortality study and the gender-mix of individuals covered under Section 72. One alternative would be for the

STATEMENT 1986-16

IRS itself to analyze (perhaps on a sampling basis) the gender-mix of individuals filing tax returns with Section 72 impact.

Another alternative with considerable appeal is simply to use a 50-50 gender-mix at some key pivotal age. This would have several advantages. First, it would simplify table construction. Second, it would avoid some of the lack of smoothness contained in the proposed tables resulting from the different mixes used at various ages. Third, it would be the most accurate approach to use for joint and survivor annuities, which comprise a significant percentage of the population of annuitants.

5. Mortality projections

The underlying data for the proposed tables actually are derived from a 1973 table projected to 1983. Mortality projections are frequently used in actuarial work and are consistent with sound actuarial principles and practices.

Since the new tables will be used for several years, consideration might be given to projecting the 1983 table a few more years into the future. In the past the IRS has not looked favorably upon such projections. For example, the IRS rejected using projected rates for the new group term life insurance table adopted in 1983 as "speculative."

Although we believe use of projected mortality rates would be quite appropriate from an actuarial viewpoint, we understand the reluctance of the IRS to do so. However, if projected mortality rates are not to be used in the IRC, this accentuates the need to update these tables more frequently in the future than they have been in the past (see discussion in 1 above).

6. Substandard annuities

The proposed tables are based on data in which the annuitants are in normal health at the time annuity payments commence. Thus, they would not be as accurate for situations in which the annuitant is in poor health at annuity commencement date (so-called "substandard annuities").

We are not suggesting that separate calculations or tables should necessarily be used in these cases, since it would increase the complexity of an already complex area. However, we do urge the IRS to at least recognize this additional source of inaccuracy and consider the issue on its merits. As in the case of unisex tables, there may well be a trade-off between "individual equity" considerations and "public policy" considerations.

Summary

In summary, we are pleased that the IRS has chosen to update badly outdated tables. We hope that the above comments are useful to you in developing final regulations.

STATEMENT 1986-16

We do request an opportunity to testify at the public hearing on May 21, 1986. The required outline of our brief testimony consists of the six numbered section headings above.

Yours truly,

(signed)

Stephen G. Kellison

STATEMENT 1986-17

May 14, 1986

The Honorable Bob Packwood
Chairman
Senate Committee on Finance
219 Senator Dirksen Office Building
Washington, DC 20510

Re: Legislation on Retiree Medical Benefits

Dear Senator Packwood:

In January, several American Academy of Actuaries (Academy) representatives met with Ann Moran (who was then serving as tax counsel to the Finance Committee) to discuss issues associated with employee benefits, particularly retiree medical benefits. It was suggested by Ann that we would provide input regarding legislation. The purpose of this letter is to suggest to you proposed changes to Internal Revenue Code which will encourage employers to advance fund retiree medical benefits. We request that these changes be incorporated into tax reform legislation when it goes to the Conference Committee.

These proposed changes are provided on behalf of the Subcommittee on Health and Welfare Plans (the Subcommittee) of the Academy. During the past two years, the Subcommittee has engaged in the educational presentations on the funding of retiree medical benefits to the IRS Employee Benefit Section (National Office), the Department of Labor, and the Financial Accounting Standards Board, and has submitted written testimony on the subject to the Senate Subcommittee on Savings, Pensions and Investment Policy. Additional information regarding the Academy is attached to this letter.

BACKGROUND

The Academy believes that it is advisable for employers to fund their retiree medical benefits in a manner which assures payment of promised benefits. For most employers, this will mean funding benefits on a level basis over the working careers of their employees. This type of funding of post-employment benefits - whether pension benefits, retiree medical benefits, or retiree life insurance - is commonly referred to as "advance funding". When retiree medical benefits are funded in advance, the plan's trust will hold assets estimated to be sufficient to fully fund the benefits for all current retirees, as well as a portion of the assets estimated to be needed to fully fund the projected benefits of current employees once they retire. Only when retiree medical benefits are funded in trust on this (or a more accelerated) basis can employees be confident they will receive the medical benefits promised for their retirement.

The tax law regarding the funding of retiree medical benefit benefits differs greatly from that regarding pension benefit funding. Because of changes made by the Deficit Reduction Act of 1984, employers are substantially discouraged from funding these benefits through welfare benefit funds and especially a voluntary employee beneficiary association (commonly referred to as a VEBA or a 501(c)(9) trust); in contrast, employers are not merely encouraged, but are required by ERISA, to fund in advance retiree income

STATEMENT 1986-17

benefits. While the Academy is not advocating a minimum funding requirement for retiree medical benefits, the Academy does believe that the tax law should not discourage the advance funding of retiree medical benefits. The taxation of contributions and investment income should be consistent with that of pensions.

Actuaries have given increasing attention in recent years to the assumptions and estimation methods appropriate for the valuation and funding of retiree medical plans. The main reason for this attention is the magnitude of the liability associated with such plans. The House of Representatives' Select Committee on Aging has recently provided estimates indicating that the liability for future retiree health benefits for the Fortune 500 companies is 150% of total assets. Actuarial studies for employers who have both pension and medical plans have most often placed the liability for the retiree medical benefits at between 50% and 100% of the pension liability.

The Academy believes that it is imperative to revise the Internal Revenue Code to encourage advance funding through welfare benefit funds, for the following reasons:

- Employers are now more likely than ever to fund advance as a result of (i) the likelihood of accounting standards from the Financial Accounting Standards Board which would require some advance provision for retiree medical benefits, and (ii) recent court decisions which have attempted to vest retiree medical benefits for current retirees.
- Advance funding is often not possible under qualified pension plans. Under Internal Revenue Code regulations, it appears that contributions for the current service costs of retiree medical benefits cannot exceed 25% of the aggregate contributions made to a pension trust for the current service costs. (See IRS Regulation Section 1.401-14(c)(1). This restriction results from the requirement that non-pension benefits be "incidental" to a pension plan.) Contributions at this level are often not sufficient to advance fund an employee's retiree medical benefit at retirement.

PROPOSED CHANGES

We understand that the Senate Finance Committee tax reform bill would permit the recognition of projected increases in medical costs under a specific index for determining the tax deductible contribution to a welfare benefit fund; current tax law (as revised by DEFRA) does not permit recognition of these projected cost increases.

While this change is necessary to encourage advance funding of retiree medical benefits, an indexed medical cost inflation factor will not permit recognition of all elements which increase medical costs. While the price increase element of medical care cost inflation can be measured through an index such as the medical CPI, other elements of benefit plan cost inflation are not so easily quantified. Factors influencing the costs of benefit plans include increased utilization of services, the propensity to use more expensive technology, leveraging of deductibles, and cost shifting from public to private payors. All of these factors should be taken into account in funding for future benefit costs, but the proposed index would not permit it.

STATEMENT 1986-17

The issue of how to properly estimate future benefits costs is actuarial in nature. It requires that assumptions as to future cost behavior be developed, taking into account past results (including cost index changes) and projections of future changes. Actuaries are skilled in developing these projections and in applying projections to recommend a funding pattern. We recommend that Congress permit a "qualified actuary" to establish the appropriate assumption as to cost inflation.

We also believe two additional changes are needed to the Internal Revenue Code in order to encourage advance funding. If Congress only changes the IRC to permit recognition of future cost increases, we believe employers are not likely to fund in advance.

The first additional change deals with the unrelated business income tax on welfare benefit fund investment earnings. Under current law, when assets accumulated in a welfare benefit fund for retiree medical benefits exceed the incurred but unpaid claim reserve, investment earnings on this excess accumulation are subject to unrelated business income tax. The incurred but unpaid claim reserve averages approximately three or four months of claim payments to current retirees, and is generally dwarfed by the actuarially determined amount which should be held in a fund for advance funding retiree medical benefits. If a sponsor were to begin today to use a welfare benefit to fund in advance retiree medical benefits with the maximum tax-deductible contributions under current law, it would take only two or three years of contributions before at least 50% of the trust's investment revenue would be subject to tax, and probably no more than ten years before at least 90% of the trust's investment income was taxable. This is the situation of virtually all plan sponsors since very few currently use welfare benefit fund for advance funding retiree medical benefits.

With this degree of investment income taxation, the Academy believes that few sponsors will advance fund retiree medical benefits under a welfare benefit fund. Therefore, the Academy proposes that the unrelated business income tax on investment earnings under IRC Section 512(a)(3)(E)(i) and Section 419A(g) be curtailed. The Academy proposes that earnings be subject to tax only when welfare benefit fund assets exceed the actuarial accrued liability; investment earnings on amounts in excess of that liability, however, would be subject to unrelated business income tax. This change will permit advance funding of retiree medical benefits, but will discourage funding in excess of that warranted by the employer's plan and workforce.

A second change deals with the separate account requirement for key employees under Section 419A(d). Under current law, all retiree medical benefit contributions made to a fund on behalf of a key employee are charged to this account, and all medical benefit payments to the key employee after retirement must be paid out of this account. Furthermore, all account additions are counted against the IRC Section 415 limit for defined contribution plans.

These provisions of the IRC make it unlikely that an employer will advance fund retiree medical benefits. The requirement to pay retiree medical benefits from the separate account can easily leave a key employee without any medical benefits after retirement. A key employee could retire and

STATEMENT 1986-17

exhaust his account in the first year with a single accident or illness; however, if no advance funding of retiree medical benefits had preceded the accident or illness, the key employee would not risk exhausting his/her retiree medical benefits. Since key employees generally decide whether an employer should advance fund, and since advance funding is contrary to the interest of key employees, employers will be lesslikely to advance fund. Similarly, the counting of account additions against a key employees IRC Section 415 limit is contrary to the key employees interest, and make it less likely that employers will advance fund. Therefore, the Academy proposes that IRC Section 419A(d) be repealed.

* * * * *

We hope our comments will aid you in developing legislation. Should you have questions, please call me at (312) 876-2000. Additionally, if it would be helpful, we would be happy to meet with you to discuss these issues.

Sincerely,

(signed)

William J. Miner, MAAA
for the Subcommittee on Health and Welfare Plans

STATEMENT 1986-17

BACKGROUND ON THE AMERICAN ACADEMY OF ACTUARIES

The American Academy of Actuaries is a professional association of over 7,600 actuaries involved in all areas of specialization within the actuarial profession. Included within the Academy's membership are approximately 85% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable percentages of actuaries specializing in actuarial services for other employee coverages such as life, health and disability programs. As a national organization of actuaries, the Academy is unique in that its members have expertise in all areas of actuarial specialization. Dealing with issues associated with employee benefit plans is in part the responsibility of the Academy's Subcommittee on Health and Welfare Plans.

The Academy does not advocate public policy decisions (such as regarding tax legislation), which are not actuarial in nature. The Academy views its role in the government relations arena as providing information and actuarial analysis to public policy decision-makers, so that policy decisions can be made with informed judgment. It is our belief that the training and experience of Academy members allow a unique understanding of current practices in employee benefits. Our intention is to communicate that understanding in ways that assist policy decision-makers.

STATEMENT 1986-18

RISK CLASSIFICATION AND AIDS

STATEMENT OF THE COMMITTEE ON RISK CLASSIFICATION OF THE AMERICAN ACADEMY OF ACTUARIES

MAY 21, 1986

Introduction

This statement was prepared by the Committee on Risk Classification of the American Academy of Actuaries. The Academy is a professional association of 8,000-plus actuaries, which was formed in 1965 to bring into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition of our profession. The Academy includes within its ranks members of its three founding organizations, the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Society of Actuaries, and 85% of enrolled actuaries qualified under ERISA.

The Academy's role in the government relations arena is that of offering advice and counsel to the nation's decision-makers, so that when faced with issues of public policy, these decision-makers can proceed with the assistance of an independent actuarial perspective.

General Purpose of Risk Classification

To establish a fair price for insuring an uncertain event, estimates must be made of the probabilities associated with the occurrence, timing, and magnitude of such an event. These estimates are normally made through the use of past experience, coupled with projections of future trends, for groups with similar risk characteristics.

The grouping of risks with similar characteristics for the purpose of setting prices is a fundamental precept of a workable, private, voluntary insurance system. This process, called risk classification, is necessary to maintain a financially sound and equitable system.

To achieve and maintain viable insurance systems, the process of risk classification should serve three primary purposes. It should: (1) protect the insurance system's financial soundness, (2) be fair, and (3) permit economic incentives to operate and thus encourage wide-spread availability of coverage. Striking the appropriate balance among these objectives is not always easy, but they are clearly in the public interest and are not incompatible.

Equitable treatment is essential if each individual is to be charged a price that is perceived as fair and appropriate for the risk involved. Appropriate pricing of insurance requires that the expected costs for the individual risks in a price category be similar. This does not imply that the actual cost for any specific insured can be determined in advance. Average expected claim experience can be quite reliable, though, for a large group of insureds with similar risk expectations. The mathematical disciplines of probability,

STATEMENT 1986-18

statistics, and forecasting are applied to all relevant data available. With this information, an appropriate premium to be paid by each member of the group is determined.

Improper risk classification can lead to "adverse selection." The opportunity for adverse selection exists when relevant information is not provided or is not permitted to be used in the risk classification process. The freedom of choice and the ability to compare price may create a dramatic movement of buyers to different sellers within an insurance market or even movements into or out of a market. For example, when those insured become unrepresentative of the anticipated group because relevant adverse information is withheld, the premium (price) for the high risk insureds is too low. The group will probably have more claims than were anticipated when premiums were established. When permitted, the insurer will increase premiums to reflect revised claims expectations; this will motivate lower risk insureds to buy from a different seller or move out of the market, leading to a further escalation of premiums and fewer buyers. This upward spiral results in the desired coverage being unavailable on any reasonable premium basis or in the insurer becoming financially unsound, a phenomenon called the "assessment spiral," which actually took place in some companies during the 1800s and the early 1900s.

A risk classification system must also be efficient. The additional expense of obtaining more refinement should not be greater than the reduction in expected claims for the less expensive, less refined risk classification. Thus, there is a practical limit to the incentive to add refinements to the classification system.

Laws, regulations, and public opinion all constrain risk classification systems within broad guidelines of social acceptability. Legislative and regulatory restrictions on these systems must balance a desire for increased public acceptability against the potential economic side effects of adverse selection or market dislocation.

Risk classification is not the only approach for minimizing adverse selection. When coverage is not available to large segments of society on a profitable basis, the government is often the only alternative. In certain types of government insurance where participation is mandatory and choices are restricted, adverse selection is controlled by restricting the buyer's freedom. Within this framework, pricing is based on the principle that low risks must subsidize higher risk individuals for the overall welfare of society.

A more detailed presentation of the Academy's view of risk classification is presented in the booklet "Risk Classification: Statement of Principles," American Academy of Actuaries, June 1980.

History of Underwriting Risks

Underwriting is the process of applying a risk classification system. It seeks to answer three questions: (1) Should the applicant be issued insurance? (2) How much insurance should be issued? (3) What is the appropriate premium rate classification for the proposed insured?

STATEMENT 1986-18

Underwriting has developed over time and will continue to do so. A brief review of the history of underwriting may be helpful in understanding the application of these principles to new diseases. While the following comments show the historical development of life insurance underwriting, there has been a similar evolution of the underwriting of other forms of insurance.

Life insurance policies are first recorded to have been issued in England during the latter part of the sixteenth century. The following practices were widely used to underwrite insurance applicants:

- The prospective insured appeared before the directors of the company, who questioned him about his health and examined his physical appearance.
- Initially, insurance was limited to a relatively narrow range of issue ages, such as fifteen to forty-five.
- Early applications inquired about the general health of the prospective insured and raised questions about serious health hazards of the time, like smallpox. Although these applications were brief, they also inquired if he was in the armed services or intended to travel outside the country.

Even in early days, insurers found it necessary to determine the reason for the insurance. This need arose because some early contracts were purchased on the speculation that the insured was in ill health and that the purchaser could receive a windfall. Such speculation has long been viewed as contrary to public policy.

Additionally, early insurance policies were of a limited duration, generally no more than five years. Extra premiums were usually charged for females during the child-bearing period, for people who had not yet contracted smallpox, and for certain occupations. Also, many policies imposed travel restrictions and had limited face amounts to protect the solvency of the insurers.

Over time, many of the above restrictions were relaxed or eliminated. Benefit periods for the whole of life became common. By the 1800s, females were not charged an extra premium, since advances in medicine had significantly reduced the dangers of childbirth. Similarly, travel restrictions were eased.

During the 1800s, many current-day underwriting practices were developed, including:

- The recognition of family medical history as an important source of information.
- The employing of medical advisors by insurers, and the use of medical examinations and tests as routine requirements for insurance applicants.
- The use of more detailed questions on application forms about the prospective insured's health status and medical history.

STATEMENT 1986-18

- The introduction of a numerical rating system, which is a systematic method of evaluating the risk factors influencing mortality. These factors include such items as build (height and weight), medical information, and occupation.
- The use of additional information revealed through agents' reports, inspection reports, and attending physicians' statements.

The underwriting practices of the 1900s were a refinement of those initiated during the 1800s. These practices were updated to reflect occupational changes, inventions, new avocations, and medical advances. For example, policies issued in the early 1900s provided for extra premiums and benefit restrictions for passengers on commercial airline flights. As statistics demonstrated the increasing safety of commercial flights, these restrictions and extra premiums were eventually eliminated.

During the 1900s, the use of blood pressure readings, blood tests, urinalysis, chest x-rays and electrocardiograms further refined the underwriting process. Medical advances reduced the underwriting emphasis on certain diseases, such as tuberculosis and diabetes. Over time, the underwriting focus has shifted to other diseases, such as cancer and heart disease, which have become leading causes of death.

Underwriting has been an evolutionary and dynamic process, guided by the underlying premise of equitably classifying risks into their proper premium category and characterized by the adaptation to changes in the incidence of disease, medical advances, technological developments, and socio-economic factors.

The Acquired Immunodeficiency Syndrome (AIDS) Risk

In recent years, a medical condition has been recognized that is referred to as Acquired Immunodeficiency Syndrome (AIDS). The high mortality rates and medical costs associated with AIDS have required insurers to consider this new condition in their underwriting practices.

As stated earlier, there are three primary purposes served by the risk classification process in a viable insurance system, all of which must be in appropriate balance: (1) protect the insurance system's financial soundness, (2) be fair, and (3) permit economic incentives to operate and thus encourage the widespread availability of coverage.

Prospective life or health insureds should be underwritten based on data and criteria relevant to their own mortality or morbidity risk. The underwriting should not be unfairly discriminatory, nor should it conflict with basic individual human or civil rights. Furthermore, underwriting should be prospective only. Contractual provisions of some individual health insurance policies allow the policy to be cancelled in specific situations. These represent a very small percentage of individual health insurance policies and an even smaller percentage of individuals covered by health insurance. With this exception, individuals will not have their coverage changed because they contract AIDS after obtaining insurance.

STATEMENT 1986-18

The concentration of AIDS cases diagnosed to date in this country and the risk of this disease within several narrow segments of the population (homosexual or bisexual men, and intravenous drug users) give rise to significant problems involving its proper evaluation and underwriting. One significant problem is that the members of these population segments may realize that they are in a high risk group and choose to purchase large amounts of insurance. Additionally, insurers may be subject to charges of unfair discrimination against these population segments if they attempt to underwrite for this disease. In view of these problems, AIDS presents a most difficult challenge to insurers and regulators.

There is now no known cure or vaccine for those diagnosed as having AIDS.
1/ The median age at death is thirty-five which is significantly lower than the median age at death for the general population. The majority of individuals who contract AIDS die within 12-24 months 2/ often after incurring medical costs in excess of \$100,000. 3/

As of April 1986, about 19,000 AIDS cases had been reported to U.S. government authorities (with about 10,000 deaths). It is estimated, however, that at least one million persons are carrying the AIDS antibodies (the presence of antibodies indicates that the person has been exposed to the AIDS virus) and this figure could more than double within five to ten years, according to Dr. Anthony J. Fauci, director of the National Institute of Allergy and Infectious Diseases. Some recent studies indicate that about 8% - 34% of these persons will contract AIDS within three years. 4/ Other studies indicate that many more may contract one or more of the AIDS-related conditions that are less severe, but which progress to AIDS in some persons.

5/ There is no known limit to the length of time in which an individual with AIDS antibodies can contract the disease. If these estimates are correct, perhaps 80,000 - 340,000 Americans will contract AIDS in the next three years, with the majority of these cases dying within two years after contracting the disease.

It is crucial for life and health insurers to identify properly those risks who already have the AIDS antibodies. This includes those individuals who may not

-
- 1/ Charles Marwick, "Task Force Formed to Coordinate Study, Testing of AIDS Therapies." The Journal of the American Medical Association, Vol. 255, No. 10 (March 14, 1986).
 - 2/ American Medical News, "CDC Official Calls for AIDS Prevention Plan" (April 12, 1985).
 - 3/ Ann M. Hardy et al., "The Economic Impact of the First 10,000 Cases of AIDS in the U.S.," Journal of the American Medical Association 255, No. 2 (January 10, 1986): 210.
 - 4/ James J. Goedert, et al., "Three Year Incidence of AIDS in Five Cohorts of HTLV-III-Infected Risk Group Members," Science 231, No. 4741 (February 28, 1986): 992.
 - 5/ Department of Health and Human Services, Food and Drug Administration, "Important AIDS Information," (HFW-40).

STATEMENT 1986-18

ultimately contract AIDS or its associated conditions, but who have a significant likelihood of doing so. Due to the recent identification of AIDS, experience is still developing. Much more study and analysis, available only over a long period of time, will be needed. Yet the failure to identify these risks may reduce the effectiveness of the risk classification system to the point where the solvency of insurers is threatened.

Underwriting Individual Life and Health Insurance for AIDS

In general, insurers can viably offer individual life insurance at an extra premium to people with an expected mortality up to 500% of the mortality on standard risks. Higher risks are, as a practical matter, uninsurable since most individuals are unwilling to pay the substantial extra premium necessary. Those who are willing to do so may have reason to believe that the added cost is acceptable because they expect to have a claim against the insurer in the near future.

For example, in a group of 1,000 recently underwritten standard life insurance risks, males age thirty-five, it is estimated (based on the Society of Actuaries' 1975-80 Select Basic Mortality Tables) that six deaths are expected to occur within the next five years. In a group of 1,000 males age thirty-five with expected mortality that is 500% of the standard group (the highest percentage usually insurable), there would be thirty expected deaths. In contrast, among a group of 1,000 males age thirty-five who have AIDS antibodies (assuming 8% - 34% of these contract AIDS in the next three years, and the majority of these die within two years after contracting the disease), the number of expected deaths in the next five years could range between forty-six and 176.

Based on these mortality statistics, individuals who have AIDS antibodies cannot, as a group, be considered insurable because their mortality rate appears to greatly exceed the 500% of standard level, which has proved to be the practical limit of substandard mortality that can be insured.

For the individual risk classification process to be viable, insurers should be able to obtain all relevant information about an applicant's current health status. One method of obtaining this information is to ask appropriate medically-related questions of all individual life or health insurance applicants as to whether or not they have had or been treated for AIDS, ARC (AIDS-related complex) or the associated medical symptoms, or have had a test in which the results indicated the presence of antibodies to the AIDS virus. Such questions should be asked, not only to help properly identify uninsurable risks, but also to protect insurers and policyholders alike from the inequitable situation of providing insurance at an inadequate, unfair price. The responses to such inquiries will permit the underwriting of AIDS on the same basis as other serious diseases.

The ELISA and Western Blot tests are currently the best available indicators of the presence of antibodies to the AIDS virus and, when applied together, are considered to be reliable for this purpose.^{6/} The ELISA test is being used

^{6/} "Blood banks give HTLV-III test positive appraisal at five months" ("Medical News," Journal of the American Medical Association 254, no. 13 (October 4, 1985)); 1683.

STATEMENT 1986-18

as a protective screening device for the nation's blood supply. The use of these tests for insurance underwriting is currently being debated in some state legislatures. Regulators should carefully consider the consequences of prohibiting the use of these tests. Such legislation could seriously affect the financial soundness of the private insurance system, the overall fairness of the risk classification system, and the availability of insurance coverage to the public.

Application questions and blood tests provide a means for AIDS to be underwritten in exactly the same way as other serious conditions such as cancer, heart disease, or alcohol and drug abuse. Because of the historical association of AIDS in the United States with particular segments of the population, and because of fears that release of information obtained through the insurance application may affect one's employment, it is crucial that the public be assured that information gathered in the risk classification process will remain strictly confidential. In the absence of such assurances, the veracity and reliability of data generated will be suspect. Therefore, confidentiality is in the best interest of both applicants and insurers.

Underwriting Group Life and Health Insurance for AIDS

Group insurance is typically offered to employees through their employer. The impact of AIDS on group life insurance is relatively small. There is less opportunity for adverse selection than in the individual insurance market, because the amount of group coverage that can be elected is usually pre-determined. Furthermore, since one characteristic of group insurance is that all members of the group are usually granted insurance coverage, an adequate spreading of the risk is obtained; there is usually little or no underwriting involved in the issuance of group life insurance coverage (with the exception of very small groups where individual underwriting generally applies).

AIDS may have a more significant impact on group health coverage. Hospital expenses for the average AIDS claim case may exceed \$100,000 ^{7/}, which is substantially higher than the average hospital claim. The impact of AIDS claims on group health insurance may be stricter underwriting practices or more limitations on coverage, especially for small groups. Large groups are likely to be charged premium rates that directly reflect their own claim experience. Groups with AIDS cases may experience significantly higher health insurance claims and therefore will likely be charged higher premium rates.

In summary, individual underwriting is not frequently used for group coverage associated with employment. To the extent that individual underwriting practices are used for group insurance (e.g., with very small groups), the risk classification, underwriting standards, and privacy considerations that are used for other life-threatening diseases should also be applied to AIDS.

^{7/} Hardy et al., "The Economic Impact of the First 10,000 cases of AIDS in the U.S.," p. 210.

STATEMENT 1986-18

Conclusion

The underwriting for AIDS should be consistent with the underwriting for other diseases. It should be emphasized that contractual provisions of existing policies must be honored and cannot be altered. Any underwriting for AIDS would be prospective only.

Proper underwriting results in equitable treatment, appropriate pricing, and widespread availability of coverage. It follows that the financial soundness of the private insurance system is best protected by minimizing adverse selection. Any consideration of restricting the process of underwriting for AIDS should properly take into account the effect on these underwriting objectives.

COMMITTEE ON RISK CLASSIFICATION

Claire L. Wolkoff, Chairperson

Charles A. Bryan

Gary Grant

Richard M. Jaeger

Timothy D. Lee

Chester Lewandowski

Charles W. McConnell

Melvin C. McFall

John O. Nigh

John W. Paddon

Patricia L. Scahill

Stanley H. Tannenbaum

Donald B. Thaler

Jean M. Wodarczyk

STATEMENT 1986-19

May 27, 1986

TO: Members of NAIC (EX5) Life and Health Actuarial Task Force

SUBJECT: Report on December 1985 Discussion Draft of NAIC RESERVE STANDARDS FOR INDIVIDUAL AND GROUP HEALTH INSURANCE CONTRACTS, with Revised Exposure Draft of Proposed Standards.

In December 1985 the Academy of Actuaries mailed out to the Academy membership an initial Discussion Draft containing proposed new NAIC Reserve Standards for Individual and Group Health Insurance Contracts, together with background and commentary material. Members were urged to study this draft material and to send their criticisms and comments to the Washington Office of the Academy.

The response was extremely gratifying and helpful: a total of 43 letters were received, considerably more than the average volume received on discussion and exposure drafts. Moreover, many of these letters provided very thoughtful and thorough examination of the issues and questions involved, and the Academy's Health Subcommittee on Liaison with the NAIC greatly appreciates the thought and attention given to this matter by all those who wrote.

In response to the many valuable criticisms and suggestions received, the subcommittee has made substantial revisions in the proposed standards. We believe the revisions to be sufficiently extensive that a second round of exposure is in order, again with an invitation for criticism and comment from all interested parties.

We herewith present the following recommendation to your Task Force: that the exposure period for the proposed reserve standards be extended an additional 6 months, to December 1986, using the attached Report and the attached revised Standards draft as the basis for such extended exposure and comment. Based on this revision and continued exposure, we expect that a final document can be adopted by the NAIC at its December 1986 meeting.

We will plan to report back again to you, in sufficient time so that a final proposed document, if such appears at that time to be appropriate, can be considered for such adoption.

DOCUMENTS ATTACHED:

1. Report and Commentary on Responses Received concerning the December 1985 Discussion Draft.

This Report summarizes the major comments received, briefly summarizes the major revisions made in the draft standards in response, and also summarizes the reasons for not adopting some of the suggestions submitted.

STATEMENT 1986-19

There are two minority dissents by subcommittee members, which are also attached.

2. Revised exposure draft of the proposed Reserve Standards, dated May 27, 1986.
3. Revised appendices to the Standards, now reduced from four to three. The original Appendix B, which gave extensive illustrations of incurred claim dating, has been eliminated. The Glossary of Terms, formerly Appendix D, has now been labeled as Appendix B. These remaining three appendices all contain some revision.

Respectfully submitted,

E. Paul Barnhart	James Olsen
William J. Bugg, Jr.	Frank Rubino
William A. J. Bremer	Peter M. Thexton
G. Scott Bucher	John P. Wagner
Michael Kazakoff	

by: (signed)
Paul Barnhart, Chairperson
Subcommittee on Liaison with the NAIC
Accident and Health (B) Committee

STATEMENT 1986-20

STATEMENT FOR THE RECORD
BY STEPHEN G. KELLISON, EXECUTIVE DIRECTOR
AMERICAN ACADEMY OF ACTUARIES
TO THE
CIVIL SERVICE, POST OFFICE
AND
GENERAL SERVICES SUBCOMMITTEE
OF THE
SENATE COMMITTEE ON GOVERNMENTAL AFFAIRS
HEARINGS ON CIVIL SERVICE RATES OF PAY

MAY 30, 1986

The American Academy of Actuaries is pleased to offer the following comments on S.1327 and S.1727, two bills that would permit higher rates of pay for hard-to-hire federal employees. The Academy is a professional association of actuaries which was formed in 1965 to bring together into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition for the profession. The Academy includes members of three founding organizations--the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Society of Actuaries.

The Academy serves the entire profession. Its main focus is the social, economic, and public policy environment in which the actuarial profession functions. Its primary activities include liaison with federal and state governments, relations with other professions, the dissemination of public information about the actuarial profession and issues that affect it, and the development of standards of professional conduct and practice.

We have examined both of the proposals, and we would like to make some general observations relating to the issues addressed in these bills.

Professional actuarial positions have been in the OPM's Management Shortage categories for many years. Actuarial positions in federal service are not concentrated in one agency, but rather are spread over approximately ten different agencies. Chief actuaries of these various agencies have told me that it is extremely difficult to recruit qualified candidates primarily because federal salaries are not competitive with the private sector. Although the disparity in salaries occurs at all salary levels, it appears to be more severe for entry-level positions and senior positions than for middle-level positions.

Unlike a number of professionals, such as doctors and engineers, who pursue professional training in graduate school, aspiring actuaries undertake a series of actuarial examinations given within the actuarial profession to achieve their "advanced degrees".

The most widely accepted standards of educational qualification for actuaries consist of Fellowship in either the Society of Actuaries or the Casualty Actuarial Society. Admission to membership in either society is by examination only. There are ten examinations in either program and successful completion of all ten earns an actuary the designation "Fellow." This designation represents a comparable level of achievement in either organization and is, in essence, the Ph.D. of the actuarial profession. In

STATEMENT 1986-20

recruiting actuaries, private industry recognizes the importance of these actuarial examinations by graduating starting salaries based on the number of actuarial examinations completed.

The Academy does not offer examinations leading to membership. However, we do directly utilize the two examination systems of the Society of Actuaries and the Casualty Actuarial Society in our educational standards for membership.

One problem encountered by federal agencies in retaining highly qualified actuaries is the ability to rapidly promote individuals who are passing these examinations quickly. It has proven to be more difficult for agencies to do this than it would have been if the equivalent training were being achieved by graduate degrees. A Tentative Standard for Actuary Series, GS-1510, dated November 5, 1982 was developed by the Office of Personnel Management but never finalized. We support revisiting this standard and adopting it as a positive step in achieving greater parity between the public and private sectors.

With this background in mind, we hope that as the committee considers S.1327 and S.1727 recognition will be given to the difficulties encountered by federal agencies in hiring and retaining qualified actuaries. S.1327 specifies that for certain positions, higher minimum rates of pay might be established. It is our belief that actuarial positions in federal service are every bit as vital as the positions designated and should be included among these positions.

S.1727 refers to scientific and technical employees and defines such employees as those who are "required to have an advanced level of knowledge in one of the mathematical, computer, physical, or natural sciences or in chemical, electrical, mechanical, or other engineering and is customarily expected to have acquired such advanced level of knowledge in a prolonged program of specialized intellectual instruction and study in an institution of higher education." As our earlier comments indicated, the rigorous actuarial examination program is clearly equivalent to a graduate program in these technical areas. We hope that the committee will recognize this fact in their consideration of S.1727.

The Academy would be happy to work with the committee in providing any additional information, such as private sector salary surveys for actuaries, that might be useful.

STATEMENT 1986-20

LIST OF FEDERAL AGENCIES EMPLOYING ACTUARIES:

1. Department of Defense
2. Department of Labor
3. General Accounting Office
4. Health Care Financing Administration
5. Housing and Urban Development
6. Internal Revenue Service
7. Office of Personnel Management
8. Pension Benefit Guaranty Corporation
9. Railroad Retirement Board
10. Social Security Administration

STATEMENT 1986-21

June 9, 1986

Director
Corporate Policy and Regulations Department (611)
Pension Benefit Guaranty Corporation
2020 K Street, N.W.
Washington, D.C. 20006

Re: PBGC Proposed Regulations on Valuation of
Plan Benefits in Non-Multiemployer Plans

Attached are comments concerning the proposed rule on the valuation of plan assets which appeared in the Federal Register on March 25, 1986 (51 FR 10335).

These comments have been prepared by the Subcommittee on PBGC (Single Employer Plans) of the Pension Committee of the American Academy of Actuaries and represents a concensus of the Committee.

Respectfully submitted,

(signed)

Darrel J. Croot

STATEMENT 1986-21

June 9, 1986

Director
Corporate Policy and Regulations Department (611)
Pension Benefit Guaranty Corporation
2020 K Street, N.W.
Washington, D.C. 20006

Re: PBGC Proposed Regulations on Valuation of
Plan Benefits in Non-Multiemployer Plans

The Subcommittee on PBGC (Single Employer Plans) of the Pension Committee of the American Academy of Actuaries is pleased to have this opportunity to comment on the proposed regulations on valuing plan benefits in non-mutiemployer plans. The Academy is a professional association of over 8,000 actuaries involved in all areas of specialization within the actuarial profession. Included within our membership are approximately 85% of the enrolled actuaries certified under ERISA.

GENERAL COMMENTS

The PBGC is to be commended for the excellent and thorough job in preparing regulations designed to provide better consistency and closer agreement with marketplace values both in the aggregate and for individual streams of payments than those in current regulations. We believe that the theory embodied in the proposed regulations will lead to more realistic valuations than current regulations and will minimize the opportunities for antiselection in which a plan sponsor could compare the liability determined by the PBGC with the cost of providing the same benefits through an insurance company.

SPECIFIC COMMENTS

Administration Problems

We do not believe that the increased complexity of calculations will place an undue burden on any plan in determining termination liabilities. Major actuarial firms will develop their own in-house programs to value plan benefits under the proposed regulations. Others will use actuarial "service bureaus" which can also be expected to develop the necessary software to comply with the regulations. We also believe there will be an abundance of software available for microcomputers. Hence, we do not feel that it would be necessary or appropriate for the PBGC to develop such software.

Calculation of individual annuity values for lump sum cashouts will be more difficult. Programs designed for valuing all participants in a plan may be inappropriate for valuing a single individual. Since many plans use PBGC rates as a basis for determining actuarial equivalents, and this is specified as a minimum for calculating lump sum values under the Retirement Equity Act of 1984, we suggest that a simplified approach may be appropriate for such calculations. A single rate could be selected for all calculations for retirees. This may be the initial select rate if the initial period of selection is sufficiently long. If the initial period is too short to fairly represent the

STATEMENT 1986-21

payout period, an average rate for a "typical" retirement age development from the select rates could be published.

For deferred pensions, one rate could be specified for the period of deferral and a second rate for the immediate annuity. The rate for the period of deferral could similarly be the initial select rate or an average based upon the expected typical deferral. The immediate rate could be an average rate based upon the expected duration at which annuities are expected to be paid and the projected duration thereafter. The investment return assumption for such simplified factors could be determined on a conservative basis and each plan permitted to use the simplified factors or exact factors, provided such factors are applied on a consistent and non-discriminatory basis.

For many plans which are terminated in the future, we believe assets substantially exceed liabilities for all accrued benefits as a result of the passage of the Single-Employer Pension Plan Amendments Act of 1986. Hence, we recommend that appropriate approximations in the calculations should be permissible, provided the enrolled actuary for the plan certifies that use of such approximations results in liabilities no less than those calculated using the specified formulas. For example, the valuation of survivor benefits during the period of deferral may be complex. In most cases, the liability is relatively small and may not warrant detailed calculations.

Mortality

We believe that the mortality table specified in the proposed regulations for healthy lives (and currently in use) may be inadequate to represent current and projected lives of mortality for many plans.

The 1983 Group Annuity Mortality Table published in Vol. XXXV of the Transactions of the Society of Actuaries showed substantial reductions in mortality rates compared to those in the current and proposed table specified by the PBGC. The mortality rates in the 1983 Group Annuity Mortality Table are supported by a study made by Buck Consultants, Inc. which will be published in Vol. XXXV of the Proceedings of the Conference of Actuaries in Public Practice. Other studies have also supported continuing and significant improvements in mortality. The following table shows a comparison of liabilities for \$1 per year commencing at age 65 or attained age if greater.

Age	Proposed PBGC		Interest Rate - 7 -1/2% 1983 Group Annuity		Ratio of 1983 GAM to PBGC	
	Mortality Table		Mortality Table		Male	Female
	Male	Female	Male	Female	Male	Female
35	0.7412	0.9105	0.8839	1.0940	119.3%	120.2%
45	1.5635	1.9053	1.8451	2.2698	118.0%	119.1%
55	3.4265	4.0774	3.9501	4.7540	115.3%	116.6%
65	8.2480	9.2696	8.9353	10.2196	108.3%	110.2%
75	6.0392	7.1708	6.5647	7.8956	108.7%	110.1%
85	3.9090	4.9348	4.3280	5.3960	110.7%	109.3%

The above table illustrates that annuity values under the 1983 Group Annuity Mortality Table may result in over 15% higher liabilities than the proposed table and could be as much as 10% higher for retirees. We recommend that careful attention be given to this question of mortality because of the

STATEMENT 1986-21

potential impact on costs. We recognize that lower mortality rates will reduce costs of death benefits but the longer life expectancy of survivors will partially offset this reduced cost.

Length of Select Period

The number of select periods to be used or the extent of variations in the interest rate assumption it is not clear from the proposed regulations. It does appear, however, that the maximum select period is 15 years. The life expectancy of deferred participants may be 30 to 35 years or more on average. Many participants will be expected to live much longer. Hence, the investment return assumption covers a long period of time. We recognize that forecasts of interest rates for as long as life expectancies is more of an art than a science, but we suggest that provision be made in regulations for a select period in excess of 15 years even though it may not currently be used.

We hope this information is helpful to the PBGC in its preparation of final regulations. If we can be of further assistance, please let us know.

Respectfully submitted,

Pension Committee
Norman S. Losk, Chairman

Subcommittee on PBGC
(Single Employer Plans)
Edward N. Fleischer
James A. Gobes
Michael J. Gulotta
Marc M. Twinney
Darrel J. Croot

STATEMENT 1986-22

TO: NAIC Technical Services (EX-5) Subcommittee

FROM: American Academy of Actuaries Liaison Committee
Carl R. Ohman, Committee Chair

DATE: June 11, 1986

The American Academy of Actuaries Committee on Liaison with NAIC was established early last year to provide on-going, mostly non-technical, coordination and communication between the Academy's Executive Committee and the NAIC Technical Services (EX-5) Subcommittee on issues of actuarial significance to insurance regulators. Our last report to the (EX-5) Subcommittee in Reno in December 1985 commented on a number of actuarial issues before the NAIC which we considered to be of greatest current interest to the Academy. We are pleased to present an update on current issues in this report to the (EX-5) Subcommittee.

Implementation of the valuation actuary concept for life insurance companies continues to be a major item on the Academy's agenda. There are a number of regulatory, insurance industry and professional actuarial committees and task forces working on various aspects of the valuation actuary concept. As part of its responsibility to coordinate the activities of these groups, the Joint (Academy and Society of Actuaries) Committee on the Valuation Actuary periodically updates its report on these activities. Copies of these updates are circulated widely among interested parties, including the Life and Health Actuarial (EX-5) Task Force, providing a very useful means of keeping track of the many facets of this effort.

The Academy was pleased to note the December 1985 approval for inclusion in the Financial Condition Examiners Handbook of Actuarial Guideline No. 14 which provides surveillance procedures regarding the actuarial opinion for life and health insurance. We feel it important that this guideline, and the other 13 Examiners Handbook Actuarial Guidelines, should receive the widest possible circulation among practicing actuaries. We are therefore exploring the possibility of appending the Actuarial Guidelines to this statement so they can be published as part of this committee's report in the 1986 Journal of the American Academy of Actuaries.

In an effort to widen the on-going discussion of health valuation standards before the Life and Health Actuarial (EX-5) Task Force, the Academy exposed an Academy Health Subcommittee on Liaison with NAIC paper on this subject as a discussion draft last December, and this was followed by a point-counterpoint debate in the Academy's newsletter early this year. A total of 43 comments have been received on the discussion draft and Actuarial Update article. We trust the additional input will prove to value to the Life and Health Actuarial (EX-5) Task Force as it continues its deliberations on health valuation standards.

In December 1985 the Life and Health Actuarial (EX-5) Task Force received a report from its Reinsurance Advisory Committee on problems of recognition of reinsurance in statutory valuations. This report was referred to the Standing Technical Advisory Committee (STAC) for its advice on how the

STATEMENT 1986-22

NAIC should proceed to address the issues raised by the Reinsurance Advisory Committee. STAC reported to the Life and Health Actuarial (EX-5) Task Force on June 7 with its recommendations which would entail greater reliance by regulators on actuarial opinions specifically addressing this recognition of reinsurance in valuations. If the NAIC chooses to follow the route recommended by STAC, the Academy stands ready to assist in the development of standards of practice for actuaries signing such opinions.

On the casualty actuarial side, the Academy is very interested in proposals before the NAIC Blanks Subcommittee that would make requirements for casualty loss reserve opinions more consistent with requirements for life and health insurance annual statement actuarial opinions. While action was deferred by the Blanks Subcommittee in March, we expect that this will continue to be an important issue for regulators, insurance companies and actuaries.

Finally, the Academy was interested to note the formation of the NAIC's AIDS Advisory Committee in March of this year. As chair of this liaison committee, I have sat in on the first three meetings of the AIDS Advisory Committee. The Academy's Committee on Risk Classification is also studying the risk classification issues raised by AIDS and has just completed a statement on this important subject which is appended to this report for the information of your subcommittee.

Again, the Academy Liaison Committee welcomes this opportunity to report to the (EX-5) Subcommittee and looks forward to continuing the dialogue at future NAIC meetings.

(signed)

Carl R. Ohman, Chair
AAA/NAIC Liaison Committee

STATEMENT 1986-23

STATEMENT TO
THE SUBCOMMITTEES ON OVERSIGHT AND SOCIAL SECURITY
OF THE
HOUSE COMMITTEE ON WAYS AND MEANS
BY NORMAN S. LOSK
PENSION COMMITTEE
OF THE AMERICAN ACADEMY OF ACTUARIES

HEARING ON NATIONAL RETIREMENT
INCOME POLICY: UNDERFUNDDED PENSION PLANS

JUNE 24, 1986

The Pension Committee of the Academy of Actuaries appreciates the opportunity to provide testimony to the Subcommittees on Oversight and Social Security of the House Committee on Ways and Means. Funding of private pension plans is a substantial area of interest and an area of competence of the actuarial profession. It is in this spirit that we offer the following comments.

Background

The American Academy of Actuaries is a professional association of over 8,000 actuaries involved in all areas of specialization within the actuarial profession. Included within our membership are approximately 86% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable percentages of actuaries providing actuarial services for other employee benefit plans such as life, health, and disability plans. As a national organization of actuaries, the Academy is unique in that it includes actuaries with expertise in all areas of actuarial specialization. With respect to government relations, the Academy views its role as a provider of information and actuarial analysis in order that policy decisions may be made with informed judgement. It is our belief that the training and experience of Academy members allows for unique understanding of current practices in employee benefits. It is our intention to communicate that understanding in ways that assist public policy makers. We are grateful for the invitation to appear here today and look forward to working closely with the members and staff of the subcommittees on all issues relating to national retirement policy.

Funding Retirement Plans

In order to provide perspective, we would like first to discuss the elements of pension funding. The funding concepts relative to defined benefit pension plans are often misunderstood. While the members of the committee and their staffs have worked at developing an understanding of these concepts, we feel that it would be helpful to provide these introductory remarks.

A defined benefit pension plan is nothing more nor less than a set of promises. In a single employer retirement plan, for example, the employer in that plan agrees to provide benefits, calculated in accordance with a specific and well-defined formula, to its employees who may retire voluntarily, become disabled, die, etc.

STATEMENT 1986-23

Thus, the primary obligation of the plan sponsor is not to make contributions to the plan or to invest the funds of the plan. The primary obligation of the plan sponsor is to provide the benefits promised in the plan.

In order to properly budget for the benefits to be provided, to provide a level of security for the participants in the plan, to satisfy the requirements of the federal minimum funding requirements, and ultimately, to accumulate assets in an orderly way to provide the benefits of the plan, the plan sponsor provides funding for the plan by making contributions. The plan sponsor relies on an actuary to determine a range of appropriate contributions that can be paid into the plan each year.

At any point in time, there is no way to know with precision the magnitude of the financial commitment made by the plan sponsor. The job of the actuary is essentially to make statistical projections of the benefits expected to be paid from the retirement plan. In this sense, an actuarial valuation is similar in nature to long-term projections of benefit outlays under Social Security, or even to short- and medium-term projections of such items as federal revenues, expenditure levels, and so on.

In order to make such projections the actuary simulates, statistically, all the dynamics inherent in retirement plans. Since there is no way of knowing with precision what experience will be in the future, actuaries must use assumptions to simulate experience. A variety of assumptions reflecting the estimated flow of participants through and out of such retirement plans are used in order to estimate the overall flow of benefit payments from a plan. Specific assumptions relative to patterns of employee disability, death, retirement, and general turnover are used in such studies. If benefits are based on pay, estimates of future pay increases are made in order to estimate the amounts of such benefits. In addition, longevity after retirement, disability, etc. is simulated in order to estimate the duration of benefit payments.

The resulting estimates of the amounts and timing of benefit payments from the plan are then reduced to present value using the assumed time value of money (rate of investment return). This present value represents the value today of all estimated future benefit payments to be made from the subject plan.

The actuary then applies a set of techniques called an "actuarial cost method." An actuarial cost method is used to convert the actuarial present value of future benefits, described above, to a range of annual contributions which will support those benefits. The basic concept underlying most of these methods is not dissimilar to that used by financial institutions in converting mortgage amounts to monthly payments for home buyers.

As we can see, from the above discussion, there are several things which heavily impact the results of actuarial valuations:

- (1) The Provisions of the Plan - It is the provisions of the plan that will determine when individuals are eligible for benefits and how much those benefits are to be.

STATEMENT 1986-23

- (2) The Group of Employees to be Covered - The characteristics of the group to be covered is a vital ingredient in the results of actuarial calculations.
- (3) Actuarial Assumptions - As with any set of assumptions used in statistical projections, there is a degree of variability in assumptions that are considered to be appropriate. However, it is clear that actuarial assumptions are a key ingredient in the results of any actuarial study.
- (4) Actuarial Method - The levels of contribution generated by any actuarial study are sensitive to the actuarial method used.

It must be understood that the real cost of any retirement plan is not the actuary's estimates. The real cost of any retirement plan is the actual benefits that are expected to be paid from the plan and any administrative expenses involved in paying those benefits. That cost is supported over the long-term life of the plan by contributions and investment returns. Thus, an actuarial determination of contributions to be made to a retirement plan is only an estimate of the cost of the plan and an attempt by the actuary to provide information to the plan sponsor that will allow for an orderly accumulation of assets to cover the obligations generated by the set of promises that is a pension plan.

What Characteristics of Plans and of Plan Sponsors Can Lead to Underfunding

This is a very broad and a very difficult question. We must first attempt to define what we mean by an "underfunded" plan. In the context of this hearing, we will assume that underfunding means that at the time of the termination of a retirement plan there are insufficient assets to support the benefits which have been accrued by the participants in the plan.

Funding a pension plan is, by nature, a long-term venture. In performing actuarial valuations described above, the actuary normally assumes that the plan is to be an ongoing entity. Benefits under the plan are generally earned over a long period of time and such benefits are funded over a long period of time. Because of the long-term nature of pension funding, benefit accrual and asset accumulation do not generally follow parallel paths. If a plan termination cuts short that period, the plan may or may not have accumulated sufficient assets to provide the promised benefits.

Some actuarial cost methods actually are designed to produce an excess of assets over the actuarial present value of accrued benefits during the early years of a plan in order to stabilize the costs of a plan. If a plan terminates during this period of the plan's development, the plan may have assets that are more than sufficient to cover accrued benefits and a reversion may result.

On the other hand, many retirement plans have a history of regular benefit improvement. For example, if a plan which currently provides a benefit of ten dollars per month per year of service is amended to provide fifteen dollars per month per year of service, that benefit is available immediately. That plan may have been well funded before such a change. However, upon adoption of such an amendment, the commitment for the payment of benefits

STATEMENT 1986-23

increases by 50% while assets do not change. The financial effect of such a change is amortized over a period up to thirty years. Thus, it will take a number of years for the financial status of the plan to return to the pre-amendment level. As a result, if that plan terminates within thirty years after the adoption of such an amendment, some of the funding for that amendment will probably not have been made. In the real world, such changes may occur at intervals of two to five years (although a 50% increase in benefit levels at one time is unusual). Thus, at any point in time, a plan sponsor may be amortizing the effects of many such plan amendments. This dynamic can be a cause of underfunding of plans at termination.

There are a number of other factors which can contribute to a plan having insufficient assets upon termination to cover the benefits accrued. For example, rapidly growing employers face two problems in funding pensions. First, they may be adding staff rapidly and, while new staff may initially have little benefit accrual, this will grow rapidly. Second, such business growth must be financed, with operational and capital funding needs taking priority over pension funding.

Another situation deserving review is the non-mutliemployer negotiated plan. In such a situation, it is in the interest of both labor and management to fund at minimum contribution levels. From the standpoint of labor, the largest benefit supportable by the contribution level of the plan is to be pursued. From the standpoint of management, it is fruitless to fund at levels greater than the minimum as continuing gains will probably result in increased benefits negotiated. The termination of such a plan can result in an underfunded condition.

Finally, a retirement plan is only as healthy as the employer or the industry which underlies it. Even though a plan may be well funded today, continuing contributions must be made in order to sustain funding levels. Employers or industries in difficult financial conditions may find it difficult to make appropriate levels of contribution, even under the minimum funding requirements of the Internal Revenue Code (IRC).

In summary, while there are general conditions which may give rise to such underfunding, it is difficult to generalize the conditions which will result in underfunding at plan termination.

Impact of Federal Regulation

For a long period of time, federal regulation has impacted the private pension system. Prior to 1974, Internal Revenue Service (IRS) requirements relative to minimum and maximum contribution levels had a major impact on the funding of retirement plans in the United States. Since 1974, federal regulation has clearly impacted pension funding to a substantial extent.

The minimum funding standards (Section 412 of the IRC) and the regulations thereunder have established a solid, well-defined set of minimum funding goals for private pension plans. The minimum funding standards provide guidelines to actuaries in terms of the actuarial methods that can be used, the manner in which actuarial assumptions are selected, the extent of employee information to be used in these valuations, and the periods over which certain

STATEMENT 1986-23

types of actuarial liabilities are to be amortized. Thus, constraints on the funding of pension plans are well defined.

The minimum funding standards require the use of actuarial assumptions which, in the aggregate, reasonably reflect the actuary's best estimate of anticipated experience. Only actuarial methods that are recognized by the IRS as reasonable funding methods can be used in calculating contribution rates relative to these plans. The general thrust of the minimum funding standards, as adopted in 1974, was to insure that sufficient assets are accumulated, in an orderly way, to support the obligations of the plan.

However, these standards are not unsympathetic to an employer in financial trouble. While there are tax penalties for funding deficiencies, there is a procedure for waiving funding deficiencies of distressed employers. It would clearly be unreasonable to insist so strongly on pension funding that, by virtue of that insistence, the jobs underlying the retirement plan are eliminated.

There are other areas of federal law, however, which work in the opposite direction. Contributions to qualified pension plans are tax deductible to the employer in the year paid, with no tax consequences to plan participants until benefits are paid. To the extent that such contributions are tax deductible, they impact federal revenues. In this era of substantial federal deficits, the revenue question is an important one.

An example of an IRC provision, the focus of which is in conflict with the goal of adequate pension funding is the benefit limits of Section 415. The benefit limits of Section 415 of the IRC are designed to limit the amount of dollar benefit which can be paid from a qualified pension plan. It is understood that the dollar limits of Section 415 are to be indexed to the Consumer Price Index during and after 1988. Thus, the dollar limits of Section 415 will be increasing regularly and consistently over time. However, IRS regulations will not allow actuaries to recognize future increases in those limits in the calculation of contributions to retirement plans. As a result, plans, by virtue of this regulation, are being encouraged to underfund the benefits that they are promising.

For example, assume we have a participant in a pension plan currently age fifty-two. Let us assume further that this individual will stay in active participation and retire at age sixty-five. The maximum benefit payable currently at age sixty-five is \$90,000 per year. If we assume that the limits of Section 415 will increase at a rate of about 5% a year, that maximum will be over \$150,000 by the time this individual retires. Under current regulations the plan sponsor may fund only the benefit of \$90,000. Thus, this regulation requires the plan sponsor to fund to a benefit which is perhaps, 60% (in this case) of the benefit which the individual will ultimately receive.

Another example of this phenomenon occurs in H.R.3838. This bill contained a provision which would assess a penalty tax of up to 30% against plan sponsors who underestimate their tax liability by overstating pension tax liabilities. The purpose of this provision was apparently to attack the perceived use of the pension portions of the IRC as a tax shelter. The Academy is very much concerned about such alleged "abuse." However, this provision would affect the funding decisions of most sponsors of defined benefit pension plans. While we cannot quantify the effect of such a

STATEMENT 1986-23

provision, we are certain that it would not encourage appropriate funding of private pension plans.

These are only examples of the basic conflict which currently exists in the making of policy relative to pension funding. It is important that retirement plans have sufficient assets to pay the pensions which they are promising. It is important in the conduct of commerce that such assets be allowed to accumulate in an orderly manner. However, there currently seems to be a conflict at the policy level between the impact of pension contributions on federal revenues and concern for appropriate funding of private pension plans.

Age of the Private Pension Industry

It is interesting to note that the private pension industry is still relatively young. There was only a span of twenty-five years from the date of the Inland Steel decision, which established the concept that pension plans were proper subjects of collective bargaining, to the enactment of ERISA. In evaluating the progress of the private pension system during that twenty-five year period and the eleven year period since ERISA, we must note that even today the private pension movement is still a relatively young one. The numbers of retirement plans grew rapidly during the initial twenty-five year period and with that growth in numbers of plans, funding, which of course started slowly, improved substantially. Funding has continued to improve over the last ten years. Part of this improvement can be traced to the growing maturity of private pensions, while some of it can be attributed to the minimum funding standards in ERISA.

Of course, the numbers of new defined benefit plans has dropped substantially and many defined benefit plans have terminated during the post-ERISA period. We find this trend to be alarming. This trend has been attributed to a number of factors:

- (1) The desirability of using working capital in operations rather than tying it up in pension funds;
- (2) Concerns relative to corporate takeovers;
- (3) The expected impacts of the new accounting standards recently announced; and
- (4) An uncertain and rapidly changing regulatory environment.

There are a number of sound social and economic reasons for the desirability of a solid, growing private pension movement. Such growth, in the defined benefit pension area, has virtually stopped in terms of numbers of plans. While the first three of the reasons listed above for this trend are difficult to control in the current economic environment, the fourth (and in our opinion, most significant of the reasons) is subject to congressional control.

The Future

In spite of the fact that actuaries make projections, we do not have the exclusive use of the crystal ball. We truly do not have a feel for what the future will bring. However, there are trends that are disturbing. First, there

STATEMENT 1986-23

is a movement away from defined benefit plans toward defined contribution plans. This movement is the result of a number of factors already cited. However, we feel the most significant factor is the uncertainty of the regulatory environment.

Since 1982, there have been three major legislative enactments relative to qualified retirement plans which have required virtually every plan in the United States to be amended. The Congress is in the process of debating a fourth set of changes in the tax reform package. We would like to suggest that the best thing that could be done for the private pension system in the United States would be to stabilize the regulatory environment. That is, to establish policy and then to leave it alone to operate.

A parallel hope is that the current conflict between federal revenue concerns and pension funding considerations can be resolved at a policy-making level. We would hope that the future of participants in private pension plans will not become the subject of future short-term debates over federal revenue.

The graying of America continues and is expected to continue well into the twenty-first century. Along with defined contribution plans, defined benefit pension plans have a solid role to play in the retirement security of older Americans. It is to be hoped that the trend to termination of such plans, with or without sufficient assets to support promised benefits, can be curtailed and that such plans will be allowed to operate in a stable, certain regulatory environment over the long-term future.

Summary

In summary, the nature of pension funding is such that problems inevitably arise when the time for accumulation of assets and accrual of benefits is cut short by plan termination.

While the minimum funding standards certainly provide a solid guide for funding, there is no practical way to insulate pension plans from the financial problems of their sponsoring employers and industries.

We would suggest that stability of the economy underlying the sponsors of pension plans is the most effective means of stabilizing private pension financing. In addition, the stabilization of the regulatory environment for private pension plans would establish a positive environment for these plans which provide post-retirement income to millions of citizens of the United States and promise such security to the current generation of workers.

AMERICAN ACADEMY OF ACTUARIES PENSION COMMITTEE

Norman S. Losk, Chairperson

Yung Chang	Joseph A. LoCicero
Darrel J. Croot	Russell J. Mueller
Paul L. Engstrom	Donald M. Overholser
Jeff Furnish	Eugene Schloss
Harper L. Garrett, Jr.	Michael J. Tierney
Thomas D. Levy	Larry D. Zimpleman

STATEMENT 1986-24

July 24, 1986

Mr. Kenneth D. Merin
Commissioner
State of New Jersey
Department of Insurance
201 East State Street
P.O. Box CN 325
Trenton, New Jersey 08625

Dear Commissioner Merin:

The Committee on Property and Liability Insurance is pleased to enclose the attached statement on current insurance industry issues. Please note that at the close of the year, the statement will be included in the Journal of the American Academy of Actuaries as part of the record of statements and correspondence for 1986.

Although the Academy is available for statements similar to the enclosed, it does not currently undertake detailed studies. The Committee recommends that an advisory committee be founded to discuss these issues and develop practical and effective solutions.

If you have any questions, or if we can be of assistance in some other way to either yourself or an advisory group, please do not hesitate to call.

Sincerely,

(signed)

Albert J. Beer (Chairman)

The Committee

Carole J. Banfield
Robert V. Deutsch
George Levine
Frank Neuhauser, Jr.
Charles Potok
Lee R. Steeneck

Howard V. Dempster
David Hafling
Aileen Conlon Lyle
Richard W. Palczynski
John M. Purple
Alfred O. Weller

STATEMENT 1986-24

**REPLY BY
THE COMMITTEE ON PROPERTY AND LIABILITY INSURANCE
OF THE
AMERICAN ACADEMY OF ACTUARIES
TO
COMMISSIONER KENNETH D. MERIN
NEW JERSEY DEPARTMENT OF INSURANCE**

The American Academy of Actuaries is pleased to reply to New Jersey's request for assistance in setting an agenda for review of current insurance issues. Specifically, the Committee's comments address an inquiry of May 22, 1986 and questions which arose during a subsequent meeting¹ of June 2, 1986.

Role of the Academy

The American Academy of Actuaries is a professional association of 8,000 actuaries representing all areas of specialization and types of practice within the actuarial profession.

The American Academy of Actuaries views its role in government relations as one of offering advice and counsel. The Academy assumes a neutral position with respect to issues of policy and restricts its commentary to the proper application of professional actuarial expertise.

Purpose

Insurance regulators are asked to strike a delicate balance between providing an environment conducive to reasonable profitability for the insurance industry while ensuring fair prices and security to the consumer. Two key questions which must be addressed in resolving this problem are:

1. How can the pronounced cycles in the insurance industry be avoided, or at least tempered in order to provide adequate levels of insurance coverage at actuarially sound rates?
2. How can insurer solvency be better protected?

Scope

The emphasis of the Committee's commentary is directed towards the identification of topics which are deemed to be worthy of consideration in addressing these affordability, availability, and solvency issues.

The actual design of regulation and the evaluation of particular changes in the New Jersey insurance law are beyond the scope of this commentary. However, it is suggested that all proposed solutions be examined in light of several basic issues:

1. Is the Department sufficiently staffed to assume a greater analytical work load?

¹ In attendance were Kenneth D. Merin, Jasper J. Jackson, Albert J. Beer, John M. Purple, and Alfred O. Weller.

STATEMENT 1986-24

2. Are the proposed regulations of such a productive nature that they will encourage compliance by the large majority of the industry and prevent a few "outliers" from driving the market into financial ruin?
3. Are the additional costs of these changes warranted by the potential benefits to be derived?
4. Have the root causes of the problem been identified or are the proposed solutions merely addressing the symptoms?
5. Are there tools currently in place which would ease the need for additional administrative expenses for both the Department and the insurers?
6. Are the proposed solutions farsighted enough to be useful in a "soft" as well as in a "hard" market environment?

Background: The Current Market Situation

Rapid changes in the property/liability insurance environment have posed serious problems for both insurance consumers and insurance providers. The magnitude of recent increases in insurance premiums have strained and often exceeded the purchasing power of many insureds. At the same time, inadequate pricing and escalating claim costs have forced a number of insurance companies to confront shrinking capacity and, in some cases, insolvency.

These conditions are neither new nor unique to New Jersey. The insurance marketplace is essentially driven by the supply of capital. As prices are perceived to reach adequate levels for various coverages, capital is reallocated or infused to support writings in these lines. As the supply increases, competition grows and prices fall. This pattern continues until prices are at a level whereby the returns are unacceptable. Capacity is then withdrawn, supply decreases and availability problems arise.

Simply expressed, the insurers will allocate funds to those states and coverages which they believe will provide acceptable, consistent return on their investment. To the extent that New Jersey can attract and maintain insurance capacity while still maintaining an effective regulatory system to monitor insurers and protect consumer interests, problems with availability of coverage should be greatly reduced.

Sources of Risk Financing Capacity

Capital can enter the insurance industry through investment in existing insurance companies or through the creation of new insurance mechanisms.

With regard to investment in existing insurance companies, capacity will generally respond to the relative level of anticipated income vis-a-vis alternative opportunities. Currently, premium strengthening and more selective underwriting have encouraged investors and have helped Insurers raise substantial amounts of capital in the financial marketplace.

STATEMENT 1986-24

In addition to attracting new insurance industry capital, additional capacity can also be created by facilitating the formation of insurance mechanisms by non-insurance entities.

With respect to new insurance mechanisms, captive insurance companies and self-insurance pools often bring new capital to coverages that the existing insurance industry is unwilling to write. Indeed, a number of today's major insurers began in this way. From a stability viewpoint, successful captives and pools created to underwrite association and group exposures seldom withdraw from their markets abruptly. As a consequence, proposed legislation regulating the pooling of risk among municipalities and commercial entities has become a key issue on both the state and federal level.

It must be mentioned, however, that an important regulatory role is to scrutinize business plans and ensure adequate capitalization for new ventures. Solvency should not be sacrificed to solve immediate availability problems. There must be a thorough analysis of capital structure, business plans, and underwriting guidelines in evaluating any risk-financing mechanism.

Attracting and Maintaining Risk Financing Capacity

Given this potential for infusion of capital into new and existing insurance mechanisms on a national basis, it remains to be seen whether New Jersey can attract and maintain the related new or increased insurance capacity. For example, many analysts believe that Florida's proposed highly regulated environment will cause a significant reduction of capacity in that state at a time when the insurers feel they can begin to offer more expanded coverage.

In general, key incentives for attracting insurance capital to New Jersey are (i) a business environment that facilitates reasonable predictability of insured losses, and (ii) insurance regulation that encourages effective adjustment of prices in response to changing business conditions. Additional incentives may include reasonable premium tax levels, efficient residual market mechanisms and well-designed guarantee funds.

Of course, since insurance marketplace conditions in any state are linked to national and global economic factors, there are practical limitations on the influence that New Jersey insurance regulation can exert.

As an illustration, recent declines in interest rates have contributed to the rise in premiums. Although reduced cost of capital generally aids U.S. trade in world markets, low interest rates increase the present-value cost of insurance.

Despite the existence of these external pressures, there are still a number of areas in which New Jersey can exert significant influence to control costs for both the insurance industry and their insureds. Chief among these is the issue of providing a stable judicial/legislative/regulatory environment in which to forecast the cost of claims.

Insurance is basically a promise to perform a service in the future. In addition to typical statistical variability, insurers also are confronted with uncertainties related to rapidly expanding technology and significant societal trends. To the extent that insurers of New Jersey risks perceive an ability to

STATEMENT 1986-24

reasonably quantify the cost of future claims and have the flexibility to change prices as a result of demonstrable changes in that environment, there will be a significant incentive to invest capital in the state.

If such a favorable scenario is presented to the insurance community, then there should be a commitment on its part to accommodate the New Jersey public with regard to cost and availability of coverage. It is also reasonable to expect that such a mutually beneficial environment will require limited regulatory involvement. However, regardless of how enticing the "carrot" may be, there is generally a need for some type of "stick". Although minimal required regulatory involvement should be the ideal, some proposed regulatory roles to monitor the industry are discussed below.

Current Proposals

A number of proposals have been advanced by various organizations to address current market conditions. While this list is not exhaustive, it is representative of the approaches suggested or implemented to date and would serve as a reasonable point at which to begin further analysis.

A. Prior Approval of Commercial Rates

This alternative would likely require increased staffing by the Department, generate additional expense for the insurance industry and greatly restrict the ability of companies to introduce new products and adjust pricing. While prior approval would create administrative hurdles which may somewhat temper upward swings in the cycle, the experience of other states has shown that this form of regulation has little effect on controlling the cyclical nature of the marketplace. It would be advisable to thoroughly review the reasons why New Jersey chose to move away from prior approval of commercial rates before this procedure is reinstated.

B. Flex-Rating

This approach is an attempt to introduce a modified prior approval form of rate regulation. Although the details of this method may vary, there is effectively an open competition environment for those insurers who stay within a certain "band" of tolerance centered on the current rate level. If the carrier wishes to increase or decrease rates outside this band, prior approval is required.

While this approach need not be as administratively burdensome as full prior approval, there will be an additional workload for the Department. An important issue that would need to be resolved is the question of whether the band would apply to entire lines of business, each class of business, or even each risk. Another dimension to this question is whether the flex-rating method addresses only basic rates or refers to the actual premium charged after application of various experience and schedule rating programs and increased limits adjustments.

A variation of this approach may be to exclude certain lines (e.g., pollution liability, professional liability) from flex-rating due to their unusually volatile nature.

STATEMENT 1986-24

C. Certification of Premium Adequacy

It has been suggested that company management be made more accountable to regulatory authorities by requiring a senior executive to "sign-off" on the adequacy of premium being written. The key goal of this regulation would be to prevent companies from cutting rates well below adequate levels merely to maintain market share.

While such an attempt to enforce "good business judgment" appears to offer some potential benefit to both the insurers and the insurance buying public, there are a number of issues which must first be addressed.

Given today's volatile social and economic environment, it is extremely difficult to project future losses for some of the complex commercial lines exposures such as environmental impairment and municipal liability. If the proposed regulation is too imposing, companies will be much more selective in their writings, resulting in a significant shift away from the "long-tail" coverages and thereby creating more availability problems.

In addition, most insurers within New Jersey write business in other states. Regulators in these jurisdictions may have denied requests by the companies to bring rates to what is perceived to be an adequate level. If companies were forced to write business in these states at apparently inadequate rate levels, their senior management could not comply with the proposed regulation.

D. Market Conduct Surveillance

There currently exists a mechanism at the Statistical Agency level whereby an individual insurer's deviations from a "standard" rate level can be monitored on a quarterly basis. Requiring companies to report and explain only unusually large deviations in certain lines of business might be a way to minimize regulatory involvement while still overseeing market conduct.

Conclusion

Formulating regulatory policy to dampen cycles while also protecting solvency is a multi-dimensional problem. The Committee recommends the formation of an Advisory Group to analyze the problems of the New Jersey marketplace in light of the issues presented above. Representation in the Group from broad based constituencies such as the public, State government, the insurance industry, agents and attorneys would assure that these issues would be examined from a variety of perspectives. Such a coordinated effort would likely provide the best forum to create effective long-term solutions.

The Academy thanks the New Jersey Insurance Commissioner for the invitation to review these issues relating to current insurance problems. We hope that this initial outline of issues proves helpful.

STATEMENT 1986-24

Members of the Committee on Property and Liability Insurance:

Albert J. Beer (Chairman)

Carole J. Banfield
Robert V. Deutsch
George Levine
Frank Neuhauser, Jr.
Charles Potok
Lee R. Steeneck

Howard V. Dempster
David Hafling
Aileen Conlon Lyle
Richard W. Pałczynski
John M. Purple
Alfred O. Weller

STATEMENT 1986-25

July 25, 1986

Congressman or Senator

Dear (conference committee member):

The American Academy of Actuaries includes within its ranks more than 80% of all enrolled actuaries. We would like to bring to the conference committee's attention a provision of the House-passed tax reform bill that would impose a penalty tax against pension plans when actuarial liabilities and deductible contribution amounts are "overstated," presumably as a result of unreasonable actuarial assumptions. The Finance Committee considered, but did not adopt, this provision, which is found on page 132 of the current spread sheet. The Academy strongly opposes this provision for the reasons set forth below:

- The bill contains no definition of the word "overstated," and the accompanying committee report offers little guidance. This absence of a clear definition would increase uncertainty and could easily lead to litigation.
- The proposal, as originally drafted, applied directly to the plan actuary, but was modified during House consideration to apply to the plan sponsors. This change is of little significance, since any plan so taxed would seek restitution from the plan actuary. We note also that the original language has reappeared in the spread sheet currently under consideration. Either way, this proposal will exacerbate the liability insurance problem faced by actuaries and increase actuarial fees for all plans.
- With a wide array of enforcement tools already at its disposal, the Internal Revenue Service does not need the hypothetical leverage the new penalty would offer. Administering the nebulous concept of "overstated" liabilities would add to IRS compliance costs as well.
- Penalizing alleged overfunding would have the inevitable result of encouraging underfunding of pension obligations, which is antithetical to the intent of ERISA. This would add to the strain on the already limited resources of the PBGC.
- The proposal would have little, if any, impact on the revenue neutrality of the tax reform measure as a whole.

We hope that the conference committee will consider these points and follow the Senate's lead in this matter.

Sincerely yours,

(signed)

Stephen G. Kellison
Executive Director

STATEMENT 1986-26

**SUPPLEMENTAL STATEMENT TO
THE SUBCOMMITTEES ON OVERSIGHT AND SOCIAL SECURITY
OF THE
HOUSE COMMITTEE ON WAYS AND MEANS
BY NORMAN S. LOSK, CHAIRPERSON
PENSION COMMITTEE
OF THE AMERICAN ACADEMY OF ACTUARIES**

**HEARING ON NATIONAL RETIREMENT
INCOME POLICY: UNDERFUNDDED PENSION PLANS**

July 29, 1986

Upon completion of our oral testimony at the June 24, 1986, subcommittee hearing, Chairman Pickle invited us to provide additional comments we might have relative to specific solutions to the current financial problems of the Pension Benefit Guaranty Corporation (PBGC). The purpose of this letter is to provide our general perspective, and perhaps, some portion of a solution to the problem.

I. The Problem

Clearly the PBGC is in financial difficulty. The premiums charged for coverage under this program are simply inadequate to cover the liabilities of the program. Testimony was provided by several witnesses at the hearing indicating that a break-even premium rate is more on the order of \$13.50 per capita rather than the \$8.50 per capita premium currently in place. This testimony was provided before LTV filed for reorganization under Chapter 11 of the bankruptcy code, with a potential liability for PBGC in the range of \$1 billion to \$2 billion.

The underlying problems, however, can be summarized as follows:

- A. The PBGC "insures" the accrued vested benefits of participants in terminating retirement plans, to the extent that they are not funded. The vast majority of terminating plans do so with sufficient assets to cover the accrued vested benefits of their participants. Plans that invoke the insurance tend to be sponsored by companies in substantial financial trouble.
- B. The PBGC's position in bankruptcy proceedings may not be adequate to effect the reimbursement from plan sponsors anticipated by Congress.
- C. The current method of assessing the cost of the insurance program to participating plans is simple but inadequate. At \$1-\$2.60 per participant, the premium was small enough that the premium structure was not a serious problem. Premiums at those levels proved, however, to be inadequate to cover the costs of the insurance program. At \$8.50 per participant (which is, according to other testimony, still inadequate) the premium structure may become burdensome to at least some sponsors.

STATEMENT 1986-26

II. Characteristics of An Appropriate Solution

We believe that a solution to this problem should have certain characteristics:

- A. The PBGC exists to protect plan participants from loss of benefits due to termination of their plan. The plan termination insurance program should not be such that it can be used by failing companies as a cheap means of financing. At the same time, companies which have a chance to survive should not be "pushed over the edge" by the program or by the manner of administration of the funding waiver program.
- B. The solution should not affect the vast majority of plan sponsors who fund their plans adequately and who present no potential risk to the PBGC. Such plan sponsors should neither be penalized for their exercise of such responsibility nor discouraged from continuing the exercise of that responsibility.

III. Possible Solutions

A solution to the problems of the PBGC needs to be both structural and financial. We would suggest that the following combination of changes might satisfy the conditions described above:

- A. Collateralized waivers/bankruptcy priority - While we are not experts in bankruptcy law, a substantial review of this entire area is in order.
- B. Risk related premium - In the pricing of any insurance mechanism, one of the major components is what actuaries call "equity". Equity in a premium structure means fairness. It means that an insured is charged for a risk commensurate with the probability that the risk will occur and the size of the insurance at risk. For example, a driver with a very bad driving record should be charged more than a driver who has never had an accident or a ticket, for the same amount of coverage. Likewise, two identical drivers would be charged different premiums if the dollar limits of their policies differed.

If this basic fairness is not built into an insurance mechanism the result is that the good risks subsidize the poor ones. A natural implication of this in a free enterprise setting is that a good risk will either go elsewhere for the insurance or will not buy the insurance, while the bad risks continue with the insurance. As a result the amount required to cover the losses grows rapidly because only the poor risks remain within the insured pool.

The PBGC's termination insurance programs are mandatory; virtually every retirement plan of any size must participate in this program by law. However, employers are not required to sponsor pension plans. The increasingly burdensome, uncertain, and rapidly changing federal regulations of private pension plans and new accounting requirements of the Financial Accounting Standards Board have combined to create a negative environment in which defined benefit plans operate. Large numbers of plans have terminated over the last few years with very few new plans forming. The increase in the PBGC premium rate from

STATEMENT 1986-26

\$2.60 per capita to \$8.50 is just one more disincentive for the creation or maintenance of defined benefit pension plans.

The large majority of the plans that have terminated in recent years have had assets sufficient to cover the benefits of their vested members. Thus, decisions are being made to avoid participation in the PBGC's insurance by plan termination. A \$13.50 or more per capita premium would certainly add to this burden.

On the other hand, a risk related premium would allocate the cost of the program more fairly in the direction of those plans likely to terminate with insufficient assets. Such a structure would encourage responsible funding of retirement plans while penalizing the opposite behavior.

The administrative details of such a structure would contain certain problems. A truly risk related premium structure would be based upon:

- (1) the size of the unfunded actuarial present value of increased vested benefits,
- (2) the economic viability of the underlying plan sponsor, and
- (3) the economic viability of the industry in which the plan sponsor operates.

Any complete assessment of the risk of plan termination must include an assessment of the economic viability of the plan sponsor. Future financing of a plan depends on that viability. However, there are important implications regarding a federal agency's assessing the economic viability of a private enterprise and publishing the results of the assessment.

In addition, a true risk-related premium structure would assess no premium to a plan during a year in which it has no chance of terminating with insufficient assets. If there is no assessment of economic viability of the underlying sponsor, this must be defined as a year in which the assets of the plan equal or exceed the actuarial present value of insured benefits.

However, it is possible that if no premium were assessed against such plans, the cost of the termination insurance program would be overly burdensome to those who remain, particularly if they already have financial difficulty. Thus, some subsidy from well funded plans may be required. This would lead to development of a premium structure that would assess cost based on a formula such as:

- x% of unfunded actuarial present value of insured vested benefits, but with a minimum charge based on a formula such as:
- \$y per participant.

STATEMENT 1986-26

The variables "x" and "y" can be established based on a review of the appropriate statistics. However, we suggest that "y" be set at a level below that of the current \$8.50 level.

- C. Minimum Funding Standards - It has been suggested that the minimum funding standards be amended so that the cost of pension benefits be amortized more rapidly. Again, we believe that the problem of termination of underfunded retirement plans is one which involves only a small minority of plans. The vast majority of those plans terminating do so with excess assets. Thus, in the majority of cases the minimum funding standards are working.

The one area in which minimum funding standards may be improved relates to plans that do not have sufficient assets to cover the benefits being paid or to be paid to retired and vested terminated participants.

As has been stated previously, there are a number of actuarial funding methods used within the structure of the minimum funding standards. However, the goal of each of these methods is to generate sufficient assets during the working careers of active participants so that by the time such participants retire or otherwise terminate, sufficient assets will have accumulated to support their benefits. That is, theoretically, no additional contributions should need to be made with respect to inactive participants.

There may, however, be plans in the United States that do not have sufficient assets to cover the actuarial present value of their benefits to inactive participants. We believe that the unfunded actuarial present value of benefits to current retirees and vested terminated participants should be amortized over a very short period of time, such as ten years. This is the only area in which changes can reasonably be made to the minimum funding requirements--overall, they work well.

The Academy appreciates the opportunity to provide these comments to the Subcommittees on Oversight and Social Security. We hope to continue to work with members and staff of the subcommittees on all issues relating to national retirement income policy.

STATEMENT 1986-27

To: Conferees on H.R. 3838, Tax Reform Act of 1986
Subject: Book Income Provisions of the Alternative Minimum Tax
Date: August 7, 1986

In its present form, the Senate's proposal for the alternative minimum tax would tax the difference between pension "expense" (as defined by accounting standards) and a pension plan sponsor's actual contribution to the pension plan. The impact of this highly complex and technical proposal would undermine the appropriate funding of pension plans in the future, and should be rejected. As actuaries who are daily involved in the funding of pension plans, our opposition to the Senate provision is based on the following:

- Over 40 years of experience in pension funding is expressed in current law and regulations, which permit a variety of pension funding methods. The recently issued and highly controversial directive by the Financial Accounting Standards Board (FASB) relating to accounting for pensions (FAS 87) mandates a single cost method for financial reporting purposes. FAS 87, being limited to a single method, is quite arbitrary when used to compute pension "expense" for accounting purposes if alternative actuarial cost methods are actually utilized for funding purposes. Moreover, tax policy was never considered at all in the adoption of FAS 87. It is also our understanding that FASB itself has objected to the Senate's approach because of its use of financial reporting standards for purposes of tax calculations.
- Critics of the FASB approach to accounting for pensions have noted that the FASB method results in a high level of volatility from year to year, making budgeting for pension expense quite difficult. This volatility would be transferred to the tax ledgers as well if the Senate proposal is adopted.
- Adoption of the Senate proposal would lead to pressure on many employers to limit contributions to their pension plans in order to avoid unanticipated "income" from such plans (as calculated under FAS 87) and a resultant increase in corporate tax. This would undermine funding for pension plans, endanger the security of the private pension system, and further increase the strain on the limited resources of the Pension Benefit Guaranty Corporation.
- The Senate proposal could penalize employers who fund their pension plans in excess of artificial FAS 87 "expense" limits, although within the lawful limits under the Internal Revenue Code. If, in fact, Congress wishes to reduce the tax-favored treatment of pension plans, then it should address the issue directly, and not through such an arbitrary and capricious provision as contained in the Senate bill.

We hope that you will carefully consider the alternative proposal, as contained in the August 4, 1986 "Official House Offer" (JCX-20-86). While we do not necessarily endorse that alternative, we suggest that it is more rational and appropriate than the Senate proposal.

(signed)

Stephen G. Kellison
Executive Director

STATEMENT 1986-28

August 25, 1986

Wayne Upton
Project Manager
Financial Accounting Standards Board
High Ridge Park, P.O. Box 3821
Stamford, CT 06905

Dear Wayne:

On behalf of the Academy's Committee on Financial Reporting, I want to again thank you and the Board for taking time to meet with us on August 12. We all have amuch better understanding of the thinking that has gone into the tentative decisions you have made on the universal life accounting issue, and I do not think that could have been achieved without the opportunity to spend the time with you.

At the end of our meeting I attempted to summarize areas where we agreed follow-up would be helpful to you, and I would like to review that summary here. John Glass, Chairman of our Task Force, will be calling you later this week to talk about timing and priorities from your point of view.

The areas where we agreed follow-up would be helpful are:

1. Providing live data to you and the Board. We need a better understanding of the type of live data you are seeking, and John will specifically be asking you about that when he calls.
2. It is clear the Board feels that their tentative decision provides an objective measure of revenue and that our original proposal contains significant subjective elements. We need to provide you with a better discussion of this point, plus comments related to the admittedly arbitrary one-third splits.
3. We spent considerable time talking about whether universal life represents a fundamental change in product or whether it is simply the traditional product with a new name and contract features, which will not substantially change operational results from that expected from the sale of traditional business. We will address this issue in our follow-up.

Along these lines, one Board member mentioned (after our discussions) that it would be helpful to present factual experience from different companies, to try to resolve the inconsistent comments made by individuals from different companies. We will attempt to address this concern as well.

4. You would like information on front-end load products to test the approach you are developing for extra reserves, beyond the account balance.

Now that we have a better understanding of the considerations that have led FASB to its tentative conclusion, we would like to follow up and present what we hope will be a more effective rationale in support of alternative

STATEMENT 1986-28

approaches. As we stated, our Committee on Financial Reporting has a great deal of concern about the Board's tentative decision to use the retrospective deposit approach, both on its own merits and in terms of consistency with FAS #60. While a few feel otherwise, most on our Committee share this concern, and we believe we are generally representative of the attitude of all Academy members who have seriously considered the issue.

We also recommend that, if the current FASB tentative decisions are carried through, consistent treatment be extended to all products, so there will not be different revenue or profit definitions by product.

We appreciate the opportunity to provide support to FASB in its review of this difficult issue, and I hope you will feel free to call any of us on the Committee for assistance.

Yours sincerely,

(signed)

Allan D. Affleck, Chairman
Committee on Financial Reporting

STATEMENT 1986-28

PRODUCTS MODELED

Front Load

Rear Load

Product 1: "Market Mortality Charges"

Mortality Charges	(70% x '58 CSO	+	30% x '65-'70 Basic)
Premium Load	5%		2%
FY Expense Charge	\$250		0
Surrender Charge	0		\$15.43 per 1000*

Product 2: "High Mortality Charges"

Mortality Charges	'58 CSO	'58 CSO
Premium Load	5.22%	2%
FY Expense Charge	0	0
Surrender Charge	0	\$4.78 per 1000*

Product 3: "Low Mortality Charges"

Mortality Charges	110% x '65-'70 Basic	110% x '65-'70 Basic
Premium Load	9.05%	8%
FY Expense Charge	\$500	0
Surrender Charge	0	\$27.44 per 1000*

Contract assumptions common to all products (FL and RL) :

- Male, issue age 35
- Face = \$100,000 level death benefit option
- \$1000 annual premium
- 10% accrual rate

* Surrender charges per \$1000 of face amount grading off 10% per year to 0 after 10 years.

STATEMENT 1986-28

MODEL ASSUMPTIONS

Cell Modeled

Sex	Male
Issue Age	35
Specified Amount	\$100,000
Annual Premium	\$1,000

Interest

Investment Income Rate	12%
Accrual Rate	10%
GAAP Rate (Composite only)	10.8%

Expenses

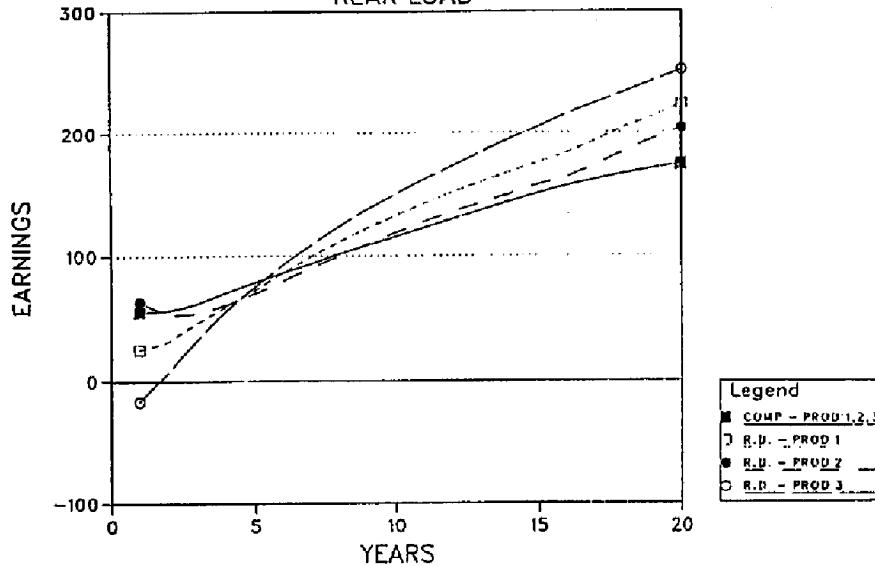
Compensation Rate - Year 1	40%
Year 2	4%
First Year Acquisition Costs	\$400
Non-Deferrable Expenses	0
Maintenance Expenses	0

Persistency

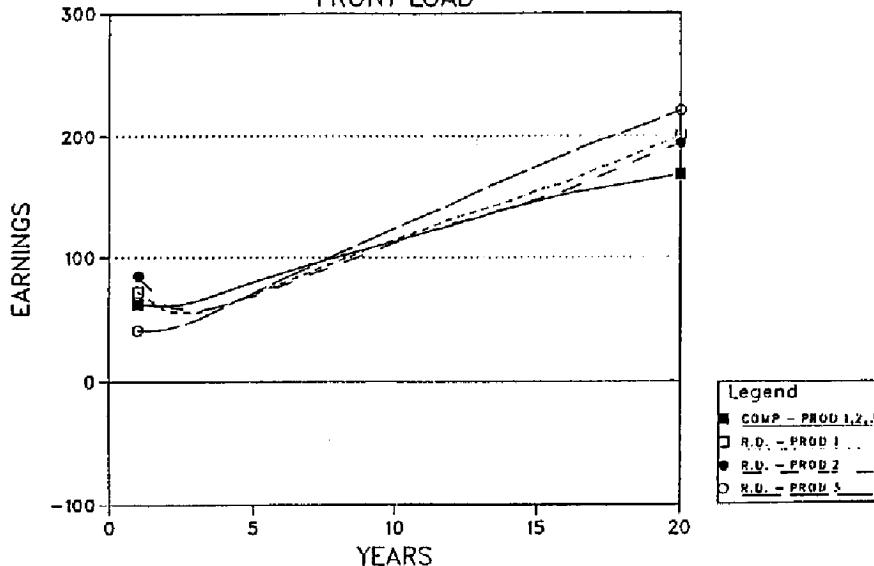
Actual Lapse Rates - Year 1	20%
Year 2	10%
Year 3+	5%
Actual Mortality	'65-'70 Basic
GAAP Assumed Mortality (composite only)	125% x '65-'70 Basic

STATEMENT 1986-28

COMPOSITE VS. RETRO DEPOSIT
REAR LOAD

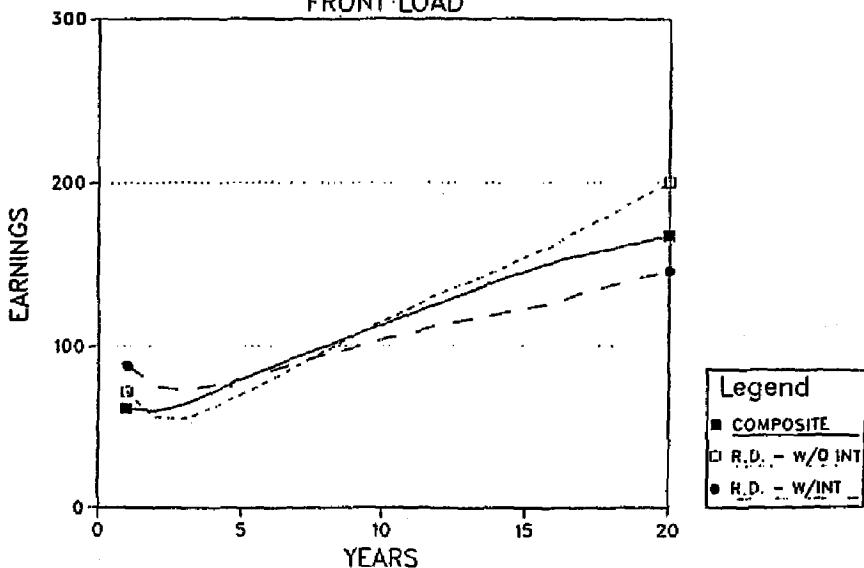


COMPOSITE VS. RETRO DEPOSIT
FRONT LOAD

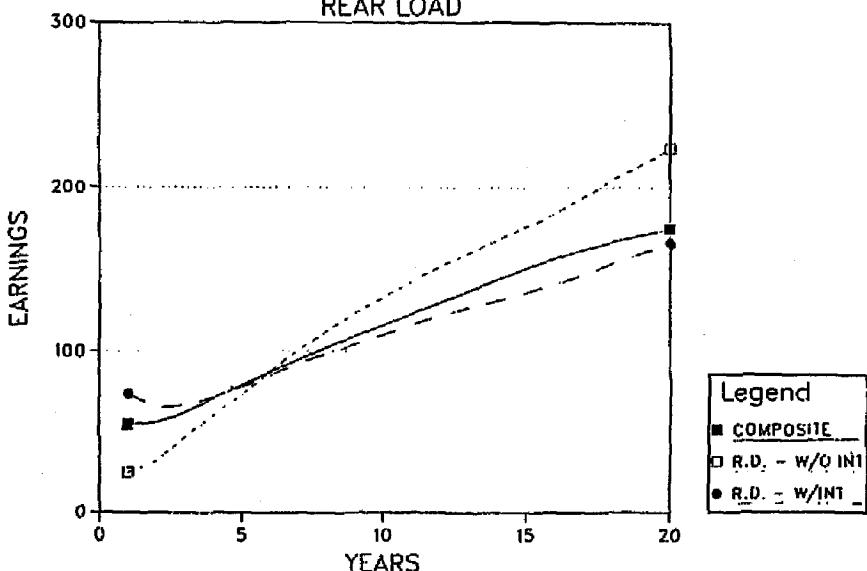


STATEMENT 1986-28

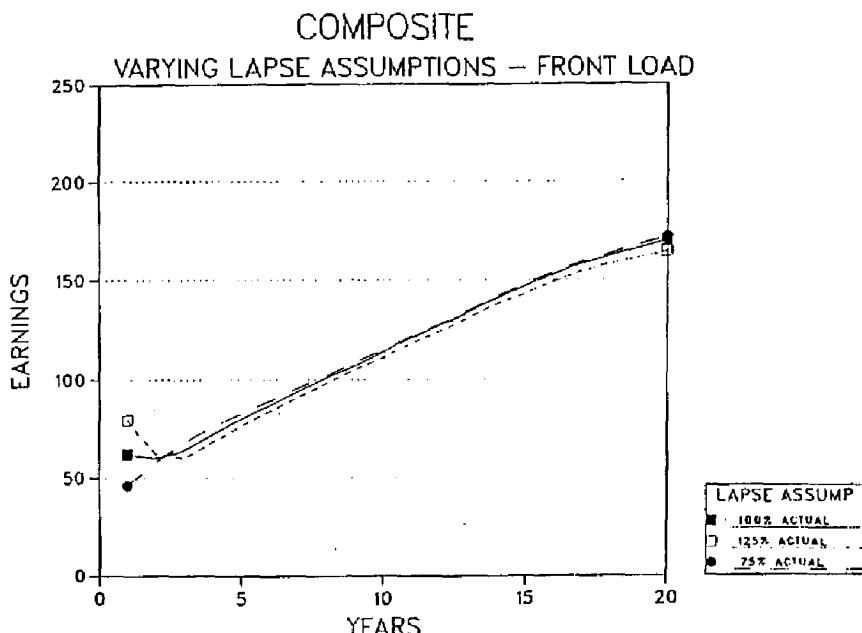
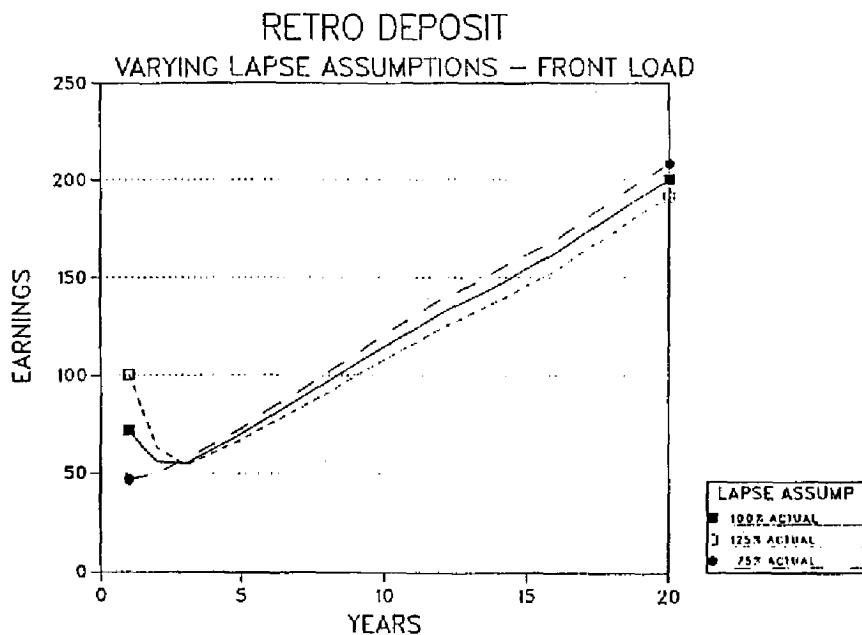
COMPOSITE VS. RETRO DEPOSIT
FRONT LOAD



COMPOSITE VS. RETRO DEPOSIT
REAR LOAD



STATEMENT 1986-28



STATEMENT 1986-29

August 26, 1986

Mr. William M. Lieber
Pension Tax Counsel
Joint Committee on Taxation
1011 Longworth House Office Building
Washington, D.C. 20515

Dear Bill:

From our review of the tax reform conference agreement, we understand that the committee agreed to adopt the House proposal relating to the imposition of a penalty for the overstatement of pension liabilities. In the final bill passed by the House, this provision specifies a penalty on the actuary. In previous discussions, you indicated that the penalty was to be applied to plan sponsors (not to actuaries) and that the reference to actuaries in the House Bill was a printing error.

The Academy is concerned that in a bill of this size, such a necessary change could be inadvertently overlooked, and we therefore bring it to your attention here. On the other hand, if it has been determined that the penalty will be applied to the actuary, we certainly hope that such an idea will be reconsidered and rejected.

Sincerely,

(signed)

Gary D. Simms
General Counsel

STATEMENT 1986-30

September 19, 1986

Mr. Storm Johnsen
Chief Actuary
Office of Insurance Commissioner
Insurance Building
Olympia, Washington 98504-0321

Dear Mr. Johnsen:

The Committee on Risk Classification of the American Academy of Actuaries has prepared the enclosed statement commenting on the state of Washington's proposed regulations on insurance rules pertaining to AIDS (chapter 284-90 WAC). Please let us know if we can be of further assistance to you. If you have any questions, I can be reached at (212) 330-1170.

Very truly yours,

(signed)

Claire L. Wolkoff, Chairperson
Committee on Risk Classification

STATEMENT 1986-30

**AMERICAN ACADEMY OF ACTUARIES
COMMITTEE ON RISK CLASSIFICATION
COMMENTS ON THE STATE OF WASHINGTON'S PROPOSED
RULES PERTAINING TO AIDS
CHAPTER 284-90 WAC**

The statement that follows is filed by the Committee on Risk Classification of the American Academy of Actuaries ("Academy"). The Academy is a professional association of over 8,000 actuaries which was formed in 1965 to bring together into one organization all qualified actuaries in the United States and to seek accreditation and greater public recognition for our profession. The Academy includes members of its three founding organizations - the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, and the Society of Actuaries. Membership also includes 85% of the total number of enrolled actuaries who are qualified under ERISA.

Our Committee appreciates the opportunity to comment on the proposed regulations. Our comments will be brief and directly related to your proposals since you have already received a copy of our May, 1986 statement, "Risk Classification and AIDS."

We are in general agreement with the first two sections (284-90-010 and 284-90-020) of the proposed regulations. You are to be commended for your clear statement on risk classification and the prohibition of unfair discrimination.

However, the final section of the proposed regulations, WAC 284-90-030, concerns us. We understand your desire for an actuarial statement of the expected effect of the AIDS epidemic on an insurer's financial position.

Undoubtedly many, if not most, companies will incur AIDS claims which were not anticipated in setting the original premium rates or in calculating the reserves. While it would be desirable to be able to estimate the effect of AIDS claims, we do not believe enough statistical data are available to make a meaningful estimate. The disease is a recent one, having been first recognized in the United States in 1981. Early cases have occurred in greatest numbers in certain states (e.g., New York and California) and in certain groups (e.g., homosexual and bisexual men and intravenous drug users). However, some of these patterns may be changing and the ultimate incidence of the disease is not yet known. The long incubation period from initial exposure to actual development of the disease further complicates predictions.

In light of these uncertainties, we do not think a reliable estimate can be made of the impact of AIDS on an insurer's financial position at this time. While many actuaries would be able to develop an estimate if required to do so, such estimates would not have the same degree of credibility as the other numbers in the actuary's statement, and in most cases would have to be appropriately qualified.

Sound actuarial practice requires actuaries expressing opinions in insurance company financial statements to consider all relevant factors in determining the adequacy of the actuarial items. We do not feel that including a paragraph in the actuary's opinion letter on the AIDS epidemic is either appropriate or necessary, and doing so would open the door to requiring

STATEMENT 1986-30

specific references in the actuary's opinion letter to other named conditions (flu epidemics, cancer, etc.). Therefore, we would recommend that the final paragraph of the proposed regulation be amended to call attention to the fact that the opining actuary needs to consider the impact of the AIDS epidemic on the insurer, but not require the inclusion of an AIDS-related paragraph in his opinion letter.

STATEMENT 1986-31

September 29, 1986

To: NAIC (EX5) Life and Health Actuarial Task Force
Subject: NAIC Reserve Standards for Individual and Group Health Insurance Contracts: Final Recommendations

Dear Task Force Members:

This Report comprises our final recommendations concerning Reserve Standards for Individual and Group Health Insurance Contracts, following up on the July, 1986 exposure of draft Reserve Standards as distributed by the American Academy of Actuaries on behalf of the NAIC.

Our Subcommittee has reviewed all comment letters received by the Academy as of the comment deadline of September 15, 1986 and, in addition, has reviewed 3 letters received after the deadline, comprising a total of 14 responses. Combined with the 44 letters received in response to the original December, 1985 Discussion Draft, a total of 58 letters, from 55 different individuals, have been received and carefully reviewed.

These letters contained a wealth of constructive comment and criticism. Many revisions have been made in the original Draft of December, 1985 as a result. Most of these changes appeared in the second exposure Draft of July, 1986, but the attached Final Draft contains a number of additional changes made in response to comments received on the July, 1986 Draft. The subcommittee greatly appreciates the thought and attention given to the two Standards drafts by all those who wrote.

The following documents are attached to this Report:

1. Two minority dissent letters from members of our subcommittee. These are the same dissent letters that were attached to our previous Report of May 27, 1986 (and also published with the July, 1986 Exposure Draft). These members wish to express the same dissents as before.
2. Summary of the major comments received during the Second Exposure (ending September 15, 1986), including responding comment from our subcommittee.
3. "Commentary" on the numbered final revisions made.
4. Final Draft of the proposed Reserve Standards and Appendices, dated September 26, 1986. In the left page margins of this final draft are a series of "Comment Numbers" which identify each change made in the July, 1986 Exposure Draft. The numbers correspond to those in the "Commentary", which briefly explains the reason or reasons for each change.

We herewith submit the following recommendations to your Task Force:

- (1) That the Final Draft of the proposed Reserve Standards as attached, dated September 26, 1986, and including Appendices A and B, be recommended to the NAIC for adoption at its December, 1986 meeting.

STATEMENT 1986-31

- (2) That Appendix C be accepted by the NAIC, for publication with the Standards, but with the understanding that it is not part of the Standards proper, but rather comprises supplementary illustrative and explanatory material relating to the "benefit ratio reserve." (The proposed text of the Standards makes reference to Appendix C as a "Supplementary" appendix. Reference to Appendix C should be deleted if this is not considered appropriate.)

Respectfully submitted,

E. Paul Barnhart	James Olsen
William J. Bugg, Jr.	Frank Rubino
William A.J. Bremer	Peter M. Thexton
G. Scott Bucher	John P. Wagner
Michael Kazakoff	

by: (signed)

**E. Paul Barnhart, Chairperson
Subcommittee on Liaison with the NAIC
Accident and Health (B) Committee**

STATEMENT 1986-31

ATTACHMENT I

May 19, 1986.

Mr. E. Paul Barnhart
959 Gardenview Office Parkway
St. Louis, Missouri 63141-5917

Dear Paul:

I am writing to ask that your report to the NAIC indicate that one member of the committee feels that voluntary lapse rates should be used in the calculation of tabular active life reserves as well as benefit ratio reserves.

The reason for my position is that the reserves for certain types of plans are particularly sensitive to the decrement rate. In testing a large block of our business, we found that the reserves were nearly 50% higher than what they would have been without provision for a representative "voluntary lapse" decrement. It is my feeling that such an increase in the level of reserves exceeds the requirements for conservatism and will impose constraints unnecessarily upon insurance companies whose business is primarily individual A&H.

Thank you for your consideration of this request.

Sincerely,

(signed)

William J. Bugg, Jr.

STATEMENT 1986-31

ATTACHMENT 1

May 15, 1986

Mr. E. Paul Barnhart
Consulting Actuary
959 Gardenview Office Parkway
St. Louis, MO 63141

RE: Reserve Standards for Individual and Group Health Insurance Contracts

Dear Paul:

The purpose of this letter is to state in writing that I do not support the benefit ratio reserve concept as proposed by our subcommittee. Along with this statement, I wish to offer the following comments explaining my position:

1. Clearly, a balancing reserve type of liability exists in jurisdictions with rating guidelines similar to the NAIC model. Further, the balancing reserve is a very practical, simple approach for handling this. However, in the absence of any regulatory, statutory, or contractual requirement with respect to favorable experience margins, the disposition of such margins, if any, must be the prerogative of management. This is entirely consistent with traditional practice in our industry.
2. Again, in jurisdictions with rating guidelines similar to the NAIC model, funds held as balancing reserves are for the benefit of the policyholders to be applied against future rate increases. And they would serve that purpose. But, in the absence of such rating rules:
 - Balancing reserve requirements would serve no purpose except that intended by management.
 - Filed or anticipated loss ratios are not continued lifetime targets even though balancing reserve requirements may so imply. Thus, such requirements would mean setting aside surplus but the final disposition thereof would still be decided by the insurer.
 - It would be highly unlikely that the IRS would recognize such a reserve for tax purposes.
3. Except where clearly required by rate regulation or policy provision, balancing reserves should not be mandated. The responsibility for determining if such reserves are appropriate should be left to the valuation actuary.
4. There is always the possibility that benefit ratio reserves will be viewed as funds belonging to the policyholders. Thus, pressure can result to pay refunds, reduce premiums, or increase benefits when such reserves develop. Again, in the absence of any rating regulation, the disposition of such funds is properly the responsibility of management.

Respectfully submitted,

(signed)

Michael Kazakoff
Executive Vice President and Chief Actuary

STATEMENT 1986-31

ATTACHMENT 2

SUMMARY OF MAJOR COMMENTS RECEIVED BY COMMENT DEADLINE
OF SEPTEMBER 15 ON SECOND EXPOSURE DRAFT (JULY, 1986)
OF NAIC RESERVE STANDARDS FOR
INDIVIDUAL AND GROUP HEALTH INSURANCE CONTRACTS,
WITH SUBCOMMITTEE RESPONSE:

1. Several letters expressed disappointment that the July, 1986 draft did not retain some version of the modified net unearned premium reserve proposed in the December, 1985 draft.

RESPONSE: Due to the wide range of views expressed on this matter and lack of any "clustering" of opinion around any particular approach to use of a net unearned premium basis, the subcommittee concluded that the most prudent resolution was to revert essentially to the provisions of the existing NAIC standard with respect to unearned premium reserves.

2. Several letters raised questions concerning items in Appendix A.

RESPONSE: The version of Appendix A included in the July, 1986 Exposure Draft is the one adopted by the NAIC in December, 1985, and this is the version now in effect under the existing NAIC Standards. The subcommittee has not undertaken to propose any further revision in this recently adopted document.

3. A number of letters included further critical comment on the benefit ratio reserve, many of these closely similar to comments received on the December, 1985 draft.

RESPONSE: The subcommittee continues to have three problems with most of the criticisms of the benefit ratio reserve concept:

- a. Some criticisms still fail to recognize the prospective nature of this reserve, focusing almost entirely on the retrospective aspects of its calculation.
- b. Most criticisms fail to recognize that this reserve method is designed to cope with circumstances involving high likelihood of frequent and substantial rate increases: situations not contemplated or addressed by traditional tabular reserve methods using either statutory or "natural" (GAAP type) tables.
- c. It has been the subcommittee's judgment, with respect to the very few instances where any serious alternatives have been proposed, that the proposed alternatives simply fail to recognize or address the problems peculiar to Type C contracts.

The subcommittee continues to hold the opinion that the benefit ratio reserve is the most promising method of any that have been proposed.

4. Two letters criticised the proposed treatment of benefit ratio reserve "transfers" as "claims paid" or "credits against claims paid." (The first exposure period also produced criticism of this treatment.)

STATEMENT 1986-31

RESPONSE: The subcommittee agrees with these criticisms and has revised the text of the final draft to avoid treating transfers in the manner objected to.

5. One letter questioned whether certain paragraphs or sections belong in the Reserve Standards, on the ground that these portions of the text appear to deal with standards of practice or matters not bearing directly on determination of statutory reserves. The portions of the text brought into question are: Section IIA, second paragraph; Section IIB1c; Section IIC, last sentence; Section IID, last paragraph; Section IVF; Appendix A, definitions of "dates"; and all of Appendix C.

RESPONSE: The subcommittee agrees concerning Appendix C, and has recommended changes accordingly. We do not agree that the other text items in question should be deleted or changed. In our opinion, all of these have too immediate a connection to reserve determination or else involve regulatory requirements as to monitoring or testing of reserve adequacy. Some are indeed in the nature of "standards of practice", but we believe these proposed requirements continue requirements that already exist either explicitly or implicitly in present regulations and which we believe should continue to be so required.

6. One letter, received a week after the comment deadline, questioned whether contract reserve requirements should apply to group insurance at all.

RESPONSE: The subcommittee believes that contract reserves should apply to certain group insurance contracts, but a revision has been made in Section IVAl, item 3, which we believe is more appropriate than the language in the July, 1986 draft and which should substantially reduce the scope of applicability of contract reserve requirements to group contracts.

STATEMENT 1986-31

ATTACHMENT 3

**COMMENTARY ON FINAL REVISIONS
MADE IN JULY, 1986 DRAFT OF THE RESERVE STANDARDS**
(Numbers refer to those shown in left page margins of Attachment 3)

1. This is the proposed change intended to downgrade Appendix C, from part of the Standards proper, to a supplementary explanatory status.
2. Premiums waived were not specifically addressed in previous drafts including the July, 1986 draft. One letter suggested that they should be and the subcommittee agrees. The 3 changes marked "2" introduce specific mention of premiums waived into each reserve section of the final draft.
3. The last 9 words of IIB1c, "regardless of the date of incurrance of the claim", have been deleted as superfluous.
4. The description given in the July, 1986 draft of certain group contracts intended to be subject to contract reserve requirements was too broad and failed to convey our intent. IVAl, item (3), as here revised, we believe describes clearly the type of group contracts we think should be subject to contract reserve requirements.
5. We have somewhat enlarged the list of benefits included in Type B and subject to tabular reserve requirements, with 2 additions:
 - (a) Daily hospital benefits payable on an "expense incurred" basis provided they are subject to an "explicit daily dollar limit."
 - (b) Miscellaneous Hospital Expense benefits, but only up to the limits indicated. Miscellaneous benefits with limits any higher than these we believe are more properly included in Type C, since they reach levels that are too "cost sensitive."

These additions have been made because existing NAIC tabular standards specifically provide for them and, within the limits indicated, we believe they can be satisfactorily valued using tabular standards.

This permits hospital-surgical contracts with limited miscellaneous benefits to be valued as Type B rather than Type C.

6. This change clarifies our intent. Several letters expressed uncertainty as to what was meant here: i.e., "were contracts renewable only at the option of the insurer" meant to be included here. The answer is NO, and we hope we have now made this very clear.
7. The parenthetical insertions here are again for purposes of clarification. A few letters seemed to misunderstand this.
8. Several discussants (e.g., William Bugg and Robert Shapland, both on panels at the June, 1986 Kansas City meeting of the Society of Actuaries) have pointed out that, all other factors or assumptions being the same, the benefit ratio reserve may be as much as 50% conservative when compared with either (a) natural benefit (GAAP type) reserves using 2 year preliminary term, or (b) a gross premium valuation without preliminary term but taking first year expense amortization into account. Others have called attention to the "inconsistency" between permissive 2 year preliminary term with tabular reserves vs. only

STATEMENT 1986-31

permissive "disappearing one-year preliminary term" with benefit ratio reserves.

Statutory contract reserves are of course expected and intended to be conservative as compared to GAAP reserves allowing for negative reserves representing deferred expenses and using lapse rates, or as compared to 2 year preliminary term benefit reserves using lapse rates. Beyond these considerations, we have 2 reasons for concluding that first year experience needed to be incorporated into benefit reserve determination:

- (a) Under a typical block of business where premium income is accumulated over the contract lifetime, taking interest and lapsation into account, first year premiums will usually represent a large fraction of the total value as much as 20% or more. We think this is too much to exclude entirely, as would be the case with "permanent" 1 or 2 year preliminary term reserve methods.
- (b) If full 1 or 2 year preliminary term were permitted, a substantial adjustment would be needed in the reserve basis anticipated loss ratio, since select period experience with the lowest loss ratios would be excluded. We did not consider it prudent or practical to try to provide for such adjustment on either and "arbitrary" or a "subjective" basis.

Because of (a) and (b), we concluded that we could reasonably allow only for the disappearing 1 year preliminary term as provided for in the July, 1986 draft. However, the degree of conservatism and the degree of "inconsistency" with tabular reserves standards continues to bother quite a number of valuation people.

In order to respond at least somewhat more to this concern, we have concluded that we could go a little farther: permit permanent exclusion of 50% of first year experience from the reserve determination: a kind of "one-half year" permanent preliminary term basis. So we are proposing the change now appearing in the draft under IVD3: a graded adjustment excluding first year experience 100%, if within 12 months of the valuation date; 75%, if within 12 to 24 months; and 50% thereafter, for first year experience more than 24 months before the valuation date.

This provides insurers somewhat more relief in relation to high first year expenses, while still permanently retaining a substantial fraction of first contract year experience in the reserve determination. We believe this to be a reasonable resolution of the concerns involved here.

9. A number of individuals have objected to the treatment of benefit ratio reserve "transfers" as "paid claims" or "credits against paid claims." We agree there is merit to these objections, and we have changed the text here to avoid this treatment, while still providing for the same effect and objective in permitting such reserve transfers.

No changes from the July, 1986 draft are proposed with respect to Appendices A and B. The title of Appendix C has been changed in accordance with its downgrading to a supplementary explanatory and illustrative status.

STATEMENT 1986-31

ATTACHMENT 4

**RESERVE STANDARDS FOR INDIVIDUAL AND GROUP
HEALTH INSURANCE CONTRACTS**

SEPTEMBER 26, 1986

I. INTRODUCTION

A. SCOPE.

These Standards apply to all individual and group health (accident and sickness) insurance coverages except credit insurance.

When an insurer determines that adequacy of its health insurance reserves requires reserves in excess of the minimum standards specified herein, such increased reserves shall be held and shall be considered the minimum reserves for that insurer.

B. CATEGORIES OF RESERVES.

The following sections set forth minimum standards for three categories of health insurance reserves:

Section II.	Claim Reserves
Section III.	Premium Reserves
Section IV.	Contract Reserves

The ultimate test of the adequacy of an insurer's health insurance reserves is to be made on the basis of all three categories combined. However, these Standards emphasize the importance of determining appropriate and aggregate reserves for each of the three categories separately.

C. APPENDICES.

*1

These Standards contain two Appendices which are an integral part of the Standards, and a third "Supplementary" Appendix which is not part of the Standards as such, but is included for illustrative purposes.

Appendix A. Specific minimum standards with respect to morbidity, mortality and interest, which apply to claim reserves according to year of incurral and to contract reserves according to year of issue.

Appendix B. Glossary of Technical Terms used.

*1

Appendix C. (Supplementary) Discussion of the actuarial management of the benefit ratio reserve and examples of determination of contract benefit ratio reserves.

*1 Comment Number

STATEMENT 1986-31

II. CLAIM RESERVES

A. GENERAL.

1. Claim reserves as of a given valuation date shall be established for those payments that the insurer has become obligated to make, in accordance with its contracts, as a result of such contracts having been in effect on or before such valuation date.

In determining the incurred status of claims, insurers may use practical and convenient approximations to actual contractual dates of incurral, provided it can be demonstrated that aggregate claim reserves resulting from such approximate dating represent an adequate and reasonable estimation of aggregate claim liability. The actuary responsible should periodically review the incurred dating practices and approximations followed by the insurer to determine whether satisfactory estimation results.

2. Appropriate claim expense reserves are required with respect to the estimated expense of settlement of all incurred but unpaid claims.
***2**
3. Premiums waived are to be considered as claims paid, for purposes of establishing claim reserves.

B. MINIMUM STANDARDS FOR CLAIM RESERVES.

I. DISABILITY INCOME

- a. Interest. The maximum interest rate for claim reserves is specified in Appendix A.
- b. Morbidity or other contingency. The reserve should be based on the insurer's experience or other assumptions designed to place a sound value on the liabilities.
- c. For contracts with an elimination period, the DURATION of disablement should be measured as dating from the time that benefits would have begun to accrue had there been no elimination period.

***3**

C. AGGREGATE ESTIMATION OF LIABILITY.

It is permissible for insurers to estimate claim liabilities using methods that value the various reserve items in the aggregate, combining accrued and unaccrued, reported and unreported, in course of settlement, etc. Separate specific items as may be required for statutory reporting may then be determined using any reasonable method.

D. CLAIM RESERVE METHODS GENERALLY.

Any generally accepted or reasonable actuarial method or combination of methods may be used to estimate all claim liabilities. The methods used for

***2** Comment Numbers

***3** Comment Number

STATEMENT 1986-31

estimating liabilities generally may be aggregate methods, or various reserve items may be separately valued. Approximations based on groupings and averages may also be employed. Adequacy of the claim reserves, however, is to be determined in the aggregate.

All such reserves for prior years are to be tested by the actuary responsible for adequacy and reasonableness by the paid development of incurred claims, plus an estimate of any residual unpaid liability, over a sufficient period to provide reasonable demonstration of the aggregate amount of matured liability. Such testing should include adjustment at the appropriate rate (or rates) of interest from the date of valuation. Record systems, coding and methods used to estimate the liabilities should also be assessed to determine their continuing adequacy and reliability.

III. PREMIUM RESERVES

A. GENERAL.

1. Unearned premium reserves are required for all contracts with respect to the period of coverage for which premiums have been paid beyond the date of valuation.
2. If premiums due and unpaid are carried as an asset, such premiums must be treated as premiums in force, subject to unearned premium reserve determination. The value of unpaid commissions and premium taxes in connection with such due and unpaid premiums must also be carried as an offsetting liability.
*2
3. Premiums waived are to be considered as premiums received, for purposes of establishing unearned premium reserves.

B. MINIMUM STANDARDS FOR UNEARNED PREMIUM RESERVES.

The minimum unearned premium reserve with respect to any contract is the pro rata unearned modal premium that applies to the premium period beyond the valuation date, with such premium determined on the basis of: (a) the valuation net modal premium of the contract reserve basis applying to the contract; or (b) the gross modal premium for the contract, if no contract reserve applies. However, in no event may the sum of the unearned premium and contract reserves for all contracts of the insurer subject to contract reserve requirements be less than the gross modal unearned premium reserve on all such contracts, as of the date of valuation.

C. PREMIUM RESERVE METHODS GENERALLY.

The insurer may employ suitable approximations and estimates, including but not limited to groupings, averages and aggregate estimation, in computing premium reserves. Such approximations or estimates should be tested periodically to determine their continuing adequacy and reliability.

*2 Comment Number

STATEMENT 1986-31

IV. CONTRACT RESERVES.

A. GENERAL.

*4

1. Contract reserves are required, unless otherwise specified in this Section IV, for: (1) all individual health insurance contracts; (2) group health insurance contracts with which leveling premiums are used; and (3) group health insurance contracts for which premiums are substantially or entirely paid by the insured participants, except for those where an entity exists (such as an employer, board or committee) which is empowered to negotiate benefits, provisions and premium rates on behalf of the participants, which is wholly independent of the insurer, which includes no individuals selected by the insurer and none of whose members receive financial compensation either directly or indirectly from the insurer, other than reimbursement of expenses incidental to performance of their functions on behalf of the participants. The contract reserve is in addition to claim reserves and premium reserves.
2. The nature of the minimum contract reserve required depends (a) upon the "type" of contract involved and (b) upon whether "leveling" premiums are used in the rate structure of the contract. A "tabular" contract reserve or a "benefit ratio" contract reserve may be required, depending on the characteristics of the contract.
- *2
3. Contracts for which premiums are being waived are to be considered contracts in force, for purposes of establishing contract reserves.
4. The assumptions comprising the basis of contract reserves should be consistent with the assumptions comprising the basis of claim reserves for any contract, or else appropriate adjustment must be made when necessary to assure that the aggregate liability is provided for.

TYPES OF HEALTH INSURANCE CONTRACTS.

Type A. Contracts which are guaranteed renewable at guaranteed premium rates (either level or changing), to a specified age or for life.

Type B. Contracts not meeting the Type A guaranteed premium requirements, which provide ONLY scheduled benefits or benefits payable at stated time period rates, other than incidental benefits, and/or which provide benefits limited to the following kinds only:

*5

- Disability Income
- Hospital Indemnity payable at stated time period rates or hospital daily room and board benefits payable on an expense incurred basis but subject to an explicit daily dollar limit
- Miscellaneous Hospital Expense benefits subject to a maximum benefit per confinement not exceeding the greater of:
 - (a) 10 times the daily room benefit limit provided, or
 - (b) \$1000

*4 Comment Number

*2 Comment Number

*5 Comment Number

STATEMENT 1986-31

- Surgical benefits provided on the basis of fixed scheduled limits by procedure
- Accidental Death or Accidental Death and Dismemberment
- Cancer benefits on a fixed scheduled basis and/or benefits payable at stated time period rates

*5

Unless contracts not meeting Type A requirements are limited to these kinds of benefits only, except for incidental benefits not material to the total benefit value, they are to be considered Type C contracts.

Type C. All other contracts.

NOTE with respect to Type of contract:

A contract may have premium guarantees qualifying it as Type A, until a specified age or duration after which the premium guarantees, or lack of such guarantees, may qualify it as Type B or Type C. In such case, the contract during each period should be considered for reserve purposes according to the type to which it then belongs.

B. CONTRACTS REQUIRING NO CONTRACT RESERVE.

*6

1. Contracts of any Type which cannot be renewed beyond one year.
2. Contracts of Types A or B with which leveling premiums are not used.
3. Contracts already in force on the effective date of these standards for which no contract reserve was required under the immediately preceding standards.

C. CONTRACTS REQUIRING TABULAR RESERVES.

1. Contracts of Types A or B with which leveling premiums are used.

Tabular reserves are required, with respect to all such contracts, equal to or greater than minimum reserves calculated by methods and assumptions as specified in Section IVC2 following.

2. MINIMUM STANDARDS FOR TABULAR RESERVES.

- a. Interest. The maximum interest rate for tabular reserves is specified in Appendix A.
- b. Mortality. Mortality rates used in the computation of tabular reserves shall be on the basis of a mortality table as specified in Appendix A.
- c. Morbidity or other contingency. Minimum standards with respect to morbidity are those specified in Appendix A.
- d. Reserve Method. The minimum reserve is the mid-terminal reserve, on the basis of the two-year full preliminary term reserve method; that is, under which the terminal reserve is zero at the first and also the second contract anniversary.

*5 Comment Number

*6 Comment Number

STATEMENT 1986-31

- e. Negative Reserves. Negative reserves on any benefit may be offset against positive reserves for other benefits in the same contract, but the total tabular reserve for the contract may not be less than zero.

D. CONTRACTS REQUIRING BENEFIT RATIO RESERVES.

1. All other Type C contracts. Benefit ratio reserves are required, with respect to all such contracts, equal to or greater than minimum reserves calculated by methods and assumptions as specified in Section IVD2 following.
2. MINIMUM STANDARDS FOR BENEFIT RATIO RESERVES.

- a. If, upon the effective date of these Standards, a tabular reserve basis applies to any contracts otherwise subject to these requirements and then in force, such reserve basis shall continue to apply to such contracts, and tabular reserves shall be valued in accordance with the standards previously applicable to such reserves.
- b. For all such contracts issued on or after the effective date of these Standards, benefit ratio reserves are required. Such reserves apply on an aggregate basis to all such contracts included in any one "contract group." Such aggregate reserve is determined as follows, as of any subsequent valuation date:
 - *7 Let C = the accumulated value with interest, as of the valuation date, of all past claims incurred (without considering contract reserves) under the contracts affected, up to the valuation date, with an adjustment for claims incurred in the first contract year as provided in Section IVD3 following;
 - *7 Let G = the accumulated value with interest, as of the valuation date, of all past premiums earned (without considering contract reserves) on the contracts affected, up to the valuation date, with an adjustment for premiums earned in the first contract year as provided in Section IVD3 following;

Let R = the applicable anticipated loss ratio. Originally, this shall be the filed loss ratio (or composite of such ratios), or if no such ratio or ratios have been filed, a loss ratio as otherwise determined to be appropriate. As of the effective date or dates of any revision of the gross premiums, if the anticipated loss ratio applicable to such premium revision has changed, such revised loss ratio shall be used for accumulation of reserves related to premiums earned on the revised basis, while original loss ratios applying to earlier past earned premiums are continued unchanged.

However, following any revision to a "probable" loss ratio for the purpose of strengthening or releasing reserves as provided for in

*7 Comment Number

STATEMENT 1986-31

Section IVF and IVG following, all original values of R shall be replaced by their corresponding adjusted values R'.

The rate of interest used to compute C and G above for each rate period shall be the same as that used to compute the corresponding value of R.

The benefit ratio reserve required is the amount B in the following formula:

$$\frac{C + B}{G} = R, \text{ or } B = (G \times R) - C$$

However, if B is negative as of the valuation date, the benefit ratio reserve shall be zero for that date.

3. Adjustment for Premiums Earned and Claims Incurred in the First Contract Year.
- *8 In the computation of C and G in the preceding formulae, a graded adjustment is allowed with respect to the accumulated values of premiums earned and claims incurred within the first contract year, as follows:
 - a. 100% of the accumulated values of such amounts earned or incurred within 12 months of the date of valuation may be excluded from C and G.
 - b. 75% of the accumulated values of such amounts earned or incurred more than 12 but within 24 months of the date of valuation may be so excluded.
 - c. 50% of the accumulated values of such amounts earned or incurred more than 24 months before the date of valuation may be so excluded.
4. Standards governing the strengthening, release or transfer of benefit ratio reserves are set forth in Section IVG following.

E. ALTERNATIVE VALUATION METHODS AND ASSUMPTIONS GENERALLY.

Provided the contract reserve on all contracts to which an alternative method or basis is applied is not less in the aggregate than the amount determined according to the applicable standards specified above, an insurer may use any reasonable assumptions as to interest rates, termination and/or mortality rates, and rates of morbidity or other contingency. Also, subject to the preceding condition, the insurer may employ methods other than the methods stated above in determining a sound value of its liabilities under such contracts, including but not limited to the following:

1. Alternate tabular reserve basis and methods may be used in lieu of either the tabular or benefit ratio reserves prescribed in this Section IV, including any of the following: optional use of either the net level premium or the one-year full preliminary term method; use of

*8 Comment Number

STATEMENT 1986-31

interpolated terminal reserves based on actual anniversary dates, in lieu of mid-terminal reserves; prospective valuation on the basis of actual gross premiums with reasonable allowance for future expenses; the use of approximations such as those involving age grouping, groupings of several years of issue, average amounts of indemnity; the computation of the reserve for one contract benefit as a percentage of, or be other relation to, the aggregate contract reserves, exclusive of the benefit or benefits so valued; the use of a composite annual claim cost for all or any combination of the benefits included in the contracts valued.

2. For benefit ratio reserves: the combining of similar contract groups, or combining of successive time intervals subject to different R values, using approximate composite values of R; or other reasonable groupings and approximate methods.

F. TESTS FOR ADEQUACY AND REASONABLENESS OF CONTRACT RESERVES.

At intervals of not greater than 3 years for tabular reserves and 1 year for benefit ratio reserves, the actuary responsible shall make an appropriate valuation of the insurer's prospective contract liabilities, by contract group, to determine the continuing adequacy and reasonableness of contract reserves. The insurer shall make appropriate adjustments to its contract reserves if such tests indicate that the basis of such reserves is no longer appropriate. The prospective liability must be estimated for the remainder of the expected lifetime of each contract group.

G. PROVISIONS FOR STRENGTHENING, RELEASE OR TRANSFER OF BENEFIT RATIO RESERVES.

As stated in Section IVF preceding, the continuing appropriateness of the benefit ratio reserve carried on each contract group is to be reviewed each statement year by the actuary responsible. In the event any contract group holding benefit ratio reserves shall be deemed by the actuary responsible to have either:

1. No substantial probability of ultimately attaining the anticipated loss ratio or ratios on which the reserve is based; or
2. A substantial probability of ultimately exceeding the anticipated loss ratio or ratios on which the reserve is based, in spite of any prospective premium increases that may reasonably be anticipated;

then the actuary responsible shall determine an appropriate revised "probable loss ratio", R' , on which the reserve in each case is to be determined. If more than one existing value of R is in effect for the group affected, the same increase or decrease in absolute percentage points shall be applied to all such values to obtain a corresponding set of R' values, or else all such R' values may be composited (Illustrations in Appendix C include examples for which multiple values of R are assumed to be in use). The existing level of reserve in each such case shall be adjusted to the revised level within a period not to exceed 5 years, with respect to reserve strengthening; and within a period of not less than the lesser of (a) 5 years, or (b) the period during which any

STATEMENT 1986-31

contracts subject to such excess reserves remain in force, with respect to release of excess reserves.

As an alternative to the release of excess benefit ratio reserves in any year, on a particular contract group, the insurer may elect to make a transfer of the amount of all or a portion of such year's release over to other contract groups that in need of reserve strengthening.

*9

If the insurer elects to make such a transfer, then with respect to a contract group to which transfer is made, the amount transferred shall be maintained as a reserve which serves as an offset against claims paid under such contract group. The benefit ratio reserve thereupon required on the contract group from which transfer was made shall be determined by valuing the cumulative retrospective incurred claims using the adjusted R' values as determined. The benefit ratio reserve thereupon required on the contract group to which transfer is made shall be determined treating the transferred reserve as an offset value against claims paid, the benefit ratio reserve being valued on the basis of the cumulative retrospective incurred claims reduced by the value of the transferred reserve.

All such transferred reserves shall be permanently identified in the insurer's records. The aggregate of out-transfers shall balance with the aggregate of in-transfers, for each year.

V. REINSURANCE.

Increases to or credits against reserves carried, arising because of reinsurance assumed or reinsurance ceded, must be determined in a manner consistent with the rate structures and all applicable provisions of the reinsurance contracts which affect the insurer's liabilities.

*9 Comment Number

STATEMENT 1986-32

September 29, 1986

To: NAIC (EX5) Life and Health Actuarial Task Force

Subject: Proposed Revisions in NAIC
"GUIDELINES FOR FILING OF RATES FOR INDIVIDUAL
HEALTH INSURANCE FORMS"

Dear Task Force Members:

In order to accommodate more appropriate and logical treatment of contract reserves in the experience submitted by insurers in connection with the filing of rate revisions on individual contracts, the GUIDELINES FOR FILING OF RATES need some revisions.

The need for this has become obvious in the case of benefit ratio reserves, since reserve accumulation must clearly be separated from accumulation of incurred claim experience. However, the need has also really existed all along in the case of tabular reserves as well, but simply has not been so apparent. Whenever tabular reserves are unrealistic and either conservative or insufficient, as compared to actual experience, inclusion of such reserves in the filed experience creates distortions. This should be corrected.

Attached to this Report as Attachment 1 (dated September 26, 1986) are those sections of the Guidelines that need revision to provide for appropriate treatment of contract reserves in the submission of experience in support of rate revisions. Attachment 1 is marked to show both proposed ~~deletions~~ - by brackets, and proposed insertions - by underlines.

In addition to the changes specifically needed to correct the manner in which contract reserves are reported in submitted experience, there are two other places where we believe the Guidelines should be revised.

- a. The 2 footnotes dealing with future assumptions, which we believe should allow for secular trends such as inflation in a different way, allowing for longer calculation periods when "leveling" premium structures are involved, and
- b. Clarification of the definitions of the 4 types of renewal clause. There has been some confusion on this score in several states and among some insurers, and we think these definitions need clarification. We are not proposing any change in the intent. Note that confusion between what is meant by "OR" as compared to "CR" actually affects reserve requirements under the existing NAIC reserve standards.

Attachment 2 is a reference copy of the current Guidelines. The actual text of the APPENDIX would appear not to be affected, except that the interpretation of what constitutes "Premiums" or "Benefits" could of course be altered to the extent the treatment of contract reserves is corrected.

We herewith submit the following recommendation to your Task Force:

That the NAIC Model "GUIDELINES FOR FILING OF RATES FOR INDIVIDUAL HEALTH INSURANCE FORMS" be revised as proposed in Attachment 1 (dated September 26, 1986) and recommended to the NAIC

STATEMENT 1986-32

for adoption at the earliest meeting at which such a revision may be considered, in accordance with NAIC rules.

Respectfully submitted,

E. Paul Barnhart
William J. Bugg, Jr.
William A.J. Bremer
G. Scott Bucher
Michael Kazakoff

James Olsen
Frank Rubino
Peter M. Thexton
John P. Wagner

by: E. Paul Barnhart

(signed)

Chairperson
Subcommittee on Liaison with the NAIC
Accident and Health (B) Committee

STATEMENT 1986-32

ATTACHMENT 1

9/26/86

REVISIONS PROPOSED IN GUIDELINES FOR FILING OF RATES

Revision 1.

The footnote at the bottom of pages 155-1 and 155-5 (as numbered in the attached reference copy of the Guidelines): Delete the bracketed words and insert the underlined wording:

- * Assumptions applying to the future "period for which rates are computed" should be reasonable in relation to the circumstances. For example, if future rates of inflation are a "major" factor, "the period of projection of such rates normally should be short, such as 3 to 5 years only." Other assumptions, however, may still appropriately"the rate or rates of inflation assumed must have a logical and reasonable relation to the assumed monetary rates of interest." Such assumptions may apply over the entire future policy renewal period, particularly in cases where the basic rate structure is one of "level" premiums based on original issue age.

Revision 2.

Section IC3: Delete the bracketed wording as indicated:

- C. Previously Approved Forms. Filings of rate revisions for a previously approved policy, rider, or endorsement form shall also include the following:
 1. A statement of the scope and reason for the revision, and an estimate of the expected average effect on premiums, including the anticipated loss ratio for the form.
 2. A statement as to whether the filing applies only to new business, only to in-force business, or both, and the reasons therefore.
 3. A history of the experience under existing rates, including at least the data indicated in Section I.D. The history may also include, if available and appropriate, the ratios of actual claims to the claims expected according to the assumptions underlying the existing rates. Additional data might include: substitution of actual claim run-offs for claim reserves and liabilities; "determination of loss ratios with the increase in policy reserves subtracted from premiums rather than added to benefits;" accumulation of experience fund balances; "substitution of net level policy reserves for preliminary term policy reserves;" reserve adjustments arising because of select period loss experience; "adjustment of premiums to an annual mode basis;" or other adjustments or schedules suited to the form and to the records of the company. All additional data must be reconciled, as appropriate, to the required data.
 4. The date and magnitude of each previous rate change, if any.

STATEMENT 1986-32

Revision 3.

Section ID: Delete the bracketed wording and insert the underlined wording:

- d. Experience Records. Insurers shall maintain records of earned premiums and incurred benefits for each calendar year for each policy form, including data for rider and endorsement forms which are used with the policy form, on the same basis, ~~including all reserves,~~ as required for the Accident and Health Policy Experience Exhibit, except that all contract reserves shall be displayed separately, neither added to incurred benefits nor subtracted from earned premiums. Any out-transferred or in-transferred benefit ratio reserves shall be displayed separately from other benefit ratio reserves. Separate data may be maintained for each rider or endorsement form to the extent appropriate. Subject to approval of the commissioner experience under forms which provide substantially similar coverage and provisions, which are issued to substantially similar risk classes and which are issued under similar underwriting standards, may be combined for purposes of evaluating experience data in relation to premium rates and rate revisions particularly where statistical credibility would be materially improved by such combination. Once such a combining of forms is adopted, however, the insurer may not afterward again separate the experience, except with approval of the commissioner.

The data shall be for all years of issue combined and for each calendar year of experience utilized in the rate determination process (but never less than the last three years). For example, for policies originally filed under this guideline, experience since inception would be required because of the utilization of Section II.B.2b(ii). Here, it is permissible to combine experience for calendar years prior to the most recent five.

E. Evaluating Experience Data.

In determining the credibility and appropriateness of experience data, due consideration must be given to all relevant factors, such as:

1. Statistical credibility of premiums and benefits, e.g., low exposure, low loss frequency.
2. Experienced and projected trends relative to the kind of coverage, e.g., inflation in medical expenses, economic cycles affecting disability income experience.
3. The concentration of experience at early policy durations where select morbidity ~~is~~ and preliminary term reserves are~~are~~ applicable and where loss ratios are expected to be substantially lower than at later policy durations. Where this consideration is pertinent, ratios of actual to expected claims, on a select basis, will often be appropriate for an adequate evaluation.
4. The mix of business by risk classification.

STATEMENT 1986-32

Revision 4.

Section II A2: Insert the underlined wording, to clarify definition of OR and CR:

2. Definitions of Renewal Clause

OR - Optionally Renewable: renewal on an individual policy basis is at the option of the insurance company.

CR - Conditionally Renewable: renewal can be declined by class, by geographic area or for stated reasons other than deterioration of health of an individual insured.

Revision 5.

Section II B2: Delete the bracketed wording and insert the underlined wording:

2. With respect to filings of rate revisions for a form approved subject to these Guidelines, benefits will be deemed reasonable in relation to premiums provided both the following loss ratios meet the standards in II.A. of these Guidelines:
 - a. The anticipated loss ratio over the entire future period* for which the revised rates are computed to provide coverage;
 - b. The ~~■lifetime■~~ anticipated loss ratio derived by dividing (i) by (ii) where
 - (i) is the sum of the accumulated benefits from the original effective date of the form to the effective date of the revision, and the present value of future benefits, and
 - (ii) is the sum of the accumulated premiums from the original effective date of the form to the effective date of the revision, and the present value future premiums,such present values to be taken over the entire period* for which the revised rates are computed to provide coverage, and such accumulated benefits and premiums to include an explicit estimate of the actual benefits and premiums from the last date as of which and accounting has been made to the effective date of the revision. Alternatively, accumulated values and present future, values may be separated at the closest practical date to the effective date of revision, such as the end of the quarter closest to the date of filing the rate increase of the end of the immediately preceding calendar year. Interest shall be used in the calculation of these accumulated benefits and premiums and present values only if it is a significant factor in the calculation of this loss ratio.

STATEMENT 1986-32

"Accumulated benefits" include only claims incurred prior to the effective date of the revision, including claim reserves valuing claims incurred but unpaid as of such date. "Future benefits" include only the estimated value of future claims not yet incurred as of the effective date.

"Accumulated premiums" and "future premiums" mean earned premiums excluding contract reserves.

While contract reserves are therefore to be excluded from the calculation of loss ratios as provided above, the insurer should separately display the amounts of such reserves, as provided in Section ID, and describe how and to what extent such reserves have been taken into account in computing the revised rates.

STATEMENT 1986-33

September 30, 1986

Mr. Paul Joffe
Commerce, Transportation,
and Tourism Subcommittee
H2-151 House Office Building
Annex II
Washington, DC 20515

Dear Paul:

Thank you for taking the time to meet with me earlier this month to discuss the Risk Retention Act of 1986. We were pleased to note that the bill as passed by the House of Representatives on September 23, 1986, uses only the American Academy of Actuaries designation in referring to statement of opinion on loss and loss adjustment expense reserves.

As I indicated to you when we met, this is consistent with current language used by state insurance regulators. Membership in the Academy has been acknowledged by regulators in many areas as evidence of actuarial qualification. For instance, the National Association of Insurance Commissioners has so defined qualification for signing statements of actuarial opinion on a variety of annual statement blanks for financial reporting purposes.

The Academy is recognized throughout the actuarial profession as the accreditation and public interface body within the profession. All issues relating to standards of practice and discipline are handled by the Academy. The Academy promulgates professional standards, and this responsibility is important and growing. Quality of work is addressed in our official Recommendations and Interpretations, questions of ethics by our Guides and Opinions. Violation of professional standards is a serious infraction that carries with it a range of disciplinary sanctions, including expulsion from the Academy.

We hope that there will be no difficulty with the Senate in adopting this change to the language in their version of the bill. Please let me know if we can provide any background material relating to this issue that might be of use to you in your discussions with Senate staffers.

Sincerely,

(signed)

Christine Nickerson
Public Affairs Specialist

STATEMENT 1986-34

October 1, 1986

Edwin V. Kelleher
New Jersey State Department of Health
Alternative Health Systems Program
CN-367
Trenton, NJ 08625

Re: HMO Rate Filings and Financial Reporting

Dear Mr. Kelleher:

The American Academy of Actuaries is a professional association of actuaries, founded in 1965, to bring into one organization all qualified actuaries in the United States. The Academy serves the entire profession, and includes within its ranks actuaries who practice in all areas of actuarial specialization, including life and health insurance, property and liability insurance, and pension and welfare benefit plans. Members of the Academy are engaged in the practice of actuarial science as it relates to alternative delivery systems, including HMO's. The Academy views its role as a provider of objective information to public policy makers.

A memorandum from your department, dated August 18, 1986, addresses certification of HMO premium rates by an actuary - NJ HMO Act, C26: 2J-8b(2). The Academy would like to address three significant issues involved in making such certification, as suggested by your departmental memorandum:

1. Who is qualified to sign the opinion?
2. What is the opinion to say?
3. Should the actuary be "independent?"

We suggest that the term "qualified actuary" be defined as a member in good standing of the American Academy of Actuaries. The Academy is recognized throughout the actuarial profession as the accreditation body for the profession. In addition, the Academy promulgates professional standards, and this responsibility is important and growing. Quality of work is addressed in our official **Recommendations and Interpretations**, questions of ethics by our **Guides and Opinions**. Violation of professional standards is a serious infraction that carries with it a range of disciplinary sanctions, including expulsion from the Academy.

Membership in the Academy has been acknowledged by regulators in many areas as evidence of actuarial qualification. For instance, the National Association of Insurance Commissioners (NAIC) has so defined qualification for signing statements of actuarial opinion on a variety of annual statement blanks for financial reporting purposes, including the blank recommended by the NAIC for HMO financial reporting purposes. The NAIC and the regulators who have adopted its models recognize that the Academy's system of standards of practice, enforced through its **Guides to Professional Conduct** and disciplinary process, assure the professional expertise of Academy members.

The Academy's current standard for signing statements of opinion as a qualified actuary on the NAIC health maintenance organization annual

STATEMENT 1986-34

statement blank requires that the actuary should have acquired a comprehensive knowledge of :

- principles of insurance and underwriting;
- mathematics of finance and health insurance;
- principles of ratemaking;
- insurance accounting and expense analysis;
- premium, loss, expense and contingency reserves; and
- social insurance.

The Academy's literature for HMO financial reporting purpose is fairly explicit and complete. It is suggested that many of these requirements could be adapted to the rate filing arena, and we would be pleased to discuss this matter with you at greater length. According to the Academy's **Recommendation 10**, the statement of Actuarial Opinion for HMOs will express the opinion of the actuary as to whether the stated actuarial items:

- (i) are in accordance with accepted actuarial standards consistently applied and are fairly stated in accordance with sound actuarial principles,
- (ii) are based on actuarial assumptions relevant to contract provisions and appropriate to the purpose for which the Statement was prepared,
- (iii) meet the requirements of the laws of (state of domicile),
- (iv) make a good and sufficient provision for all unpaid claims and other actuarial liabilities of the corporation under the terms of its contracts and agreements,
- (v) are computed on the basis of assumptions consistent with those used in computing the corresponding items in the annual statement of the preceeding year end,
- (vi) include provision for all actuarial items which ought to be established.

In reference to the word "independent", actuaries recognize through the Guides to Professional Conduct promulgated by the Academy that the actuary has a responsibility to the public. In a very real sense, the public has an interest in the work undertaken by the actuary, despite the fact the actuary is employed (either as an employee or on a consulting basis) by a private entity in most cases.

The Academy maintains that the issue of "independence" for an actuary exists primarily due to a misunderstanding about the role of the actuary by regulators. The qualification standards and standards of practice promulgated under the auspices of the Academy apply to all members, regardless of employment status. Secondly, the question of "independence" often arises in comparison to the work of auditors. We believe that such a comparison is misplaced. Independence is necessary for auditors due to the fact that their principle task is to review and analyze the work of others; the lack of independence in such an instance creates at least the appearance of a conflict

STATEMENT 1986-34

of interest. Actuaries, on the other hand, generally are not involved in reviewing the work of others. Particularly in the area of opinion rendering, actuaries are engaged in primary, original work, and hence the need for "independence" is minimized. Finally, use of the word "independent" would be an expression of undue favoritism for the consulting actuary, which may be inappropriate in some contexts due to cost or availability considerations.

Please feel free to contact the Academy with any questions you may have in relation to the above discussed topics. Thank you for the opportunity of making these observations to you.

Sincerely yours,

(signed)

Gary D. Simms
General Counsel

STATEMENT 1986-35

October 3, 1986

Mr. David H. Rogers
Chief Deputy Insurance Commissioner
Washington Insurance Commissioner's Office
Insurance Building, AQ-21
Olympia, WA 98504

Dear Mr. Rogers:

The purpose of this letter is to respond to subparagraph (3) of the memorandum dated September 24, 1986 from the Office of the Insurance Commissioner regarding the proposed AIDS regulation and the testimony which was received on September 23. The statement submitted by the Risk Classification Committee of the Academy took the position that Section 284-90-030 of the proposed regulation was both (1) superfluous, and (2) not objectively quantifiable. We do not believe that such a statement is contradictory.

First, as mentioned in the statement submitted last week, sound actuarial practice requires actuaries expressing opinions on insurance company financial statements to consider all relevant factors affecting the adequacy of the company's reserves and other actuarial items. Therefore, the special paragraph setting forth the actuary's expectation of the effects of the AIDS epidemic on the insurer's financial position as required by the proposed regulation is unnecessary.

Second, even though the opining actuary must consider all relevant factors, it is also true that not enough data is available yet for actuaries to make reliable estimates of the impact of the AIDS epidemic on insurers. Therefore, for the time being, actuaries must simply do the best job they can with the tools presently available to them. In time, enough may become known about the impact of the AIDS epidemic to allow the actuaries to make reliable estimates.

Although not pointed out in our previous submission, Actuarial Guideline XIV (copy attached), which was approved by the NAIC earlier this year, allows the various State regulatory authorities to require the actuary expressing an opinion on an insurer's reserves to furnish an actuarial report in support of his opinion. The actuarial report may indicate the extent to which the AIDS epidemic has been considered in determining that the company's reserves are good and sufficient. However, if not , Actuarial Guideline XIV gives insurance regulators the further authority to request additional information deemed to be material to the development of the actuarial opinion. The broad scope of this new guideline allows regulators to discuss with individual companies the extent to which consideration is being given to the financial impact on the insurer of the AIDS epidemic.

We hope that this letter sheds further light on the Academy's submission, particularly our assertion that it is not contradictory to state that there is not yet enough reliable data available while at the same time suggesting that sound actuarial principles already require the opining actuary to consider the

STATEMENT 1986-35

AIDS epidemic in forming his opinion. It continues to be the Academy's position that the special paragraph in the actuarial opinion letter which would be required by Section 284-90-30 of the proposed regulation is unnecessary.

Sincerely,

(signed)

Gary E. Dahlman, M.A.A.A.
Chairperson
Committee on Life Insurance

STATEMENT 1986-35

ACTUARIAL GUIDELINE XIV

Surveillance Procedure for Review of the Actuarial Opinion for Life and Health Insurers

To assist regulators in their responsibility for surveillance of life and health insurers, the NAIC adopts the following interim procedure for use of the Actuarial Opinion to be used until such time as model legislation and/or regulations are adopted and become effective.

1. The regulator should accept Actuarial Opinions only from qualified actuaries. The educational and experience standards established by the American Academy of Actuaries for this purpose offers evidence that an individual is so qualified.
2. The regulator should determine if an opinion is qualified in any respect, or omits items from the outline provided in the instructions to the Blank. If so, a follow up with the actuary rendering the opinion as to the nature of the qualification or omission is appropriate if the opinion does not provide a satisfactory explanation.
3. The regulator should examine the circumstances where the actuary rendering the opinion differs from the prior actuary, and ascertain the reasons for the change. In some cases the regulator may wish to discuss the change with the current and prior actuaries.
4. The regulator should, if desired, obtain for reviews, documentation supporting the Actuarial Opinion. Except in matters of professional discipline, the regulator's use of these documents should be considered within the Department's guidelines for confidential information.
5. The regulator may require that the actuary furnish an Actuarial Report supporting the Actuarial Opinion. The report should conform to the standards of the American Academy of Actuaries with respect to Actuarial Reports (Opinion 3 to the Guides to Professional Conduct). It should document the methodology and approach to assumptions used in making the opinions and, additionally, provide specific details in reference to items in 6 through 10 below if such details are required by the regulator.
6. In the Actuarial Report, the actuary providing the opinion should refer to the NAIC Insurance Regulatory Information System (IRIS) ratios, point out ratio values outside the prior year's range of usual values, and provide explanations for those which are significant.
7. In the Actuarial Report, the actuary providing the opinion should make specific reference to the extent to which the good and sufficient analysis considered all the unmatured obligations of the company, in aggregate, guaranteed under the terms of its policies.
8. In the Actuarial Report, the actuary providing the opinion should make specific reference as to whether the good and sufficient analysis, with respect to annuities and other products with benefits (guaranteed or non-guaranteed) sensitive to interest rates, considered future insurance

STATEMENT 1986-35

and investment cash flows as they would emerge under a reasonable range of future interest rate scenarios, and, if so, what those considerations were.

9. In the Actuarial Report, the actuary providing the opinion should make specific reference as to whether the good and sufficient analysis considered the inter-relationships of assumptions with respect to guaranteed benefit payments, future expenses, policyowner dividends, and post-issue premium or benefit adjustments, especially among persistency, mortality, morbidity, inflation, and interest rates, and, if so, what those considerations were.
10. In the Actuarial Report, the actuary providing the opinion should document the extent to which the opinion is influenced by a continuing business assumption, and, if the impact is material, comment on the company's plan of operations with regard to this assumption as it affects assumed expenses and interest rates, and future reserve requirements.
11. A review of the documentation obtained in (4) above, undertaken or sponsored by the regulator, should:
 - a. Be done by a qualified reviewer.
 - b. Emphasize an examination of the appropriateness of the actuary's work process, methodology, and approach to assumptions.
12. If at any time during the review, the regulator requires more information deemed to be material to the development of the opinion, the company would be expected to comply with requests for such information.

STATEMENT 1986-36

**AMERICAN ACADEMY OF ACTUARIES
PENSION COMMITTEE
COMMENTS ON REVISION OF ANNUAL
INFORMATION RETURNS/REPORTS**

(F.R. Vol. 51, No. 182, p.33500-33547, September 19, 1986)

OCTOBER 20, 1986

Introduction

The Academy is a professional association of over 7,800 actuaries involved in all areas of specialization within the actuarial profession. Included within our membership are approximately 85% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable percentages of actuaries providing actuarial services for other employee benefit plans such as life, health, and disability programs.

Comments on Form 5500 Changes

Since the Academy represents about 85% of the enrolled actuaries certified under ERISA, we are vitally interested in the quality and integrity of the information on the Annual Return. We are also very interested in changes to the Annual Report which will (as mentioned in the Supplementary Information on the proposed changes):

1. Ease the overall reporting burden on plans.
2. Reduce the cost of providing the information; and,
3. Increase the efficiency of the information collection without compromising enforcement, research and policy objectives.

We also support the simplification of Form 5500 by modifying questions to require a simple yes/no response.

There is, however, one change to the Annual Return/Report that does not ease the reporting burden or reduce the cost of providing the information. Neither does it increase the efficiency of information collected by the agencies so they can perform their enforcement function more effectively.

Item 19(d) of Form 5500 asks for a letter signed by a terminated accountant or enrolled actuary explaining the reason(s) for the termination. It appears that only accountants or enrolled actuaries are singled out for this treatment. Neither the instructions nor any of the supporting material provide any clue as to why this is required for accountants or enrolled actuaries.

Item 22(d) of Form 5500-C has an identical question with the identical instructions.

Requiring a letter from the enrolled actuary stating the reason for the termination of services will not be helpful to the agencies in their enforcement or data collection roles. In many cases, the enrolled actuary

STATEMENT 1986-36

may not know (or agree with) the reason for the termination. In other cases, the plan sponsor may not state only one reason, when one or more may be involved. For example, the plan sponsor may state that the cost of the enrolled actuarial function is the reason, even though the plan sponsor may not be happy with the level of service. The enrolled actuary will only be able to disclose what was told to him/her. The quality and integrity of the information therefore will be inherently questionable.

Form 5500 must be filed for plans with 100 or more participants. Part IV of Form 5500-C must be filed only if the plan has from 26 to 99 participants. Form 5500-C must be filed only every third year; in the interim years, Form 5500-R may be filed. Form 5500-R has no requirement for a letter from the accountant or enrolled actuary if their services are terminated.

This means the agencies will receive, at best, very spotty and incomplete information. If the plan:

- has 25 or less employees, they will not need a letter signed by the accountant or enrolled actuary;
- has from 26 to 99 employees, they will only need a letter if the termination occurs in the third year (Form 5500-R can be filed in the interim);
- has 100 or more employees only then can the agencies be assured of the collection of this information each year.

The form 5500 instructions and Supplementary Information do not provide any clues as to the purpose of gathering this information. One reason might be to look for excessive patterns of terminations -- either by the plan sponsor over a period of years or by a particular provider of accounting or enrolled actuarial services. However, items 19(c) and 19(d) of Form 5500 (and items 22(c) and 22(d) of Form 5500-C) will not add to the ability of the agencies to gather this information.

The Academy suggests that items 19(c) and 19(d) of Form 5500 (as well as items 22(c) and 22(d) of Form 5500-C) not be included in any revisions at this time. The information gathered will be incomplete. It will also be spotty, since only plans with over 100 participants will be required to file this information each year. With the development of the Interim Actuarial Standards Board (IASB), the Academy is taking an active role in creating standards of practice. The development of the IASB should help meet the need of the government agencies for standards of practice that are better defined and of ways for dealing with members whose work product does not meet the standards.

Schedule B Changes

Items 6(c) through 6(e) of the Schedule B have been changed to require end-of-year values for non-multiemployer plans. The Overview mentions that this change will make the information consistent with the new requirements of FASB 87. The FASB guidelines do not apply to all employers with 100 or more employees. This new Schedule B requirement will effectively require a second valuation for these employers to produce end-of-year values.

STATEMENT 1986-36

FASB 87 allows the beginning of the year results to be projected to the end of the year. This means that there is no need to wait until the end of the year, gather the data, and calculate the required information. If the Schedule B change requires an end-of-year valuation (as opposed to being able to project from the beginning of year results), then the actuary will have only seven months to gather and calculate the information. For many plans, this is simply not possible. There gathering of compensation, hours worked, etc., often takes months. This leaves very little time to calculate the present values. This in turn means that more plans will be filing for extensions -- which reduces the timeliness of the information to the agencies.

The situation is also complicated if the plan sponsor is changing enrolled actuaries. The prior actuary will be responsible for the current Schedule B, but will not have the end-of-year information for items 6(d) and 6(e). Two actuaries may have to prepare and sign a certification for the information they prepared.

Our suggestion would be either to clarify that the end-of-year values can be projected from the beginning of the year values, or make the end-of-year values optional for a few years. This will allow time for a refinement of the methods used to calculate the information. Making the end-of-year values optional will allow a plan sponsor to make a timely filing of the Annual Return if there are extenuating circumstances where the end-of-year values cannot be calculated in seven months.

Conclusion

The Academy appreciates this opportunity to comment on the proposed changes. We believe that the three goals listed for the changes (ease reporting burden, reduce cost, and increase efficiency) are very desirable.

However, we suggest postponing the requirement for a letter from the terminated actuary stating the reasons for termination. The information will be incomplete and will increase the reporting burden.

We also suggest clarification and/or optional reporting of the end-of-year values for items 6(c) through 6(e) on Schedule B Form 5500. We believe that there are some practical difficulties with calculating end-of-year values that will result in more plans needing to file for a time extension.

We would be happy to work with any of the agencies on these items. Of course, we would also be happy to answer any questions you have on any comments.

American Academy of Actuaries Pension Committee

Larry D. Zimpleman, Chairperson

Yuan Chang	F. Jay Lingo
Darrel J. Croot	Joseph A. Lo Cicero
Paul L. Engstrom	Donald M. Overholser
Jeff Furnish	Eugene Schloss
Harper L. Garrett, Jr.	John B. Thompson
Thomas D. Levy	Michael J. Tierney

STATEMENT 1986-37

October 30, 1986

Honorable Roxani M. Gillespie, Chairman
NAIC Blanks Task Force
California Insurance Commissioner
600 South Commonwealth Avenue
Los Angeles, CA 90005

RE: Life Insurance Non-Guarantee Elements

Dear Commissioner Gillespie:

Products that contain non-guarantee charges, benefits or premiums have become a very significant portion of today's life insurance market. Universal Life insurance is only one example of such a product. Various insurance departments have expressed concern that adequate information on these new products is not being provided in the annual report to the insurance departments. As a result, the Academy appointed a task force on non-guarantee elements.

This task force recommends that the annual statement to the insurance departments be modified. The enclosed are the recommended modifications. These recommendations include a set of instructions, a set of interrogatories and a specimen actuarial opinion. The task force has no suggestion on the placement of these interrogatories in the annual statement. The NAIC may wish to include them with other interrogatories or may feel it is more productive to have them in a separate location.

If the task force can be of any assistance to you, please let me know.

Yours truly,

(signed)

William T. Tozer, Chairman
Task Force on Non-Guarantee Elements

STATEMENT 1986-37

INSTRUCTIONS

This interrogatory relates to the redetermination of non-guaranteed elements in individual life insurance and annuity contracts which provide for the adjustment of benefits, premiums or charges from time to time. For purposes of this interrogatory, the term "determination" shall mean both determination at issue and subsequent redetermination.

For the purpose of this interrogatory, "Individual Contracts" includes contracts issued under the "group" umbrella of any trust which does not have the discretion to select the insurer(s) on behalf of all the individual insureds.

The specific types of business encompassed by this interrogatory include, but are not limited to, the following types of contracts if they contain non-guaranteed elements:

1. Single and periodic premium deferred annuities.
2. Universal life contracts providing for fixed and/or flexible premiums.
3. Adjustable periodic premium life contracts, also known as indeterminate premium life contracts.
4. Single and periodic premium life contracts.
5. Renewable and convertible term insurance contracts which do not guarantee the premiums payable upon renewal, or which provide for renewal on the then current premium basis.

The term "non-guaranteed" does not apply to charges or benefits that contractually follow a separate account result or a defined index.

An actuarial opinion similar to the one below shall be provided.

DETERMINATION PROCEDURES

For all contracts subject to this interrogatory which were first introduced during the current year and for any other such contracts not previously included in this interrogatory, define the company's policy to be used in the process of determining nonguaranteed elements, with particular reference to the degree of discretion reserved for the company, together with the general methods and procedures which are expected to be used.

GENERAL INTERROGATORIES

1. Since this interrogatory was last filed, have there been any changes in the values of non-guaranteed elements on new or existing business authorized for illustration by the company? If yes, describe the changes that were made.
2. Since this interrogatory was last filed, have there been any changes in the values of nonguaranteed elements actually charged or credited? If yes, describe the changes that were made.

STATEMENT 1986-37

3. Indicate to what extent any changes described in 1 or 2 vary from the policy and/or general methods and procedures last reported in this interrogatory for the affected contracts.
4. Are the anticipated experience factors underlying any non-guaranteed elements different from current experience? If yes, describe in general terms the ways in which future experience is anticipated to differ from current experience and the non-guaranteed element factors which are affected by such anticipation.
5. State whether anticipated investment income experience factors are based on (a) a portfolio average approach, (b) an investment generation approach, or (c) other. If (b) or (c), describe the general basis used, including the investment generation groupings.
6. Describe how the company allocates anticipated experience among its various classes of business.
7. Does the undersigned believe there is a substantial probability that illustrations authorized by the company to be presented on new and existing business cannot be supported by currently anticipated experience? If yes, indicate which classes and explain.
8. Describe any aspects of the determination of non-guaranteed elements not covered above that involve material departures from the actuarial principles and practices of the American Academy of Actuaries applicable to the determination of non-guaranteed elements.

ACTUARIAL OPINION

I, (name, title), am (relationship to company) and a member of the American Academy of Actuaries. I have examined the actuarial assumptions and methods used in determining non-guaranteed elements for the individual life insurance and annuity policies of the company used for delivery in the United States. The non-guaranteed elements included are those:

- i. paid, credited, charged or determined in (year of statement); and
- ii. authorized by the company to be illustrated on new and existing business during (year of statement).

My examination included such review of the actuarial assumptions and methods of the underlying basic records and such tests of the actuarial calculations as I considered necessary. In my opinion, the non-guaranteed elements described above have been determined in accordance with generally accepted actuarial principles and practices applicable to the determination of non-guaranteed elements, except as described above.

Signature
Date

STATEMENT 1986-37

October 30, 1986

Honorable James M. Thomson, Chairman
NAIC
Market Conduct Surveillance Task Force
State Corporation Commission
P.O. Box 1157
Richmond, VA 23209

RE: NAIC Model Life Insurance Advertising Regulation

Dear Commissioner Thomson:

Products that contain non-guarantee charges, benefits or premiums have become a very significant portion of today's life insurance market. Universal Life insurance is only one example of such a product. When the NAIC model life insurance advertising regulation was adopted in 1976 such products were not a significant concern.

Various insurance departments and members of the American Academy of Actuaries have expressed concerns about advertising practices used with non-guarantee element products. As a result, the Academy appointed a task force on non-guarantee elements. This task force recommends that the NAIC model life insurance advertising regulation be amended to incorporate the enclosed changes.

If the task force can be of any assistance to you, please let me know.

Yours truly,

(signed)

William T. Tozer, Chairman
Task Force on Non-Guaranteed Elements

STATEMENT 1986-37

**RECOMMENDED CHANGE TO THE NAIC MODEL LIFE INSURANCE
ADVERTISING REGULATION**

Add to Section V: "17. For life insurance products with non-guaranteed elements, other than those that contractually follow a separate account result or a defined index, the following shall apply:

- (a) An advertisement shall not utilize or describe non-guaranteed elements in a manner which is misleading or has the capacity or tendency to mislead.
- (b) An advertisement shall not state or imply that any non-guaranteed element is guaranteed. No illustration of non-guaranteed elements shall illustrate benefits greater than those currently being provided by the company unless such illustration of non-guaranteed elements has a basis that has been publicly declared by the company with an effective date for new issues not more than three months subsequent to the date of illustration.
- (c) Any illustrations or statements containing or based upon non-guaranteed elements shall set forth with equal prominence comparable illustrations or statements containing or based upon the guaranteed elements.
- (d) Any advertisement or illustration shall state when and under what conditions the company intends to change any non-guaranteed elements."

STATEMENT 1986-37

October 30, 1986

Honorable Thomas P. Fox, Chairman
NAIC Life Cost Disclosure Task Force
Commissioner of Insurance
P.O. Box 7873
123 W. Washington Avenue
Madison, WI 53707

RE: NAIC Model Life Insurance Cost Disclosure Regulation

Dear Commissioner Fox:

Products that contain non-guarantee charges, benefits or premiums have become a very significant portion of today's life insurance market. Universal Life insurance is only one example of such a product.

Various insurance departments and members of the American Academy of Actuaries have expressed concerns about sales disclosures used with non-guarantee element products. As a result, the Academy appointed a task force on non-guarantee elements. This task force recommends that the NAIC model life insurance disclosure regulation be amended to incorporate the enclosed changes.

At the time the latest revision was made in the model life insurance disclosure regulation generally accepted actuarial standards had not established for dividends paid by stock life insurance companies. As a result the revisions apply only to mutual life insurance companies. Generally accepted actuarial practices have now been developed for dividends paid by stock life insurance companies. As a result we recommend that any references to mutual life insurance companies in a model regulation be eliminated.

If the task force can be of any assistance to you, please let me know.

Yours truly,

(signed)

William T. Tozer, Chairman
Task Force on Non-Guarantee Elements

STATEMENT 1986-37

**RECOMMENDED CHANGES TO THE NAIC MODEL LIFE INSURANCE
DISCLOSURE REGULATION**

It is recommended that any reference in this Model Regulation limiting its application to mutual life insurance companies be eliminated.

The following be added between paragraph D and E of Section 4. "Current Rate Policy. The Current Rate Policy describes when and under what conditions the company intends to change any Current Rate Schedule."

Add the following to the end of Section 4, paragraph M, sub-paragraph 9: "...and the Current Rate Policy for changing any Current Rate Schedule."

Add the following to Section 5, paragraph C: "3. If the life insurance company materially changes its Current Rate Policy on existing contracts, it shall, no later than the first contract anniversary following the change, advise each affected contract owner residing in the state of such change."

STATEMENT 1986-38

November 3, 1986

Mr. Wayne S. Upton
Financial Accounting Standards Board
High Ridge Park
Stamford, CT 06905

Dear Wayne:

Some time ago, the American Academy of Actuaries' Committee on Life Insurance Financial Reporting Principles (COLIFRP) promised to prepare for the FASB a series of profit analyses of universal life insurance policies sold by the life insurance industry today. Enclosed for your review are the results of eleven products sold by nine different companies with substantial volume of universal life business in force.

This package includes computer output, several summary exhibits and a memorandum from Dan Kunesh of Tillinghast describing the materials being sent to you. This information was prepared by Tillinghast under the direction of Mr. Kunesh. Our objective was to present pricing (profit) test data in a consistent manner so it would be easier for you to analyze and formulate conclusions in your mind about how companies approach the pricing of this popular product today.

If you have questions about this data, please either call Dan Kunesh at (312) 967-4300 or David Whittemore, also of Tillinghast, at (214) 363-2451. Please call me if we can be of any further assistance to you or offer you any more evaluative information.

Very truly yours,

(signed)

Edward S. Silins
Chairman, Committee on Life Insurance
Financial Reporting Principles
American Academy of Actuaries

STATEMENT 1986-38

MEMORANDUM

TO: Mr. Edward S. Silins, Chairman
Committee on Life Insurance Financial Reporting Principles
American Academy of Actuaries

FROM: Daniel J. Kunesh
Tillinghast, Nelson & Warren, Inc.

DATE: November 3, 1986

SUBJECT: Profit Studies for Universal Life

At your request, we have prepared profit studies of eleven universal life insurance products sold by nine companies who have a substantial amount of universal life business in force. This package was assembled from information sent to us by the various companies. For obvious reasons, we have withheld the names of companies and substituted letter codes (A through I).

Our instructions were to present data in a consistent manner so that a reader without special actuarial training could formulate conclusions about how universal life is priced. For this purpose, we have assumed the following in all cases:

- Issue age 35 male; nonsmoker.
- Level death benefit option per unit issued (\$1000) with a corridor provision in later policy years to comply with the current tax laws.
- Average size policy of \$100,000.
- No reinsurance.
- A \$9 per unit annual premium.
- A monthly premium mode.
- A 36.8% federal income tax rate.
- Discount rates of the pre-tax assumed investment rate, 10%, 15% and 20%.
- Statutory analysis.

The present value of future statutory book profits were discounted at the above discount rates to age 100 for companies A through D and for 30 years for companies E through I. This resulted from running the tests in two different batches, presumably by different people. I am sorry for this variance, but the report on the present value of future statutory book profits should be minimal due to the effect of the discount rates used.

STATEMENT 1986-38

We present the following for each product:

1. A summary page of "profit test assumptions" outlining all major assumptions.
2. Actual computer output from our Tillinghast "PROFIT" software, offering seven or eight pages of data.
3. Several summary exhibits highlighting certain aspects of the results noted.

The computer output can be described as follows:

1. Page 1 summarizes some of the major assumptions entered into our system.
2. Page 2 continues the assumption layout and offers the present value at issue of key components of profit. Note the table on the right hand side of the page shows these present values for each major component of income and expense. At the lower left hand corner we show the number of years before statutory surplus for the policy first becomes positive.
3. Page 3 lays out the year to year annual mortality and withdrawal rates, the dollars of death benefits in force (per unit) and the reduction in this death benefit each year due to mortality and withdrawal. Also shown are discount factors reflecting only the discount rates themselves.
4. Page 4 presents a year to year display of various projection information.
5. Page 5 offers a year to year display of income and expense data per unit of insurance issued. Of particular interest are columns (1), (2), (3), (4), (10), (11) and (12). Annual book profits are on a statutory pre-tax basis.
6. Page 6 gives similar profit data per unit issued both before and after taxes plus the accumulation of after tax statutory surplus. Columns (8) through (12) gives the present value of all future statutory book profits measured from the beginning of the year.
7. Page 7 is of particular interest. It offers the year by year sources of gain or loss on a pre-tax basis. Column (11), mortality gain is equal to columns (2) minus (3). Column (12), interest gain, is equal to column (6) minus (5). Column (13), loading gain, is equal to columns (8) plus (9) minus (10). Therefore, "loading gain" includes any income derived from surrender charges. I am told this report has not been used much by Tillinghast and there might be some small difference between what is shown in column (14) with that in column (12) of page 5 (rounding differences).
8. Either at the bottom of page 7 or on page 8, we present a summary of the discounted pretax statutory book profits at issue by source.

We are also including five exhibits which either provide additional information or summarize key data from the computer output.

1. Exhibit 1 displays the contractual loads charged the policyholder for each of the eleven plans.

STATEMENT 1986-38

2. Exhibit 2 presents a summary of the present value of future statutory book profits by source and in total discounted at a 15% rate of return. Also shown is the policy year during which the statutory surplus invested in the policy is first recovered and the spread between the assumed earned rate of return and the assumed credited rate. Some observations are also presented.
3. Exhibit 3 displays a sampling of the cost of insurance rates (annual) with the assumed experience rates of mortality.
4. Exhibit 4 translates all acquisition and maintenance expenses as a percent of premium for easy comparison between companies. Also shown is the assumed inflation rate operating on per policy and per unit costs and the first year and the ultimate lapse rates.
5. Exhibit 5 displays the absolute present value, using a 15% discount rate, of key income and expense items per unit of insurance issued. Also shown are the dollars of pre-tax profit and profit as a percent of premium.

Several observations can be made from reading this report.

1. Except for two companies' products, profits margins are slim.
2. The present value of premium varies primarily with the level of assumed withdrawal rates. Remember in all cases, we assume a level annual \$9 premium per unit issued.
3. Investment income varies due to a combination of the assumed earned rate and the level of assumed withdrawal rates.
4. Death benefits paid range from 10 to 15% of premium.
5. Surrender benefits paid range from 25 to 37% of premium.
6. The "reserve accrual" in large part represents amounts set aside as cash values for policyholders who keep their policies in force. They vary substantially dependent upon a combination of the assumed earned rate of return and the assumed withdrawal rates.
7. Total expenses vary from 24 and 43% of premium expected to be received, and average around 35% of premium.

Hopefully, this information will be helpful to the FASB in their evaluation of the pricing of universal life products found in the market today. Please call if you have any questions or comments.

STATEMENT 1986-38

EXHIBIT 1 SUMMARY OF POLICY LOADS

Company A:

Percent of Premium: 10% all years
Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1	\$51
2-5	27
6+	0

Per \$1000 of initial specified amount: \$0

Surrender Charges:

<u>Year</u>	<u>SC</u>	<u>Year</u>	<u>SC</u>
1	\$1500	6	\$800
2	1400	7	600
3	1300	8	400
4	1200	9	200
5	1000	10	0

Company B

Percent of Premium: 7.75% all years
Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$51

Per \$1000 of initial specified amount: \$0

Surrender Charges: \$16.80 per \$1000 of specified amount for 5 years grading linearly to 0 in year 15.

Company C:

Percent of Premium: 4% all years
Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$42

Per \$1000 of initial specified amount: \$0

STATEMENT 1986-38

Surrender Charges:

<u>Year</u>	<u>SC</u>	<u>Year</u>	<u>SC</u>
1	\$ 300	9	\$ 900
2	675	10	750
3	1041	11	600
4	1422	12	450
5	1500	13	300
6	1350	14	150
7	1200	15	0
8	1050		

Company D Product I

Percent of Premium: 0.00% all years

Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$60

Per \$1000 of initial specified amount: \$0

Surrender Charges: \$8.30 per \$1000 of specified amount grading linearly to 0 in the 11th year.

Company D Product II

Percent of Premium: 0.00% all years

Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$60

Per \$1000 of initial specified amount: \$0

Surrender Charges: \$9.06 per \$1000 of specified amount grading linearly to 0 in the 11th year.

Company E:

Percent of Premium: 0% all years

Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$24

Per \$1000 of initial specified amount: \$0

STATEMENT 1986-38

Surrender Charges:

<u>Year</u>	<u>SC</u>	<u>Year</u>	<u>SC</u>
1	\$ 557	11	\$1774
2	1175	12	1577
3	1872	13	1380
4	2103	14	1183
5	2083	15	985
6	2062	16	788
7	2040	17	591
8	2018	18	394
9	1995	19	197
10	1971	20	0

Also deduct 12 months excess interest upon surrender.

Company F:

Percent of Premium: 3% all years
Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$36

Per \$1000 of initial specified amount: \$0

Surrender Charges:

<u>Year</u>	<u>SC</u>	<u>Year</u>	<u>SC</u>
1	\$2162	9	\$1873
2	2144	10	1703
3	2125	11	1476
4	2106	12	1192
5	2086	13	851
6	2065	14	454
7	2043	15	0
8	1986		

Company G:

Percent of Premium: 3% all years
Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$36

Per \$1000 of initial specified amount: \$0

STATEMENT 1986-38

Surrender Charges:

<u>Year</u>	<u>SC</u>	<u>Year</u>	<u>SC</u>
1	\$1750	6	\$1590
2	1718	7	1280
3	1686	8	970
4	1654	9	660
5	1622	10	350
		11	0

Company H:

Percent of Premium: 3% all years
Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$36

Per \$1000 of initial specified amount: \$0

Surrender Charges:

<u>Year</u>	<u>SC</u>	<u>Year</u>	<u>SC</u>
1	\$2160	6	\$ 960
2	1920	7	720
3	1680	8	480
4	1440	9	240
5	1200	10	0

Company I Product 1

Percent of Premium: 8.50% all years
Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$ 0

Excess Interest Exclusion: \$1000
Per \$1000 of initial specified amount: \$0

Surrender Charges: \$5.76 per \$1000 of specified amount for the first 5 years
grading linearly to 0 in year 15.

Company I Product 2

Percent of Premium: 8.50% all years
Per Policy (1/12th assessed monthly):

<u>Year</u>	<u>Load</u>
1+	\$0

Excess Interest Exclusion: \$1000
Per \$1000 of initial specified amount: \$5.76 in first year.

STATEMENT 1986-38

EXHIBIT 2

**Profit by Source - UL Products
Using a 15% Discount Rate**

<u>Company</u>	<u>Profit - Pre-FII</u>	<u>Mortality</u>	<u>Interest</u>	<u>Loading</u>	<u>Total</u>	<u>Break Even Year</u>	<u>Investment Spread</u>
A	6.53	.44		(5.38)	1.59	7	1.5%
B	6.62	.51		(1.44)	5.69	4	2.5%
C	3.99	(.70)		(.61)	2.68	2	0.75%
D-1	6.22	1.18		(5.61)	1.78	8	2.0%
D-2	6.19	1.17		(7.51)	(.20)	14	2.0%
E	3.84	(5.14)		4.49	3.18	4	2.01%
F	3.85	2.73		(6.30)	.29	10	1.5%
G	NA	NA		NA	.52	15	1.5%
H	4.71	3.35		(7.37)	.69	14	1.75%
I-1	4.70	3.40		(6.39)	1.71	8	1.75%
I-2	4.75	2.15		(2.25)	4.65	3	1.75%

STATEMENT 1986-38

OBSERVATIONS

1. Greatest source of profits is from excess mortality charges.
2. Most companies display a loss from loading, even after considering back end load surrender charges. In other words, assumed expenses exceed the amounts that policyholders are charged for expenses, on a present value basis.
3. Our model assumed a \$9 premium per unit in all cases and a \$100,000 average size policy. Many companies encourage and receive higher levels of premium per unit at age 35. This would tend to increase the estimated gain from interest, since contract funds are larger and reduce mortality gains as there is less true risk amount with a larger fund balance per unit.
4. A larger average size policy (a likely event for many companies), would tend to reduce the loss from loading because "per policy" costs are spread over a larger base.
5. Break even years vary substantially.
6. All companies assumed a constant spread between the earned and credited rates of interest.

EXHIBIT 3

Comparison of Cost of Insurance Rates with Assumed Experience Mortality Rates per \$1000 of Death Benefit

**Cost of Insurance Rate Per 1000/
Assumed Experience Mortality Rate Per 1000**

<u>Company</u>	<u>Year 1</u>	<u>Year 5</u>	<u>Year 10</u>
A	1.73/.37	2.24/.70	3.09/1.24
B	2.00/.50	2.67/1.01	1.83/1.89
C	1.34/.47	1.68/.87	2.20/1.49
D-1	1.68/.43	2.26/.78	2.83/1.41
D-2	1.68/.43	2.24/.78	2.81/1.41
E	1.47/.46	1.78/.93	2.48/1.73
F	1.39/.49	1.78/.92	2.51/1.57
G	N.A./.36	N.A./.73	N.A./1.36
H	1.66/.50	2.00/.97	2.49/1.65
I-1	1.49/.46	1.79/.91	2.62/1.63
I-2	1.50/.46	1.80/.91	2.65/1.63

OBSERVATION

There appears to be less absolute variance in the level of assumed mortality than in the current cost of insurance rates.

STATEMENT 1986-38

EXHIBIT 4

Summary of Expenses, Inflation Rate and Select Lapse Rates

Company	Total Expenses		Inflation Rate	Lapse Rates	
	As a percent of premium Acquisition *	Maintenance **		1st Year	Ultimate
A	136.6%	13.3%	5.5%	20%	6%
B	124.3	10.4	0	15	10
C	80.7	6.7	6.25	13.2	4.8
D-1	114.1	12.3	0	12.5	10
D-2	114.1	12.3	0	12.5	10
E	124.4	11.0	5.5	9.8	6.7
F	124.0	8.7	3.0	21	5
G	121.7	9.0	0	15	5
H	117.6	9.3	7.75	15	6
I-1	83.5	***	7.0	7.5	6
I-2	83.5	***	7.0	7.5	6

* Includes excess first year commissions, per policy and per unit costs. First year only.

** Includes ultimate renewal commissions and premium taxes.

*** INDETERMINATE

STATEMENT 1986-38

EXHIBIT 5

Summary of the Present Value (15% Discount Rate) of
Select Income/Expense Items and Pre-tax Profits

<u>Company</u>	<u>Premium</u>	<u>Investment Income</u>	<u>Death Benefits</u>	<u>Surrender Benefits</u>	<u>Reserve Accrual</u>	<u>Total Expenses</u>	<u>Pre-Tax Profit</u>	<u>Profit as a % of Premium</u>
A	\$33.88	\$14.73	\$3.31	\$8.68	\$20.57	\$14.45	\$1.58	4.7%
B	32.53	10.91	3.99	8.09	12.98	12.66	5.72	17.6
C	40.05	29.12	5.85	13.25	37.77	9.52	2.76	6.9
D-1	38.67	14.09	3.97	12.48	20.57	13.96	1.79	4.6
- 255 -	D-2	38.67	15.13	3.98	13.50	22.22	14.30	<.19>
E	37.45	14.77	4.63	8.79	19.00	14.93	4.05	10.8
F	34.36	25.15	4.32	8.94	33.31	12.67	.27	0.8
G	38.53	30.46	4.21	11.51	39.46	13.28	.52	1.3
H	36.21	26.80	4.61	11.85	33.05	12.78	.71	2.0
I-1	40.33	28.07	4.94	14.72	34.42	12.62	1.69	4.2
I-2	40.33	22.27	4.93	11.94	28.24	12.84	4.65	11.5

STATEMENT 1986-39

**STATEMENT BEFORE THE NAIC'S
WORKING GROUP ON LOSS RESERVE DISCOUNTING**

NOVEMBER 19, 1986

My name is Stephen P. Lowe, and I am Chairman of the American Academy of Actuaries' Committee on Property and Liability Insurance Financial Reporting. The Academy is a professional association of actuaries which was formed in 1965 to bring together all qualified actuaries in the United States. The Academy serves the entire profession, including in its membership over 8,000 actuaries working in all areas of specialization: life, health, pension and property and liability. Members are employed by insurance companies, consulting firms, government, academic institutions, and a growing number of industries.

This statement represents the consensus of views of the Committee on Property and Liability Financial Reporting of the American Academy of Actuaries on the subject of discounting of property and liability loss and loss adjustment expense reserves for statutory financial reporting purposes.

Membership on the Committee preparing these comments has been drawn from a wide range of interests and perspectives so as to give the broadest possible range of views on this subject. As with many other professional organizations, the structure of the Academy and the timing required in responding to various public issues places the responsibility of preparing comments on such issues on its Committees, on the assumption that they are representative generally of the Academy's entire membership.

The issue of whether loss and loss expense reserves should be discounted to reflect the time value of money has received an increasing amount of attention over the last several years. Various bodies such as the AICPA, the NAIC, and the GAO have published studies analyzing the issue. Most recently, Congress has passed legislation that revises the taxation of property and liability insurers by mandating discounting in the calculation of taxable income.

The discounting issue is controversial, and today there continues to be both strong proponents and strong opponents of the concept. Even within the actuarial community, legitimate differences of opinion exist as to the circumstances under which discounting is appropriate.

The controversy over discounting stems from the complexity of the issues involved. The use of discounted reserves would represent a fundamental change in the presentation of statutory operating income and financial position. Traditional measures of performance and strength would have to be revised. The mechanics of discounting would add an additional layer of complexity to reserve calculations. Technical issues such as the choice of an appropriate interest rate would have to be resolved.

Finally, since financial statements are used by various audiences for different purposes, it is possible that different conclusions as to the discounting issue may be appropriate in different contexts.

STATEMENT 1986-39

Key Principles and Issues

Most, if not all parties should be able to agree that, in an academic sense, the most meaningful economic measure of the current value of any future liability is its discounted present value. As a concept, the discounting of future payments to reflect the time value of money is well established, both in actuarial and general financial literature. The figure that results from such a calculation represents the cost of funding currently those future payments.

In many cases (perhaps in the majority of cases), it is possible to compute a property and liability insurer's loss and loss expense liabilities on a discounted basis. It may also be true that the resulting figure may constitute the best economic measure of those liabilities. However, this does not imply in any way that discounted liabilities necessarily constitute appropriate reserves for statutory (or any other) financial reporting purposes.

This distinction is subtle, but important.

The determination of the appropriate basis for any asset or liability in any financial statement presentation is dependent on the intended purpose and use of that statement. Different bases are appropriate for different purposes.

We are certain that this Working Group, and the entire NAIC, is quite capable of defining and articulating the purposes of statutory accounting. And, it would be presumptuous of our organization to assume that task. However, in the NAIC's own literature there is a wealth of discussion on this topic. From that material, three general principles can be drawn:

1. The purpose of statutory financial reporting is to provide regulators with information by which they can test the ability of each insurer to meet its policyholder obligations.
2. The orientation of statutory accounting is therefore quite naturally towards the balance sheet, with the income statement serving mainly as a bridge between balance sheets at successive points in time.
3. In keeping with the regulatory goal of protecting the interests of policyholders, the statutory balance sheet presentation is intentionally conservative. It has been stated that the intent is that the balance sheet be prepared on a liquidating basis, with an emphasis on the solvency of the insurer.

In the case of loss and loss expense liabilities, conservatism has traditionally been achieved by the use of full-value, undiscounted reserves in the statutory statement. Recognizing that the liabilities as of the date of the statement are estimated, and that the actual ultimate liabilities could subsequently turn out to be greater than the estimate, the use of full-value reserves provides an implicit margin of conservatism.

Thus, the fundamental issue is not whether discounting is "right" or "wrong", but whether the degree of conservatism inherent in the use of full value reserves is appropriate, or whether the public policy objective of assuring insurer solvency can be maintained in a statutory financial reporting system that permits the use of discounted reserves. In addressing this issue, regulators will quite properly want to look at both what is to be gained versus what is to be lost by any movement towards discounting.

STATEMENT 1986-39

Our committee is not in a position to make a recommendation either for or against the use of discounted reserves for statutory financial reporting purposes. Clearly, more than actuarial issues are involved in addressing this question. However, we would like to take this opportunity to offer our assistance to this Working Group, and the entire NAIC, in analyzing the financial implication of this complex question.

In the balance of this testimony, we would like to provide the Working Group with some observations and additional information on the technical and actuarial issues related to the discounting questions. These comments are intended to respond to the specific questions raised by Chairman Washburn in his announcement of this hearing.

The Need For Margins of Conservatism in Reserves

As has already been noted, the use of full-value reserves produces an implicit margin of conservatism in the balance sheet, which many regulators consider to be appropriate for statutory financial reporting purposes. Our committee would like to offer several observations on the subject of risk margins.

- The need for margins of conservatism in loss reserves is well established in actuarial as well as regulatory literature. This need stems from the uncertainties associated with the estimation of these liabilities. The greater the uncertainties, the greater is the need for conservatism.

This principle is succinctly summarized in the Academy's exposure draft of Interpretation 8-B, which discusses the standards by which actuaries should measure the adequacy of loss reserves:

"In evaluating reserves, consideration should be given to the insurer's responsibilities to policyholders and claimants, as well as the inherent variability of conditions affecting future claim payments. Such consideration will often result in the judgment that reserves should be estimated on a conservative basis. In such cases the degree of conservatism is a matter of actuarial judgment and depends upon the actuary's confidence in the reserve estimate. Estimates may be conservative due to the actuary's selection of methodology and assumptions, or by including an explicit provision for adverse development."

While Interpretation 8-B has not progressed beyond the exposure draft stage, it is expected that the new Interim Actuarial Standards Board will act on it (or a similar document) in 1987.

- As the length of time over which claims are settled has increased, and the level of interest rates has risen, the size of the implicit margin inherent in full-value reserves has increased substantially. While the risks associated with the liabilities have also increased due to the lengthening of the claim settlement period, it is not clear that the increase in the implicit margin is necessary to support the increase in risk. Some actuaries believe that, in an 8-9% interest rate environment, the risk margins inherent in full-value reserves are too large.
- The Casualty Actuarial Society's Committee on Theory of Risk is actively pursuing the development of the necessary theory and principles to support the use of explicit risk margins in loss reserves. While this

STATEMENT 1986-39

project is quite necessarily a long-term goal, many actuaries feel it is a necessary precedent to any whole-scale adoption of discounting.

The choice of the degree of conservatism required in statutory loss and loss expense reserves is ultimately a matter of public policy. The higher the standard, the greater the degree of solvency protection afforded. However, higher standards of conservatism do create higher costs for insurance consumers. Regulators establish the overall capital requirements for the industry not only by setting such standards as the maximum acceptable premium-to-surplus ratio, but also by regulating what is and what is not includable in statutory surplus. Insurance prices must, in the long run, provide an adequate return on the insurer's capital. This includes both the capital that is included in statutory surplus, and any other capital that is "not admitted." The additional capital tied up in the reserves due to higher reserve standards implies the need for additional returns on that additional capital. These extra returns must be provided for in the prices charged insurance consumers.

This last point is, perhaps, the principal reason why the debate over discounting continues with such a sense of urgency. Some actuaries believe that the standard that reserves be established on a full-value basis implies overall capital requirements that are too stringent. The result, they contend, is unnecessarily reduced capacity, and higher than necessary prices.

What Reserves Should Be Discounted?

All loss and loss expense reserves for all lines of business represent provisions for future payments in satisfaction of the associated liabilities. It is the consensus of our Committee that there is no actuarial basis for restricting discounting to certain lines of business, types of reserves, or situations.

In general, if a loss or loss expense liability is reasonably fixed and determinable, then the timing of the associated payments is also reasonably fixed and determinable. The estimation of the amounts and the timing of liabilities rely on the same database: the historical development of past loss and loss expense obligations. Standard actuarial practice is to adjust the historical development to reflect anticipated future conditions, and to use the resulting pattern of development to project the amount of the ultimate liabilities. The same data and a slightly modified process can be used to project the timing of payment of those liabilities.

What Interest Rate Should be Employed?

In any review of an insurer's balance sheet, the fundamental test of solvency is embodied in the question: do the available assets represent a good and sufficient provision for the associated liabilities? If this question is to be directly answerable from the balance sheet then the liabilities must be valued in a manner consistent with the underlying assets.

Currently, bonds are carried on the balance sheet at "amortized costs." This valuation is predicated on the assumption that the bonds will be held to maturity. The use of amortized cost in the balance sheet stabilized the company's assets (and thereby its statutory surplus) by not subjecting the bonds to fluctuations in market value as interest rates rise and fall.

STATEMENT 1986-39

As interest rates rose in the late 1970's, many companies experienced a significant decline in the market value of their bond portfolio. Under these circumstances, regulators and others have questioned the appropriateness of the continued use of amortized cost; in many instances it significantly overstated the liquidation value of the company's bond portfolio.

The choice of the valuation basis of the assets should be resolved prior to any determination of the discount rate for the liabilities.

If bonds continue to be carried at amortized costs in the balance sheet, then it is appropriate to base the interest rate for discounting purposes on the underlying portfolio yield rate computed using amortized cost values. Beyond this general statement, the specified determination of the appropriate rate is dependent on such factors at the extent of the mismatch between the expected maturities of the assets and liabilities.

Alternatively, if bonds are carried at their market value, then it is appropriate to base the interest rate for discounting purposes on market rates.

It is also worthwhile to note that, because the maturities of the loss and loss expense liabilities vary by line and accident year, the use of a single interest rate for all lines and years would not necessarily be appropriate.

Our committee is aware of, and has the responsibility for monitoring, the emerging concept of the valuation actuary in the life insurance area. Much of the impetus for the valuation actuary stems from financial statement presentation issues similar to those enumerated above. It well may be that much of what is being developed in the valuation actuary arena will ultimately be transportable to the property and liability area.

Financial Statement Issues

Several proposals have been put forth as to how and where any discount that is permitted would be reflected in the balance sheet and income statement, as well as elsewhere in the convention blank.

Our Committee believes that, if discounting is permitted in statutory accounting, then the discounted reserves should be utilized in calculating income and surplus. However, we would recommend that, at least in transition, the amount of any discount continue to be isolated on the balance sheet. This would permit users of financial statements to roughly adjust to an undiscounted basis for comparison with prior years. The effect of the discount should be isolated in many other schedules in the statement, as well.

We also support the continuation of Schedule P on an undiscounted basis, so that the estimates of the ultimate liabilities can continue to be tested. In addition, since Schedule P already contains historical payments and reserves by accident year, that schedule would be a logical place for additional information on the timing of projected future payments and other information relating to discounting to be reported.

Actuarial Opinions on Loss Reserve Adequacy

An annual actuarial opinion on the adequacy of loss and loss adjustment expense reserves is an appropriate regulatory requirement, and has already been recognized as such by the NAIC. Instructions to the NAIC Fire and

STATEMENT 1986-39

Casualty Statement contain a provision for such an opinion at the discretion of the domiciliary insurance commissioner. If discounting of reserves becomes more prevalent, the need for actuarial opinions will be increased.

However, we do not believe a requirement that the actuary be independent of the company is either necessary or appropriate. Actuarial opinions are not the same as auditor opinions. Actuarial opinions involve a formal statement by someone who is taking responsibility for original work. By contrast, auditor opinions, by definition, involve the outside review of work performed by others and independence is thus a requirement. In addition, company employed actuaries have detailed knowledge of the specific coverages, risks and operating characteristics of their company. To disqualify these people may, therefore, weaken the quality of the reserve estimate.

Actuarial opinions are being satisfactorily provided today by both company employed and consulting actuaries; this would continue to be the case if discounting were to become more prevalent. The same professional standards are imposed by the Academy regardless of the employment affiliation of the actuary providing the opinion.

Conclusion

The issue of whether loss and loss expense reserves should be discounted is complex, involving public policy issues as to the degree of conservatism desired in the financial statement, and technical issues as to specific methods and assumptions. Many of the technical issues are currently under study by the actuarial profession; that study will continue and is likely to accelerate in the future. However, it is equally clear that the development of principles and standards of practice necessary to support reserving on a discounted basis is a long term effort.

Our committee would be happy to assist this Working Group, and the NAIC in general, in the further exploration and eventual resolution of these issues.

AMERICAN ACADEMY OF ACTUARIES COMMITTEE ON PROPERTY AND LIABILITY INSURANCE FINANCIAL REPORTING

Stephen P. Lowe, Chairman
Dean R. Anderson
Robert Arvanitis
Vincent P. Connor
Robert A. Daino
Walter J. Fitzgibbon, Jr.

Owen M. Gleeson
Robert P. Irvan
Alan Kaufman
Frederick O. Kist
Ronald F. Wiser
Walter C. Wright, III

STATEMENT 1986-40

November 21, 1986

Director of Research and Technical Activities
Financial Accounting Standards Board
Life Reference 025
High Ridge Park
P. O. Box 3821
Stamford, CT 06905-0821

Gentlemen:

You have requested comment on the Exposure Draft of "Accounting for Income Taxes" No. 025, September 2, 1986. This statement is submitted by the Committee on Life Insurance Financial Reporting of the American Academy of Actuaries. Our comments relate primarily to the long term aspects of life insurance rather than property and casualty companies, although some of the areas will undoubtedly overlap. I was informed that receiving our letter shortly after the November 17th deadline would not be a problem.

1. Despite the practical advice of Paragraph 16, Paragraph 15 calls for the future scheduling of the emergence of net taxable income due to differences between the tax basis and financial reporting basis of assets or liabilities existing at the financial reporting date. For life insurance companies qualifying for small company treatment (under \$500 million of assets and under \$15 million of taxable income) the accuracy of that forward projection will be crucial to the validity of the deferred tax liability determination. Under current law, three major marginal tax rate situations exist for such a company. On taxable income less than \$3,000,000, the marginal rate will be 13.6%. For taxable income over \$15,000,000, the marginal rate will be 34%, and for taxable income inbetween, the rate will increase continuously from 18.7% to 59.5% at \$14,999,999 of taxable income.

Since great care will need to be taken to project the timing and amount of emerging taxes, the appeal of discounting the resulting taxes in an industry which discounts most of its liabilities is very great.

2. The first sentence in Paragraph 13 forbidding generating profits in future years appears to conflict with life insurance purchase accounting practice where both future profits and the tax liability generated are determined and discounted to the purchase date.
3. Within current life insurance purchase accounting practice, the present value of the tax liability to be generated by release or the difference between book and tax basis values is held in the policy reserve value. The exposure draft calls for this item to be broken out and its release treated as a tax expense item. The exposure draft appears to assume that this tax liability will not need to be recalculated (Paragraph 31), but the fact that it is now a discounted number (the difference between two discounted values is a discounted value) might lead to a conclusion that it should be redetermined to a nondiscounted value, with appropriate

STATEMENT 1986-40

changes elsewhere in the balance sheet. Some companies have put tax effects directly into their reserve calculation mechanics, and as a result, the pieces would be difficult to separate. This will lead to further difficulties.

4. In a life insurance company purchase which has involved a Sec. 334 or Sec. 338 tax liquidation, some substantial future tax deductions are generated. Practice has seemed to vary as to whether the value of these deductions are set up in the purchase date opening balance sheet as a financial reporting asset. The Exposure Draft would seem to greatly inhibit setting up such an asset except as an offset to the previous book/tax deferred tax liability and then subject to timing demonstrations which would appear to be in conflict with Paragraph 13. If no asset is set up, must the benefit of the realization of such deductions act in the same fashion as "operating loss or tax credit carry-forward" described in Paragraph 20 (i.e., first against positive goodwill)?
5. We urge the FASB to move forward on a review if the discounting question in general. In particular, favorable resolution of this investigation in favor of discounting would greatly ease the problems associated with setting up a deferred tax liability with respect to Indefinite Reversal items. Specifically in relation to deferred tax liability for amounts related to the Policyholder's Surplus Account, discounting would substantially reduce or eliminate the establishment of potentially large amounts which are unlikely to ever be paid in future years. Hopefully, the deferred implementation of applying the new rules is in recognition of this possibility.

We would be happy to explain our concerns further should the FASB or staff desire.

Sincerely,

(signed)

Edward S. Silins
Chairman
Committee on Financial Reporting

STATEMENT 1986-41

November 21, 1986

Subject: NAIC Reserve Standards for Health Insurance

Attached is a copy of the follow-up material sent to the NAIC Actuarial Task Force on the proposed NAIC Health Reserve Standards, in response to their request for supplementary information at the October 10 meeting of the Task Force.

I apologize for being somewhat tardy with this: I rushed to get it all together in time to send it to Ted Becker for his November 1 mailing deadline, and then got sidetracked awhile on some other deadline work before getting around to running off copies for AAA subcommittee members and others interested.

The additional material will be discussed at the Task Force meeting in Orlando on Sunday, December 7. The key additional documents are Addenda I and II attached to Appendix C.

Cordially,

(signed)

Paul Barnhart

STATEMENT 1986-41

October 30, 1986

Mr. Ted Becker, A.S.A.
Staff Actuary
Texas State Board of Insurance
1110 San Jacinto
Austin, Texas 78786

Subject: Proposed NAIC Model Reserve Standards
for Health Insurance, with Addenda

Dear Ted:

Enclosed is a complete copy of the revised NAIC Model Reserve Standards for Individual and Group Health Insurance, in accordance with our subcommittee's report to the Task Force dated September 29, 1986 and with two Addenda. This copy incorporates the "100% to 50%" graded adjustment for exclusion of 1st year experience from minimum benefit ratio reserves.

Alternate pages, however, are separately enclosed, providing for the "100% to 0% disappearing" adjustment, as proposed in our May, 1986 report to the Task Force. There are 3 pages affected, and these are numbered so that they can be substituted for the corresponding pages in the complete copy, if for any reason you find that to be necessary.

The complete copy enclosed does NOT include our covering letter and report, which comprised the first 12 pages of our complete September 29, 1986 Report document. It picks up with the proposed Reserve Standards proper, which commence at page 13. The following are the items enclosed, starting from that page:

1. Proposed Reserve Standards proper.
Here, at the bottom of page 19 (and top of page 20), I have revised the previous brief paragraph to permit a limited 2 year delay in the strengthening of the reserve due to exclusion of 50% of first year experience, and requiring full adjustment by the end of year 5. The reason for this is set out in Addendum I, attached to Appendix C.
2. Appendix A - Specific morbidity, mortality and interest standards.
3. Appendix B - Glossary of Terms.
4. Appendix C - Supplementary discussion and illustration of benefit ratio reserves.
5. Addendum I, attached to Appendix C.
This Addendum provides additional information, as requested by the Task Force, concerning the quantitative financial impact of the change from the "100% to 0%" disappearing adjustment in benefit ratio reserves, to the "100% to 50%" permanent adjustment that we proposed at your October 10, 1986 Task Force meeting.

Quantification of the expected impact, by duration, does indicate that a 2 year delay should be permitted in the reserve strengthening

STATEMENT 1986-41

necessitated as a result of a permanent exclusion of 50% of first year experience from the reserve determination.

6. Addendum II. This Addendum to Appendix C discusses the "theoretical foundation" of the benefit ratio reserve. Several actuaries, as well as the HIAA, through the statement submitted by Peter Thexton at the October 10 meeting of the Task Force, have criticized the absence of a rigorous theoretical development.

The subcommittee had regarded this as "implicitly evident" in the Appendix C discussion of the "basic concept", but no direct development of the underlying theory has heretofore been prepared. Addendum II is meant to address this basic area, in order to provide a response to the criticism received on this score. Addendum II also points out that no "theoretical foundation" exists for any of the current prevailing practices in use with respect to "Type C" benefit reserves or for any of the alternative proposed reserving concepts, such as the one offered by Habeck and Litow.

In conclusion, several comments are in order, I think, concerning the HIAA statement of October 10, 1986 to the Task Force. I've already commented on Item (1) of the statement which addresses the "theoretical foundation".

In Item (2), the statement says "in our opinion, the minimum reserves will be substantially higher, because otherwise there isn't any point to the new minimums, ..."

This statement misses the "point" altogether, if it is referring to the proposed benefit ratio reserves for Type C benefits, which is the only area to which it appears to apply. The real "point" is that no specific or "objective" standards whatsoever now apply to Type C contract reserves. Insurers are 100% left to value on the basis of their own experience or other basis deemed "appropriate". What we are recommending is a specific (and, we think, a relatively objective and realistic standard) minimum standard where no standard currently exists at all. In this regard, it will be of interest to learn what "yardstick" as to existing "minimum reserves" the HIAA expects to measure against, in "quantifying the effect" of the new requirements.

Finally, I believe I responded to Item (3) of the HIAA Statement at the October 10 meeting, pointing out that Appendix A addresses the issues of both claim and contract reserves for group insurance. Tabular reserves are not required for group LTD as matters now stand, and never have been. I am hopeful that this vacuum will be filled when the Society of Actuaries special committee completes its work on a group LTD table. Meanwhile, group minimum reserve requirements for LTD benefits remain in limbo, much as was the case, until our proposal was accepted by the Task Force, with respect to Type C contract reserves.

Respectfully submitted,

(signed)

E. Paul Barnhart, Chairperson
Subcommittee on Liaison with the NAIC Accident and Health (B) Committee

STATEMENT 1986-41

ATTACHMENT 3

**RESERVE STANDARDS FOR INDIVIDUAL AND GROUP
HEALTH INSURANCE CONTRACTS**
SEPTEMBER 26, 1986

I. INTRODUCTION

A. SCOPE.

These Standards apply to all individual and group health (accident and sickness) insurance coverages except credit insurance.

When an insurer determines that adequacy of its health insurance reserves requires reserves in excess of the minimum standards specified herein, such increased reserves shall be held and shall be considered the minimum reserves for that insurer.

B. CATEGORIES OF RESERVES.

The following sections set forth minimum standards for three categories of health insurance reserves:

Section II.	Claim Reserves
Section III.	Premium Reserves
Section IV.	Contract Reserves

The ultimate test of the adequacy of an insurer's health insurance reserves is to be made on the basis of all three categories combined. However, these Standards emphasize the importance of determining appropriate and aggregate reserves for each of the three categories separately.

C. APPENDICES.

These Standards contain two Appendices which are an integral part of the Standards, and a third "Supplementary" Appendix which is not part of the Standards as such, but is included for illustrative purposes.

Appendix A. Specific minimum standards with respect to morbidity, mortality and interest, which apply to claim reserves according to year of incurral and to contract reserves according to year of issue.

Appendix B. Glossary of Technical Terms used.

Appendix C. (Supplementary) Discussion of the actuarial management of the benefit ratio reserve and examples of determination of contract benefit ratio reserves.

II. CLAIM RESERVES

A. GENERAL.

1. Claim reserves as of a given valuation date shall be established for those payments that the insurer has become obligated to make, in accordance

STATEMENT 1986-41

with its contracts, as a result of such contracts having been in effect on or before such valuation date.

In determining the incurred status of claims, insurers may use practical and convenient approximations to actual contractual dates of incurral, provided it can be demonstrated that aggregate claim reserves resulting from such approximate dating represent an adequate and reasonable estimation of aggregate claim liability. The actuary responsible should periodically review the incurred dating practices and approximations followed by the insurer to determine whether satisfactory estimation results.

2. Appropriate claim expense reserves are required with respect to the estimated expense of settlement of all incurred but unpaid claims.
3. Premiums waived are to be considered as claims paid, for purposes of establishing claim reserves.

B. MINIMUM STANDARDS FOR CLAIM RESERVES.

1. DISABILITY INCOME

- a. Interest. The maximum interest rate for claim reserves is specified in Appendix A.
- b. Morbidity or other contingency. The reserve should be based on the insurer's experience or other assumptions designed to place a sound value on the liabilities.
- c. For contracts with an elimination period, the DURATION of disablement should be measured as dating from the time that benefits would have begun to accrue had there been no elimination period.

2. ALL OTHER BENEFITS.

- a. Interest. The maximum interest rate for claim reserves is specified in Appendix A.
- b. Morbidity or other contingency. The reserve should be based on the insurer's experience or other assumptions designed to place a sound value on the liabilities.

C. AGGREGATE ESTIMATION OF LIABILITY.

It is permissible for insurers to estimate claim liabilities using methods that value the various reserve items in the aggregate, combining accrued and unaccrued, reported and unreported, in course of settlement, etc. Separate specific items as may be required for statutory reporting may then be determined using any reasonable method.

D. CLAIM RESERVE METHODS GENERALLY.

Any generally accepted or reasonable actuarial method or combination of methods may be used to estimate all claim liabilities. The methods used for estimating liabilities generally may be aggregate methods, or various reserve items may be separately valued. Approximations based on groupings and

STATEMENT 1986-41

averages may also be employed. Adequacy of the claim reserves, however, is to be determined in the aggregate.

All such reserves for prior years are to be tested by the actuary responsible for adequacy and reasonableness by the paid development of incurred claims, plus an estimate of any residual unpaid liability, over a sufficient period to provide reasonable demonstration of the aggregate amount of matured liability. Such testing should include adjustment at the appropriate rate (or rates) of interest from the date of valuation. Record systems, coding and methods used to estimate the liabilities should also be assessed to determine their continuing adequacy and reliability.

III. PREMIUM RESERVES

A. GENERAL.

1. Unearned premium reserves are required for all contracts with respect to the period of coverage for which premiums have been paid beyond the date of valuation.
2. If premiums due and unpaid are carried as an asset, such premiums must be treated as premiums in force, subject to unearned premium reserve determination. The value of unpaid commissions and premium taxes in connection with such due and unpaid premiums must also be carried as an offsetting liability.
3. Premiums waived are to be considered as premiums received, for purposes of establishing unearned premium reserves.

B. MINIMUM STANDARDS FOR UNEARNED PREMIUM RESERVES.

The minimum unearned premium reserve with respect to any contract is the pro rata unearned modal premium that applies to the premium period beyond the valuation date, with such premium determined on the basis of: (a) the valuation net modal premium of the contract reserve basis applying to the contract; or (b) the gross modal premium for the contract, if no contract reserve applies. However, in no event may the sum of the unearned premium and contract reserves for all contracts of the insurer subject to contract reserve requirements be less than the gross modal unearned premium reserve on all such contracts, as of the date of valuation.

C. PREMIUM RESERVE METHODS GENERALLY.

The insurer may employ suitable approximations and estimates, including but not limited to groupings, averages and aggregate estimation, in computing premium reserves. Such approximations or estimates should be tested periodically to determine their continuing adequacy and reliability.

STATEMENT 1986-41

IV. CONTRACT RESERVES.

A. GENERAL.

1. Contract reserves are required, unless otherwise specified in this Section IV, for: (1) all individual health insurance contracts; (2) group health insurance contracts with which leveling premiums are used; and (3) group health insurance contracts for which premiums are substantially or entirely paid by the insured participants, except for those where an entity exists (such as an employer, board or committee) which is empowered to negotiate benefits, provisions and premium rates on behalf of the participants, which is wholly independent of the insurer, which includes no individuals selected by the insurer and none of whose members receive financial compensation either directly or indirectly from the insurer, other than reimbursement of expenses incidental to performance of their functions on behalf of the participants. The contract reserve is in addition to claim reserves and premium reserves.
2. The nature of the minimum contract reserve required depends (a) upon the "type" of contract involved and (b) upon whether "leveling" premiums are used in the rate structure of the contract. A "tabular" contract reserve or a "benefit ratio" contract reserve may be required, depending on the characteristics of the contract.
3. Contracts for which premiums are being waived are to be considered contracts in force, for purposes of establishing contract reserves.
4. The assumptions comprising the basis of contract reserves should be consistent with the assumptions comprising the basis of claim reserves for any contract, or else appropriate adjustment must be made when necessary to assure that the aggregate liability is provided for.

TYPES OF HEALTH INSURANCE CONTRACTS.

- Type A. Contracts which are guaranteed renewable at guaranteed premium rates (either level or changing), to a specified age or for life.
- Type B. Contracts not meeting the Type A guaranteed premium requirements, which provide ONLY scheduled benefits or benefits payable at stated time period rates, other than incidental benefits, and/or which provide benefits limited to the following kinds only:
- Disability Income
 - Hospital Indemnity payable at stated time period rates or hospital daily room and board benefits payable on an expense incurred basis but subject to an explicit daily dollar limit
 - Miscellaneous Hospital Expense benefits subject to a maximum benefit per confinement not exceeding the greater of:
 - (a) 10 times the daily room benefit limit provided, or
 - (b) \$1000
 - Surgical benefits provided on the basis of fixed scheduled limits by procedure
 - Accidental Death or Accidental Death and Dismemberment
 - Cancer benefits on a fixed scheduled basis and/or benefits payable at stated time period rates

STATEMENT 1986-41

Unless contracts not meeting Type A requirements are limited to these kinds of benefits only, except for incidental benefits not material to the total benefit value, they are to be considered Type C contracts.

Type C. All other contracts.

NOTE with respect to Type of contract:

A contract may have premium guarantees qualifying it as Type A, until a specified age or duration after which the premium guarantees, or lack of such guarantees, may qualify it as Type B or Type C. In such case, the contract during each period should be considered for reserve purposes according to the type to which it then belongs.

B. CONTRACTS REQUIRING NO CONTRACT RESERVE.

1. Contracts of any Type which cannot be renewed beyond one year.
2. Contracts of Types A or B with which leveling premiums are not used.
3. Contracts already in force on the effective date of these standards for which no contract reserve was required under the immediately preceding standards.

C. CONTRACTS REQUIRING TABULAR RESERVES.

1. Contracts of Types A or B with which leveling premiums are used.

Tabular reserves are required, with respect to all such contracts, equal to or greater than minimum reserves calculated by methods and assumptions as specified in Section IVC2 following.

2. MINIMUM STANDARDS FOR TABULAR RESERVES.

- a. Interest. The maximum interest rate for tabular reserves is specified in Appendix A.
- b. Mortality. Mortality rates used in the computation of tabular reserves shall be on the basis of a mortality table as specified in Appendix A.
- c. Morbidity or other contingency. Minimum standards with respect to morbidity are those specified in Appendix A.
- d. Reserve Method. The minimum reserve is the mid-terminal reserve, on the basis of the two-year full preliminary term reserve method; that is, under which the terminal reserve is zero at the first and also the second contract anniversary.
- e. Negative Reserves. Negative reserves on any benefit may be offset against positive reserves for other benefits in the same contract, but the total tabular reserve for the contract may not be less than zero.

D. CONTRACTS REQUIRING BENEFIT RATIO RESERVES.

1. All other Type C contracts. Benefit ratio reserves are required, with respect to all such contracts, equal to or greater than minimum reserves

STATEMENT 1986-41

calculated by methods and assumptions as specified in Section IVD2 following.

2. MINIMUM STANDARDS FOR BENEFIT RATIO RESERVES.

- a. If, upon the effective date of these Standards, a tabular reserve basis applies to any contracts otherwise subject to these requirements and then in force, such reserve basis shall continue to apply to such contracts, and tabular reserves shall be valued in accordance with the standards previously applicable to such reserves.
- b. For all such contracts issued on or after the effective date of these Standards, benefit ratio reserves are required. Such reserves apply on an aggregate basis to all such contracts included in any one "contract group." Such aggregate reserve is determined as follows, as of any subsequent valuation date:

Let C = the accumulated value with interest, as of the valuation date, of all past claims incurred (without considering contract reserves) under the contracts affected, up to the valuation date, with an adjustment for claims incurred in the first contract year as provided in Section IVD3 following;

Let G = the accumulated value with interest, as of the valuation date, of all past premiums earned (without considering contract reserves) on the contracts affected, up to the valuation date, with an adjustment for premiums earned in the first contract year as provided in Section IVD3 following;

Let R = the applicable anticipated loss ratio. Originally, this shall be the filed loss ratio (or composite of such ratios), or if no such ratio or ratios have been filed, a loss ratio as otherwise determined to be appropriate. As of the effective date or dates of any revision of the gross premiums, if the anticipated loss ratio applicable to such premium revision has changed, such revised loss ratio shall be used for accumulation of reserves related to premiums earned on the revised basis, while original loss ratios applying to earlier past earned premiums are continued unchanged.

However, following any revision to a "probable" loss ratio for the purpose of strengthening or releasing reserves as provided for in Section IVF and IVG following, all original values of R shall be replaced by their corresponding adjusted values R'.

The rate of interest used to compute C and G above for each rate period shall be the same as that used to compute the corresponding value of R.

The benefit ratio reserve required is the amount B in the following formula:

$$\frac{C + B}{G} = R, \text{ or } B = (G \times R) - C$$

However, if B is negative as of the valuation date, the benefit ratio reserve shall be zero for that date.

STATEMENT 1986-41

3. Adjustment for Premiums Earned and Claims Incurred in the First Contract Year.

In the computation of C and G in the preceding formulae, a graded adjustment is allowed with respect to the accumulated values of premiums earned and claims incurred within the first contract year, as follows:

- a. 100% of the accumulated values of such amounts earned or incurred within 12 months of the date of valuation may be excluded from C and G.
- b. 75% of the accumulated values of such amounts earned or incurred more than 12 but within 24 months of the date of valuation may be so excluded.
- c. 50% of the accumulated values of such amounts earned or incurred more than 24 months before the date of valuation may be so excluded.

4. Standards governing the strengthening, release or transfer of benefit ratio reserves are set forth in Section IVG following.

E. ALTERNATIVE VALUATION METHODS AND ASSUMPTIONS GENERALLY.

Provided the contract reserve on all contracts to which an alternative method or basis is applied is not less in the aggregate than the amount determined according to the applicable standards specified above, an insurer may use any reasonable assumptions as to interest rates, termination and/or mortality rates, and rates of morbidity or other contingency. Also, subject to the preceding condition, the insurer may employ methods other than the methods stated above in determining a sound value of its liabilities under such contracts, including but not limited to the following:

1. Alternate tabular reserve basis and methods may be used in lieu of either the tabular or benefit ratio reserves prescribed in this Section IV, including any of the following: optional use of either the net level premium or the one-year full preliminary term method; use of interpolated terminal reserves based on actual anniversary dates, in lieu of mid-terminal reserves; prospective valuation on the basis of actual gross premiums with reasonable allowance for future expenses; the use of approximations such as those involving age grouping, groupings of several years of issue, average amounts of indemnity; the computation of the reserve for one contract benefit as a percentage of, or be other relation to, the aggregate contract reserves, exclusive of the benefit or benefits so valued; the use of a composite annual claim cost for all or any combination of the benefits included in the contracts valued.
2. For benefit ratio reserves: the combining of similar contract groups, or combining of successive time intervals subject to different R values, using approximate composite values of R; or other reasonable groupings and approximate methods.

STATEMENT 1986-41

F. TESTS FOR ADEQUACY AND REASONABLENESS OF CONTRACT RESERVES.

At intervals of not greater than 3 years for tabular reserves and 1 year for benefit ratio reserves, the actuary responsible shall make an appropriate valuation of the insurer's prospective contract liabilities, by contract group, to determine the continuing adequacy and reasonableness of contract reserves. The insurer shall make appropriate adjustments to its contract reserves if such tests indicate that the basis of such reserves is no longer appropriate. The prospective liability must be estimated for the remainder of the expected lifetime of each contract group.

G. PROVISIONS FOR STRENGTHENING, RELEASE OR TRANSFER OF BENEFIT RATIO RESERVES.

As stated in Section IVF preceding, the continuing appropriateness of the benefit ratio reserve carried on each contract group is to be reviewed each statement year by the actuary responsible. In the event any contract group holding benefit ratio reserves shall be deemed by the actuary responsible to have either:

1. No substantial probability of ultimately attaining the anticipated loss ratio or ratios on which the reserve is based; or
2. A substantial probability of ultimately exceeding the anticipated loss ratio or ratios on which the reserve is based, in spite of any prospective premium increases that may reasonably be anticipated;

then the actuary responsible shall determine an appropriate revised "probable loss ratio", R' , on which the reserve in each case is to be determined. If more than one existing value of R is in effect for the group affected, the same increase or decrease in absolute percentage points shall be applied to all such values to obtain a corresponding set of R' values, or else all such R' values may be composited (Illustrations in Appendix C include examples for which multiple values of R are assumed to be in use). The existing level of reserve in each such case shall be adjusted to the revised level within a period not to exceed 5 years, with respect to reserve strengthening; and within a period of not less than the lesser of (a) 5 years, or (b) the period during which any contracts subject to such excess reserves remain in force, with respect to release of excess reserves.

As an alternative to the release of excess benefit ratio reserves in any year, on a particular contract group, the insurer may elect to make a transfer of the amount of all or a portion of such year's release over to other contract groups that in need of reserve strengthening.

If the insurer elects to make such a transfer, then with respect to a contract group to which transfer is made, the amount transferred shall be maintained as a reserve which serves as an offset against claims paid under such contract group. The benefit ratio reserve thereupon required on the contract group from which transfer was made shall be determined by valuing the cumulative retrospective incurred claims using the adjusted R' values as determined. The benefit ratio reserve thereupon required on the contract group to which transfer is made shall be determined treating the transferred reserve as an

STATEMENT 1986-41

offset value against claims paid, the benefit ratio reserve being valued on the basis of the cumulative retrospective incurred claims reduced by the value of the transferred reserve.

All such transferred reserves shall be permanently identified in the insurer's records. The aggregate of out-transfers shall balance with the aggregate of in-transfers, for each year.

V. REINSURANCE.

Increases to or credits against reserves carried, arising because of reinsurance assumed or reinsurance ceded, must be determined in a manner consistent with the rate structures and all applicable provisions of the reinsurance contracts which affect the insurer's liabilities.

STATEMENT 1986-41

RESERVE STANDARDS FOR INDIVIDUAL AND GROUP HEALTH INSURANCE CONTRACTS

APPENDIX A

SPECIFIC STANDARDS FOR MORBIDITY, INTEREST AND MORTALITY

L MORBIDITY

- A. Minimum morbidity standards for valuation of individual health insurance contracts of Types A and B are as follows:

1. Disability due to accident or sickness.

Contract Reserves:

Contracts issued on or after January 1, 1965 and prior to January 1, 1986:

The 1964 Commissioners Disability Table (64 CDT)

Contracts issued on or after January 1, 1987:

The 1985 Commissioners Individual Disability Tables A (85CIDA), or

The 1985 Commissioners Individual Disability Tables B (85CIDB)

Contracts issued during 1986:

Optional use of either the 1964 Table or the 1985 Tables.

Each insurer shall elect, with respect to all individual contracts issued in any one statement year, whether it will use Tables A or Tables B as the minimum standard. The insurer may, however, elect to use the other Tables with respect to any subsequent statement year.

Claim Reserves:

The minimum morbidity standard in effect for contract reserves on currently issued contracts, as of the date the claim is incurred.

2. Hospital Benefits, Surgical Benefits and Maternity Benefits (Scheduled benefits or fixed time period benefits only).

Contract Reserves:

Contracts issued on or after January 1, 1955 and before January 1, 1982:

The 1956 Intercompany Hospital-Surgical Tables.

Contracts issued on or after January 1, 1982:

The 1974 Medical Expense Tables, Table A, Transactions of the Society of Actuaries, Volume XXX, pg. 63. Refer to the paper (in the same Volume, pg. 9) to which this Table is appended, including its discussions, for methods of adjustment for benefits not directly valued in Table A: "Development of the 1974 Medical Expense Benefits", Houghton and Wolf.

STATEMENT 1986-41

3. Cancer Expense Benefits (Scheduled benefits or fixed time period benefits only).

Contract Reserves:

Contracts issued on or after January 1, 1986:
The 1985 NAIC Cancer Claim Cost Tables.

4. Accidental Death Benefits.

Contract Reserves:

Contracts issued on or after January 1, 1965:
The 1959 Accidental Death Benefits Table.

5. For all other contracts or benefits, contract reserves are to be determined as provided in the Reserve Standards. For all benefits other than disability, claim reserves are to be determined as provided in the Standards.
- B. For group insurance contracts, morbidity assumptions for contract and claim reserves should be based on the insurer's experience or other assumptions designed to place a sound value on the liabilities.

II. INTEREST

1. For contract reserves on contracts issued prior to January 1, 1987 and for claim reserves on claims incurred prior to January 1, 1987. The greater of (i) the maximum rate permitted by law in the valuation of currently issued life insurance or (ii) the maximum rate permitted by law in the valuation of life insurance issued on the same date as the health insurance contract or the claim incurral date.
2. For contract reserves on contracts issued on or after January 1, 1987 and for claim reserves on claims incurred on or after January 1, 1987: The maximum rate permitted by law in the valuation of whole life insurance issued on the same date as the health insurance (for contract reserves).

III. MORTALITY

The mortality basis used shall be according to a table (but without use of selection factors) permitted by law for the valuation of whole life insurance issued on the same date as the health insurance contract.

STATEMENT 1986-41

RESERVE STANDARDS FOR INDIVIDUAL AND GROUP HEALTH INSURANCE CONTRACTS

APPENDIX B

GLOSSARY OF TECHNICAL TERMS USED

INTRODUCTION Use of the terms "reserve" and "liability".

In the definitions used for this Valuation Standard the term "reserve" is used to include all items of benefit liability, whether in the nature of incurred claim liability or in the nature of contract liability relating to future periods of coverage, and whether the liability is accrued or unaccrued. The terms "liability" and "reserve" are directly related and quite often the two terms are used to mean the same thing. Strictly speaking, the "liability" is the actual present value of the benefits that will ultimately be paid out, and cannot be known precisely until all benefits have been paid. The "reserve", on the other hand, is the insurer's estimate of that liability and is the amount actually carried in the insurer's financial statement to represent the liability.

An insurer under its contracts promises benefits which result in:

- (a). Claims which have been incurred, that is, for which the insurer has become obligated to make payment, on or prior to the valuation date. On these claims, payments expected to be made after the valuation date for accrued and unaccrued benefits are liabilities of the insurer which should be provided for by establishing claim reserves.
- (b). Claims which are expected to be incurred after the valuation date. The liability of the insurer for these future claims should be provided for by the establishment of contract reserves and unearned premium reserves.

ANNUAL CLAIM COST. This is the net annual cost per unit of benefit before the addition of expenses, including claim settlement expenses, and a margin for profit or contingencies. For example, the annual claim cost for a \$100 monthly disability benefit, for a maximum disability benefit period of one year, with an elimination period of 1 week, with respect to a male at age 35, in a certain occupation, might be \$12, while the gross premium for this benefit might be \$18. The additional \$6 would cover expenses, and profit or contingencies.

ANTICIPATED LOSS RATIO. The anticipated loss ratio for a grouping of contracts comprising a "contract group" is the ratio of the present value at inception of all benefits expected to be paid under such contracts, to the present value at inception of all gross premiums expected to be received under such contracts.

The anticipated loss ratio may vary according to issue age, class and plan, within such a grouping, so an appropriate composite value may need to be derived for the contract group in determining R under Section IVD2 of the Standards. Usually this should be the same value as that used in the filing of premium rates. However, not all rates are filed, and even filed rates may not

STATEMENT 1986-41

always be accompanied with an associated "anticipated loss ratio". In such cases, an appropriate actuarial value of such ratio must be determined for compliance with the Standards. Also, upon filing of increased rates for a contract group the loss ratio filed with respect to the increased rates or appropriate to such rates, may differ from the loss ratio originally filed or applicable, so that a set of values of R becomes appropriate.

Upon review of the continuing appropriateness of the benefit ratio reserve, as required under Section IVF of the Standards, it may be found that the value or values of R must be redetermined, due to experience varying from that which was expected. When the value or values of R are so redetermined at later durations, they become values of the "probable loss ratio", R', to which reference is made in Section IVG of the Standards.

BENEFITS PAYABLE AT STATED TIME PERIOD RATES. An example of this is a Daily Income Hospital policy that pays \$25 of benefit for each day of hospital confinement up to a maximum duration of 90 days. Another example is a Disability Income policy that pays \$300 a month (prorated daily) for each period of total disability after an elimination period of 1 week, with a maximum benefit period of 2 years. Time period rates that change according to a defined indexing rate are also considered "stated" rates.

BENEFITS THAT ARE SCHEDULED. One example of this is a Surgical Schedule which provides for different specified amounts payable depending upon the surgical procedure. Another example is a schedule of specified amounts payable for various specific losses under an Accidental Death and Dismemberment policy.

CLAIMS ACCRUED. These are that portion of claims incurred on or prior to the valuation date which result in liability of the insurer for the payment of benefits for medical services which have been rendered on or prior to the valuation date, and for the payment of benefits for days of hospitalization and days of disability which have occurred on or prior to the valuation date, which the insurer has not paid as of the valuation date, but for which it is liable, and will have to pay after the valuation date. This liability is sometimes referred to as a liability for "accrued" benefits. A claim reserve, which represents an estimate of this accrued claim liability, must be established.

CLAIMS REPORTED. When an insurer has been informed that a claim has been incurred, if the date reported is on or prior to the valuation date the claim is considered as a reported claim for Annual Statement purposes.

CLAIMS UNACCRUED. These are that portion of claims incurred on or prior to the valuation date which result in liability of the insurer for the payment of benefits for medical services expected to be rendered after the valuation date, and for benefits expected to be payable for days of hospitalization and days of disability occurring after the valuation date. This liability is sometimes referred to as a liability for unaccrued benefits. A claim reserve, which represents an estimate of the unaccrued claim payments expected to be made (which may or may not be discounted with interest), must be established.

CLAIMS UNREPORTED. When an insurer has not been informed, on or before the valuation date, concerning a claim that has been incurred on or prior to

STATEMENT 1986-41

the valuation date, the claim is considered as an unreported claim for Annual Statement purposes.

CONTRACT GROUP. This means any block of contracts which are appropriately combined for purposes of valuing benefit ratio reserves. The block may include all contracts of the same form number, or all contracts included in a group of form numbers providing closely similar benefits; or it may be a subdivision of contracts within a form number or group of form numbers which are appropriately combined for reserve purposes. It may be all certificates issued under a single group policy.

The decision as to what properly constitutes one "contract group" will depend upon the degree of homogeneity as to benefits, underwriting, period of issue, anticipated loss ratio and other relevant factors. It will also depend upon the credibility and size of the tentative group, since actuarial reserves can only have meaning and reliability when applied to a sufficiently large number of individual risks. Insurers, accordingly, who have relatively small volumes of in force business subject to benefit ratio reserves will normally need to establish broader and more heterogeneous "contract groups" than those with large volumes of such business.

Contracts included within one form number or combined group of form numbers should not be subdivided for benefit ratio reserve purposes unless a specific and important actuarial reason exists for such subdivision.

CONTRACT ISSUED WITH GUARANTEED PREMIUM RATES. A contract which the insured person has the right to continue in force for a specified period, such as for 5 years or to age 65, by the timely payment of specified premiums. During the specified period the insurer has no right to unilaterally make any change in the premium rate or in the scale of specified premiums.

CONTRACT NOT ISSUED AT GUARANTEED PREMIUM RATES. Any contract under which the insurer has reserved the right to make changes in the premium rates, or under which the insurer has such an implied right because the insurer can elect to terminate the contract.

DATE OF DISABLEMENT. This is the earliest date the insured is considered as being totally disabled based on a doctor's evaluation or other evidence. Normally this date will coincide with the start of any elimination period.

DATE OF INCURRAL. The date upon which an insurer becomes obligated, in accordance with its contract, to pay for all losses that may arise as the result of the dated event.

ELIMINATION PERIOD. A specified number of days, weeks, or months starting at the beginning of each period of loss, during which no benefits are payable.

GROSS PREMIUM. The amount of premium charged by the insurer. It includes the net premium (based on claim cost) for the risk, together with any loading for expenses, profit or contingencies.

LEVEL PREMIUM. This is a premium calculated to remain unchanged throughout either the lifetime of the policy, or for some shorter projected

STATEMENT 1986-41

period of years. The premium need not be guaranteed, in which case, although it is calculated to remain level, it may be changed if any of the assumptions on which it was based are revised at a later time.

Generally, the annual claim costs are expected to increase each year and the insurer, instead of charging premiums that correspondingly increase each year, charges a premium calculated to remain level for a period of years or for the lifetime of the contract. The premium is more than needed to provide for the cost of benefits during the earlier years of the policy and less than the actual cost in the latter years. The building of a prospective benefit liability is a natural result of level premiums.

Examples of "level premiums" are:

- (1) Step-rates, under which a lower premium is paid for some initial period of years, followed by a higher level premium to be paid during the remaining life of the contract; or by a series of increasing level premiums each to be paid over a period of years.
- (2) A level premium to be paid to some specified age or duration (e.g., to age 65), followed by premiums based on attained ages at subsequent renewal dates.

LEVELING PREMIUM. A premium calculated to make advance provision for some portion of those annual claim costs which are expected to be incurred beyond the policy year to which the premium applies. "Leveling" premiums need not be calculated actually to remain level. "Level" premiums, however, are included within the term "leveling premiums", unless their calculation involves no advance provision for claim costs beyond the year to which each premium applies.

In any case where leveling premiums are used, contract reserves should be determined, consistent with the leveling premium characteristics and periods involved, unless it can be shown that any resulting contract reserves would be of immaterial value.

MODAL PREMIUM. This refers to the premium paid on a contract based on a premium term which could be annual, semi-annual, quarterly, monthly, or weekly. Thus if the annual premium is \$100 and if instead monthly premiums of \$9 are paid then the modal premium is \$9.

MID-TERMINAL RESERVE. This reserve is the average of the terminal reserve for two adjacent contract years. The mid-terminal reserve at the end of calendar year $n + t$ for policies issued in year n is the average of the terminal reserve for durations $t-1$ and t .

NEGATIVE RESERVE. The terminal reserve at the end of a contract year is defined as the present value of future unincurred benefits minus the present value of future premiums. Normally this results in a positive number. However, if the value of the benefits are decreasing with advancing age this could result in a negative number which is called a negative reserve.

PRELIMINARY TERM RESERVE METHOD. Under this method of valuation the terminal reserve for a one year preliminary term method is determined by

STATEMENT 1986-41

assuming that the policy is issued one year later at an age one year older. At the end of the first policy year the terminal reserve is zero and at the end of the second policy year it is the first year terminal reserve for an age one year higher than the true issue age, etc., for the third and subsequent policy years. Similarly for a two year preliminary term method, at the end of the first and second policy years the terminal reserves are zero and at the end of the third policy year it is the first year terminal reserve for an age two years higher than the true issue age, etc., for subsequent policy years.

PRESENT VALUE OF AMOUNTS NOT YET DUE ON CLAIMS. See definition of CLAIMS UNACCRUED.

TERMINAL RESERVE. This is the reserve at the end of a contract year, and is defined as the present value of future unincurred benefits minus the present value of future premiums.

UNEARNED PREMIUM RESERVE. This reserve values that portion of the premium paid or due to the insurer which is applicable to the period of coverage extending beyond the valuation date. Thus if an annual premium of \$120 was paid on November 1, \$20 would be earned as of December 31 and the remaining \$100 would be unearned. The unearned premium reserve could be on a gross basis as in this example, or on a net valuation premium basis.

VALUATION NET MODAL PREMIUM. This is the modal fraction of the valuation net annual premium that corresponds to the gross modal premium in effect on any contract to which contract reserves apply. Thus if the mode of payment in effect is quarterly, the valuation net modal premium is 25% of the valuation net annual premium.

APPENDIX C (Supplementary explanatory material)

ACTUARIAL MANAGEMENT OF THE BENEFIT RATIO RESERVE

1. THE BASIC CONCEPT

The basic actuarial concept underlying the benefit ratio reserve is that aggregate benefit net premiums (or valuation net premiums) for a reasonably homogeneous group of contracts may be satisfactorily approximated as a "level" percentage of the corresponding aggregate gross premiums. This percentage is equivalent to the ratio of the value of all expected benefits under the group to the corresponding value of all expected gross premiums.

The ratio itself is thus an estimate of the cumulative lifetime loss ratio, as measured at any valuation point during the lifetime of the group of contracts. This ratio, although "level" or "tentatively" constant, need not be fixed, but can be adjusted in the aggregate from time to time based on actual retrospective experience. At each valuation date the cumulative lifetime ratio can be adjusted, based on the retrospective experience to date. This may be done, for example, by measuring actual to expected loss ratios and trends and adjusting the original anticipated loss ratio for the group accordingly. Once an adjusted cumulative ratio has been so determined, a reserve can then be determined retrospectively as the excess of the

STATEMENT 1986-41

accumulated value of benefit premiums over the accumulated value of incurred claims. This excess will be equal, assuming the estimated cumulative loss ratio is reliable, to the prospective present value of the excess of future claims over future benefit premiums. This reserve is called, in this Appendix and in the Reserve Standards, the "Benefit Ratio" Reserve.

The concept is similar, at the outset, to the net benefit reserve used with GAAP accounting, under which reserves are accumulated on the basis of a benefit net premium, with values determined using realistic assumptions as to morbidity, persistency and interest. It is an adaptation of the method described by George L. Hogeman in his 1973 paper published in TSA XXV, part 1 (See 6. "References").

The process is illustrated, using policy year terminal reserves, in Exhibit 1 of this Appendix. Here the "contract group" is assumed to be 1000 identical level premium contracts all issued on the same date, at age 45 and renewable to age 65. The values shown project terminal reserve values for the initially issued 1000 contracts over a 20 year contract lifetime, based on expected morbidity and persistency as shown and at 7.5% interest. The 3 right hand columns of Exhibit 1 show the conventional net premium development, under the heading "Natural Net Premium Reserve".

The 3 columns under the heading "Benefit Ratio Reserve" show the corresponding development on this basis, with gross premiums anticipating a 56.48% loss ratio over the expected 20 year lifetime. The net premium of \$263.27 is also 56.48% of the gross premium of \$469.69. The yearly reserve increments and the aggregate accumulated terminal reserves are identical (the final accumulated residue, a negative \$24, is the result of rounding. This ending value should of course be zero).

The identity of the 2 reserve accumulations here is obvious, the calculations themselves being exactly equivalent.

What, then, is different about the benefit ratio reserve method? The first difference is that it can be applied on an aggregate basis, subject to one key criterion, to broader groups of contracts than that illustrated in Exhibit 1. Thus, the "group" can be extended to all contracts of every issue age issued in the same year. It can be further extended to contracts issued over several years, including more than one plan of coverage and rating classification. The process illustrated in Exhibit 1 can readily be extended to these more complex "contract groups", because the added complexity may be dealt with implicitly working with gross premiums aggregate to the entire contract group. The one key criterion is that the aggregated group of contracts can reasonably be assumed to be subject to one composite anticipate contract lifetime loss ratio. The same identical loss ratio need not be separately applicable to every sub-cell, as long as a composite value can reasonably be determined to be applicable in the aggregate. Thus, gross premiums for different issue ages will often be subject to varying anticipated loss ratios, but if an expected distribution of issued business can reasonably be compiled, a composite aggregate anticipated loss ratio can also be estimated, as is commonly done in individual policy rate filings.

This, however, brings us to the second difference. Given these added dimensions of assumed distributions of contracts issued, as well as the fact

STATEMENT 1986-41

that the type of contract proposed to be subject to benefit ratio reserves is vulnerable to many factors that may lead to actual experience differing substantially from expected, it obviously becomes unrealistic to assume that appropriate reserves can be accumulated over any period of time locked in on the original assumptions. Were the entire accumulation to be locked-in on originally specified or expected assumptions, the valuation could stray so far from reality as to become meaningless, as is frequently the case with present attempts to value liabilities on such contracts using tabular methods, including GAAP benefit reserve methods. Actuarial prudence demands that original assumptions be periodically reviewed and tested, to determine whether they remain appropriate. This can best be done, and done in the aggregate, by valuing the reserve accumulation on the basis of actual retrospective experience, while at the same time using this actual experience to continually correct the lifetime retrospective/prospective anticipated loss ratio. The periodically corrected values will thus tend to move from the original "anticipated" loss ratio more and more in the direction of a "probable" loss ratio. Ultimately, when the lifetime history of the block of contracts has been completed, the "probable" loss ratio obviously will have evolved into the actual retrospective, fully developed lifetime loss ratio of the particular contract group, and as the lifetime of the contract group becomes more and more advanced, while periodic correction is systematically continued, the "probable" loss ratio necessarily will move closer and closer to its actual ending value when all experience has become retrospective. Thus, retrospectively calculated reserves, based on increasingly confident probable loss ratios systematically corrected toward the prospective lifetime loss ratio of the group, will produce an increasingly balanced aggregate benefit valuation.

Provided this monitoring and correcting process is carried out, and provided the establishment of appropriate "contract groups", each subject to one composite loss ratio, is determined with reasonable care, the method can serve as an effective and understandable aggregate basis for generating contract reserves. Moreover, it can be seen that it is an extraordinarily powerful and economical method, that cuts right through all the multiple arrays of sub-cells according to issue years, issue ages, rating classes and plans of coverage that must all be recognized in order to operate a conventional system of tabular reserve valuation.

While, at any one point in time, the anticipated loss ratio is viewed as a constant ratio, the implied net premiums themselves need not be at all constant or level. They will reflect the structure of the gross premiums: level, if the gross premiums are level; increasing, if the gross premiums are increasing. If the gross premiums anticipate inflationary trends for a number of years, or aging, or cumulative antiselection, so will the implied net premiums and in the same pattern. They duplicate, on a net basis, the rating structure on which the gross premiums are based, somewhat like a reduced holographic image reproduces on a diminished scale every dimension of the object it copies.

2. MORE COMPLEX SCENARIOS

The calculations involved are relatively simple and straightforward as long as the ratio (as estimated at any valuation date) of each year's net to gross premium is assumed to be constant. If this is not a reasonable assumption, or

STATEMENT 1986-#1

ceases to be such, then the calculation becomes more complex. For example, suppose that a stream of gross premiums are calculated to anticipate a loss ratio of 55% over an initial 10 year term period, and then 65% over the remainder of the policy lifetime. The reason for this might be that after 10 years only renewal premiums and renewal expenses remain, because the contracts are no longer issued. In such a case, it would be reasonable, at the outset, to calculate the aggregate benefit net premiums as 55% of the corresponding gross premiums, but after 10 years as 65% of then renewing gross premiums.

Another special situation would arise if a preliminary term period were to be used with the reserving method. Thus, the anticipated lifetime loss ratio might be 55%, whereas the anticipated lifetime ratio following a 2 year preliminary term might be 70%. One year term net premiums during the first and second years might have the anticipated values, say, of 20% and 40% of gross, respectively.

Still another complexity that may arise is the case where more than one single, constant rate of interest accumulation is involved. For example, a common practice in both gross and net benefit premium computation is the assumption of a higher initial interest rate, followed either by graded reductions or a lower ultimate rate after several policy years. Varying interest rates may be used in one aggregate benefit reserve accumulation provided each change in interest rate may reasonably be assumed to occur all at one calendar point in time. If this is not a reasonable assumption, then the contract group must be subdivided, for example, by year of issue blocks, to assure that the single aggregate interest rate assumption being used at any one point in calendar time remains reasonable.

Or suppose that the first premium increase takes effect. This may very well be accompanied with a change in the expected loss ratio, arising directly from the various assumptions entering into the calculation of the increment in the premium or of the adjusted premium. Average premium size alone in relation to "per contract" expenses may alter the loss ratio; or associated acquisition or renewal costs may have an impact. Thus, the very fact of a change in premiums may necessitate some adjustment in the composit loss ratio used to generate the benefit ratio reserve. There are several ways in which such an adjustment may be accomplished.

Exhibits 2 and 3 of this Appendix illustrate one such scenario, assumed to apply to the same group of 1000 originally issued contracts illustrated in Exhibit 1.

The assumption here is that rate increases become necessary, the first taking effect at the outset of the 5th year the group of contracts continue in effect. This is illustrated in Exhibit 2. This increase is designed to cover an expected 10% increase in morbidity. All other assumptions remain the same, even as to "first year" expenses assumed on the incremental premium, except that a one-time increase in renewal lapsation occurs at the end of the 5th year. The result is that this "5th year increment" develops, on its own, an anticipated loss ratio of 58.49%, as compared to the original 56.48% ratio illustrated in Exhibit 1. Exhibit 2 shows the incremental reserve development for the 5th year incremental premium only.

STATEMENT 1986-41

A second rate increase takes effect at the outset of the 8th year, to cover a second expected incremental increase in morbidity of 15% of the original level. Here, the combination of assumptions yields an anticipated loss ratio, for this increment separately, of 57.82%. Exhibit 3 shows the reserve development for the 8th year incremental premium only.

Further rate increases would be expected, further complicating the scenario, but these two are sufficient for our illustrative purpose.

Next, let us look at the aggregate results here on an "expected" basis only, under which the reserves accumulated for each of the three premium components are not adjusted for any changes from expected to actual. Exhibit 4 shows the total reserves, where the values arrived at are simply the summation of the three component parts, each remaining on its own original "expected" basis, somewhat similar to a tabular reserving method that recognizes each additional increment as it arises.

The 20 year development zeros out (except for rounding) but only because reality has been ignored, both as to actual morbidity and actual persistency (actual persistency, incorporating each of the two one-time increases in lapsation occurring upon rate increase, is shown in the left hand column of Exhibit 4).

Exhibit 5 shows the benefit ratio reserve basis, using actual retrospective experience. Beyond the 8th year, actual experience is assumed to be such that no further rate increases are required, to facilitate illustrative simplicity.

The middle column of Exhibit 5 shows the way the R and R' (anticipated and probable loss ratios) values are assumed to be handled. The second column show the actual incurred loss ratios experienced year by year, which is what gave rise to the evident need for the two rate increases in the first place. Since actual to expected loss ratios were consistently above 100% and reached about 110% for the 3rd and 4th years, not only has our hypothetical and perceptive actuary put a 5th year rate increase into effect; he also has begun a reserve strengthening process at year 5, since the benefit ratio reserve has by then become inadequate in relation to an increased expected lifetime loss ratio. This strengthening process is continued as the 8th year rate increase takes effect. In this scenario, by the 12th year it no longer appears that further rate increases or adjustment of the reserve ratio will be needed, and the strengthened value of R' is then held at 57.24%, as compared to the original anticipated loss ratio of 56.48%. After 20 years, where all the remaining contracts terminate, the negative ending reserve value reveals that the strengthened reserve basis proves out to have been just slightly deficient.

In truth, this is due to rounding. With the benefit of illustrative clairvoyance we have endowed our hypothetical actuary with the ability to make a quite precise forecast of a cumulative actual lifetime loss ratio of 57.24%. In an actual situation, further R' corrections would undoubtedly have been needed after year 12, as well as further rate increases after year 8. Had the need of these occurred, however, attempts to reserve by tabular methods or on a purely expected basis would have become very complex and also would have had a high likelihood of leading to reserves far removed from reality.

STATEMENT 1986-41

Since Exhibit 4 is shown only on an "expected" basis with respect to both morbidity and persistency, the accumulated reserve values are not directly comparable with Exhibit 5 values. A comparison can be drawn if the accumulated values are converted to terminal reserves per contract in force at any duration.

As an example take duration 15. In Exhibit 4, the 15th duration aggregate reserve of \$122,430 assumes 88.88 contracts to remain in force, as shown in Exhibit 1. This value of \$122,430 is the sum of the aggregate amounts shown for duration 15 in Exhibits 1, 2 and 3. Actually, only 67.18 contracts remain in force at duration 15, so the Exhibit 4 aggregate is equivalent to \$1,822 per contract in force. In Exhibit 5, the more realistic development, \$89,524 is the aggregate 15th duration reserve on 67.18 contracts still in force, which converts to \$1,333 per contract. Thus, Exhibit 4, assuming both lower morbidity and higher persistency, gives a 15th duration reserve that is conservative by 37% over the realistic Exhibit 5 value.

In the scenario illustrated in Exhibits 1 through 5, the eventual actual loss ratio and final R' value of 37.24% changes only modestly from the original 56.48%. In many actual cases, or even in a scenario assuming more drastic adjustments, the cumulative change could easily be much greater and the need (and importance) of adjustment from original assumptions would likewise be much greater.

In Exhibit 6, the same illustrative contract is assumed as in Exhibit 1, but this time using annual renewable term rates, instead of level premiums. Morbidity and persistency is assumed to be the same as in Exhibit 1 (in actual practice, this would be unrealistic, since heavier lapsation and more antiselection should be anticipated under an ART premium scale).

Exhibit 6, however, shows that, because select morbidity is assumed in the early years, benefit ratio reserves are needed even with ART premiums and that they can reach quite substantial levels.

Exhibit 7 uses the same morbidity and persistency as Exhibit 6, but provides an illustration under which two levels of anticipated loss ratio are used, rather than the single lifetime anticipated loss ratio of 61.4% used to generate the Exhibit 6 reserves. In Exhibit 7, an original anticipated loss ratio of 60% is adopted, on the expectation that the plan will continue to be issued and that the same ART premiums will apply to new as to renewing business. After 5 years, continued sale of the plan is discontinued and premiums become renewal only, with only renewal expenses involved. Accordingly, the actuary provides that continuing reserve development be based on a new anticipated loss ratio level of 83.8%, while retrospective reserves of the first five years are allowed to remain on a 60% basis. Note that the reserve burden is considerably relieved on this basis, although reserves remain substantial. The Exhibit 7 scenario is justifiable, because on a renewal only basis a higher portion of the gross premium can reasonably be regarded as an implicit net benefit premium. The proposed reserve standards provide for this multiple level method as the minimum reserve.

Rate increases, adjusting the ART scale, are of course to be expected, just as much as under the level premium scenario illustrated in Exhibits 2 through 5. Such changes would be handled in a comparable manner, but applied to the

STATEMENT 1986-41

ART premium structure. The benefit ratio reserve method would handle this in virtually the same way as was illustrated for the level premium case, because recognition of the increasing ART scale would be implicit to the method.

3. RETROSPECTIVE STRENGTHENING OF RESERVES

When benefit ratio reserves are strengthened, as a result of an increased value of R', it will be evident that the increase in reserves is calculated on the basis of past earned premiums. This may appear improper, from an accounting point of view, as a form of "restatement" of past earnings. However, the actual increase in reserves is charged to the current accounting period, the accounting being the same as for any other type of reserve strengthening. It must be kept in mind that the reserves have exactly the same prospective purpose as any other actuarial type of reserve.

4. ADJUSTMENT FOR FIRST YEAR EXPERIENCE

Section D3 of the proposed Reserve Standards permits adjustment for premiums earned and claims incurred in the first contract year. Exhibit 8, using another hypothetical scenario, illustrates the mechanics of this adjustment for a contract group with continued issue of new business over a period of several years. Addendum I, attached to this Appendix following the Exhibits, provides additional quantitative illustration of the impact of adjustment at various percentages.

5. MEASURES OF CONSERVATISM

The minimum standards for benefit ratio reserves provide for the use, initially of the anticipated loss ratio as the minimum benefit ratio. This may or may not be a conservative value. If the value of expected benefits is conservatively determined (e.g., using conservative morbidity assumption), then the anticipated loss loss ratio will be similarly conservative. However, if the value of expected benefits is determined on a most probable "realistic" basis, for example, with contingency margins separately and explicitly included in the gross premiums, the resulting anticipated loss ratio will not be conservative. In this case, the actuary responsible for the valuation should consider whether a conservative initial adjustment is in order, such as the use of 105 or 110% of the anticipated loss ratio as determined without contingency margins or conservative morbidity assumptions.

It must also be kept in mind that monitoring includes more than review of actual claim experience alone. Actual lapse rates and other factors must also be weighed.

6. ADDITIONAL ILLUSTRATION OF "BENEFIT RATIO" RESERVES

Exhibits 9-13 provide additional illustrative projections for another hypothetical group of issued contracts using level but adjustable premiums. In each of these an interest rate of 0% is used for simplicity and to aid readers in tracking the development. The radix, in each exhibit, is \$1,000,000 of annual premium issued, rather than 1000 contracts as in Exhibits 1-7. Each exhibit summarizes the key assumptions peculiar to the particular scenario

STATEMENT 1986-41

projected. Exhibit 13 illustrates the effect of one rate increase on the development of loss ratios and reserves.

7. REFERENCES

The following papers and their discussions are cited as useful and important references. Each of these papers contains discussion regarding interrelationships between loss ratios, benefit reserves, and the interpretation of experience.

Adjusted Benefit Reserves for Individual Hospital and Individual Major Medical. George L. Hogeman: TSA XXV, Part 1, pg. 681.

The Individual Accident and Health Loss Ratio Dilemma. Joe B. Pharr: TSAXXI, pg. 373.

Cumulative Antiselection Theory. William F. Bluhm: TSA XXXIV, pg. 215.

Regulatory Monitoring of Individual Health Insurance Policy Experience. John B. Cumming: TSA XXXIV, pg. 617.

Addendum II, attached to this Appendix following the Exhibits, contains further discussion concerning the theoretical foundation of the benefit ratio reserve method.

ILLUSTRATIVE MAJOR MEDICAL PLAN

INTEREST AT: 7.50

1,000 POLICIES ORIGINALLY ISSUED

BENEFIT RATIO RESERVE
 INIT. GROSS PREMIUM: 469.69

NATURAL NET PREMIUM RESERVE
 INIT. NET PREMIUM: 265.27

PERSIST. SCALE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
1	1000.00	26.33	141620	152242	46.61	141620
2	683.35	40.88	50069	217484	72.38	50069
3	506.62	51.40	12093	246795	91.00	12093
4	400.94	60.90	-8324	256357	107.83	-8324
5	335.07	70.12	-21468	252506	124.15	-21468
6	293.43	74.21	-24437	245174	131.39	-24437
7	256.96	78.48	-26549	235022	138.95	-26549
8	225.03	82.89	-27919	222635	146.77	-27919
9	197.06	87.37	-28593	208595	154.70	-28593
10	172.57	91.92	-28729	193355	162.76	-28729
11	151.12	96.69	-28542	177174	171.20	-28542
12	132.34	101.81	-28178	160171	180.27	-28178
13	115.90	107.42	-27731	142373	190.20	-27731
14	101.49	113.54	-27202	123808	201.04	-27202
15	88.88	120.09	-26555	104547	212.63	-26555
16	77.83	127.02	-25787	84667	224.90	-25787
17	68.16	134.30	-24915	64233	237.80	-24915
18	59.69	141.91	-23951	43304	251.26	-23951
19	52.27	149.93	-22943	21888	265.47	-22943
20	45.77	158.40	-21910	-24	280.46	-21910

ANTICIPATED LOSS RATIO: 56.48% 100.00%

STATEMENT 1986-41

EXHIBIT 1

ILLUSTRATIVE MAJOR MEDICAL PLAN

INTEREST AT: 7.50

5TH YEAR INCREMENTAL PROJECTION

BENEFIT RATIO RESERVE
GROSS PREMIUM: 86.64NATURAL NET PREMIUM RESERVE
NET PREMIUM: 50.68

PERSIST. SCALE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
5 335.07	37.02	6236	6703	63.28	6236	6703
6 278.90	44.64	3347	10804	76.32	3347	10804
7 234.29	51.84	1352	13067	88.61	1352	13067
8 198.60	58.89	-68	13975	100.67	-68	13975
9 169.81	65.88	-1087	13855	112.63	-1087	13855
10 146.43	69.31	-1372	13419	118.49	-1372	13419
11 126.28	72.90	-1576	12731	124.63	-1576	12731
12 108.89	76.77	-1724	11833	131.24	-1724	11833
13 93.90	80.99	-1830	10753	138.46	-1830	10753
14 80.98	85.61	-1902	9515	146.35	-1902	9515
15 69.83	90.55	-1939	8144	154.79	-1939	8144
16 60.22	95.78	-1945	6663	163.73	-1945	6663
17 51.93	101.27	-1924	5094	173.13	-1924	5094
18 44.78	106.99	-1882	3454	182.91	-1882	3454
19 38.62	113.05	-1825	1750	193.27	-1825	1750
20 33.30	119.44	-1758	-8	204.18	-1758	-8

ANTICIPATED LOSS RATIO:

58.49%

100.00%

EXHIBIT 2

STATEMENT 1986-41

ILLUSTRATIVE MAJOR MEDICAL PLAN

INTEREST AT: 7.50

8TH YEAR INCREMENTAL PROJECTION

BENEFIT RATIO RESERVE
 GROSS PREMIUM: 152.27

NATURAL NET PREMIUM RESERVE
 NET PREMIUM: 88.05

PERSIST. SCALE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
8	198.60	37.60	6115	6574	65.03	6115
9	166.28	45.17	3204	10511	78.11	3204
10	140.50	52.18	1208	12598	90.23	1208
11	119.78	59.02	-218	13309	102.07	-218
12	103.00	65.96	-1276	12935	114.07	-1276
13	89.32	69.59	-1601	12184	120.35	-1601
14	77.46	73.56	-1856	11103	127.21	-1856
15	67.18	77.80	-2044	9739	134.55	-2044
16	58.26	82.29	-2171	8136	142.32	-2171
17	50.53	87.01	-2245	6332	150.47	-2245
18	43.82	91.94	-2276	4360	158.99	-2276
19	38.00	97.14	-2275	2242	167.98	-2275
20	32.95	102.62	-2248	-6	177.47	-2248
ANTICIPATED LOSS RATIO:				57.82%	100.00%	

ILLUSTRATIVE MAJOR MEDICAL PLAN

INTEREST AT: 7.50

1,000 POLICIES ORIGINALLY ISSUED

		BENEFIT RATIO RESERVE INIT. GROSS PREMIUM: 469.69			NATURAL NET PREMIUM RESERVE INIT. NET PREMIUM: 265.27		
PERSIST. SCALE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	
1 1000.00	26.33	141620	152242	46.61	141620	152242	
2 683.35	40.88	50069	217484	72.38	50069	217484	
3 506.62	51.40	12093	246795	91.00	12093	246795	
4 400.94	60.90	-8324	256357	107.83	-8324	256357	
5 335.07	INCR. GROSS PREMIUM: 86.64	64.96	-15232	259209	INCR. NET PREMIUM: 50.68	259209	
6 278.90	70.38	-21090	255978	123.93	-21090	255978	
7 234.29	76.12	-25197	248089	134.04	-25197	248089	
8 198.60	INCR. GROSS PREMIUM: 152.27	72.56	-21872	243183	INCR. NET PREMIUM: 88.05	243183	
9 166.28	79.48	-26476	232961	127.26	-21872	232961	
10 140.50	86.04	-28893	219372	139.41	-26476	219372	
11 119.78	92.76	-30336	203214	150.90	-28893	144426	
12 103.00	99.73	-31178	184939	162.69	-30336	122430	
13 89.32	106.25	-31162	165310	174.93	-31178	103.00	
14 77.46	113.42	-30961	144426	186.35	-31162	89.32	
15 67.18	121.16	-30538	122430	198.93	-30961	77.46	
16 58.26	129.45	-29903	99466	212.51	-30538	67.18	
17 50.53	138.25	-29085	75660	227.05	-29903	58.26	
18 43.82	147.54	-28108	51118	242.49	-29085	50.53	
19 38.00	157.44	-27043	25880	258.78	-28108	43.82	
20 32.95	168.00	-25916	-38	276.15	-27043	38.00	
				294.66	-25916	-38	

ANTICIPATED LOSS RATIO: 56.71% 100.00%

EXHIBIT 4

STATEMENT 1986-41

STATEMENT 1986-41

EXHIBIT 5

ILLUSTRATIVE MAJOR MEDICAL PLAN

**INTEREST AT: 7.50
1,000 POLICIES ORIGINALLY ISSUED**

**BENEFIT RATIO RESERVE
INIT. GROSS PREMIUM: 469.69**

PERSIST. SCALE	ACTUAL CLAIM %	R TO R'	RESERVE INCREMENT	ACCUM. RESERVE
1 1000.00	26.90	56.48	138900	149318
2 683.35	44.26	56.48	39204	202660
3 506.62	56.19	56.48	689	218601
4 400.94	66.84	56.48	-19522	214010
	INCR. GROSS PREMIUM:	86.64		
5 335.07	65.57	56.57	-15329	213582
6 278.90	74.29	56.67	-25605	202076
7 234.29	81.22	56.76	-29853	185139
	INCR. GROSS PREMIUM:	152.27		
8 198.60	70.23	56.86	-16504	181282
9 166.28	75.67	56.95	-19433	173988
10 140.50	80.62	57.05	-20521	164977
11 119.78	85.69	57.15	-20959	154820
12 103.00	91.04	57.24	-24671	139909
13 89.32	96.06	57.24	-24571	123989
14 77.46	101.54	57.24	-24314	107151
15 67.18	107.39	57.24	-23873	89524
16 58.26	113.59	57.24	-23262	71231
17 50.53	120.10	57.24	-22506	52380
18 43.82	126.90	57.24	-21628	33058
19 38.00	134.08	57.24	-20689	13296
20 32.95	141.65	57.24	-19710	-6894

ACTUAL LOSS RATIO: 57.24%

ILLUSTRATIVE MAJOR MEDICAL PLAN: ANNUAL RENEWABLE TERM

INTEREST AT: 7.50

1,000 POLICIES ORIGINALLY ISSUED

BENEFIT RATIO RESERVE

NATURAL NET PREMIUM RESERVE

PERSIST. SCALE	GROSS PREMIUM	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	NET PREMIUM	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
1	1000.00	349.82	35.35	91139	97975	214.79	57.57	91139
2	683.35	369.70	51.93	23914	131031	227.00	84.58	23914
3	506.62	390.91	61.75	-700	140106	240.02	100.58	-700
4	400.94	413.31	69.20	-12933	136711	253.77	112.71	-12933
5	335.07	436.75	75.41	-20498	124929	268.16	122.81	-20498
-295-	6	293.43	461.09	75.59	-19202	113656	283.11	123.12
	7	256.96	485.97	75.85	-18040	102787	298.39	123.53
	8	225.03	511.51	76.12	-16939	92287	314.07	123.97
	9	197.06	538.21	76.25	-15747	82281	330.46	124.18
	10	172.57	566.60	76.20	-14471	72895	347.89	124.10
-151-	11	151.12	597.19	76.05	-13218	64153	366.67	123.85
	12	132.34	629.99	75.90	-12093	55965	386.81	123.62
	13	115.90	664.65	75.91	-11178	48146	408.10	123.63
	14	101.49	701.17	76.06	-10431	40543	430.52	123.87
	15	88.88	739.55	76.27	-9773	33078	454.08	124.21
-77-	16	77.83	779.79	76.51	-9169	25702	478.79	124.61
	17	68.16	833.81	75.65	-8101	18922	511.96	123.21
	18	59.69	887.83	75.07	-7246	12552	545.13	122.27
	19	52.27	941.86	74.77	-6581	6419	578.30	121.77
	20	45.77	995.88	74.70	-6065	381	611.47	121.67

ANTICIPATED LOSS RATIO:

61.40%

100.00%

STATEMENT 1986-41

EXHIBIT 6

ILLUSTRATIVE MAJOR MEDICAL PLAN: ANNUAL RENEWABLE TERM

INTEREST AT: 7.50

1,000 POLICIES ORIGINALLY ISSUED

BENEFIT RATIO RESERVE

NATURAL NET PREMIUM RESERVE

PERSIST. SCALE	GROSS PREMIUM	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE	NET PREMIUM	EXPECTED CLAIM %	RESERVE INCREMENT	ACCUM. RESERVE
ANTICIPATED LOSS RATIO: 60.00%								
1 1000.00	349.82	35.35	86242	92710	209.89	58.91	86242	92710
2 683.35	369.70	51.93	20377	121569	221.82	86.56	20377	121569
3 506.62	390.91	61.75	-3472	126954	234.55	102.92	-3472	126954
4 400.94	413.31	69.20	-15253	120078	247.99	115.34	-15253	120078
5 335.07	436.75	75.41	-22547	104846	262.05	125.68	-22547	104846
ANTICIPATED LOSS RATIO: 63.80%								
6 293.43	461.09	75.59	-15955	95558	294.18	118.48	-15955	95558
7 256.96	485.97	75.85	-15043	86554	310.05	118.88	-15043	86554
8 225.03	511.51	76.12	-14176	77806	326.34	119.30	-14176	77806
9 197.06	538.21	76.25	-13201	69450	343.38	119.51	-13201	69450
10 172.57	566.60	76.20	-12125	61625	361.49	119.44	-12125	61625
11 151.12	597.19	76.05	-11052	54366	381.01	119.19	-11052	54366
12 132.34	629.99	75.90	-10092	47595	401.93	118.97	-10092	47595
13 115.90	664.65	75.91	-9329	41135	424.05	118.98	-9329	41135
14 101.49	701.17	76.06	-8723	34843	447.35	119.21	-8723	34843
15 88.88	739.55	76.27	-8195	28646	471.83	119.54	-8195	28646
16 77.83	779.79	76.51	-7712	22504	497.51	119.92	-7712	22504
17 68.16	833.81	75.65	-6737	16949	531.97	118.58	-6737	16949
18 59.69	887.83	75.07	-5974	11798	566.44	117.67	-5974	11798
19 52.27	941.86	74.77	-5399	6879	600.91	117.19	-5399	6879
20 45.77	995.88	74.70	-4971	2052	635.31	117.09	-4971	2052

STATEMENT 1986-41

EXHIBIT 8

Illustrative Adjustment for Premiums Earned and Claims Incurred in the First Contract Year

Temporary Graded Exclusion from 100% to 0%

- A. New contract form, with no adjustment of loss ratio indicated, following monitor review.

An insurer places a new contract on sale in Statement Year 1. The "anticipated loss ratio" is 55%. The cumulative experience is calculated at 7% interest. The following is the assumed experience by statement year, year 6 being the last year the plan is issued:

	(All \$ amounts in 000's)					
	1	2	3	4	5	6
First Year Business:						
Incurred Claims:	\$ 280	\$ 520	\$ 580	\$ 800	\$ 700	\$ 150
Earned Premiums:	1200	2000	2400	2500	2500	500
Renewal Year Business:						
Incurred Claims:	0	320	1210	2300	3480	4550
Earned Premiums:	0	800	2200	3600	5200	6600
Total Business:						
Incurred Claims:	280	840	1790	3100	4180	4700
Earned Premiums:	1200	2800	4600	6100	7700	7100
Actual Loss Ratio (\$):	20.0	30.0	38.9	50.8	54.3	66.2
Expected Loss Ratio (\$):	18.0	32.0	41.0	49.0	55.0	66.0
Cumulative Experience and Benefit Ratio Reserve without 1st Year exclusion: (At end of year):						
Claims:	248	1135	3066	6487	11265	16915
Premiums:	1241	4225	9279	16238	25340	34458
Loss Ratio (\$):	20.0	26.9	33.0	39.9	44.5	49.1
55% Benefit Ratio Reserve without exclusions:	434	1169	2038	2444	2672	2037
Maximum excludable*:	434	949	1495	1685	1797	1263
Net reserve:	0	240	538	755	872	771
* Excludable reserve on 1st Year Business of each Year, at 7% accumulation:						
	1	2	3	4	5	6
At 100%:	434	500	765	595	698	129
At 75%:	349	481	614	477	560	104
At 50%:	289	343	438	340	400	74
At 25%:	133	184	234	182	214	40

Thus, the aggregate exclusion for Year 5 is: \$698 + \$477 + \$438 + \$184 = \$1797

(Totals above are not adjusted for rounding.)

Assumptions:

Only one year's issues

0% interest

Persistency: 1.00, .70, .75, .80, .85, .88, .90 thereafter

Actual lifetime loss ratio equals anticipated lifetime loss ratio of 60%

No rate increase

No reserve adjustments

POLICY YEAR				ACCUMULATED VALUES				BENEFIT RATIO RESERVE
	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	R or R' *	
1	1,000,000	400,000	40.0%	1,000,000	400,000	40.0%	60%	200,000
2	700,000	350,000	50.0%	1,700,000	750,000	44.1%	60%	270,000
3	525,000	315,000	60.0%	2,225,000	1,065,000	47.9%	60%	270,000
4	420,000	284,650	68.3%	2,645,000	1,351,650	51.1%	60%	235,350
5	357,000	243,653	68.3%	3,002,000	1,595,303	53.1%	60%	205,897
6	314,160	214,414	68.3%	3,314,160	1,809,717	54.6%	60%	179,979
7	282,744	192,973	68.3%	3,598,904	2,002,689	55.6%	60%	156,653
8	254,470	173,676	68.3%	3,853,374	2,176,365	56.5%	60%	135,659
9	229,023	156,308	68.3%	4,082,396	2,332,673	57.1%	60%	116,765
10	208,120	140,677	68.3%	4,288,517	2,473,350	57.7%	60%	99,760
11	185,508	126,609	68.3%	4,474,016	2,599,960	58.1%	60%	84,455
12	166,958	113,948	68.3%	4,640,982	2,713,908	58.5%	60%	70,681
13	150,262	102,554	68.3%	4,791,244	2,816,462	58.8%	60%	58,285
14	135,234	92,298	68.3%	4,926,480	2,908,760	59.0%	60%	47,128
15	121,712	83,068	68.3%	5,048,192	2,991,628	59.3%	60%	37,087
16	109,541	74,762	68.3%	5,157,733	3,066,590	59.5%	60%	28,050
17	98,587	67,285	68.3%	5,256,319	3,133,873	59.6%	60%	19,916
18	88,728	60,597	68.3%	5,345,047	3,194,432	59.8%	60%	12,596
19	79,855	54,501	68.3%	5,424,903	3,248,934	59.9%	60%	6,008
20	71,876	49,051	68.3%	5,496,772	3,297,985	60.0%	60%	79

* Also represents loss ratio including Benefit Ratio Reserve.

EXHIBIT 9

BENEFIT RATIO RESERVE MODEL
Level Premiums

STATEMENT 1986-41

STATEMENT 1986-41

EXHIBIT 10

BENEFIT RATIO RESERVE MODEL
Level Premiums

POLICY YEAR				ACCUMULATED			VALUES	
	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	R or R' *	BENEFIT RATIO RESERVE
1	1,000,000	350,000	35.0%	1,000,000	350,000	35.0%	60%	250,000
2	700,000	315,000	45.0%	1,700,000	685,000	39.1%	60%	355,000
3	525,000	288,750	55.0%	2,225,000	953,750	42.9%	60%	381,250
4	420,000	265,650	63.3%	2,645,000	1,219,400	46.1%	60%	367,500
5	357,000	225,803	63.3%	3,002,000	1,445,203	48.1%	60%	355,998
6	314,160	198,706	63.3%	3,316,160	1,643,909	49.6%	60%	345,787
7	282,744	178,836	63.3%	3,598,904	1,822,744	50.6%	60%	336,598
8	254,470	160,952	63.3%	3,853,374	1,983,496	51.5%	60%	328,328
9	229,023	144,867	63.3%	4,082,394	2,128,553	52.1%	60%	320,885
10	206,120	130,371	63.3%	4,288,517	2,258,924	52.7%	60%	314,184
11	185,508	117,334	63.3%	4,474,025	2,376,258	53.1%	60%	308,157
12	166,958	105,601	63.3%	4,640,982	2,481,859	53.5%	60%	302,731
13	150,262	95,041	63.3%	4,791,244	2,576,899	53.8%	60%	297,847
14	135,236	85,537	63.3%	4,926,480	2,662,436	54.0%	60%	293,452
15	121,712	76,983	63.3%	5,048,192	2,739,419	54.3%	60%	289,496
16	109,541	69,285	63.3%	5,157,733	2,808,703	54.5%	60%	285,936
17	98,587	62,356	63.3%	5,256,514	2,871,060	54.6%	60%	282,732
18	88,728	56,120	63.3%	5,345,047	2,927,180	54.8%	60%	279,848
19	79,855	50,508	63.3%	5,424,903	2,977,668	54.9%	60%	277,253
20	71,870	45,458	63.3%	5,494,772	3,023,146	55.0%	60%	274,917

* Also represents loss ratio including Benefit Ratio Reserve.

STATEMENT 1986-41

BENEFIT RATIO RESERVE MODEL

Level Premiums

EXHIBIT 11

Assumptions:

Only one year's issues

0% interest

Persistency: 1.00, .70, .75, .80, .85, .88, .90 thereafter

Actual loss ratio equals 55% or 5% less than anticipated
lifetime loss ratio of 60%

No rate increase

Anticipated lifetime loss ratio, R, of 60% adjusted to a probable loss
ratio, R', of 55% over a five year period, beginning in the 6th year

Year (n)	Reserves Released	
	$(R'_{n+1} - R') \times \sum E_n$	Earned Premiums
6		33,162
7		35,989
8		38,534
9		40,824
10		42,885

- 300 -

POLICY YEAR	ACCUMULATED VALUES						BENEFIT RATIO RESERVE	
	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO		
1	1,000,000	350,000	35.0%	1,000,000	350,000	35.0%	60%	250,000
2	700,000	315,000	45.0%	1,700,000	665,000	39.1%	60%	355,000
3	525,000	288,750	55.0%	2,225,000	953,750	42.9%	60%	381,250
4	420,000	265,650	63.3%	2,645,000	1,219,400	46.1%	60%	367,600
5	357,000	225,803	63.3%	3,002,000	1,445,203	48.1%	60%	355,998
6	314,160	198,706	63.3%	3,316,160	1,643,909	49.6%	59%	312,626
7	282,744	178,836	63.3%	3,598,904	1,822,744	50.6%	58%	264,620
8	254,470	160,952	63.3%	3,853,374	1,983,696	51.5%	57%	212,727
9	229,023	144,857	63.3%	4,082,396	2,128,563	52.1%	56%	157,589
10	206,120	130,371	63.3%	4,288,517	2,258,924	52.7%	55%	99,760
11	185,508	117,334	63.3%	4,474,025	2,376,258	53.1%	55%	84,455
12	166,958	105,601	63.3%	4,640,982	2,481,859	53.5%	55%	70,681
13	150,262	95,041	63.3%	4,791,144	2,576,899	53.8%	55%	58,285
14	135,236	85,537	63.3%	4,926,480	2,662,436	54.0%	55%	47,128
15	121,712	76,983	63.3%	5,048,192	2,759,414	54.3%	55%	37,087
16	109,541	69,285	63.3%	5,157,732	2,808,703	54.5%	55%	28,050
17	98,587	63,356	63.3%	5,266,319	2,871,060	54.6%	55%	19,916
18	86,728	56,120	63.3%	5,345,047	2,927,180	54.8%	55%	12,596
19	79,850	50,508	63.3%	5,404,903	2,977,688	54.9%	55%	6,008
20	71,870	45,458	63.3%	5,496,772	3,023,146	55.0%	55%	79

* Also represents loss ratio including Benefit Ratio Reserve.

Assumptions:

Only one year's issues

0% interest

Persistency: 1.00, .70, .75, .80, .85, .88, .90 thereafter

Actual loss ratio equals 65% or 5% more than anticipated

lifetime loss ratio of 60%

No rate increase

No reserve adjustments

POLICY YEAR	EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	ACCUMULATED VALUES				BENEFIT RATIO RESERVE
				EARNED PREMIUMS	INCURRED CLAIMS	LOSS RATIO	R or R' *	
1	1,000,000	450,000	45.0%	1,000,000	450,000	45.0%	60%	150,000
2	700,000	385,000	55.0%	1,700,000	835,000	49.1%	60%	185,000
3	525,000	341,250	65.0%	2,225,000	1,176,250	52.9%	60%	156,750
4	420,000	307,650	73.3%	2,645,000	1,483,900	56.1%	60%	103,100
5	357,000	261,503	73.3%	3,002,000	1,745,403	58.1%	60%	55,798
6	314,160	230,122	73.3%	3,316,160	1,975,525	59.6%	60%	14,171
7	282,744	207,110	73.3%	3,598,904	2,182,635	60.6%	60%	0
8	254,470	186,399	73.3%	3,853,374	2,369,034	61.5%	60%	0
9	229,023	167,759	73.3%	4,082,396	2,536,793	62.1%	60%	0
10	206,120	150,983	73.3%	4,288,917	2,687,776	62.7%	60%	0
11	185,508	135,885	73.3%	4,474,025	2,823,661	63.1%	60%	0
12	166,958	122,296	73.3%	4,640,982	2,945,957	63.5%	60%	0
13	150,262	110,067	73.3%	4,791,244	3,056,024	63.8%	60%	0
14	135,236	99,060	73.3%	4,926,480	3,155,084	64.0%	60%	0
15	121,712	89,154	73.3%	5,048,192	3,244,238	64.3%	60%	0
16	109,541	80,239	73.3%	5,157,733	3,324,477	64.5%	60%	0
17	98,587	72,215	73.3%	5,254,319	3,396,691	64.6%	60%	0
18	88,728	64,993	73.3%	5,345,047	3,461,685	64.8%	60%	0
19	79,855	58,494	73.3%	5,424,903	3,520,179	64.9%	60%	0
20	71,870	52,645	73.3%	5,496,772	3,572,823	65.0%	60%	0

* Also represents loss ratio including Benefit Ratio Reserve
except where loss ratio excluding reserve is higher than R or R'.

BENEFIT RATIO RESERVE MODEL
Level Premiums

EXHIBIT 12

STATEMENT 1986-41

STATEMENT 1986-41

EXHIBIT 13

BENEFIT RATIO RESERVE MODEL
Level Premiums

Year (n)	Reserve Strengthening $(R_n - R_{n-1}) \times \sum_{i=1}^n \text{Earned Premiums}$	
	6	33,423
7	0	0
8	39,243	
9	0	
10	43,957	

Assumptions:

Only one year's issues

0% interest

Persistency: .100, .70, .75, .80, .85, .88, .90 thereafter

Actual loss ratios for first 5 years 5% more than anticipated loss ratios

(Lifetime anticipated loss ratio = 60%)

An 8-1/3% rate increase implemented in the 6th year

Anticipated lifetime loss ratio, R, of 60% adjusted to a probable loss ratio, R', of 65% over a five year period, beginning in the 6th year

POLICY YEAR	ACCUMULATED VALUES		R or R' *	BENEFIT RATIO RESERVE	
	EARNED PREMIUMS	INCURRED CLAIMS			
1	1,000,000	450,000	45.0%		
2	700,000	385,000	55.0%		
3	525,000	341,250	65.0%		
4	420,000	307,650	73.3%		
5	357,000	261,503	73.3%		
6	340,340	230,121	67.6%		
7	306,306	207,109	67.6%		
8	278,675	186,398	67.6%		
9	248,108	167,758	67.6%		
10	223,297	150,982	67.6%		
11	200,967	135,884	67.6%		
12	180,871	122,296	67.6%		
13	162,784	110,066	67.6%		
14	146,505	99,059	67.6%		
15	131,855	89,154	67.6%		
16	118,669	80,238	67.6%		
17	106,802	72,214	67.6%		
18	96,122	64,993	67.6%		
19	86,510	58,494	67.6%		
20	77,859	52,644	67.6%		

* Also represents loss ratio including Benefit Ratio Reserve.

STATEMENT 1986-41

ADDENDUM I. Quantitative Impact of Percentage Adjustment for Premiums Earned and Claims Incurred in the First Contract Year (Section IV D3 of Reserve Standards)

In our Subcommittee Report of May, 1986 to the NAIC (EX5) Life and Health Actuarial Task Force, we recommended a form of "disappearing one-year preliminary term" method for use with benefit ratio reserves. This provided that reserves otherwise arising from first contract year experience could be excluded from the aggregate reserves on a reducing percentage basis: 100% with respect to contracts within the first 12 months, 75% the next 12 months, then 50% and 25%, with no exclusion for contracts beyond the 48th month.

The reason for this recommendation was that, otherwise, benefit ratio reserves would be on a full net level method, unlike tabular reserves for which a full 2 year preliminary term method is allowed. The purpose of such preliminary term adjustments is to assist insurers in the amortization of high first year expenses.

The "disappearing one-year preliminary term" method proposed has been criticized for not allowing sufficient relief from first year expenses, particularly when compared with the tabular 2 year preliminary term provision. The subcommittee agreed that there was "unequal treatment" here, but concluded that, given the type of business to which benefit ratio reserves would apply, first year experience was too significant a portion of total experience to be excluded entirely, as would be true even under a permanent one-year preliminary term method. Further, reserve basis loss ratios would need substantial adjustment to fit such methods as one or two year preliminary term.

However, in an effort to provide for somewhat greater recognition of the first year expense problem, the subcommittee decided that its concerns as to exclusion of first year experience from the reserves would not be severely compromised if a permanent exclusion of 50% of first year experience were allowed, and so recommended in its Report of September, 1986. The reducing percentage feature was retained, so that the exclusion begins at 100% as before, then reduces to 75% and finally to a permanent 50% level. Thus, first year experience still enters into the reserve determination, while increased relief is provided against first year expenses.

The Task Force requested that some quantification of the impact of this proposed change be provided, and this Addendum I to Appendix C has been prepared in response.

Four tests of the quantitative impact have been carried out, and the results are displayed in the four exhibits attached to this Addendum, as follows:

Exhibit B shows the results of an actual trial valuation of a large block of in-force cancer expense contracts of American Family Life Insurance Company. Mr. William Bugg, a member of our subcommittee, arranged for this analysis to be carried out for us. The block of contracts tested here is the same as that for which Mr. Bugg provided comparative aggregate reserve values during a session at the June, 1986 Kansas City meeting of the Society of Actuaries. The valuations in Exhibit B, however, were carried out as of

STATEMENT 1986-41

September 30, 1986; 15 months later than the valuations reported on at the Kansas City meeting.

Benefit ratio reserves are shown here for 5 different methods. In each case, appropriate adjustments in the net premiums (i.e., in the anticipated loss ratios) were made with respect to the method used. The block of contracts involved here is relatively mature; it contains very little new business issued within the last two years. Accordingly, the tests show the quantitative effects of the several methods as applied to contracts of substantial average duration.

Our September, 1986 "100% to 50%" recommended method develops reserves, for this block and valuation date, equal to 93% of the aggregate reserve developed under our June, 1986 "100% to 0%" disappearing one-year term method. Note that under a full two year preliminary term method the aggregate reserve developed is only 66% of the amount developed under our June, 1986 proposed method.

Exhibit 1B shows the impact, by duration, for the same hypothetical block of contracts as that illustrated in Exhibit 1 of Appendix C. The right-hand column shows the ratios of the durational reserves under the "100% to 50%" exclusion method, which we now recommend, to the corresponding durational reserves under our previously proposed "100% to 0%" exclusion method.

In calculating Column 3 (the "100% to 50%" values), a linear strengthening process was used to adjust the anticipated loss ratio (R) value from 56.48%, as shown in exhibit 1 for a method with 0% permanent exclusion of first year experience, to 61.19%, which is the loss ratio required under the Exhibit 1 scenario when 50% of first year experience is permanently excluded.

Observe that this linear strengthening procedure produces higher reserves, under the 100% to 50% method, at durations 2, 3 and 4, than occur under the 100% to 0% method. This is the result of the strengthening loss ratio, and it occurs in each of Exhibits 1A, 9A and 8A. This result is obvious, since without the strengthening the reserves for the first three years would be identical under either method. Because of this, we are recommending that, under the 100%-50% method, insurers be permitted to reserve on the original loss ratio within three years after inception of a contract group (NOT the first 3 durations of a particular contract), but then strengthen promptly to the adjusted loss ratio by the end of year 5. One modified "linear" procedure for accomplishing this could be to interpolate between the column (1) and column (2) reserves for years 3, 4 and 5 at 67-33%, 33-67%, and 0-100%. The proposed method does not specify any one procedure for strengthening, but the procedure used should be systematic and should be tested for its impact on an insurer's financial position during the transitional strengthening period. Under these 3 year "linear" factors, the column 5 ratios for years 2, 3, 4 and 5 are 1.00, 1.11, 0.98, and 0.91 respectively.

Exhibit 9B shows the impact, by duration again, for the same hypothetical block of contracts as that illustrated in Exhibit 9 of Appendix C. Similar information is provided here as what is shown in Exhibit 1B, and a similar linear strengthening procedure was used. The Exhibit 9 block of contracts is illustrated at 0% interest, for simplicity. Exhibit 1 uses 7.5%.

STATEMENT 1986-41

Note that, in Exhibit 9B higher reserves result under the "100% to 50%" method than under the "100% to 0%" method only at durations 2 and 3. The column 5 ratios, under the same 3 year linear factors as above, for years 2, 3, 4 and 5 are 1.00, 1.07, 0.89 and 0.76 respectively.

Exhibit 8B displays an illustrative development of the "100% to 50% method for the same hypothetical contract group as the one illustrated in Exhibit 8 of Appendix C. Here the illustrated block includes contracts issued over several years, not all at the same time, as is the case in Exhibits 1 and 9. Comparison with the aggregate reserves in Exhibit 8 developed under the "100% to 0%" method, shows that the 100% to 50% reserves are higher for contract group years 2, 3 and 4, again with "linear" strengthening over years 2 to 5.

In all the Exhibits, the "100% to 50%" reserves become and remain lower after the 4th year.

STATEMENT 1986-41

EXHIBIT B

October 22, 1986

Mr. E. Paul Barnhart, F.S.A.
Consulting Actuary
959 Gardenview Office Parkway
St. Louis, MO 63141

Dear Paul:

Attached is an exhibit containing results from the calculations you requested. We have actually shown more information than you requested since our programs were already set up and available. These reserve calculations have been performed for the same block of business as before, but using a valuation date fifteen months later. We have used the current claim costs and lapse assumptions as are being used for valuation of our current products and interest of 6%.

If you have any questions please give me a call.

Sincerely,

(signed)

William J. Bugg, Jr.

STATEMENT 1986-41

EXHIBIT B

**American Family Life Assurance Company
SUMMARY OF RESULTS
FOR NAIC PROPOSED RESERVE STANDARD
10/22/86**

			Line (n) Line (2)
(1)	Net Level	\$228,022,472	1.04
(2)	Previous NAIC Proposal (June, 1986; 100% to 0%)	220,213,552	1.00
(3)	New NAIC Proposal (September, 1986: 100% to 50%)	203,829,511	0.93
(4)	One Year Preliminary Term	178,278,445	0.81
(5)	Two Year Preliminary Term	144,718,169	0.66
	Number of Policies	1,505,214	
	Run on 9/30/86 inforce		
	Current company claim costs used		
	6% interest		
	Lapses used		

**EXHIBIT 1B: Adjustment for 50% permanent exclusion of 1st Year experience
(7.5% interest). Refer to Exhibit 1.**

1. Adjusted loss ratio = 61.19% (originally 56.48%)

The reserve basis must be strengthened to this level by Year 5.

2. Benefit ratio reserve, 1st 6 years; with graded adjustment over 1st 3 years of 100% to 50% exclusion of 1st year.

Year	(1)	(2)	(3)	(4)	(5)
	56.48% Res. (100% to 50%)	61.19% Res. (100% to 50%)	56.48% to 61.19% Res. by Year 5 (100% to 50%)	56.48% Res. (100% to 0%)	(3)/(4)
1	0	0	0	0	-
2	94,739	121,209	101,357	94,739	1.07
3	158,828	210,320	184,519	158,828	1.16
4	161,792	226,681	210,459	209,075	1.01
5	150,849	228,574	228,574	252,506	0.91
6	135,892	226,427	226,427	245,174	0.92

STATEMENT 1986-41

EXHIBIT 9B: Adjustment for 50% permanent exclusion of 1st Year experience (0% interest). Refer to Exhibit 9.

1. Adjusted loss ratio:

$$\frac{\text{Incurred Claims}}{\text{Earned Premiums}} = \frac{3,097,985}{4,496,772} = 62.0\% \text{ l.r.}$$

The reserve basis must be strengthened to this level by year 5.

2. Benefit ratio reserve, 1st 6 years, with graded adjustment over 1st 3 years of 100% to 50% exclusion of 1st year:

Year	(1)	(2)	(3) 60 to 62%	(4)	(5)
	60% Reserve (100% to 50%)	62% Reserve. (100% to 50%)	Res. by Year 5 (100% to 50%)	60% Res. (100% to 0%)	(3)/(4)
1	0	0	0	0	-
2	120,000	139,000	124,750	120,000	1.04
3	170,000	204,500	187,250	170,000	1.10
4	135,350	178,250	167,525	185,350	0.90
5	105,897	155,937	155,937	205,897	0.76
6	79,979	136,302	136,302	179,979	0.76

STATEMENT 1986-41

EXHIBIT 8B

Illustrative Adjustment for Premiums Earned and Claims Incurred in the First Contract Year

Graded Exclusion from 100% to 50%

- A. New contract form, with no adjustment of loss ratio indicated, following monitor review.

An insurer places a new contract on sale in Statement Year 1. The "anticipated loss ratio" is 55%. With 50% of 1st Year business excluded, the loss ratio is expected to be 57%. The cumulative experience is calculated at 7% interest. The following is the assumed experience by statement year, year 6 being the last year the plan is issued:

	(All \$ amounts in 000's)					
	Statement Year					
	1	2	3	4	5	6
50% of First Year Business:						
Incurred Claims:	\$ 120	\$ 260	\$ 290	\$ 400	\$ 350	\$ 75
Earned Premiums:	600	1000	1200	1250	1250	250
Renewal Year Business:						
Incurred Claims:	0	320	1210	2300	3480	4550
Earned Premiums:	0	800	2200	3600	5200	6600
Total Business:						
Incurred Claims:	120	580	1500	2700	3830	4625
Earned Premiums:	600	1800	3400	4850	6450	6850
Actual Loss Ratio (%):	20.0	32.2	44.1	55.7	59.4	67.5
Expected Loss Ratio (%):	18.0	34.0	45.0	54.0	60.0	65.0
Cumulative Experience and Benefit Ratio Reserve with 50% 1st Year exclusion: (At end of year):						
Claims:	124	733	2336	5292	9624	15082
Premiums:	621	2526	6220	11672	19161	27588
Loss Ratio (%):	20.0	29.0	37.6	45.3	50.2	54.7
55% to 57% Benefit Ratio Reserve*						
with 50% excluded:	217	669	1147	1303	1298	643
Maximum excludable**:	217	421	558	528	548	271
Net reserve:	0	248	589	775	750	372

* Basis strengthened from 55 to 57% over 5 years at 0.5% yearly.

** Additional excludable reserve on 1st Year Business of each Year, at 7% accumulation:

	1	2	3	4	5	6
At 50%:	217	305	395	317	375	70
At 25%:	116	163	211	169	201	37

Thus, the aggregate exclusion for Year 5 is: \$375 + \$173 = \$548

(Totals above are not adjusted for rounding.)

STATEMENT 1986-41

ADDENDUM II. Further Discussion Concerning the Theoretical Foundation of the Benefit Ratio Reserve Method

The benefit ratio reserve method, recommended for adoption by the NAIC in our subcommittee's Report of September 29, 1986, has been questioned by some actuaries and by a major trade association as lacking a rigorous theoretical foundation uniting the retrospective and prospective aspects of the method.

The "theoretical foundation" is implicit to the opening discussion of Appendix C, although not explicitly addressed in "rigorous" terms. In an attempt to render this theoretical basis as clear and rigorous as possible for all concerned, we will here set forth a restatement of the fundamental principles underlying the method.

A. The Principle of Equivalent Monetary Value Over Time.

We believe it is an unquestioned and long established actuarial principle that any known or assumed finite time stream of monetary payments, no matter how irregular, when either discounted or accumulated at a stated effective rate of interest, may be shown to be equivalent in value to some determinable single monetary amount valued as of any given point in time; or, alternatively, equivalent in value to some determinable finite periodic series of uniform (or changing) monetary amounts, payable at stated points in time.

This principle obviously serves as the "foundation" for calculation of actuarial single premiums, level periodic premiums, yearly one year term premiums and final maturity values, any of which can be determined so as to be equal in aggregate value to another changing stream of values, such as annual claim costs, varying over time. We trust that we need not, in this present discussion, demonstrate mathematically the truth and generality of this principle: if it is not accepted as valid, then the entire established process and theory of the computation of actuarial present values and accumulated values comes under doubt.

An irregular or changing monetary stream may be valued in the aggregate as of a beginning point in time: for example, as a present value at inception of all future benefit payments expected to be made under a continuing insurance contract, or under a group or aggregate of such contracts. It may also be valued in the aggregate as of an ending point in time: for example, as the accumulated value, upon termination of the contract (or upon termination of the last of a group of contracts), of all actual benefit payments that have been incurred under the contract or group of contracts.

B. Replacement of Expected by Actual Values, as Time Passes.

We believe it is further apparent that as time passes, expected payments may be steadily replaced in the equation by actual payments made within the increasing period of elapsed time, and the combined aggregate values of past actual payments and expected future payments may be steadily redetermined or "corrected." As time continues to pass, the past actual and future expected values so combined clearly must tend steadily to shift from what was originally a present value of payments 100% expected, to an eventual accumulated value of payments 100% actual and 100% known.

STATEMENT 1986-41

In this discussion, we will refer to a "present value" as a discounted value of expected future payments; an "accumulated value" as a value of past payments accumulated to some point in time (including either expected or actual payments), and an "intermediate value" as a value determined at a point within the time stream which combines both present and accumulated values, measured at that point in time.

C. Mathematical Representation of the Amounts in the Time Stream.

The payment streams being discussed can be more readily analyzed and equated through algebraic representation.

The irregular, changing time stream that we are here concerned with is a stream of benefit payments. Let us represent any isolated benefit payment amount by the symbol B .

The periodic stream of payments payable at regular time intervals, with which we are concerned, is a stream of premium payments. Let G represent such an isolated gross premium and P the corresponding net benefit premium.

Let i represent the rate of interest used for discounting future amounts or accumulating past amounts. Expected or actual persistency will be assumed to be implicit to the aggregate amounts incurred. Then we will use a set of definitional symbols to define B , G and P more specifically, as follows:

Agg indicates a discounted or accumulated aggregate value, combining isolated amounts.

T indicates some intermediate point in time, e.g., a valuation date.

TI indicates date of inception.

TT indicates time of termination.

$T\{$ indicates that future payments are discounted back to time point T .

$\}T$ indicates that past payments are accumulated forward to time point T .

Superscript E indicates expected amounts.

Superscript A indicates actual amounts.

Thus, $T\{Agg^EB^i}$ indicates the discounted value, at time T , of the aggregate of expected future benefit payments, at rate of interest i .

$Agg^AP^iT\}$ indicates the accumulated value, at time T , of the aggregate of past actual net benefit premiums; and so on.

We desire to equate the aggregate value of all net benefit premiums to the corresponding aggregate value of all benefit payments. At time of inception TI , we have:

STATEMENT 1986-41

$$(1) \quad T \{ \text{Agg}^E B^i \} = T \{ \text{Agg}^E P^i \}$$

and, at time of termination TT:

$$(2) \quad \text{Agg}^A B^i \} TT = \text{Agg}^A P^i \} TT$$

with all originally expected values now replaced by actual.

At any intermediate date of valuation T we have:

$$(3) \quad \text{Agg}^A B^i \} T \quad \text{and} \quad \text{Agg}^A P^i \} T$$

as accumulated past actual values,

and

$$(4) \quad T \{ \text{Agg}^E B^i \} \quad \text{and} \quad T \{ \text{Agg}^E P^i \}$$

as discounted future expected values.

At this intermediate valuation date in the lifetime of the contract group, we desire to achieve, as a result of correcting from expected to actual, an intermediate "corrected" equivalence between the aggregate values of all benefits and all net premiums, that is, we desire that:

$$(5) \quad \text{Agg}^A B^i \} T + T \{ \text{Agg}^E B^i \} = \text{Agg}^A P^i \} T + T \{ \text{Agg}^E P^i \}$$

and from this desired equivalent relationship we can then derive:

$$(6) \quad T \{ \text{Agg}^E B^i \} - T \{ \text{Agg}^E P^i \} = \text{Agg}^A P^i \} T - \text{Agg}^A B^i \} T$$

that is, if we can develop a reasonable basis of estimating, or inferring, the values of the quantities in equation (5), then equation (6) will also hold reasonably valid; in other words, the retrospective valuation on the right-hand side will be reasonably equivalent to the prospective valuation represented by the left-hand side.

Keep in mind that what we are concerned with here are benefit payments and rates of persistency that are subject to high likelihood of change from original expectations, due to changing trends and to various pressures. Consequently, non-guaranteed premiums are also subject to high likelihood of change, possibly at frequent intervals. Accordingly, we are aiming at a target that is both moving and changing. The only known quantity in equation (6) is $\text{Agg}^A B^i \} T$. We need to find ways to reduce, at least, the scope of uncertainty in all three of the other quantities.

$\text{Agg}^A P^i \} T$ is NOT a known quantity, in the general case, even though we conceptually identify its amounts here as "actual", since the appropriate values of ALL net benefit premiums may depend on the entire benefit stream, not just that actual portion that is now past and known. This is one of several rather obvious reasons why any ongoing contract valuation method, based on valuation premiums and other "expected" assumptions "locked in" at inception, or based throughout the contract lifetime on some

STATEMENT 1986-41

defined statutory table, offers no assurance at all, beyond pure coincidence, of developing an appropriate valuation of future contract liability. All such methods, including those that have been offered as "objective" alternatives to the benefit ratio reserve method, would appear to be totally wanting as to any "theoretical foundation". From inception, such methods are subject to increasing danger of parting company with reality and of growing increasingly artificial and arbitrary with the passage of time.

D. Gross Premiums and Anticipated and Probable Loss Ratios as Elements in the Benefit Valuation Equation.

In determining both original and revised gross premiums for contracts of the type we are addressing, insurers will presumably develop assumptions and projections with some care. In most cases, prospective anticipated loss ratios will also be determined, since a number of jurisdictions require that this be done as a measure of gross premiums deemed "reasonable" in relation to the benefits expected. In those jurisdictions that have adopted some version of the NAIC individual health rate filing guidelines, a prospective anticipated loss ratio is required to be included in original rate filings, and at the time of any rate revision both a revised prospective loss ratio and a retrospective-prospective "lifetime" loss ratio are required, under which the prospective element pertains to the future period over which the revised rates have been calculated to apply. Using this retrospective-prospective lifetime loss ratio, the insurer should be able to estimate a reasonable value for the "probable" loss ratio that, under the proposed standards, would replace the previous anticipated loss ratio and become the R^1 value (or one of several such values) required for computation of benefit ratio reserves.

In any case, such ratios should be readily determinable for representative gross premium cells, since any insurer should surely have some clear idea of what the allocations of its gross premiums are with respect to provision for benefits, expenses and margin. So it would seem to be a fair presumption that insurers should be able to make reasonable estimates of expected loss ratios with respect to relatively homogeneous groups of contracts. Accordingly, we shall proceed on the assumption that reasonable estimates of the required anticipated loss ratios can be determined.

Let us return to equations (5) and (6) and make some substitutions:

For each Agg P value, substitute the equivalent estimated value Agg $R_T G$, where R_T indicates the anticipated or probable lifetime (that is, retrospective-prospective) loss ratio associated as of time T with Agg G. This substitution is made on an aggregate basis only, and does not presume that every individual P item is necessarily equal to its own corresponding gross premium multiplied by R_T . We are concerned only with the premiums of the contract group in the aggregate. We will, however, require that the aggregated P amounts for the contract group be allocated in such a way that, under the aggregate basis of valuation we are using, each separate Agg A^P value is set equivalent to

the corresponding Agg $A^P R_T G$ value and each separate Agg E^P value is set equivalent to the corresponding Agg $E^P R_T G$ value.

STATEMENT 1986-41

Equation (5) may now be restated as:

$$(7) \text{Agg}^A B^i \sum T + T \{ \text{Agg}^E B^i \} \simeq \text{Agg}^A R_T G^i \sum T + T \{ \text{Agg}^E R_T G^i \}$$

leading to a restated equation (6):

$$(8) T \{ \text{Agg}^E B^i \} - T \{ \text{Agg}^E R_T G^i \} \simeq \text{Agg}^A R_T G^i \sum T - \text{Agg}^A B^i \sum T$$

In this restated estimated equivalent of equation (6), both terms of the right-hand side are now known quantities, subject, of course, to how well R_T has been estimated. The known right side is the retrospective reserve, and is equivalent in value to the prospective reserve on the left side, under the reserving method employed.

The ultimate reliability of this equivalence depends of course on the accuracy with which R_T has been determined. A terminal value R_{TT} does "exist", but will be known precisely only when time TT has been reached. Thus, restating equation (2), here without reliance on any estimate,

$$(9) \text{Agg}^A B^i \sum TT = \text{Agg}^A R_{TT} G^i \sum TT$$

As the lifetime of the contract group advances, and corrected values of R_T are adopted, the reliability of the equivalence may in general be expected to improve, since more and more of the eventual total values become represented by $\text{Agg}^A B$ and $\text{Agg}^A R_T G$ values, rather than by expected values.

While projections of future G values are necessary to determination of R_T values, note that what is necessary to evaluating the right-hand side of Equation (8) is a reasonable estimate of A_{R_T} . Estimated values of $\text{Agg}^E G$ or $\text{Agg}^E R_T G$ are not, in themselves, directly involved in the calculation of the retrospective side.

The proposed benefit ratio reserve standards provide that different levels of R may be permanently employed with respect to different calendar periods, in which case the various equivalent values would need to be expressed as summations of two or more aggregate subsets. Thus, when multiple calendar time period values of R apply, equation (9) becomes:

$$(10) \text{Agg}^A B^i \sum TT = \text{Agg}^A R_{TT_1} G^i \sum TT + \text{Agg}^A R_{TT_2} G^i \sum TT + \dots$$

Equations (7) and (8) would need to be restated in similar summation form and, in any actual case, the reserve valuation as of valuation date T , represented by the right-hand (retrospective) side of equation (8), would involve a summation of as many $\text{Agg}^A R_{Tn} G_n$ values as there were distinct R_T values in

STATEMENT 1986-41

use. Usually there would be little need of identifying more than two or three, within what would otherwise be one relatively homogeneous contract group.

In connection with the relation of gross premiums and loss ratios to reserve valuation, the reader will find it instructive to refer to the papers by George Hogeman and Joe Pharr, reference at the end of the discussion portion of Appendix C.

Mr. Hogeman's paper develops the concept of calculation of reserves directly on an aggregate basis, making use of aggregate gross premiums and loss ratios in the method (Mr. Hogeman uses the term "constant percentage" instead of "loss ratio"). He also emphasizes the importance of regular monitoring and correction of assumptions.

Mr. Pharr's paper examines the distorting effects on variously defined loss ratios using additional reserves (called "contract reserves" in the proposed standards) calculated on various assumptions. Of particular interest is Mr. Pharr's demonstration that stable yearly loss ratios, when calculated by adding the change in additional reserves to the incurred claims of the year, only result when the reserves are based on realistic assumptions that track with the experience projections in all respects, including investment income assumptions.

E. Use of Actual Retrospective Claims.

The question as to the validity or propriety of using actual retrospective claims will surely linger for some. The objective of the benefit ratio reserve method, however, is to achieve a real world valuation of real world contracts which are subject to high likelihood of changing costs and frequent premium revision. What gives rise to the need of such revision is the actual experience, and, moreover, actual realized claims and loss ratios, rather than expected, are what govern revision of assumptions and therefore the magnitude of premium revisions. Finally, the levels of the R values required, from the standpoint of the adequacy of the reserve valuation, are obviously dependent on an insurer's practical ability to put adequate rate revisions into effect on a timely basis.

Valuations on a purely prospective basis, or using specified tabular standards or original net benefit premium assumptions "locked in", as with a typical GAAP valuation, simply do not address or resolve the valuation problems peculiar to this general class of benefits. We would be very interested in seeing the results of anyone's attempt to establish a credible "theoretical foundation" for any of the alternative methods that have been proposed.

Valuation on the basis of actual retrospective experience, using R values that are regularly corrected to take into account revised estimation of loss ratio levels realistically to be expected under future premiums, provides a credible basis that remains closely honed in on emerging experience.

We have not seen any other method that looks nearly as promising, or that hold up as well under critical practical and theoretical examination.

STATEMENT 1986-41

ALTERNATE PAGES FOR "100% TO 0%" GRADING

gross premiums, if the anticipated loss ratio applicable to such premium revision has changed, such revised loss ratio shall be used for accumulation of reserves related to premiums earned on the revised basis, while original loss ratios applying to earlier past earned premiums are continued unchanged.

However, following any revision to a "probable" loss ratio for the purpose of strengthening or releasing reserves as provided for in Sections IVF and IVG following, all original values of R shall be replaced by their corresponding adjusted values R'.

The rate (or rates) of interest used to compute C and G above for each rate period shall be the same as that used to compute the corresponding value of R.

The benefit ratio reserve required is the amount B in the following formula:

$$\frac{C+B}{G} = R, \text{ or } B = (G \times R) - C$$

However, if B is negative as of the valuation date, the benefit ratio reserve shall be zero for that date.

3. Adjustment for Premiums Earned and Claims Incurred in the First Contract Year.

In the computation of C and G in the preceding formulae, a temporary graded adjustment is allowed with respect to the accumulated values of premiums earned and claims incurred within the first contract year, as follows:

- a. 100% of the accumulated values of such amounts earned or incurred within 12 months of the date of valuation may be excluded from C and G,
- b. 75% of the accumulated values of such amounts earned or incurred more than 12 but within 24 months of the date of valuation may be so excluded.
- c. 50% of the accumulated values of such amounts earned or incurred more than 24 but within 36 months of the date of valuation may be so excluded.
- d. 25% of the accumulated values of such amounts earned or incurred more than 36 but within 48 months of the date of valuation may be so excluded.
- e. None of the accumulated values of such amounts earned or incurred more than 48 months before the date of valuation may be excluded.

STATEMENT 1986-41

4. Standards governing the strengthening, release or transfer of benefit ratio reserves are set forth in Section IVG following.

E. ALTERNATIVE VALUATION METHODS AND ASSUMPTIONS GENERALLY.

Provided the contract reserve on all contracts to which an alternative method or basis is applied is not less in the aggregate than the amount determined according to the applicable standards specified above, an insurer may use any reasonable assumptions as to interest rates, termination and/or mortality rates, and rates of morbidity or other contingency. Also, subject to the preceding condition, the insurer may employ methods other than the methods stated above in determining a sound value of its liabilities under such contracts, including but not limited to the following:

1. Alternate tabular reserve bases and methods may be used in lieu of either the tabular or benefit ratio reserves prescribed in this Section IV, including any of the following: optional use of either the net level premium or the one-year full preliminary term method; use of interpolated terminal reserves based on actual anniversary dates, in lieu of mid-terminal reserves; prospective valuation on the basis of actual gross premiums with reasonable allowance for future expenses; the use of approximations such as those involving age grouping, groupings of several years of issue, average amounts of indemnity; the computation of the reserve for one contract benefit as a percentage of, or by other relation to, the aggregate contract reserves, exclusive of the benefit or benefits so valued; the use of a composit annual claim cost for all or any combination of the benefits included in the contracts valued.
2. For benefit ratio reserves: the combining of similar contract groups, or combining of successive time intervals subject to different R values, using approximate composite values of R; or other reasonable groupings and approximate methods.

F. TESTS FOR ADEQUACY AND REASONABLENESS OF CONTRACT RESERVES.

At intervals of not greater than three years for tabular reserves and one year for benefit ratio reserves, the actuary responsible shall make an appropriate valuation of the insurer's prospective contract liabilities, by contract group, to determine the continuing adequacy and reasonableness of contract reserves. The insurer shall make appropriate adjustments to its contract reserves if such tests indicate that the basis of such reserves is no longer appropriate. The prospective liability must be estimated for the remainder of the expected lifetime of each contract group.

G. PROVISIONS FOR STRENGTHENING, RELEASE OR TRANSFER OF BENEFIT RATIO RESERVES

As stated in Section IVF preceding, the continuing appropriateness of the benefit ratio reserve carried on each contract group is to be reviewed each statement year by the actuary responsible. In the event any contract group

STATEMENT 1986-41

holding benefit ratio reserves shall be deemed by the actuary responsible to have either:

1. No substantial probability of ultimately attaining the anticipated loss ratio or ratios on which the reserve is based; or
2. A substantial probability of ultimately exceeding the anticipated loss ratio or ratios on which the reserve is based, in spite of any prospective premium increases that may reasonably be anticipated;

then the actuary responsible shall determine an appropriate revised "probable loss ratio", R' on which the reserve in each case is to be determined. If more than one existing value of R is in effect for the group affected, the same increase or decrease in absolute percentage points shall be applied to all such values to obtain a corresponding set of R' values, or else all such R' values may be composited (Illustrations in Appendix C include examples for which multiple values of R are assumed to be in use). The existing level of reserve in each such case shall be adjusted to the revised level within a period not to exceed 5 years, with respect to reserve strengthening; and within a period of not less than the lesser of (a) 5 years, or (b) the period during which any contracts subject to such excess reserves remain in force, with respect to release of excess reserves.

As an alternative to the release of excess benefit ratio reserves in any year, on a particular contract group, the insurer may elect to make a transfer of the amount of all or a portion of such year's release over to other contract groups that are in need of reserve strengthening.

If the insurer elects to make such a transfer, then with respect to a contract group to which transfer is made, the amount transferred shall be maintained as a reserve which serves as an offset against claims paid under such contract group. The benefit ratio reserve thereupon required on the contract group from which transfer was made shall be determined by valuing the cumulative retrospective incurred claims using the adjusted R' values as determined. The benefit ratio reserve thereupon required on the contract group to which transfer is made shall be determined treating the transferred reserve as an offset value against claims paid, the benefit ratio reserve being valued on the basis of the cumulative retrospective incurred claims reduced by the value of the transferred reserve.

All such transferred reserves shall be permanently identified in the insurer's records. The aggregate of out-transfers shall balance with the aggregate of in-transfers, for each year.

V. REINSURANCE

Increases to or credits against reserves carried, arising because of reinsurance assumed or reinsurance ceded, must be determined in a manner consistent with the rate structures and all applicable provisions of the reinsurance contracts which affect the insurer's liabilities.

STATEMENT 1986-42

STATEMENT BY THE COMMITTEE ON PROPERTY AND LIABILITY ISSUES OF THE AMERICAN ACADEMY OF ACTUARIES ON ESTIMATING THE IMPACT OF CIVIL JUSTICE REFORMS ON THE COST OF LIABILITY INSURANCE

NOVEMBER 24, 1986

The Committee on Property and Liability Issues of the American Academy of Actuaries, is pleased to present this statement on estimating the impact of civil justice reforms on the cost of liability insurance.

The Committee's membership is drawn from a variety of interests and perspectives so as to give the broadest possible range of views. As with many other professional organizations, the structure of the Academy and the timing required in responding to public issues place the responsibility of preparing comments on such issues on its committees, on the assumption that they are representatives generally of the Academy's entire membership.

Background on the Academy

The American Academy of Actuaries serves the entire actuarial profession. Its main focus is the social, economic, and public policy environment in which the profession functions. Its primary activities include liaison with federal and state governments, relations with other professions, dissemination of public information about the profession and issues that affect it, and development of standards of professional conduct and practice. Over 8,000 actuaries in all areas of specialization belong to the Academy. These members are employed by insurance companies, consulting actuarial firms, government, academic institutions, and a growing number of industries.

The Academy does not advocate major public policy positions such as civil justice reforms. The Academy does provide information and actuarial analysis to public policy decision-makers so that policy decisions can be made with informed judgment.

Issue

The subject of civil justice reforms is being considered both by Congress and by many state legislatures. Concern about the availability and affordability of liability insurance are the primary reasons why this subject is receiving legislative attention. The purpose of this statement is to provide insight concerning: (1) which civil justice reforms have predictable impacts on the cost of liability insurance and which do not, and (2) what are the difficulties associated with estimating these impacts.

Types of Reform

Many different types of civil justice reforms are being considered. While not intended to be an exhaustive list of all possible reforms, the following list includes those most commonly proposed:

1. Restrict the application of the doctrine of strict liability.
2. Restrict the application of the doctrine of joint and several liability.

STATEMENT 1986-42

3. Limit non-economic damages.
4. Provide for periodic payments of future damages.
5. Reduce awards by collateral sources of compensation received for the same injury.
6. Schedule contingency fees.
7. Reduce statute of limitations on filing suits.

Each of these reforms can be classified based on its intended impact on the cost of liability insurance. For example, some reforms are assumed to reduce the number of claims; while others are intended to reduce the amount of compensation or intended to improve the efficiency of the civil justice system. Naturally, it is useful to clearly identify the intended impact when addressing the issue of the cost of liability insurance. After this identification, it may be possible to estimate the size of the impact. Although estimating the impact of change on insurance costs is a principal topic of actuarial science, standard ratemaking techniques will often not suffice.

Standard Ratemaking

The purpose of insurance ratemaking is to determine the appropriate premium for an insurance policy. The policy premium plus the investment income associated with that policy covers a variety of expenses including expected losses and loss adjustment expenses, agents'/brokers' commissions, the insurer's cost of processing a policy, premium taxes, and the insurer's expected profit. The relative size of the expected profit varies directly with the riskiness of the type of insurance. This risk depends both on how accurately the insurer can predict expected losses and loss adjustment expenses and how widely the actual losses will range around the expected losses. The components that would be directly impacted by civil justice reforms are expected losses and loss adjustment expenses.

When estimating expected losses and loss adjustment expenses, the standard procedure is to adjust the actual losses and loss adjustment expenses during a recent time period to anticipated future levels. This adjustment takes into account anticipated changes in the average cost per claim (severity) and in the number of claims per exposure unit (frequency). Under normal conditions, the size of the adjustment is determined by analyzing the rate at which severity and frequency have been changing during the past. This approach is not appropriate when there is discontinuity in the rate of change. Civil justice reforms are intended to cause just such a discontinuity; therefore, an alternate approach is generally necessary.

An Alternate Approach - Claims File Review

Ideally, the effect on expected losses and loss adjustment expenses of capping the amount of compensation or eliminating certain types of claims could be determined from existing data; however, the necessary information is often not available in an aggregate form. When the appropriate data is in individual claims files, the available information may be extracted by means of a claims file review. In such a review, individual claims files are re-examined by experienced claims examiners who either directly re-evaluate the losses and loss adjustment expenses on particular claims or collect data for use in a claims cost model to estimate the losses and loss adjustment expenses that

STATEMENT 1986-42

would be eliminated under the reformed civil justice code. Based on an accumulation of such reviews, an actuary can, in some cases, estimate the expected impact on the cost of liability insurance of a civil justice reform. A great deal of care, however, must be exercised in this process because of the following uncertainties:

1. The courts' ultimate interpretation of the reforms may differ from the claims examiners' interpretations.
2. While individual insurer data is often too limited to be credible, aggregated data for more than one insurer can be distorted by differences in claim handling or mix of business.
3. Often the necessary information is not in the file. In particular, the impact of some types of reform (for example, restrictions on punitive damages or non-economic damages) are often difficult to estimate based upon information in the file if the claims are settled outside of court.

A claims file review is a sizable task. For example, based on a recent study, there have been over 240,000 bodily injury liability claims reported for policies issued during 1983 from the three principle types of general liability contracts: Owners, Landlords and Tenants; Manufacturers and Contractors; and Products/Completed Operations. In addition, the files on these claims are located in offices throughout the country. The cost of a claims file review must be carefully weighed against the benefit of such a review.

The Impact of Specific Reforms

The results of a claims file review depends upon the civil justice reform and upon the information available in claims files. The following is a brief discussion of the expected impact of these reforms and comments on the extent to which they may be quantified.

1. **Restrict the application of strict liability doctrine.**
The doctrine of strict liability imposes liability on a person for resulting injury even in the absence of negligence. In contrast, traditional liability doctrines only impose liability if negligence is proven. Limiting the application of the strict liability doctrine would reduce the number of claims. A careful analysis of claims files could often reveal those claims settled under the strict liability doctrine.
2. **Restrict the application of joint and several liability doctrine.**
When injuries are caused by more than one person, the doctrine of joint and several liability allows the injured person to recover the entire judgment from "deep pocket" defendants, even if those defendants are only minimally at fault. Eliminating this doctrine will, in many cases, result in lower claim costs. A careful analysis of claims files could reveal those claims settled under this doctrine, and the savings resulting from smaller settlements may be estimated.

In some cases, the proposed civil justice reform only calls for limiting (not totally eliminating) the doctrine of joint and several liability. For example, the proposal may call for the elimination of this doctrine only if the defendant's share of negligence is less than a given percentage.

STATEMENT 1986-42

Although information needed to estimate the impact for various percentages can be collected, future problems can arise when the courts assign proportions of negligence. Because the assignment of these proportions is very subjective, civil justice reform may result in different allocations which, in effect, cancel the benefits of the reform.

3. Limit non-economic damages.

Non-economic damages, such as pain and suffering or punitive damages, are intrinsically subjective and highly variable from case to case. Limiting the amount of the non-economic damages should result in lower claim costs without affecting the number of claims. A careful analysis of claims files will generally yield a reasonable split between economic and non-economic losses; however, because this distinction is not always clear, significant amounts of judgment will have to be applied during the review. Once the non-economic component is determined, applying a cap will provide an indication of potential savings.

The amount of the savings will depend on the policy limits that were purchased. For example, if the coverage purchased was less than the cap, there will be no savings when the cap is introduced. In addition, the valuation of economic damages could be affected by a cap on non-economic damages. In particular, since the valuation of future economic damages is subjective, increases in this area could offset reductions in non-economic damages.

4. Provide for periodic payments of future damages.

Traditionally, claim settlements involving future damages have involved lump-sum payments either directly to claimants or to other organizations, which, in turn, make future periodic payments. In either case, the amount of the lump-sum payment is less than the sum of all future payments because the lump-sum payment recognizes future investment income. To the extent that liability insurers continue using other organizations, such as life insurance companies, to administer the periodic payments, this reform will have no impact on losses and loss adjustment expenses. Replacing direct lump-sum payments to claimants with periodic payments will result in two offsetting changes. First, the total payout could easily increase; second, the insurer's investment income would also increase. The net change should be minimal. Therefore, this reform may have little impact on the cost of liability insurance.

5. Reduce awards by collateral sources of compensation received for the same injury.

The collateral source rule permits duplicate recoveries for certain components of awards in some jurisdictions. Specifically, the jury is prohibited from considering collateral sources of income when awarding damages to the plaintiff. Eliminating this rule should reduce the number of claims, and for the remaining claims, reduce the amount of the claim. Information on collateral sources of compensation is not generally in claim files; therefore, estimating the impact would require making assumptions about the availability of medical coverage, workers' compensation, and salary continuation programs. Although this can be done, the resulting estimates will not be precise. In addition, in some cases the provider of the collateral source (for example the provider of

STATEMENT 1986-42

the workers' compensation insurance) has the right of subrogation. Unless the civil justice reform eliminates this, the right of subrogation could reduce the impact of this civil justice reform on insurance costs.

6. Schedule contingency fees.

Traditionally, a plaintiff's attorney receives a flat percentage of a client's award. One proposed civil justice reform has been to schedule these fees on a decreasing scale so that contingency fees would increase more slowly than awards. The purpose of this reform is to improve the efficiency of the civil justice system by increasing the injured party's net recovery. Information on the compensation received by the plaintiff's attorney is not in the claims files. In addition, it is not clear what impact such a revision would have on the size of claims. In the area of economic loss, for example, reducing the fee paid by the plaintiff's attorney will probably not reduce the size of the jury's award.

7. Reduce statute of limitations on filing suits.

Statutes of limitations fix the period of time within which a cause of action must be brought. The limitations applicable to liability often range from one to six years for bodily injury and three to ten years for medical malpractice. If this time period is reduced, the number of claims should be reduced. Since claim files contain information concerning when the cause of action occurred, the impact of changing a statute of limitations could be estimated. By examining the time between the occurrence and filing of a suit, the claims examiner could identify which claims would be eliminated. The reduction in frequency measured by past litigation experience may be partially offset by a more claims-conscious public; in other words, injured parties could file claims earlier.

Conclusion

Aggregate information needed to estimate the impact of civil justice reforms is generally not available. Some of this information, however, can be found in individual claims files. Available information can be extracted by means of a claims file review. This type of review, however, is expensive and has inherent technical limitations. Given these limitations, and the fact that the intent of these reforms may not be sustained by the courts, careful consideration should be given to potential cost/benefit tradeoffs when a claims study is proposed.

Committee on Property and Liability Issues

Albert J. Beer, Chairperson

Carole J. Banfield
Howard V. Dempster
Robert V. Deutsch
David N. Hafling
George M. Levine
Aileen C. Lyle

Frank Neuhauser, Jr.
Richard W. Palczynski
Charles M. Potok
John M. Purple
Lee R. Steeneck

STATEMENT 1986-43

TO: John Montgomery

FROM: Douglas C. Doll

DATE: November 25, 1986

RE: American Academy of Actuaries Universal Life Task Force

Enclosed is a preliminary report from our Task Force which we promised to send you prior to the December meeting of the Actuarial Task Force. We also are mailing copies to the other Actuarial Task Force members.

Gary Dahlman and I will be at your December 6 meeting to answer questions about this report and to receive your comments. We look forward to discussing it with you.

American Academy of Actuaries
Committee on Life Insurance
Universal Life Task Force

(signed)

Douglas C. Doll, Chairman

STATEMENT 1986-43

TO: NAIC Life and Health Actuarial Task Force

FROM: AAA Universal Life Task Force - Preliminary Report

Universal Life Model Regulation - Concerns with Valuation and Nonforfeiture Provisions and Criteria for Evaluating Proposed Revisions.

The Life and Health Actuarial Task Force asked the Academy of Actuaries Life Committee to develop amendments to the valuation and nonforfeiture provisions of the NAIC's Universal Life Model Regulation. In a letter to John Montgomery dated October 22, 1986, Gary Dahlman said that a Universal Life Task Force (ULTF) would be created to work on this problem. The work of the ULCF would proceed in several phases. The first phase would be to document your concerns relative to the current model regulation and to suggest standards and criteria for evaluating proposed revisions. A preliminary report covering this initial phase was to be presented for the December 1986 meeting of the Actuarial Task Force, with the objective being to achieve a consensus on the major issues before proceeding to the development of solutions. This is that preliminary report.

The ULCF prepared a list of discussion questions and surveyed by telephone several insurance department actuaries, including several representatives of the Actuarial Task Force. A list of the persons surveyed, the questions, and a summary of the responses is included as an appendix to this report.

The major concerns described to us in our survey are as follows:

Valuation Concerns

The calculated CRVM reserve frequently is less than the cash surrender value; therefore, the company holds the cash surrender value as the reserve.

- a. There is concern that producing reserves less than the cash surrender value means that the method has shortcomings.
- b. There is concern that the cash surrender value may be an inadequate reserve in some cases.

Initial guarantees beyond the minimum valuation basis of mortality charges and interest may not produce additional reserves, if the ultimate guarantees are low enough. A question related to this concern is whether it is appropriate to have a valuation basis more liberal than the policy guarantees.

Rapid cash surrender value increases caused by surrender charges that reduce rapidly, or caused by some sort of "bonus", are not pre-funded in the reserves.

The method is complicated, difficult, and costly to apply and to check.

Nonforfeiture Concerns

It is possible to manipulate charges and interest credits to end up with low or no cash values, even if premiums are level. In effect, there are no meaningful minimum cash surrender values produced by the Model Regulation.

STATEMENT 1986-43

- a. No limits on mortality charges means that they can be manipulated to produce effectively higher front-end expense loads. Also, higher than standard table mortality charges can be a way to "hide" expense loads.
- b. Expense loads may be level on a guaranteed basis, but a different pattern on a current basis, thus allowing manipulation.
- c. There is no minimum required interest guarantee.

There is no requirement for cash value increases to be smooth year-by-year, e.g., no restrictions on surrender charges that decrease abruptly or "bonuses" paid in specific years.

Non-guaranteed elements may be credited to the policyholder's fund value, but not increase his cash surrender value. Excess interest surrender charges are an example. Another example is a type of fixed premium universal life, where the cash surrender value is the larger of two values -- a prospectively calculated value based on the guaranteed death benefits and a retrospective fund generated value minus a surrender charge. Amounts credited to the fund generated value might not increase the cash surrender value immediately.

The above concerns are those that we identified as the major concerns of the Actuarial Task Force members. We expect not to limit ourselves to those concerns only. To the extent possible, we will attempt to address all the comments in the appendix. In addition, we expect to raise some additional concerns ourselves. For example, we are concerned that the model regulation does not give sufficient guidance on how to value supplemental benefits or how to handle secondary death benefit guarantees on flexible premium contracts. While we cannot address all possible situations, we will try to consider as many as possible. We noted that several comments addressed disclosure issues. Because of the close relationship between nonforfeiture and disclosure, we also may include possible disclosure issues in our considerations.

Standards and Criteria

Several of those surveyed mentioned the importance of distinguishing between "principles" and "methods" of valuation and nonforfeiture. Our Task Force will be mindful of the underlying valuation principle of solvency and the underlying nonforfeiture principle of equity. The Standard Valuation and the Standard Nonforfeiture Laws have indeterminate premium plan sections that provide, among other things, that reserves be computed "by a method which is consistent with the principles of this Standard Valuation Law" and that cash values must "not be less than the minimum values...computed by a method consistent with the principles of this Standard Nonforfeiture Law."

A key criterion for evaluating proposed revisions will be that they produce results consistent with results for otherwise similar fixed benefit fixed premium plans. Consistent results would imply that methodology is consistent with the Standard Valuation and Nonforfeiture Laws. On a more practical level, a criterion for evaluating the proposals will be how well they address your concerns listed above.

STATEMENT 1986-43

* * * * *

If a concensus can be reached at your December meeting as to the concerns that need to be addressed and the criteria for proposed revisions, our task force will proceed to the conceptual phase of its work. We expect to present an oral report at the March meeting of the Actuarial Task Force, and to have a draft report at your June meeting.

American Academy of Actuaries
Committee on Life Insurance
Universal Life Task Force

Douglas C. Doll, Chairperson
David N. Becker
Shane A. Chalke
Gary E. Dahlman
Michael J. Hambro
William L. Hezzelwood
David J. Hippen
John J. Palmer
Forrest A. Richen
Stephen A.J. Sediak

STATEMENT 1986-43

APPENDIX A

UNIVERSAL LIFE TASK FORCE SURVEY

The following persons were surveyed:

Ted Becker, Texas
Robert Callahan, New York
John Gilchrist, California
Bradford S. Gile, Wisconsin
Larry Gorski, Illinois
Storm Johnsen, Washington
J. Alan Lauer, Pennsylvania
John O. Montgomery, California
Bill Robinson, Arizona
Catherine Turner, Oregon

I. WHAT ARE THE DEFICIENCIES OF THE VALUATION AND
NONFORFEITURE PROVISIONS OF THE CURRENT MODEL
REGULATION AS YOU SEE THEM? CAN YOU SUPPLY ANY "LIVE"
EXAMPLES?

VALUATION

- The valuation methodology in the regulation is much too complex and costly to administer and may be beyond the capabilities of smaller companies. The regulation is unclear and unintelligible in many areas and, as a result, there is little uniformity among companies as to their interpretations of various provisions in the regulations.
- The regulation allows the valuation interest rate to be greater than the guaranteed rate in the contract. It's inappropriate to accumulate policy values at a lower rate and then discount them back at a higher valuation rate.
- Model regulation does not address the situation where a policy guarantees 15% for 5 years and 3% thereafter. No "excess interest reserve" would be required under the model, which seems inappropriate.
- Another problem is the complexity of the model, but that point is probably now moot because the model has been around so long.
- Rapidly diminishing surrender charges imply a higher guaranteed interest rate, creating a situation not addressed by the current model.
- The main problem is that a lot of work is done that leads a company to hold only the surrender value. This is probably too low in many situations.
- Reserves may not be adequate where current mortality charges and/or interest credits are guaranteed for an extended period of time. It is necessary to look at guaranteed cash values using a CARVM-type approach.

STATEMENT 1986-43

- Companies are required to go through a complex set of calculations that usually end up with reserves equal to the cash values. The main problem is the interest rate differential between the minimum guaranteed interest rate for the accumulation of the policy value and the valuation interest rate.
- The deficiency of the valuation provision is that it does not require adequate reserves in all instances. Increases in cash values should be pre-funded. There are other examples of pre-funding in actuarial work. One is the pre-funding of the endowment of a ten year deposit term policy. Another is the pre-funding of the present values of the settlement options when these exceed the cash value available at attained age 65. The insurance code defines life insurance liabilities as amounts calculated according to the Standard Valuation Law, plus "any additional reserves which may be required by the Commissioner, consistent with practice formulated or approved by the National Association of Insurance Commissioners." This is standard code and most states have the same or a similar provision.
- The present value of future guaranteed benefits is particularly appealing. Reserves need to be prospectively oriented, with some appropriate adjustment for unamortized acquisition expense. "Greatest of future present values" (like CARVM) seems to be necessary to handle Sarnoff-type problems. Also good to have explicit "but not less than cash value" provision incorporated into valuation requirements.
- Many people believe that the reserve should be equal to the cash value plus "something". It's the definition of this "something" that the valuation regulation need to deal with.
- A personal preference for a gross premium valuation.
- The first problem is to define what the appropriate reserve should be and then to define required minimum cash values.
- The cries of deficiencies were coming from the industry--that the model regulation is too complex. Most companies now have figured it out; therefore, are willing to live with it and, in fact, do not want to change it.

NONFORFEITURE - GENERAL

- The most critical concern is that, by manipulating charges, you can have zero reserves and cash values whenever you want. There is no true minimum cash value. Reserves can be less than the cash values. Regulators do not have total faith in the marketplace--people can get hurt before the market corrects inequities.
- The nonforfeiture provisions are structured in a way which allows the accumulation of premiums taking into account actual policy loads. This makes it virtually impossible for a policy to not comply with these requirements. Especially concerned about manipulation (that is, having current loads in earlier years that are lower than in later years).

STATEMENT 1986-43

- It is easy to design policies with zero minimum cash values under the model because there is no limit on interest, mortality and expenses. This is why the Pennsylvania guidelines have a 3% minimum interest and a maximum mortality requirement for standard, regularly underwritten business. There is no expense limitation because it would appear to be similar to rate regulation. There is a potential for abuse with expenses by using very high renewal expense charges. Another abuse is conditional excess interest, particularly in the presence of other surrender charges.
- It is easy to manipulate and to generate minimum nonforfeiture values that are not meaningful. In addition, when a policy has a large initial premium (e.g., in a replacement sale), the surrender charge often seems too high.
- It is possible to manipulate mortality and expense charges to end up with no cash values on what purports to be whole life type coverage.
- The current model regulation does not require any minimum cash surrender values. Expense and mortality charges can be manipulated to avoid cash values. Has seen a case with a maximum annual expense charge of \$10 per thousand. This contract permitted the company to project attractive cash values based on current expenses (but poor guaranteed values) and to charge high expenses in actual practice and thus develop minimal cash values.
- The basic deficiency of the nonforfeiture provision of the current model is that there is no floor below which the cash value may not go. One of the underlying principles of the Standard Nonforfeiture Law is that it provides for a minimum cash value which may not be penetrated. While an insurer operating under the current model may grant nonforfeiture values far in excess of the minimum required by the Standard Nonforfeiture Law for an otherwise similar policy, it may also grant nonforfeiture values amounting to zero at each duration.

NONFORFEITURE - SPECIAL CASES & DISCLOSURE ISSUES

- Current assumption whole life. What are minimum values when the cash value is defined as the larger of two quantities, one a traditional prospective value and the other a fund generated value, when the mortality and interest basis differ for the two values? Do these products have an unfair advantage? What about low premium versions where the initial death benefit is not guaranteed? Current model does not clearly address fixed premium products that allow pourins.
- Another rather obscure problem with the fixed premium policies is that the "lock-in" of excess interest can trigger additional death benefits because of a corridor provision. That additional benefit should be considered in determining minimum values. It seems like a circularity.
- Using the maximum nonforfeiture interest rate and low guaranteed crediting rate can produce an anomalous situation.

STATEMENT 1986-43

- Examples have been seen where a table of guaranteed values (which may exceed the values generated by the policy language) is included because compliance cannot be demonstrated using the formulas in the policy.
- Policies with contingent interest credits are sometimes abusive. An example is a policy with two crediting rates; one for the policy value and a much lower one for the surrender value.
- Policies have been submitted that apparently comply with regulation but which have little or no cash value:
 - Policy where guaranteed insurance charges decrease by duration.
 - Policy illustrated as a 7-pay on a current basis has a rider which guarantees that policy will stay in force even if cash value goes to zero (because interest crediting rate drops, for example). Result is a paid-up policy with no cash value.
- Need to address persistency bonuses, don't see how they are approvable. Should bonus be to the fund or to the cash value? What are the reserve implications?
- One plan guarantees a refund of actual cost of insurance (COI) charges; therefore, the endowment benefit is reduced if COI charges are reduced. It could be misleading to decrease benefits when others are increased.
- Expenses should not be expressed as a percentage of COI charge to avoid COI limitations.
- After 80 CSO election date, policies with 58 CSO charges should not continue to be sold.
- 90% of the problems with the current model are in disclosure. Products are sold as whole life and it is often not pointed out that the products will expire without cash value at some age less than 95 or 100 unless additional premiums are paid.
- It is possible to administer UL contract under the current Model Regulation in an inequitable manner. The example was of crediting higher interest rates for new business than for existing business in order to make sales illustrations more attractive. Higher rates for new business can in some cases be justified, but such practices are objectionable if the differences are arbitrary and manipulative.
- There are some companies that will administer the model in an inequitable fashion and grant cash values that are far smaller than those that could be expected. The argument has been presented that such insurers should be dealt with by some other means. The advantage of such an approach would leave the insurers that administer it properly not subject to onerous regulatory requirements which may impair product innovation, etc. Why should the majority of the companies suffer for the unfortunate actions of the few? The answer to this question is that an insurer should be reprimanded for the unfortunate actions taken. The

STATEMENT 1986-43

regulator should not search his statutes and regulations for some oblique way to approach the problem. The regulation and the amendments your committee will propose must, therefore, deal with the issues at hand.

- The authority in the current model for the commissioner to require higher cash values is limited to situations where "benefit charges are substantially level by duration".
 - New York's second test requires once-a-year option to paid-up, surrender charges must grade off over 20 years, expense allowance limited to \$50/l,000 (instead of \$60). Also, New York does not approve products with secondary guarantees -- they are subject to manipulation /deception. No excess interest surrender charge is allowed in New York.
- 2. WHAT CHANGES TO THE MODEL ARE (A) MANDATORY, (B) DESIRED BUT NOT NECESSARILY MANDATORY, IN ORDER FOR THE MODEL TO BE ADOPTED IN YOUR STATE?**
- Mandatory: Model must define minimum values. Reserves should be greater than or equal to cash values. COI charges should be less than or equal to defined tables. Expense charges that increase by attained age should be addressed. Should be proof that if level guaranteed maturity premiums are paid, cash values are at least equal to whole life. Desirable: Should decreases be handled on LIFO or FIFO basis? One time, extra premiums without extra death benefits--should there be any extra expense allowance? Model regulation should address issue of smooth cash values.
 - Mortality charges in a contract should not exceed the statutory table.
 - No changes are mandatory, because my state is doing okay with its guidelines. However, something better for valuation is desirable.
 - Valuation needs some meaningful change that will result in a reserve that is different from the cash value. Nonforfeiture probably needs some limitation on the expense charges.
 - Wouldn't commit to adopting the Model Regulation without seeing the specific changes to be recommended by the Task Force.
 - Would likely adopt the Model Regulation if the valuation and nonforfeiture provisions were amended in an acceptable way.
 - Would like to see additional mandatory policy provisions and disclosure requirements in order to adopt the model.
 - Not applicable to New York. It has gone its own way, via legislation.

3. WHAT DOES "A METHOD CONSISTENT WITH THE PRINCIPLES OF THE STANDARD VALUATION/NONFORFEITURE LAW" MEAN TO YOU?

- A method that corrects problems in question 1. and addresses items in question 2. (See Guertin's book, page 58.) The model regulation should

STATEMENT 1986-43

track what the law is trying to do. "Benefits substantially as favorable as minimum" and "must not be less than minimum"--we don't have to force these to be equal. The Commissioner must be satisfied that benefits and pattern of premiums are not misleading; we need guidelines.

- Other principles:
 - preserve smoothness
 - do not regulate expenses unduly
 - net premiums should be proportional to gross
- Wonders whether surrender charges on single premium policies violate principles of Standard Nonforfeiture Law.
- For nonforfeiture, would try to keep things simple by being a bit vague and requiring that the policy meet minimum of regular nonforfeiture law under a set of defined premium payment patterns. The abuses would not be too hard to discover using a prospective view.
- "Consistent" must be interpreted loosely, as staying too close to the model laws will be difficult. For example, the New York version of the nonforfeiture law is consistent, even though others would not agree.
- Any definition of consistency for flexible premium products will likely be loose enough to permit abusive products, which suggests that rate regulation may be necessary. The description of consistency in the model Standard Nonforfeiture Law requires that the consistent method be just as favorable and not misleading. This suggests that it may be impossible to separate nonforfeiture from disclosure issues.
- It is necessary to examine the underlying principles of the standard laws and to distinguish principles from methods. Under the valuation law, companies must establish reserves for benefits guaranteed as of the valuation date and this can only be done using a prospective method. The phrase "guaranteed benefits" in the Standard Valuation Law is interpreted to include guaranteed cash values.
- The basic principle of the Standard Nonforfeiture Law is the requirement of equity between terminating policyholders and continuing policyholders. In this case, the prospective approach does not reflect a principle, only a method.
- The principles of the standard laws are not codified. Refer to the Guertin report from the early 1940's and the 1976 report of the Unruh Committee. With respect to nonforfeiture principles, terminating policyholders must be given a fair shake, while, at the same time, attempting to maintain equity between terminating and continuing policyholders.
- Before this question can be answered, we need to define what are "principles" and what are "methods of computation". It may eventually be necessary for our committee to develop a list of the principles of the Standard Valuation and Nonforfeiture Laws, and perhaps to list items that are not principles. The list should be compatible with the actuarial work done in the 1930's and 1940's.

STATEMENT 1986-43

- One principle of the Standard Valuation Law is that of modified reserves, reserves modified from the net level system. The underlying principle is to permit the insurer some relief in the year of issue for reason of the large acquisition expenses incurred in that year. There are several methods for doing this; full preliminary term, CRVM, and others. These are methods and not principles.
- One principle of the Standard Nonforfeiture Law is that there is a floor for the cash values that may not be penetrated. The adjusted premiums, the dollars and percentages of the expense allowance, etc., are parts of the method of calculation and not a principle. The prospective method of calculation is a method and not a principle.
- An interpretation of the phrase "computed by a method consistent with the principles of the Standard Nonforfeiture Law" is that once you identify the principles, you are free to develop any method you want, provided it is consistent with these principles.
- If the only principles of the Standard Nonforfeiture Law were a firm floor and equity between policies, you may develop any set of formulas you want, prospective or retrospective in nature, provided the resulting values may not be penetrated and are equitable.
- The values you calculate by your new method of computation must be substantially as favorable to policyholders and insureds as the minimum benefits for a traditional policy.
- Underlying valuation principle (with which the regulation is to be consistent) is simply adequate solvency protection. Underlying nonforfeiture consistency principle: merely "equity" to all classes of policyholders.
- Initial expense allowance should vary by plan of insurance. For universal life, you need to determine a plan, which implies you should use the planned periodic premium (but see response to 4., below).
- Since flexible premiums means the ability to stop premiums (i.e., go on paid-up), results should be as favorable as paid-up, i.e., guaranteed benefits on nonforfeiture basis, no policy fee deducted from fund. (Note, New York does this via a once-a-year option.)

4. IS AN APPROACH FOR FLEXIBLE PREMIUM CONTRACTS WHICH DEPENDS ON A PLANNED PERIODIC PREMIUM WORKABLE AND/OR DESIRABLE?

- Not sure how to work such an approach. Section 5c of Standard Nonforfeiture Law might provide guidance.
- This is a reasonable approach, at least for nonforfeiture.
- Doubtful that this approach will work. The committee that drafted the Model Regulation felt that an approach based on planned periodic premiums was open to manipulation.

STATEMENT 1986-43

- We are using this technique now because it is practical. However, it is not totally satisfactory because it is subject to manipulation.
- Would be opposed to a planned periodic premium approach if it left any room for manipulation.
- Too much room for manipulation in the planned periodic premium approach. However, something like a guaranteed maturity premium which cannot be manipulated might be acceptable.
- There have been discussions in our office to prohibit the use of planned premiums in the sales material.
- New York used a planned periodic premium approach prior to this year, according to their circular letter. Dropped it in this year's legislation. Not sure how workable it was. New York received criticism, saying it could be manipulated.

5. WHAT IS YOUR VIEW CONCERNING NONFORFEITURE LIMITATIONS ON (A) MINIMUM INTEREST CREDITS, (B) MAXIMUM MORTALITY CHARGES, (C) MAXIMUM EXPENSE CHARGES? WOULD CONSISTENCY WITH THE NONFORFEITURE LAW OF YOUR STATE PERMIT SUCH LIMITATIONS?

- Pointed out that some rate regulation exists in the current Standard Nonforfeiture Law (for example, the "purchase rates" for RPU and ETI). What is needed is a balance between a meaningful cash value standard and undue rate regulation. If mortality charges are limited, then the limitation must be 100% of the nonforfeiture mortality table because of reduced paid-up insurance requirements.
- a) Yes, there should be a minimum interest rate, especially if more than one interest rate is involved, i.e., secondary guarantees. 3% is consistent with annuity requirements. Excess interest surrender charges perhaps are inconsistent with Standard Nonforfeiture Law; b) Yes, COI charges should be limited to recognized mortality tables, except for substandard; and c) Expense charges that increase with age and are based on net amount at risk should be studied further.
- Concerned that this becomes rate regulation and wants to avoid this.
- No problem with mortality or interest limitations but there may be political problems with expenses.
- These would be acceptable and state law would probably permit them.
- Favors limitations, such as the nonforfeiture table, for mortality charges. On the other hand, if needed at some future date, companies could secure additional margins from the interest rate spread or expense loadings (if expense charges are indeterminable).
- This is an exceptionally difficult question to discuss with most actuaries because if you do not immediately and fully agree with their statements, you are accused of attempting to introduce rate regulation. As I see it,

STATEMENT 1986-43

and as I want to discuss it, the concern of the regulator is not rate regulation, for or against. The concern is deception. I believe that to charge a multiple of a mortality table as a mortality charge for a standard issue is a deceptive and unfair practice and is misleading to the public. A standard issue is a standard issue and a substandard issue is so labeled on the policy specifications page. If a loading is needed then call it a loading and not a mortality charge. I believe that to increase the interest rate and simultaneously increase the mortality charge by an offsetting amount is a deceptive and unfair practice and is misleading to the public. I believe that these and other similar practices should be prohibited. The maximums and the minimums must be disclosed in the policy and identified for what they are.

- Now to leave my argument of deception and ask a question that may relate to the discussion of rate regulation. I am asking because I do not have the answer. The above prohibition would have the effect of limiting the mortality charge for a standard issue to the standard table. This has been the practice under the Standard Valuation and Nonforfeiture Laws for quite some time. Would not the consistency with the Standard Valuation and Nonforfeiture Laws require such limitations?
- Mortality charges should be limited to the nonforfeiture table for regularly underwritten business, multiples allowed for substandard. Regarding minimum interest requirement, any meaningful nonforfeiture law has to take the form of rate control in appearance, if not in fact. New York's circular letter required a 3% minimum, similar to annuities. New law has no minimum in second test, but has a 4% minimum for the paid-up option--note that 4% is the minimum interest for Section 7702 qualification. Also, New York's first test has a 3% minimum.
- Noted that he has received requests to have expense charges as a percentage of the fund, which effectively reduces the interest guarantee. Model law permits this on a current basis, if there is a high level guaranteed expense charge.

6. SHOULD THE INSURER BE FREE TO DEFINE THE POLICY VALUE WITHOUT ANY RESTRICTIONS, EXCEPT THAT THE RESULTING CASH SURRENDER VALUE MUST EQUAL OR EXCEED THE MINIMUM CASH SURRENDER VALUE DEFINED BY THE MODEL REGULATION?

- No, refer to limits in question 5. The policy fund must be clearly defined in the policy.
- Yes.
- Yes, but not if the resulting policy and illustration can mislead the applicant.
- Yes, with the understanding that the minimum value referred to should require a "lock in" of excess interest. This is similar to the requirement for paid-up additions in a participating policy.
- Thinks the policy value is a "red herring", apparently because policyholders don't fully comprehend that often the entire policy value is

STATEMENT 1986-43

not available to them. However, with adequate disclosure, he has no problem with an absence of restrictions on the policy value, providing that the resulting cash surrender values equal or exceed the minimum cash surrender values.

- The answer is no. I anticipate that the argument for this freedom is that the competitive nature of the marketplace would perform all the regulation necessary. I do not believe this argument to be true.
- The marketplace adequately and quickly regulates the price and benefits of such products as gasoline at the pump or hamburger at the supermarket. These products are simple enough so that the consumer can readily understand about regular and super gasoline, about lean and not-so-lean hamburger. Life insurance products are not that simple and have several pages of print that are difficult to understand.
- There is also the additional consideration that the consumer does not know what his policy value will be in advance. He is asked to believe a projection which is frequently based on rather favorable assumptions. Thus, it is some time after he has invested his money that he finds out what the policy value really is. The market does not regulate well on after the fact information.
- Considering the policy value as a separate benefit, one may argue that a universal life insurance policy is a term insurance with an endowment or annuity rider. The policy provisions of the rider, the rider provisions, are built into the policy itself in a separate section and may be exercised at the option of the policyholder.

The term insurance would carry its own minimum guaranteed cash value if any. In addition, there could be a so-called "inside build-up" of funds as a result of favorable experience on the term portion.

The endowment or annuity rider would permit premium payments optional to the insured and would carry a separate nonforfeiture value.

Would it be possible to justify a CARVM approach to the annuity rider in spite of the absence of such language? I can remember life insurance policies issued 40 or 50 years ago that had both insurance and annuity benefits in the same policy. The insurance portion complied with insurance regulations and the annuity sections with annuity requirements.

A consideration is that a universal life insurance policy is really a deferred annuity with a term insurance rider.

- Oscillates between thinking current model is okay, and needing some minimum floor guarantees as to mortality and interest--tends toward favoring the latter.
- Suggests use of safe harbor approach--no need for minimum floor guarantees provided there is adequate disclosure to policyholder, e.g., via yield index disclosure.

STATEMENT 1986-43

- There should be a relationship between policy value and cash surrender value. Note that New York does not allow secondary guarantees or excess interest surrender charges.
- 7. SHOULD THE MODEL REGULATION REQUIRE ESSENTIALLY THE SAME RESERVES AND MINIMUM CASH VALUES FOR OTHERWISE SIMILAR FIXED AND FLEXIBLE PREMIUM UNIVERSAL LIFE PLANS? FOR OTHERWISE SIMILAR FRONT-LOADED AND REAR-LOADED UNIVERSAL PLANS? FOR SIMILAR UNIVERSAL LIFE AND TRADITIONAL PLANS?**
- Fixed versus-flexible - should be similar, force convergence like for annuities. Front-load versus rear-load - should be similar. (Should be no reserve credit for surrender charges if policy can avoid surrender charges by doing an "extended term"). Universal life versus traditional--similarity desirable, but it is not always clear that it is possible.
- Yes, to all three questions.
- Tentative yes to all three questions, but wasn't sure what "otherwise similar" meant. Consistency between front and rear-loaded products may be too tough to achieve in a regulation.
- Consistency is highly desirable in all three situations, but in the first and last, there is a question as to whether it is attainable. In the second situation, it is not clear what consistency means. In the long term project to revise the model Standard Valuation and Standard Nonforfeiture Laws, consistency will be achieved by starting with the totally flexible situation first and letting the fixed situations (traditional products) fall out as special cases.
- Consistency is desirable but not the number 1 requirement.
- Yes, a fixed premium and a flexible premium policy with the same benefits and the same sequence of premium payments should have the same cash values. A front-loaded and a rear-loaded flexible plan with the same benefits and sequence of premium payments should have the same cash values. A universal life and a traditional whole life with the same benefits and the same sequence of premium payments, should have the same cash value. Note that the benefits are defined to be the same. A universal life policy collapses to a traditional policy in the absence of favorable experience beyond the guaranteed rates.
- I believe the statutes were intended to be interpreted with the average consumer in mind, as he would understand his insurance policy. Is there not a legal tradition that tends to put the burden on the insurance companies because they authored the contracts and administered them? There is frequent argument that a regulation should not inhibit product innovation. Much of the product innovation in the recent years has not been for the benefit of the consumer, but for the benefit and convenience of the insurer. Regulations should inhibit product innovation when it takes advantage of the consumer.

STATEMENT 1986-43

- Comparing fixed versus flexible has its problems. To be consistent with traditional plans almost requires planned periodic premium approach.
- 8. HOW SHOULD SPECIAL PRODUCT FEATURES (E.G., PERSISTENCY BONUSES) BE ADDRESSED? SINCE IT IS NOT POSSIBLE TO ANTICIPATE FUTURE PRODUCT INNOVATIONS IN ADVANCE, SHOULD THERE BE MORE RELIANCE ON ACTUARIES FOR (A) INSURANCE DEPARTMENT FILINGS, (B) VALUATION?
- Regulations are preferable in advance of products. Thinks it is okay if the regulation placed some reliance on actuaries, but his staff is uncomfortable with such reliance. Specifically, regarding persistency bonuses, it uncomfortable about no prior reserves for these. These bonuses ought to increase the cash value, not the fund.
- A product was turned down with a feature which increases the cash value after ten years by the amount of the insurance charges deducted during the first ten years. If that is a guaranteed benefit, then it should be funded like an endowment. If it is not guaranteed, it amounts to a tontine, which is probably not legal.
- Would like to avoid an overly rigid nonforfeiture regulation which requires more reliance on insurance department actuaries.
- Turned down a contract that featured a special increase of cash value on the 10th, 15th and 20th anniversaries consisting of the mortality charges deducted to date. It was inconsistent with the smoothness requirement in the current Standard Nonforfeiture Law.
- There are advantages and disadvantages to relying more on actuaries to exercise judgment on innovations. On the one hand, insurance department resources are scarce and are not likely to be able to do the job. On the other hand, too many actuaries seem willing to sign an opinion without exercising adequate judgment. Standards will help here, but the profession needs to provide a mechanism to support the actuary when his or her judgment runs counter to management.
- More reliance on actuaries is probably inevitable but standards of practice are necessary for this to be workable.
- Receptive to the idea of more reliance on actuaries, either at the time of the policy form submission or as part of the valuation process. In terms of innovative product design features that are developed in future years, suggested a statement from an actuary at the time of policy filing to the effect that an actuary has considered all future cash flows in developing an appropriate reserve methodology for the plan.
- Favors placing more reliance on actuaries. Innovative new features not specifically covered by law or regulation should be reserved based on conservative assumptions under statutory valuation principles.
- Valuation--no need to deal explicitly in regulation with special wrinkles (e.g., persistency bonus)--can't expect regulation to deal with all possible variations--need to rely on valuation actuary.

STATEMENT 1986-43

- More reliance on actuaries--seems to be the trend of things, but not sure how well it would work.
- 9. **WHAT CRITERIA WOULD YOU SUGGEST FOR EVALUATING PROPOSED AMENDMENTS TO THE CURRENT MODEL REGULATION?**
 - Likes the six criteria John Gilchrist used to evaluate some earlier proposals:
 1. Policies with identical benefits require the same minimum values even though the premiums may differ.
 2. The minimum values should vary with the rate of interest guaranteed in the contract.
 3. Zero cash values for arbitrary durations should be prohibited.
 4. Unlevel premium policies should be equitable to the policyholder.
 5. The reserves and values should be reasonably related to the incidence of premium payments in a flexible premium plan.
 6. The model regulation for universal life plans must not directly or indirectly define the maximum gross premium which may be charged.
 - The main criterion should be consistency with what was contemplated under the regular Standard Nonforfeiture and Standard Valuation Laws. There is a problem with consistency with the indeterminate premium Model Regulation which requires that cash values be based on the larger of projected or guaranteed rates. This seems inappropriate.
 - Criteria are that proposal must address the problems, must be produced in a timely fashion, and must be politically acceptable. With the Lauer/Montgomery stopgap coming in December and the major overhaul starting soon, there is not much of a window for the ULTF work. We shouldn't be afraid to back off on our offer if our task is not doable. There is a chance that the quick fix will work as well as anything we can come up with.
 - The primary criteria is addressing the problems mentioned above. Consistency is only secondary.
 - A policy that purports to be whole life insurance should generate whole life type cash values.
 - A few standard premium patterns could be established (level premium, single premium, etc.) and the resulting cash values for UL plans calculated and compared to minimum cash values for similar traditional plans. UL products would be deemed to be in compliance with the Model Regulation if they produced satisfactory cash values for these standard premium patterns.
 - Minimum paid-up benefits should be required, perhaps as is done in New York.

STATEMENT 1986-43

- Discontinuities in cash values should be prohibited. Some way should be found to apply the smooth grading requirements of the 1980 amendments to UL plans.
- The criteria should be the number of insolvencies and justifiable consumer complaints we will experience by the year 2020 or some such future date. At present, review the amendments in light of the list of underlying principles that your committee may hopefully have derived.
- Would like a regulation with limitations on charges against premium, a minimum interest rate, maximum mortality charges, maximum charges against the fund, and a limited period over which surrender charges may be made. Should permit interest guarantees, but allow market value adjustments. Should be limitation of amount of surrender charge. Additional amounts, once credited, should not be forfeitable.

STATEMENT 1986-44

MEMORANDUM

TO: NAIC Technical Services (EX 5) Subcommittee

FROM: Carl R. Ohman, on behalf of the
American Academy of Actuaries Committee on Liaison with NAIC

DATE: December 10, 1986

The American Academy of Actuaries Committee on Liaison with NAIC was established to provide on-going coordination and communication between the Academy's Executive Committee and the NAIC Technical Services (EX 5) Subcommittee on issues of actuarial significance to insurance regulators. Continuing the tradition of recent meetings of the (EX 5) Subcommittee, we are pleased to make this report on current Academy/NAIC liaison activities.

When the Committee on Liaison with NAIC was established, it was our intention that it be chaired by an officer of the Academy to assure a direct link with the Academy's Executive Committee. As an Academy Vice President, it was my pleasure to serve as chairperson for the past two years. My term as Vice President ended this fall and I am happy to report that Burton D. Jay, a newly elected Academy Vice President, now chairs the committee. I do plan to remain on the committee, however, and look forward to continued involvement in this liaison effort.

Academy/NAIC interface occurs in various forms and I would like briefly to mention some of the ways in which our organizations do relate to each other.

First, the Academy recognizes the need for individual actuaries to be kept aware of issues of actuarial significance before the NAIC. Accordingly, Academy staff and members of Academy committees monitor activities of the two NAIC Actuarial (EX 5) Task Forces and of the various other NAIC committees and task forces addressing actuarial issues, and report on a regular basis on these activities to Academy members through such Academy publications as the Government Relations Watch, the Issues Digest and Actuarial Update. In addition, the Joint Committee on the Valuation Actuary monitors the activities of all insurance industry, professional actuarial and regulatory groups working on the developing concept of the valuation actuary and the Joint Committee's periodic reports are circulated widely among actuaries and regulators.

Second, there are several Academy committees working directly with NAIC committees and task forces in providing technical support on specific projects. Noteworthy among recent such efforts have been the work of the Academy's Health Subcommittee on Liaison with NAIC on health valuation standards, work now underway in the Committee on Life Insurance on universal life valuation standards, and participation by members of the Committee on Property and Liability Insurance on one of the advisory committees to the NAIC Legal Liability Task Force. In addition, I would note here the Academy's submission to the NAIC of a statement on health insurance rate filings (submitted September 29), a submission on proposed disclosure requirements for non-guaranteed elements (submitted October 30),

STATEMENT 1986-44

and our testimony at the hearings on discounting casualty loss reserves (on November 19).

Third, the Interim Actuarial Standards Board, with the support of various Academy committees, is working on a variety of proposed standards of practice which are of interest to regulators as well as actuaries who will be bound by the standards. Several proposed standards are now in various stages of exposure. One such draft standard, which should be of considerable current interest to regulators, is the Actuarial Standards of Practice Relating to Continuing Care Retirement Communities that was exposed by the Academy in May 1986 with a September 1 comment deadline. A second standard project which merits mention is the Exposure Draft on Recommendations Concerning Non-Guaranteed Elements in Life Insurance and Annuity Contracts, which was released last March with a June 1 comment deadline. This exposure relates directly to the proposed disclosure requirements submitted by the Academy in October.

Finally, the Academy has been pleased to provide direct support to the NAIC Actuarial (EX 5) Task Forces from time to time in providing the means of exposing Task Force material to the actuarial community. An important example has been the two Discussion Drafts of proposed health valuation standard exposed by the Academy on behalf of the Life and Health Actuarial (EX 5) Task Force. In addition, in order to give widest possible exposure of the NAIC's Actuarial Guidelines among practicing actuaries, we are planning to publish all fourteen of the Actuarial Guidelines already approved by the NAIC, plus Actuarial Guideline No. XV if approved at this NAIC meeting in Orlando, as an appendix to this Liaison Committee report in the Academy's 1986 Journal.

Once again, the Academy Committee on Liaison with NAIC welcomes this opportunity to report to the (EX 5) Subcommittee and we look forward to continuing this interchange at future NAIC meetings.

Sincerely

(signed)

Carl R. Ohman
for AAA/NAIC Liaison Committee

STATEMENT 1986-44

ACTUARIAL GUIDELINES

The NAIC Life and Health Actuarial (EX5) Task Force has been asked on many occasions to assist a particular state insurance department in interpreting a statute dealing with an actuarial topic relative to an unusual policy form or situation not contemplated at the time of original drafting of a particular statute. The Actuarial Task Force, in developing its interpretation or guideline, must often consider the intent of the statute, the reasons for initially adopting the statute and the current situation. The Actuarial Task Force feels that for those situations which are sufficiently common to all states, that the publishing of actuarial guidelines on these topics would be beneficial to the regulatory officials in each state and would promote uniformity in regulation which is beneficial to everyone. To this end, the Actuarial Task Force has developed certain actuarial guidelines and will continue to do so as the need arises. The guidelines are not intended to be viewed as statutory revisions but merely a guide to be used in applying a statute to a specific circumstance.

ACTUARIAL GUIDELINE I

INTERPRETATION OF THE STANDARD VALUATION LAW WITH RESPECT TO THE VALUATION OF POLICIES WHOSE VALUATION NET PREMIUMS EXCEED THE ACTUAL GROSS PREMIUM COLLECTED

1. The purpose of this guideline (items 2 and 3 below) is to clarify the intent of the Standard Valuation Law.
2. The method of valuation promulgated by the model legislation adopted by the NAIC in December 1976 for the valuation of life insurance policies whose valuation net premiums exceed the actual gross premiums collected is a change in method of reserve calculation and not a change in reserve standards.
3. For policies so valued the maximum permissible valuation interest rate and the applicable mortality basis specified is that in effect at the date of issue of such policies.

ACTUARIAL GUIDELINE II

RESERVE REQUIREMENTS WITH RESPECT TO INTEREST RATE GUIDELINES ON ACTIVE LIFE FUNDS HELD RELATIVE TO GROUP ANNUITY CONTRACTS

As part of the determination of the aggregate minimum group annuity reserves, a computation must be made of minimum reserves for deposit administration group annuity funds with interest rate guarantees including all such funds pertaining to possible purchase of group annuities whether such funds are held in a separate account or in a general account, whether shown as premiums, advance premiums, auxiliary funds, etc. and whether the liability is shown as Exhibit 8 or elsewhere. In making such computations, the procedure and minimum standards described below shall be applicable for the December 31 calendar year "y" valuation giving recognition to the dates deposits were made. Where appropriate and with the approval of the commissioner, recognition may be given to the extent and time of application of active life

STATEMENT 1986-44

funds to purchase annuities, expense assessments against the funds, and excess of purchase price over minimum reserves. In no event shall the reserve be less than the transfer value, if any, of the fund. Approximate methods and averages may be employed with the approval of the commissioner.

To the extent that the application of these valuation procedures and standards would require a company to establish aggregate minimum reserves for group annuities and related funds in excess of reserves which it would not otherwise hold if these valuation procedures and standards did not apply, such company shall set up additional reserve liability as shown in its general account or in a separate account, whether shown in Exhibit 8 or elsewhere.

The valuation procedures and standards specified in this guideline shall not be applicable to the extent that the valuation procedures and standards relating to reserves for deposit administration group annuity funds with interest rate guarantees (i.e., group annuity and guaranteed interest contracts) in the amendments to the Standard Valuation Law adopted by the National Association of Insurance Commissioners in December 1980, or in later NAIC amendments, have become applicable in a jurisdiction.

For funds received:

- (1) Prior to calendar year 1976, follow the procedure used at that time.
- (2) In calendar year 1976 or later, follow the minimum standards described below:
 - (a) Contracts having no guaranteed interest rates in excess of 6% on future contributions to be received more than one year subsequent to the valuation date.

The minimum reserve shall be equal to the sum of the minimum reserves for funds attributable to contributions received in each calendar year.

Where V_y =Minimum reserve for funds attributable to contributions received in calendar year y

$$V_y = [C_y \times (1 + i_{gy})^n] / (1 + i_{py})^n$$

C_y =Portion of guaranteed fund attributable to contributions received in calendar year y

i_{gy} = Interest rate guaranteed under the contract with respect to funds attributable to contributions received in calendar year y

i_{py} = Lowest of:

- (1) The net new money rate credited by the company on group annuity funds attributable to contributions received in calendar year y less .005; or

STATEMENT 1986-44

- (2) i_{gy} ; or
- (3) i_{my} ; where
 $i_{my} =$ (i) for calendar years $y + 1$ through $y + 10$, the values shown in the table of values of i_{my} distributed each year by the Central Office of the National Association of Insurance Commissioners;
- (ii) for calendar years $y + 11$ and later, .060.
- n = Number of guarantee years, and fractions thereof, remaining as of the December 31 valuation.
- (b) Contracts having guaranteed interest rates in excess of 6% on future contributions to be received more than one year subsequent to the valuation date.
- The same procedures as set forth under (a) above shall be used except that the deduction under (1) of i_{py} shall be .01 instead of .005 and i_{my} for calendar years $y + 1$ through $y + 10$ shall be reduced by .005.

**Table of Values of i_{my}
(Effective for the December 31, 1977 Valuation)**

Calendar Year y in Which Contributions Were Received	Value of i_{my} for Calendar Years $y + 1$ Through $y + 10$
1976	.089
1977	.087
1978	.081
1979	.084
1980	.100
1981	.124
1982	.145

ACTUARIAL GUIDELINE III

INTERPRETATION OF MINIMUM CASH SURRENDER BENEFIT UNDER STANDARD NONFORFEITURE LAW FOR INDIVIDUAL DEFERRED ANNUITIES

Section 6 of the model bill as written does not require that cash surrender benefits be paid; but where they are paid, it requires that such cash surrender benefits grade into maturity value using an interest rate not more than one percent higher than the rate specified in the contract for accumulating net considerations. While this method will be suited for contracts having a sales load at issue, it may create a problem for contracts having surrender charges for cash surrender.

STATEMENT 1986-44

For contracts providing cash surrender values, the cash surrender value at maturity shall be at least equal to the minimum nonforfeiture amount at maturity as defined in section 4. For purposes of calculating cash surrender values prior to maturity, the term "maturity value" in the Standard Nonforfeiture Law for Individual Deferred Annuities shall mean the cash surrender value at maturity.

ACTUARIAL GUIDELINE IV

ACTUARIAL INTERPRETATION REGARDING MINIMUM RESERVES FOR CERTAIN FORMS OF TERM LIFE INSURANCE

Scope

This interpretation recommended by the NAIC Technical Task Force to Review Valuation and Nonforfeiture Value Regulation deals only with term life insurance without cash values which the owner has the unilateral right to maintain in force until its stated expiry date, subject only to the payment of required premiums which vary (generally increasing on a per \$1000 basis) during the term of the policy and under which premium rates are guaranteed to the stated final expiry. This interpretation applies only to such term plans valued on the 1958 CSO Mortality Table for the current term period.

Ten-year renewable term, five-year renewable term and one-year renewable term to a stated age with generally increasing premiums are titles commonly given to such policies, but this interpretation concerns itself with the actual coverage provided and is not controlled by the name given the coverage.

Background Information

Historically, reserves on one-year renewable term policies have consisted of a basic reserve for the current term period of one-half the cost of insurance for the current term period, plus a deficiency reserve, if any. The application of the commissioners reserve valuation methods to determine basic reserves and efficiency reserves for such policies is subject to varying interpretations as noted in Walter O. Menge's paper, "Commissioners Reserve Valuation Method" written at the time of construction of the Standard Valuation Law.

. . . the adaptation of the commissioners reserve valuation method to fit policies for which the gross premium varies from year to year becomes a problem of generalization which, from a purely theoretical viewpoint, has an infinite number of possible solutions, some of which are practical and others of which are impractical.¹

and

For these reasons, it seems desirable not to formulate at this time any fixed rules for the valuation of these unusual types of policies and riders. The second paragraph of section 4 of the Standard Valuation Law does not define the method of valuation of such contracts but requires that the method used, whatever it may be, must be consistent with that employed for uniform

STATEMENT 1986-44

premium policies providing uniform insurance benefits, thus leaving open the possibility of a choice of several consistent methods.²

Acceptable Approaches

Two approaches to "consistent" reserves are suggested. The unitary policy approach considers such policies as variable premium policies up to the mandatory expiry date. Under this approach the valuation net premiums are a uniform percentage of gross premiums with the percentage fixed at issue date. If appropriate deficiency reserves are held, this approach has great appeal. However, it is susceptible to manipulation and illogical results. Reserves according to this approach should be acceptable only if the company can demonstrate that actual reserves, including deficiency reserves, for all renewable term business valued using this approach are of the same general magnitude as would occur using an approved method as defined below.

The other approach is to hold policy reserves for only the current period of years (not necessarily equal to the renewal period) during which the required premium per \$1000 remains level, including deficiency reserves if appropriate. Additional reserves are established where net premiums, calculated on a basis which reflects current mortality, exceed gross premiums for future periods of level premiums. Although not speaking directly to valuation problems in this instance, the Hooker Committee report said:

The question was raised whether a policy providing term insurance for several years, automatically followed by permanent insurance, should be considered as two separate policies for the purpose of the Act. In the Committee's opinion, the respective portions may be treated separately if the portion providing permanent insurance takes the Company's regular rate at the then attained age. The rated age provision in the law appears to cover this point. However, the Committee draws a distinction between policies providing purely term insurance followed by permanent insurance at the company's published rate at the attained age of conversion, the policies providing for an initial premium such that the increased premium at the subsequent duration differs from that for a new policy at the attained age. The latter case obviously constitutes a single policy to which the formula should be applied at the outset.

The second sentence of the above quotation lends support to the approach of separating successive periods of level premiums.

Under this interpretation, an approved method is any method which produces reserves greater than or equal to the sum of policy reserves, including deficiency reserves, for the current period of level premiums calculated on the basis of the applicable mortality and interest standards and reserve method specified in the Standard Valuation Law plus additional reserves calculated according to the following basis applied uniformly to all such policies.

STATEMENT 1986-44

The present value of the excess of test premiums for future periods of level premiums for which gross premiums are guaranteed over the respective gross premiums, such test premiums and present values being calculated on the Commissioners 1980 Standard Ordinary Mortality Table with Ten-Year Select Mortality Factors and 4 1/2 percent interest. For each plan of insurance with separate rates for smokers and nonsmokers an insurer may substitute the 1980 CSO Smoker and Nonsmoker Mortality Tables with Ten-Year Select Mortality Factors for the Commissioners 1980 Standard Ordinary Mortality Table with Ten-Year Select Mortality Factors.

In case a future gross premium exceeds the test premium, the excess shall be considered zero and not a negative amount. This is in accordance with the principle of anticipating no future profits but providing for all future losses.

Reinsured Business

If reinsurance is assumed under an agreement in which the reinsurer reserves the right to raise premiums to a level at least as great as the net valuation premiums, the reinsurer is not required to establish deficiency reserves or additional reserves, and the ceding company is not permitted to take credit for such reserves on the portion of the business which is reinsured.

If a reinsurance agreement guarantees future reinsurance premiums, reinsurer should establish deficiency reserves and additional reserves as required by this interpretation for the period for which reinsurance premiums are guaranteed, and the ceding company may take credit for such reserves against its deficiency and additional reserves on the portion of the business which is reinsured to the extent permitted by law.

Adequacy of Reserves

Although the above alternative is acceptable as meeting the intent of the Standard Valuation Law, this does not in any way relieve the certifying actuary of the insurance company from exercising his own best judgment with respect to the appropriate reserves. In particular, the actuary should consider term contracts of this nature when he states his opinion that aggregate reserves "make a good and sufficient provision for all unmaturity obligations of the company guaranteed under the terms of its policies" and "include provision for all actuarial reserves and related statement items which ought to be established."⁴

References

- 1 The Record, American Institute of Actuaries. Vol. XXXV, 1946, p. 270.
- 2 Ibid., p. 300.
- 3 1947 NAIC Proceedings, 257.
- 4 Instructions for Completing NAIC Life and Health Annual Statement Blank, 1976, p.1.

STATEMENT 1986-44

ACTUARIAL GUIDELINE V

INTERPRETATION REGARDING ACCEPTABLE APPROXIMATIONS FOR CONTINUOUS FUNCTIONS

Text:

For reserves and values using continuous functions:

$$(a) \quad \bar{D}_x = \int_0^1 D_{x+t} dt$$

By assuming that D_{x+t} is linear for $0 < t < 1$

$$\bar{D}_x \doteq \frac{1}{2} (D_x + D_{x+1})$$

By assuming that the deaths in the year of age x to $x+1$ are uniformly distributed over that year of age,

$$\bar{D}_x \doteq [(\delta - d)/\delta^2] D_x + [(i - \delta)/\delta^2] D_{x+1}$$

where:

$$d = i v = i/(1+i)$$

$$\delta = \text{force of interest}$$

$$i = \text{interest rate}$$

$$(b) \quad \bar{C}_x = \int_0^1 D_{x+t} u_{x+t} dt$$

By assuming that deaths in the year of age x to $x+1$ are uniformly distributed over that year of age,

$$\bar{C}_x \doteq (i/\delta) C_x$$

By assuming that the total deaths are concentrated at the middle of the year of age,

$$\bar{C}_x \doteq (1+i)^{1/2} C_x \quad \text{or} \quad (1 + i^{1/2}) C_x$$

Background Material

The actuarial mathematics used in calculating net premiums, reserves and nonforfeiture values for life insurance policies was first developed using two basic assumptions. These basic assumptions are: (1) that all death benefits are payable at the end of the policy year of death and (2) that all gross premiums due under the policy are payable annually at the beginning of the policy year. Actuarial values which are calculated under these two basic assumptions are described as being calculated using curtate functions. For any specific mortality table and interest rate, all the necessary actuarial values are uniquely defined for a policy using curtate functions.

The Standard Valuation Law and the Standard Nonforfeiture Law define minimum reserves and minimum nonforfeiture values, respectively, for life insurance policies using curtate functions. These two model laws originated in the early 1940's when almost all insurance companies were using the two basic

STATEMENT 1986-44

assumptions inherent in the curtate functions. However, the wording of the model laws does not prohibit insurance companies from using other assumptions if the resulting reserves and nonforfeiture values will always be at least as large as the minimum amounts defined in these laws.

Nowadays, many insurance companies do prefer to use alternative assumptions in computing the reserves and nonforfeiture values for their life insurance policies. These companies consider the alternative assumptions more appropriate for their policies. These alternative assumptions are: (1) that all death benefits are payable immediately upon death and (2) that all gross premiums due under the policy are payable continuously throughout the policy year.

Actuarial values which are calculated under both of the alternative assumptions, pertaining to death benefits and gross premiums, are described as being calculated using continuous functions. However, the underlying mathematics for continuous functions involves two integrals, representing the actuarial functions \bar{C}_x and \bar{D}_x , which must be approximated. In the past, there has been some disagreement among actuaries as to which approximations for the two integrals are the most suitable. Because of the use of different approximations for these two integrals, actuaries have obtained different numerical amounts for the necessary actuarial values using continuous functions even though these actuaries were working with the same mortality table and interest rate.

Some insurance companies prefer to calculate their reserves and nonforfeiture values assuming: (1) that death benefits are payable immediately upon death and (2) that all gross premiums due under the policy are payable annually at the beginning of the policy year. Thus, these companies are using the alternative assumption pertaining to death benefits and the basic assumption pertaining to gross premiums. The underlying mathematics for the combination of these two assumptions involves the integral \bar{C}_x , which must be approximated. Thus, the use of these two assumptions together gives rise to essentially the same problem as using continuous functions.

ACTUARIAL GUIDELINE VI

INTERPRETATION REGARDING USE OF SINGLE LIFE OR JOINT LIFE MORTALITY TABLES

The Standard Valuation Law and the Standard Nonforfeiture Law for Life Insurance apply to policies which provide joint life insurance benefits as well as to policies which provide single life insurance benefits. References in these laws to plans such as "nineteen year premium whole life" or "a whole life policy . . . with uniform premiums for the whole of life" are to be interpreted as references to such plans based on the same life status(es) as the policy for which minimum reserves or nonforfeiture benefits are being determined. For example, if the net level annual premium on the nineteen year premium whole life plan is needed to calculate the minimum reserve for a policy which insures two lives and pays a benefit at the first death, the premium is to be that for a policy which insures two lives and pays a death benefit at the first death. The same principle would apply to a policy which insures only one life, or a policy which pays a benefit at the first death of

STATEMENT 1986-44

more than two lives. The principle also applies to a policy that pays a benefit on the death of t-th life of n lives (t is greater than 1 but less than or equal to n).

ACTUARIAL GUIDELINE VII

INTERPRETATION REGARDING CALCULATION OF EQUIVALENT LEVEL AMOUNTS

Text:

Pure endowments will not be considered in the determination of equivalent level amounts for valuation and nonforfeiture purposes.

Background Material

The "Background Material" section relating to the previous actuarial guideline went into some detail concerning the "expense allowances" defined in the Standard Valuation Law and the Standard Nonforfeiture Law. See Actuarial Guideline 6. "Interpretation Regarding Use of Joint Life Insurance Tables."

This Actuarial Guideline 7 is also concerned with the level of these "expense allowances" defined in these model laws. The most common plans of life insurance provide a level face amount as the death benefit, during the period the policy is in full force. These plans do not provide for any benefit which is payable as a pure endowment. (A pure endowment benefit pays a specified amount of pure endowment to the policyholder if the insured is still alive on the specified maturity date and if the policy is still in full force on this maturity date.) However, policies which provide for a death benefit which varies with the duration and policies which provide one or more pure endowment benefits can be legally written in most states.

The Standard Valuation Law and the Standard Nonforfeiture Law do apply to such policies with varying death benefits or pure endowment benefits. In fact, the wording of the model laws shows that considerable thought was given to the treatment of these kinds of policies. In the case of both model laws, the present value of future guaranteed benefits under the policy clearly includes both the death benefits and the pure endowment benefits provided. A more difficult question is involved in the calculation of the "expense allowances" defined under these model laws.

The Standard Nonforfeiture Law includes a paragraph which reads as follows:

In the case of a policy providing an amount of insurance varying with duration of the policy, the equivalent uniform amount thereof for the purpose of this Section shall be deemed to be the uniform amount of insurance provided by an otherwise similar policy, containing the same endowment benefit or benefits, if any, issued at the same age and for the same term, the amount of which does not vary with duration and the benefits under which have the same present value at the date of issue as the benefits under the policy; provided, however that in the case of a policy providing a varying amount of insurance issued on the life of a child under age ten, the equivalent

STATEMENT 1986-44

uniform amount may be computed as though the amount of insurance provided by the policy prior to the attainment of age ten were the amount provided by such policy at age ten.

While the wording of the above paragraph is rather complex, the meaning seems to be actuarially precise. The paragraph defines an "equivalent uniform amount" which affects the "expense allowance" defined in the law. The phrase "containing the same endowment benefit or benefits, if any" effectively means that pure endowment benefits are to be ignored in computing this "equivalent uniform amount." This "equivalent uniform amount" or "equivalent level amount" becomes a sort of weighted average of the death benefits provided by the policy, an average which is not affected in any way by the pure endowment benefits which may be provided by the policy.

The Standard Valuation Law is not nearly so clear on this point. It contains wording as follows:

Reserves according to the commissioners reserve valuation method for (1) life insurance policies providing for a varying amount of insurance...shall be calculated by a method consistent with the principles of the preceding paragraph....

(Note that the quoted wording refers back to the preceding paragraph in the Standard Valuation Law. It does not intend to refer to the paragraph quoted from the Standard Nonforfeiture Law.)

Most actuaries have interpreted the Standard Valuation Law so as to use an "equivalent level amount" which is not affected by any pure endowments included in the policy. They would then use this "equivalent level amount" to calculate the "expense allowance" defined in the model law. This "equivalent level amount" is also a weighted average of the death benefits provided by the policy, in the same fashion as the "equivalent uniform amount" used in applying the Standard Nonforfeiture Law. Some insurance companies use the same "equivalent level amount," for the purpose of the Standard Valuation Law, as the "equivalent uniform amount" defined in the Standard Nonforfeiture Law. Other companies use a very similar calculation to obtain a special "equivalent level amount," for the purpose of the Standard Valuation Law, based only on the death benefits provided on and after the first policy anniversary.

Some actuaries have felt that the wording of the Standard Valuation Law permits an alternate calculation of the "equivalent level amount" which would be affected by pure endowment benefits. Such an "equivalent level amount" would be used to calculate an "expense allowance" under the Standard Valuation Law, even though the "equivalent level amount" no longer has the character of a weighted average of the death benefits provided by the policy.

The inclusion of the pure endowment benefits in the calculation of the "equivalent level amount" would affect the level of the "expense allowance" defined in the Standard Valuation Law, and therefore it would affect the level of the minimum reserves required by the policy. Typically, the denominator of the fraction used in calculating the "equivalent level amount" would remain the same, but the numerator of this fraction would be increased because of this inclusion. Thus, the "equivalent level amount" itself and the resulting

STATEMENT 1986-44

"expense allowance" defined in the Standard Valuation Law would also be increased with the inclusion. The end result of the inclusion would be lower minimum reserves at every duration.

If the amounts and maturity dates of the new pure endowment benefits were carefully selected, a considerable degree of reduction in the reserve factors would probably be possible.

This actuarial guideline would expressly prohibit including the pure endowment benefits in determining the "equivalent level amount" for either valuation or nonforfeiture purposes. As explained under "Background," the need for this actuarial guideline arises primarily for valuation purposes under the Standard Valuation Law. The wording of the Standard Nonforfeiture Law is sufficiently precise that this actuarial guideline is virtually a truism for the purpose of calculating nonforfeiture values.

The purpose of this actuarial guideline is to assist state insurance departments and insurance company actuaries by identifying a method of calculating "equivalent uniform amounts" and "expense allowances" which is not considered proper and which will not be accepted.

ACTUARIAL GUIDELINE VIII

THE VALUATION OF INDIVIDUAL SINGLE PREMIUM DEFERRED ANNUITIES

Text:

With respect to those states which have enacted the 1976 amendments to the Standard Valuation Law, individual single premium deferred annuity reserves shall at least equal the greatest of any of the discounted values of all guaranteed future benefits including cash surrender values available after the date of valuation, such benefits discounted to the valuation date at the maximum permissible statutory interest rate. This method applies to all individual single premium deferred annuities which are subject to the provisions of the Standard Valuation Law in those states which have enacted the 1976 amendments. For those states which have not yet enacted the 1976 amendments this interpretation is a method of valuing individual single premium deferred annuities.

ACTUARIAL GUIDELINE IX

FORM CLASSIFICATION OF INDIVIDUAL SINGEL PREMIUM IMMEDIATE ANNUITIES FOR APPLICATION OF THE VALUATION AND NONFORFEITURE LAWS

Text:

Solely for the purposes of the applicable Valuation and Nonforfeiture Laws, an individual single premium annuity shall be considered to be immediate, as opposed to deferred, provided:

- (1) the first annuity payment is due not more than thirteen months from the annuity issue date;

STATEMENT 1986-44

- (2) succeeding payments under the annuity, after the initial payment, are due at regular intervals no less frequently than annually;
- (3) in the case of a fixed benefit annuity, the total guaranteed payments due in any contract year are not greater than 115% of the total guaranteed payments due in the immediately preceding contract year. In the case of variable annuities and indexed annuities, the same characteristic would be required for the underlying pattern of payments, before adjustments which are made solely because of the performance of the separate account associated with a variable annuity or the changes in the associated index. (This characteristic is not intended to prevent or reduce any lawful nonguaranteed payments under the annuity which are in the nature of dividends or excess interest credits.)

ACTUARIAL GUIDELINE X

GUIDELINE FOR INTERPRETATION OF NAIC STANDARD NONFORFEITURE LAW FOR INDIVIDUAL DEFERRED ANNUITIES

Text:

For contracts which provide cash surrender benefits, the NAIC Model Law prescribes a basis for determination of minimum cash surrender benefits. That law does not require that a company grant additional amounts in excess of the amounts guaranteed in the contract, either in the form of excess interest credits or otherwise. When such additional amounts have been credited to the contract, the question of how the Model Law applies to such amounts must be considered.

Under one interpretation the portion of the maturity values which would arise from such amounts may be discounted to the date of surrender at an interest rate 1% higher than the rate specified in the contract for accumulating such amounts. This interpretation would permit a surrender charge against such amounts on the same basis as the surrender charge which may be applied to the contractually guaranteed portion of the interest credited to the contract.

Under another interpretation such amounts could not be treated as providing a portion of the maturity value and, therefore, would be included in the phrase "any additional amounts credited by the company to the contract". This interpretation would require that the cash surrender value be increased by 100% of the accrued value of such amounts.

By providing for a surrender charge to be made in determining the minimum cash surrender value, the Model Law enables a company to provide for recovery of all or part of any (1) excess first year expenses not yet recovered, and (2) potential investment losses at surrender. The reason for permitting surrender charges to be made against accumulated amounts of contractually guaranteed interest are equally valid reasons for permitting surrender charges against any non-guaranteed interest credited. If such surrender charges were not permitted, companies offering such contracts may be discouraged from crediting as much additional interest as they might if the additional interest were to contribute to the minimum cash surrender value in the same manner as do the interest amounts derived from the rates guaranteed in the contract.

STATEMENT 1986-44

In view of the above considerations, the following guidelines are recommended:

I. Treatment of Amounts of Excess Interest Credited to Deferred Annuity Contracts

The NAIC Standard Nonforfeiture Law for Individual Deferred Annuities shall be interpreted to permit the portion of the maturity value which would arise from the amounts of interest credited in excess of the minimum rates guaranteed in the contract to be discounted to the date of surrender at an interest rate 1% higher than the rate specified in the contract for accumulating such amounts, provided such excess interest is declared prior to the period for which it is to be effective, and provided such excess interest accrues over the effective period. Amounts of excess interest treated in accordance with the above interpretation shall not be included by the phrase "additional amounts credited by the company to the contract" in Section 6 of the Model Law.

II. Treatment of Dividends Credited to Deferred Annuity Contracts

No single rule can be given for the treatment of dividends credited to deferred annuity contracts. The contractual wording of the applicable dividend option must be taken into account together with the appropriate provisions of the NAIC Standard Nonforfeiture Law for Individual Deferred Annuities.

If the dividend option in effect provides that dividends be left on deposit at interest, without any further qualification, then the cash surrender value should be increased by the full accumulated amount. In this case, the phrase "increased by any additional amounts credited by the company to the contract" applies and no surrender charge may be made.

In other cases, the dividends may be added, directly or indirectly, to the contractual value and made subject to the surrender charge provision. This would be the case when dividends are applied to purchase additional paid-up benefits or applied as premiums.

Contracts may contain other provisions or variations of these provisions. In such cases, the terms of the contract and the provision of the NAIC Standard Nonforfeiture Law for Individual Deferred Annuities should be taken into account.

ACTUARIAL GUIDELINE XI

EFFECT OF AN EARLY ELECTION BY AN INSURANCE COMPANY OF AN OPERATIVE DATE UNDER SECTION 5-C OF THE STANDARD NONFORFEITURE LAW FOR LIFE INSURANCE

Section 5-C of the Standard Nonforfeiture Law for Life Insurance may be made operational for one or more plans at a time provided that:

- A. Sales are discontinued in this state on all like plans using rates and values generated by past requirements.

STATEMENT 1986-44

- B. Sales are discontinued in all other states which have enacted the new legislation on all like plans using rates and values generated by past standards, provided the state of sale has allowed changes to 1980 requirements on a plan-by-plan basis.
- C. Once the new law has been made operational for one plan, the new law shall be operational for all subsequent new plans of the same generic form to be marketed in this state unless the insurer can demonstrate to the Commissioner's satisfaction the need to continue to prior set of requirements.
- D. "Life plans," as mentioned in Sections A and B, refers to plans with the same benefits, including cash values, and with the same premium paying period and pattern of premiums.
- E. "Generic form," as mentioned in Section C, refers to generic groups, such as ordinary vs. group, term vs. permanent, flexible cash value vs. fixed cash value, separate account vs. fixed account.

ACTUARIAL GUIDELINE XII

INTERPRETATION REGARDING VALUATION AND NONFORFEITURE INTEREST RATES

Preamble:

When the Standard Valuation and Nonforfeiture Laws were amended in 1976, the minimum standards for most life insurance policies were based on interest rates of 4 1/2 percent for reserves and 5 1/2 percent for nonforfeiture values. Prior to this, no differential had existed between these two standard rates and companies had almost always based reserves and nonforfeiture values on the same interest rates. This new aspect of the Standard Laws raised questions concerning the application of these laws to policies with reserves and nonforfeiture values based on different interest rates.

The sections in this guideline cover the manner in which the Standard Valuation Law and the Standard Nonforfeiture Law for Life Insurance, as amended in December 1980, govern the choice of the interest rate or rates used in the various applications covered by these laws. These sections shall be applicable to policies issued after the effective date of this guideline and pursuant to the Standard Laws as amended in December 1980.

In the development of these sections, consideration was given to the application of the Standard Laws to traditional products, Products, such as universal life, that may be of such a nature that minimum values cannot be determined by the methods described in the Standard Laws were not considered.

Text:

1. **Basic Policy Cash Surrender Value.** Any cash surrender value provided for by a life insurance policy, regardless of the interest rate or rates used to calculate it, shall be an amount not less than the minimum cash surrender value calculated by the method described in the Standard

STATEMENT 1986-44

Nonforfeiture Law for Life Insurance using the maximum interest rate permitted for the policy by that law.

2. Amount of Paid-Up Nonforfeiture Benefit. Any paid-up nonforfeiture benefit provided for by a life insurance policy shall be such that its present value shall be at least equal to the then current cash surrender value. The present value referred to should be calculated using the same interest rate or rates as were used in the prospective calculation of the cash surrender value or as is stated in the polciy as the minimum interest rate that will be used in the accumulation of successive policy year cash values.
3. Cash Surrender Value of Paid-Up Nonforfeiture Benefits. Any cash surrender value of a life insurance policy continued under any paid-up nonforfeiture benefit shall be an amount not less than the present value of the then future benefits. The present value referred to should be calculated using the same interest rate or rates as were used in determining the amount of the paid-up nonforfeiture benefit.
4. Valuation of Paid-Up Nonforfeiture Benefits. The interest rate used in determining the minimum standard for the valuation of a life insurance policy continued under any paid-up nonforfeiture benefit shall be the interest rate specified in the Standard Valuation Law for that life insurance policy had it continued in a premium paying status.
5. Paid-Up Dividend Additions. The following conditions relate to additional paid-up life insurance purchased by dividends:
 - (a) Any cash surrender value of paid-up additions shall be an amount not less than the persent value of the future benefits calculated using the interest rate used in determining the amount of such additions.
 - (b) The interest rate used in determining the minimum standard for the valuation of any dividend additions shall be the interest rate used in determining the minimum standard for the valuation of the basic life insurance policy.

Background Material:

The sections in this guideline are intended to represent a straightforward interpretation of the current Standard Laws. Most of the Background Material consist of direct quotations from the sections of the Standard Laws on which these sections are based. Unless otherwise indicated, references are to the NAIC Standard Nonforfeiture Law for Life Insurance, as amended December 1980. To facilitate cross reference, the section numbers used here correspond to those in the text of the guideline.

1. Basic Policy Cash Surrender Value. The first section in this guideline deals generally with minimum standard cash surrender values—a prerequisite to a discussion of nonforfeiture benefits and their values -- and specifically with the interest rates which may be used in calculating these minimum values. The method is described in section 3 of the Standard Nonforfeiture Law: "Any cash surrender value...shall be an

STATEMENT 1986-44

amount not less than...the present value...of the future guaranteed benefits...including any existing paid-up additions... over...the then present value of the adjusted premiums..." Adjusted premiums are then defined in section 5-c. Finally, section 5-c(8) states that: "all adjusted premiums and present values...shall...be calculated on the basis of a rate of interest not exceeding the nonforfeiture interest rate..."

It is important to compare this language to that used in older sections of the law that apply to policies sold prior to the operative date of 5-c. Section 5-a, for example, provides that values "be calculated on the basis of...the rate of interest specified on the policy for calculating cash surrender values... provided that such rate of interest shall not exceed..." Note that the rate of interest used to calculate the minimum standard is no longer defined by reference to the rate specified in the policy for calculating actual cash surrender values. The removal of this linkage is double-edged. The minimum standards are defined in the law without regard to the rates used to calculate actual values of the policy and the rates used to calculate actual values are no longer restricted by the indirect requirement that they be acceptable for use in calculating minimum standard values. The result is that actual policy values may be calculated using any interest rate or rates as long as the resulting values exceed the minimum values defined by the law.

2. Amount of Paid-Up Nonforfeiture Benefit. Section 2(a) requires that a policy provide "a paid-up nonforfeiture benefit...of such amount as may be hereinafter specified," That amount is specified in section 4: "...shall be such that its present value...shall be at least equal to the cash surrender value..." Note that it is stated in the form of a minimum requirement. Policies may provide for paid-up nonforfeiture benefits in amounts greater than the minimum. One obvious way to do so is to use a higher interest rate. New language added in 1980 makes this more clear:

A company may calculate the amount of any guaranteed paid-up nonforfeiture benefits including any paid-up additions under the policy on the basis of an interest rate no lower than that specified in the policy for calculating cash surrender values. (5-c(8)(c)).

At the time a paid-up nonforfeiture benefit is actually provided, the company is given a further option to provide a more valuable benefit than that guaranteed under the policy by language added to section 2(a) in 1980:

In lieu of such stipulated paid-up nonforfeiture benefit, the company may substitute, upon proper request not later than sixty days after the due date of the premium in default, an actuarially equivalent alternative paid-up nonforfeiture benefit which provides a greater amount or longer period of death benefits or, if applicable, a greater amount or earlier payment of endowment benefits.

The fact that the amount of the paid-up benefit actually provided may have been determined using a higher interest rate than the rate specified

STATEMENT 1986-44

in the policy for calculating cash surrender values should be kept in mind when reviewing the next two sections.

3. Cash Surrender Value of Paid-Up Nonforfeiture Benefits. The cash surrender value of a policy continued under a paid-up nonforfeiture benefit is required by section 3 to be at least equal to the present value of the future benefits. The interest rate to be used in that calculation is covered by language added in 1980:

Under any paid-up nonforfeiture benefit, including any paid-up dividend additions, any cash surrender value available, whether or not required by section two, shall be calculated on the basis of the mortality table and rate of interest used in determining the amount of such paid-up nonforfeiture benefit and paid-up dividend additions, if any. (5-c(8)(b)).

4. Valuation of Paid-Up Nonforfeiture Benefits. The interest rate used in determining the minimum standard for the valuation of a life insurance policy does not change when the policy is continued under a paid-up nonforfeiture benefit.

For example, for policies issued on and after the effective date of the 1976 amendments and before the operative date of section 5-c of the Standard Nonforfeiture Law for Life Insurance, the Standard Valuation Law distinguished between single premium life insurance policies and other policies. The 5-1/2 percent interest rate permitted for the valuation of single premium life insurance is one percent higher than the rate permitted for other life insurance. The higher single premium rate does not apply to life insurance policies continued as paid-up nonforfeiture benefits.

Any argument that the higher rate should be permitted for valuation of paid-up nonforfeiture benefits would probably involve the point that continuation as paid-up insurance is comparable to the purchase of a single premium policy. The argument for the more liberal treatment is weaker here than in the single premium case since those policies issued in a given year which are eventually continued on a paid-up nonforfeiture status are so continued at various times over several years following the issue of the policies and the establishment of the valuation standards.

5. Paid-up Dividend Additions. The minimum standards for the calculation of reserves and cash surrender values for paid-up additions are the same as those discussed in sections 3 and 4 for paid-up nonforfeiture benefits. The Standard Laws provide for this by appropriate use of the phrase "including any paid-up additions." Of course, this does not mean that reserves held and benefits provided must be on the same basis; it merely requires that paid-up additions and nonforfeiture benefits are subject to the same minimum standards.

STATEMENT 1986-44

ACTUARIAL GUIDELINE XIII

GUIDELINE CONCERNING THE COMMISSIONERS' ANNUITY RESERVE VALUATION METHOD

Preamble. At its December 1976 meeting, the NAIC adopted the Commissioners' Annuity Reserve Valuation Method (CARVM) and incorporated it in its model Standard Valuation Law. CARVM is now included in the laws of nearly all of the states. Differences in interpretations of CARVM have developed in practice, particularly on whether and under what conditions surrender charges may be taken into account in determining CARVM reserves. This guideline is intended to clarify which surrender charge factors may be taken into account and which are to be disregarded under CARVM.

Reserves according to CARVM depend in part upon the present values of "future guaranteed benefits, including guaranteed nonforfeiture benefits." It has always been recognized that this phrase, as used in the NAIC model Standard Valuation Law, includes cash surrender values based on contractual guarantees after reduction for any contractual surrender charges available to the insurer. This is illustrated in the Proceedings. See proceeding of the National Association of Insurance Commissioners, I (1977), 538-45.

Guideline. The phrase, "future guaranteed benefits, including guaranteed nonforfeiture benefits," as used in CARVM include the cash surrender values based on contractual guarantees after reduction for any surrender charges available under the contract.

In recent years, annuity contracts with contingent surrender charges have become more prevalent. For example, a contract may provide the option to surrender without surrender charge if the rate at which interest is credited falls below a specified rate, referred to in this guideline as the "bail-out" rate. Contingent surrender charges may not be available upon cash surrender at future contract anniversaries, and it is not consistent with the conservative nature of CARVM to reduce the value of future guaranteed benefits on account of such contingent surrender charges.

The value of future guaranteed benefits under CARVM may not be reduced by contingent surrender charges which may not be available upon cash surrender.

There may be some contracts with contingent surrender charges with bail-out rates which are so low that it would not be contrary to the conservative intent of CARVM to treat such surrender charges as available. The calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty years, which is used in the Standard Valuation law in connection with the definition of guaranteed duration for most annuities and guaranteed interest contracts, provides an appropriate measure for this purpose. Whether or not such surrender charges should be treated as available should be determined as of December 31, 1984 for contracts in force at the date and as of the date of issue for contracts subsequently issued.

For contracts issued on and after January 1, 1985, contingent surrender charges with bail-out rates less than or equal to the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty years issued in the same year may be treated as available.

STATEMENT 1986-44

For contracts issued prior to January 1, 1985, contingent surrender charges with bail-out rates less than or equal to 6.00% the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty years issued in 1984 may be treated as available.

There are some contracts with contingent surrender charges with bail-out rates which are a function of an external index whose future values are not known. Judgment is required to determine whether or not such surrender charges may be treated as available. Comparison to the calendar year statutory valuation interest rate for life insurance policies with guarantee duration in excess of twenty years may be useful.

For contracts with contingent surrender charges with bail-out rates which are a function of an external index, a judgment as to the availability of the surrender charges may be made by comparing historical values of the function with corresponding values of the calendar year statutory valuation interest rate for life insurance with guarantee duration in excess of twenty years. If the values of the function have generally been less than or equal to the valuation rates, then the surrender charges may be treated as available.

For the purpose of this guideline, in the case of a variable annuity that offers the policyholder a choice of multiple investment options, a surrender charge that may be waived for all the accounts of the contract by reference to one or more of the accounts will be treated as a contingent surrender charge that may not be available upon cash surrender with respect to the entire contract. If no surrender charge is imposed on transfers among the accounts, and the surrender charge may be waived for one account, provided the formula for the availability of the waiver is set at the date of issuance, then the surrender charge will be treated as a contingent surrender charge that may not be available upon cash surrender with respect to the entire contract.

Since this guideline is intended to apply to all contracts in force that are subject to CARVM, its application may work an undue hardship on some insurers who have, on the basis of good faith interpretation of CARVM, held reserves less than required by this guideline. In cases of severe hardship, state insurance commissioners may wish to permit insurers to conform on a gradual basis.

ACTUARIAL GUIDELINE XIV

SURVEILLANCE PROCEDURE FOR REVIEW OF THE ACTUARIAL OPINION FOR LIFE AND HEALTH INSURERS

To assist regulators in their responsibility for surveillance of life and health insurers, the NAIC adopts the following interim procedure for use of the Actuarial Opinion to be used until such time as model legislation and/or regulations are adopted and become effective.

1. The regulator should accept Actuarial Opinions only from qualified actuaries. The educational and experience standards established by the American Academy of Actuaries for this purpose offers evidence that an individual is so qualified.

STATEMENT 1986-44

2. The regulator should determine if an opinion is qualified in any respect, or omits items from the outline provided in the Instructions to the Blank. If so, a follow up with the actuary rendering the opinion as to the nature of the qualification or omission is appropriate if the opinion does not provide a satisfactory explanation.
3. The regulator should examine the circumstances where the actuary rendering the opinion differs from the prior actuary, and ascertain the reasons for the change. In some cases the regulator may wish to discuss the change with the current and prior actuaries.
4. The regulator should, if desired, obtain for review, documentation supporting the Actuarial Opinion. Except in matters of professional discipline, the regulator's use of these documents should be considered within the Department's guidelines for confidential information.
5. The regulator may require that the actuary furnish an Actuarial Report supporting the Actuarial Opinion. The report should conform to the standards of the American Academy of Actuaries with respect to Actuarial Reports (Opinion 3 to the Guides to Professional Conduct). It should document the methodology and approach to assumptions used in making the opinions and, additionally, provide specific details in reference to items in 6 through 10 below if such details are required by the regulator.
6. In the Actuarial Report, the actuary providing the opinion should refer to the NAIC Insurance Regulatory Information System (IRIS) ratios, point out ratio values outside the prior year's range of usual values, and provide explanations for those which are significant.
7. In the Actuarial Report, the actuary providing the opinion should make specific reference to the extent to which the good and sufficient analysis considered all the unmatured obligations of the company, in aggregate, guaranteed under the terms of its policies.
8. In the Actuarial Report, the actuary providing the opinion should make specific reference as to whether the good and sufficient analysis, with respect to annuities and other products with benefits (guaranteed or non-guaranteed) sensitive to interest rates, considered future insurance and investment cash flows as they would emerge under a reasonable range of future interest rate scenarios, and if so, what those considerations were.
9. In the Actuarial Report, the actuary providing the opinion should make specific reference as to whether the good and sufficient analysis considered the inter-relationships of assumptions with respect to guaranteed benefit payments, future expenses, policyowner dividends, and post-issue premium or benefit adjustments, especially among persistency, mortality, morbidity, inflation, and interest rates, and, if so, what those considerations were.
10. In the Actuarial Report, the actuary providing the opinion should document the extent to which the opinion is influenced by a continuing business assumption, and, if the impact is material, comment on the

STATEMENT 1986-44

company's plan of operations with regard to this assumption as it affects assumed expenses and interest rates, and future reserve requirements.

11. A review of the documentation obtained in (4) above, undertaken or sponsored by the regulator, should:
 - a. Be done by a qualified reviewer.
 - b. Emphasize an examination of the appropriateness of the actuary's work process, methodology, and approach to assumptions.
12. If at any time during the review, the regulator requires more information deemed to be material to the development of the opinion, the company would be expected to comply with requests for such information.

ACTUARIAL GUIDELINE XV

ILLUSTRATIONS GUIDELINE FOR VARIABLE LIFE INSURANCE MODEL REGULATION

Any sales illustration shown or furnished in connection with the sale of Variable Life Insurance must conform with the following requirements except that these requirements only apply to the variable portion of contracts with fixed variable funding options. Item 9 specifically pertains to variable life insurance contracts offering both fixed and variable funding options.

- 1) The hypothetical interest rates used to illustrate accumulated policy values must be an annual effective gross rate after brokerage expenses and priority and any deductions for taxes, expenses and contract charges.
- 2) If illustrations of accumulated policy values are shown then for the highest interest rate used one illustration must be based solely upon guarantees contained in the policy contract being illustrated. (For example, if the illustration includes the effect of mortality charges and administrative charges which are below the guaranteed maximums for such charges, an illustration must be prepared which involves the effect of the maximum charges).
- 3) Except for illustrations contained in the prospectus, the pattern of premium payments used in an illustration should be the initial pattern requested by the proposed policyholder at inception or upon changes in face amount requested by the policyholder.
- 4) If the illustrated policy contract provides for a variety of investment options, the illustration may either use an asset charge which is reasonably representative or use the asset charge of a particular option. The illustration should clearly identify the asset charge and either label it "hypothetical" or identify the fund.
- 5) The illustration must disclose the transaction charges which will be levied against the contract because of transactions requested in accordance with rights and privileges specified in the policy contract. Any charge for the exercise of a right or privilege upon which the illustration is based must be reflected in the illustrated values. The nature of any other such

STATEMENT 1986-44

- charges must be disclosed in a clear statement accompanying such illustrations. (For example, a charge to switch from one investment option or death benefit option to another).
- 6) A clear statement must be made following the table of illustrated accumulated policy values that use of hypothetical investment results does not in any way represent actual results or suggest that such results will be achieved and must indicate that the policy values which actually arise will differ from those shown whenever the actual investment results differ from the hypothetical rates illustrated. Assumptions upon which illustrations are based must be clearly disclosed.
 - 7) Any sales illustration to a prospective policyholder must reflect the policy being presented accurately. Misleading statements or captions or other misrepresentations are prohibited.
 - 8) The requested sales illustration must be printed clearly and legibly on hard paper copy. An illustration displayed on a computer screen may be used in addition to, but not as a substitute for, hard paper copy.
 - 9) In connection with variable life insurance contracts offering both fixed and variable funding options:
 - a) An illustration of the variable funding option must comply with these guidelines.
 - b) If an illustration of the fixed funding option is shown, accumulated policy values must be shown on the basis of guaranteed rates. One or more additional rates may also be shown but such rates may not exceed current rates.
 - c) A summary illustration may be given in which results from comparable illustrated and hypothetical interest rates are combined. Such summary must cross-reference to the accompanying separate illustrations of the fixed and variable funding options.
 - 10) Nothing herein shall prohibit the distribution to the prospective policyholder of illustrations in addition to those required by Article VII of the NAIC Model Variable Life Insurance Regulation provided that, except for Item 3 which shall only apply to required illustrations under Article VII, such additional illustrations comply with the standards set forth herein.

ACTUARIAL GUIDELINE XVI

CALCULATION OF CRVM RESERVES ON SELECT MORTALITY AND/OR SPLIT INTEREST

Text:

When CRVM reserves are being calculated, it is necessary to determine the value of ${}_{{}_{19}}P_{x+i}$. The Standard Valuation Law permits the use of Select

STATEMENT 1986-44

Mortality Factors with the 1980 CSO Table. While the maximum valuation interest rate for any policy is level for all durations, the law permits the use of other interest rates as long as the resulting reserves are not less than those according to the minimum standard. Thus, it is possible to calculate reserves by the CRVM method using split interest rates, i.e., interest rates that are not the same at all durations.

When either Select Mortality Factors or split interest are involved, the "net level annual premium on the nineteen year premium whole life plan" is the renewal net level premium for a 20 payment life valued on the full preliminary term basis. That is ${}_19^P[x] + 1$ should be used instead of, for example ${}_19^P[x+1]$.

Background Information:

The Report of the Society of Actuaries Committee on Specifications for Monetary Values - 1980 CSO Tables recommend this approach. This Report was accepted by the Board of Governors of the Society and forwarded to the NAIC early in 1984. This approach is logical because it is consistent with the calculation of the "net level annual premium equal to the present value, at the date of issue, of such benefits provided for after the first policy year, divided by the present value, at the date of issue, of an annuity of one per annum payable on the first and each subsequent anniversary of such policy on which a premium falls due..." (see section 4 of the Standard Valuation Law, emphasis added).

ACTUARIAL GUIDELINE XVII

CALCULATION OF CRVM RESERVES WHEN DEATH BENEFITS ARE NOT LEVEL

Text:

In the definition of the Commissioners Reserve Valuation Method, the Standard Valuation Law (section 4) refers to the "net level annual premium on the nineteen year premium whole life plan for insurance of the same amount..." The law does not define "the same amount" for cases when death benefits are not level. For policies issued after the operative date of section 5-c of the Standard Nonforfeiture Law for Life Insurance (section 5-c provides for the use of the 1980 CSO Table, among other things) "the same amount" is to be taken as the renewal 9 year arithmetic average, i.e., the arithmetic average of the death benefit at the beginning of each of policy years 2 through 10, inclusive.

Background Information:

The Report of the Society of Actuaries Committee recommended this approach. Walter O. Menge in his paper Commissioner Reserve Valuation Method, RAIA XXXV (see pp 277ff, especially p 283), defined a "equivalent level renewal amount" which has been accepted and still is the appropriate function for policies issued before the operative date of section 5-c of the Standard Nonforfeiture Law for Life Insurance. The Society Committee indicated that the strongest factor that weighed in its conclusion was the

STATEMENT 1986-44

effect on reserves for such plans as jumping juvenile. Menge noted the similarity between his definition of "equivalent level renewal amount" and the definition of "equivalent uniform amount" in section 5 of the Standard Nonforfeiture Law for Life Insurance. In the same way, the function prescribed above is consistent with the "average amount of insurance" in section 5-c of the Standard Nonforfeiture Law for Life Insurance. A principal reason for the change in the Standard Nonforfeiture Law was to simplify calculations, and this guideline will also have that result.

ACTUARIAL GUIDELINE XVIII

CALCULATION OF CRVM RESERVES ON SEMI-CONTINUOUS, FULLY CONTINUOUS OR DISCOUNTED CONTINUOUS BASIS

Text:

The Standard Valuation Law uses the "excess of (a) over (b)" in the definition of the modified net premiums in section 4. If reserves are calculated on a basis other than curtate, i.e., using semi-continuous, fully continuous or discounted continuous functions, the excess of (a) over (b) may be calculated using the same basis (semi-continuous, etc.).

Background Information:

The Report of the Society of Actuaries Committee recommended this approach. The excess of (a) over (b) is sometimes referred to as the initial expense allowance. Basing this expense allowance on curtate functions is conservative as this results in the smallest amount of expense allowance. Also, the expense allowance is the same regardless of which type of functions are used. On the other hand, the use of curtate functions when the basic calculation is based on other functions can result in complications in calculation. The difference in the resulting reserves does not justify the additional complication.

ACTUARIAL GUIDELINE XIX

1980 CSO MORTALITY TABLE WITH 10-YEAR SELECT MORTALITY FACTORS

Text:

The Standard Valuation Law and the Standard Nonforfeiture Law for Life Insurance make reference to the Commissioners 1980 Standard Ordinary Mortality Table with Ten-Year Select Mortality Factors. The Ten-Year Select Mortality Factors referred to are those developed by the Society of Actuaries Special Committee to Recommend New Mortality Tables for Valuation (see Report on pp 617ff and table of 10-year select mortality factors on p 669 of TSA XXXIII).

The NAIC model regulation regarding mortality tables independent of sex refers to certain specific tables which are blends of the male and female mortality rates of the 1980 CSO Table and specifies that these tables may be used with or without Ten-Year Select Mortality Factors. The Ten-Year Select Mortality Factors to be used with these blended tables are to be determined

STATEMENT 1986-44

by use of the formula in the letter from Robert J. Johansen to Ted Becker reproduced on p 457 of NAIC Proceedings-1984 Vol. I.

Background Information:

The published report of a committee of the Society of Actuaries contains two sets of alternative select mortality factors. While that committee recommended that the alternative factors not be adopted, their publications has caused some confusion.

ACTUARIAL GUIDELINE XX

JOINT LIFE FUNCTIONS FOR 1980 CSO MORTALITY TABLE

Text:

The tables of uniform seniority and the "Ultimate 1xx tables" in Appendix 5 of the Report of the Society of Actuaries Committee on Specifications for Monetary Values - 1980 CSO Tables are acceptable for use in calculating reserves or nonforfeiture values for joint life policies on the 1980 CSO basis. These tables from Appendix 5 of the report are reproduced on the following pages of this Actuarial Guideline. (Note: These tables are numbered A5-1, A5-6 and A5-7 to coincide with the page numbers of these tables in Appendix 5 of the Society Committee Report. These are the only tables considered necessary for the purposes of this guideline.)

Other methods of calculating joint life functions may also be acceptable. In particular, it is acceptable to calculate "exact" joint life functions using published 1980 CSO mortality rates for the actual ages and genders of the lives to be insured.

1980 CSO AND 1980 CET TABLES

Tables showing the deduction to be made from the age of the older of two lives in order to obtain the equivalent equal ages. The equivalent equal ages are then used to enter tables of functions derived from tables based on one male and one female of the same age.

Male/Male			Older Male/Younger Female		Older Female/Younger Male		Female/Female	
Difference in Ages	Deduct from Older Age		Difference in Ages	Deduct from Older Age		Difference in Ages	Deduct from Older Age	
0- 1 Years	-2		0- 1 Years	0		0- 1 Years	0	
2- 3	-1		2- 4	1		2- 3	1	
4- 6	0		5- 8	2		4- 6	2	
7- 9	1		9- 14	3		7- 9	3	
10- 13	2		15- 27	4		10- 13	4	
14- 19	3		28- 54	5		14- 20	5	
20- 32	4		55 & Over	6		21- 48	6	
33- 55	5					49- 70	7	
56 & Over	6					71 & Over	8	
						48- 70	8	
						71 & Over	7	

It is not appropriate to apply values from the FEMALE/FEMALE column so that a negative joint equal age results. In such situations equivalent equal age zero should be used.

STATEMENT 1986-44

**ULTIMATE TABLES
MALE/FEMALE - JOINT EQUAL AGES**

Age	1980 CSO		1980 CET		Age	1980 CSO		1980 CET	
	ANB		ANB			ANB		ANB	
0	60,560,928		16,765,573,343		50	50,059,381		12,731,016,815	
1	60,133,368		16,611,833,035		51	49,476,690		12,538,651,151	
2	60,016,709		16,554,688,329		52	48,854,768		12,334,020,364	
3	59,908,679		16,500,057,858		53	48,189,855		12,115,954,884	
4	59,802,641		16,446,102,669		54	47,476,163		11,882,965,072	
5	59,699,780		16,393,146,218		55	46,711,322		11,634,492,272	
6	59,600,678		16,341,343,876		56	45,894,341		11,370,389,297	
7	59,505,913		16,290,849,123		57	45,025,102		11,090,791,424	
8	59,415,464		16,241,650,759		58	44,105,689		10,796,774,543	
9	59,328,717		16,193,575,473		59	43,138,010		10,489,174,436	
10	59,243,877		16,146,128,297		60	42,120,816		10,168,205,698	
11	59,160,343		16,099,143,064		61	41,050,947		9,833,163,320	
12	59,073,969		16,051,489,601		62	39,922,456		9,482,414,384	
13	58,981,223		16,002,211,528		63	38,727,178		9,114,117,409	
14	58,878,596		15,950,364,363		64	37,455,765		8,726,038,290	
15	58,763,783		15,895,335,606		65	36,104,361		8,317,746,958	
16	58,635,678		15,836,840,771		66	34,673,184		7,890,297,942	
17	58,494,366		15,774,918,724		67	33,168,368		7,446,389,780	
18	58,341,111		15,709,926,059		68	31,598,177		6,989,702,695	
19	58,180,090		15,643,001,774		69	29,974,031		6,524,328,290	
20	58,012,531		15,574,485,426		70	28,301,780		6,052,945,571	
21	57,841,394		15,503,178,966		71	26,582,447		5,577,062,990	
22	57,669,027		15,435,715,764		72	24,815,246		5,097,324,032	
23	57,497,173		15,366,563,757		73	22,997,777		4,614,505,500	
24	57,326,406		15,297,875,217		74	21,131,047		4,130,490,018	
25	57,156,720		15,229,646,694		75	19,226,083		3,649,618,370	
26	56,989,251		15,162,179,359		76	17,303,859		3,178,781,104	
27	56,822,842		15,095,162,526		77	15,392,302		2,726,027,311	
28	56,656,351		15,028,290,956		78	13,522,753		2,299,340,338	
29	56,488,648		14,961,264,778		79	11,725,985		1,906,364,931	
30	56,318,617		14,893,789,474		80	10,025,717		1,551,018,508	
31	56,145,156		14,825,724,856		81	8,438,546		1,235,758,486	
32	55,966,614		14,756,488,721		82	6,977,243		961,383,029	
33	55,783,044		14,686,100,270		83	5,651,637		727,555,449	
34	55,592,824		14,614,138,379		84	4,470,897		533,319,971	
35	55,393,802		14,540,044,697		85	3,448,826		377,233,215	
36	55,185,521		14,463,709,462		86	2,579,176		236,609,122	
37	54,964,779		14,384,303,697		87	1,872,714		167,383,564	
38	54,728,980		14,301,162,422		88	1,316,256		104,405,498	
39	54,476,679		14,213,496,296		89	893,896		62,098,302	
40	54,204,296		14,119,829,355		90	585,350		35,106,033	
41	53,909,967		14,019,719,765		91	368,642		18,789,100	
42	53,390,820		13,911,767,923		92	222,531		9,470,646	
43	53,246,767		13,795,743,779		93	128,118		4,461,337	
44	52,876,702		13,671,168,213		94	69,801		1,940,503	
45	52,480,127		13,537,874,323		95	35,420		760,483	
46	52,055,563		13,395,455,885		96	16,202		255,127	
47	51,602,680		13,243,953,279		97	6,225		65,264	
48	51,120,195		13,083,039,247		98	1,699		9,381	
49	50,606,437		12,912,305,585		99	200			

STATEMENT 1986-44

**ULTIMATE δ_{xx} TABLES
MALE/FEMALE - JOINT EQUAL AGES**

Age	1980 CSO		1980 CET		Age	1980 CSO		1980 CET	
	ALB	ALB	ALB	ALB		ALB	ALB	ALB	ALB
0	60,347,148	16,688,703,189	50	49,768,036	12,634,833,983				
1	60,075,038	16,583,260,682	51	49,165,729	12,436,333,758				
2	59,962,694	16,527,373,094	52	48,522,312	12,224,987,624				
3	59,855,660	16,473,080,264	53	47,833,009	11,999,459,978				
4	59,751,210	16,419,624,444	54	47,093,742	11,758,728,672				
5	59,650,229	16,367,245,047	55	46,302,832	11,502,440,784				
6	59,553,296	16,316,096,500	56	45,459,722	11,230,590,360				
7	59,460,688	16,266,249,941	57	44,565,396	10,943,782,984				
8	59,372,090	16,217,613,116	58	43,621,850	10,642,974,490				
9	59,286,297	16,169,851,885	59	42,629,413	10,328,690,067				
10	59,202,110	16,122,635,680	60	41,585,882	10,000,684,509				
11	59,117,156	16,075,316,332	61	40,486,702	9,657,788,852				
12	59,027,596	16,026,850,364	62	39,324,817	9,298,265,896				
13	58,929,910	15,976,287,946	63	38,091,472	8,920,077,850				
14	58,821,190	15,922,849,984	64	36,780,063	8,521,892,624				
15	58,699,730	15,866,088,188	65	35,388,772	8,104,022,450				
16	58,565,022	15,805,879,748	66	33,920,776	7,668,343,861				
17	58,417,738	15,742,422,392	67	32,383,272	7,218,046,238				
18	58,260,600	15,676,463,916	68	30,786,104	6,757,015,492				
19	58,096,310	15,608,743,600	69	29,137,906	6,288,636,930				
20	57,926,962	15,539,832,196	70	27,442,114	5,815,004,280				
21	57,755,210	15,470,447,365	71	25,698,846	5,337,193,511				
22	57,583,100	15,401,139,760	72	23,906,512	4,855,914,766				
23	57,411,790	15,332,219,487	73	22,064,412	4,372,497,759				
24	57,241,563	15,263,760,956	74	20,178,365	3,890,054,194				
25	57,072,986	15,195,913,026	75	18,264,971	3,414,199,737				
26	56,906,046	15,128,670,942	76	16,348,080	2,952,404,208				
27	56,739,596	15,061,726,741	77	14,457,528	2,512,783,824				
28	56,572,500	14,996,777,867	78	12,624,369	2,102,952,634				
29	56,403,632	14,927,527,126	79	10,873,851	1,728,691,720				
30	56,231,886	14,859,757,165	80	9,232,132	1,393,388,497				
31	56,055,885	14,791,106,788	81	7,707,894	1,098,570,758				
32	55,874,829	14,721,294,496	82	6,314,440	844,469,239				
33	55,687,934	14,650,119,324	83	5,061,267	630,437,710				
34	55,493,313	14,577,091,538	84	3,957,862	455,276,593				
35	55,289,662	14,501,877,080	85	3,012,001	316,921,168				
36	55,075,150	14,424,006,580	86	2,225,945	211,996,343				
37	54,846,880	14,342,733,060	87	1,594,485	135,894,531				
38	54,602,830	14,257,329,359	88	1,105,076	83,251,900				
39	54,340,688	14,166,662,826	89	739,623	48,602,168				
40	54,057,132	14,069,774,560	90	476,996	26,947,566				
41	53,750,394	13,963,743,844	91	295,586	14,129,873				
42	53,418,794	13,853,755,851	92	175,324	6,965,992				
43	53,061,734	13,733,455,996	93	98,960	3,200,920				
44	52,678,414	13,604,521,268	94	52,610	1,350,493				
45	52,267,845	13,466,665,104	95	25,811	507,805				
46	51,829,122	13,319,704,382	96	11,214	160,196				
47	51,361,438	13,163,496,263	97	3,962	37,322				
48	50,863,316	12,997,672,416	98	950	4,790				
49	50,332,909	12,821,661,200	99	100	100				

STATEMENT 1986-45

December 12, 1986

Commissioner of Internal Revenue
CC:LR:T
Internal Revenue Service
Room 4429
Washington, D.C. 20224

**Re: IRS Request for Public Comment on Projects
to Implement Tax Reform Act of 1986**

Dear Commissioner:

I am writing to you as Chairman of the American Academy of Actuaries' Committee on Property and Liability Insurance Financial Reporting. The Academy is a professional association of actuaries in the United States, with a membership that exceeds 8,000 individuals. Members are employed by insurance companies, consulting firms, government, academic institutions, and a growing number of industries.

Our committee is responsible for public comment on issues relating to financial reporting for property and liability insurers. This would include statutory reporting and reporting under GAAP, as well as financial reporting for federal income tax purposes.

On October 23, 1986, the Service issued a news release requesting public comment on projects needed to implement the Tax Reform Act of 1986. The "priority list" included Section 1023: Discounting of Unpaid Losses of Property and Casualty Insurance Companies.

Our committee has been analyzing that section of the new tax law, as well as other affecting property and liability insurers. We agree that Section 1023 should be on the priority list for guidance by the IRS. The application of the procedures prescribed in the section to the actual circumstances of individual companies will undoubtedly raise many questions. Under the circumstances, some clarifying materials could be very helpful to those companies.

The purpose of this letter is to offer our assistance to the Service in the review or preparation of any clarifying materials relating to the application of the provisions of Section 1023. This assistance could take any form that you wish. In particular, we would be happy to review and critique any draft materials that you prepare.

Please feel free to call, or write to me at the address below, if you feel our committee can serve you in this matter.

Sincerely,

(signed)

Stephen P. Lowe, Chairman
c/o Tillinghast/TPF&C
One Mill Pond Lane
Simsbury, CT 06070
(203) 651-3761

STATEMENT 1986-46

December 17, 1986

The Honorable James P. Corcoran, Chair
NAIC Blanks Task Force
New York Superintendent of Insurance
160 West Broadway
New York, NY 10013

Dear Superintendent Corcoran:

Products that contain non-guaranteed charges, benefits or premiums have become a very significant portion of today's life insurance market. Universal Life insurance is only one example of such a product. Various insurance departments have expressed concern that adequate information on these new products is not being provided in the Annual Report to the insurance departments. As a result, the Academy appointed a Task Force on Non-Guaranteed elements.

This task force recommended modifications to the Annual Statement at the NAIC Meeting in Orlando earlier this month. The NAIC Blanks Task Force requested that the Academy Task Force make their modifications more specific and resubmit them. The enclosed Appendix A and Appendix B are our resubmission of our modifications.

Appendix A are the specific changes we recommend for Page 11 of the Annual Statement. Appendix B are the recommended modifications to Page 11-1 of the Annual Statement Instructions Manual. The Academy Task Force recommends the adoption of these changes at your March meeting. We recommend that these modifications be made in the Annual Statements filed for the year ending December 31, 1987 and thereafter.

If the Academy Task Force can be of any assistance to you or the NAIC Blanks Task Force, please let me know.

Yours truly,

(signed)

William T. Tozer, Chair
Task Force on Non-Guaranteed Elements
Kentucky Central Life Insurance Company
Kincaid Towers
Lexington, Kentucky 40507

STATEMENT 1986-46

APPENDIX A

Changes to the NAIC Annual Statement for Life, Accident & Health Insurance

On Page 11, make the following changes to the questions located between Exhibit 8A and Exhibit 9:

1. Renumber Questions 3, 4 and 5 to 4, 5 and 6.
2. Insert the following question after Question 2. "3. Does the company at present issue or have in force policies that contain non-guaranteed elements? Answer:.....If so, attach a statement that contains (a) the determination procedures, (b) the answers to the Interrogatories, and (c) an actuarial opinion as described in the Instructions."

APPENDIX B

Changes to the Annual Statement Instructions for Life, Accident & Health Manual

Insert the following material on Page 11-1 following Exhibit 8A and before Exhibit 9.

"Page 11 - Question 3

This question relates to the redetermination of non-guaranteed elements in individual life insurance and annuity contracts which provide for the adjustment of benefits, premiums or charges from time to time. For purposes of this question, the "determination" shall mean both determination at issue and subsequent redetermination.

For the purpose of this question, "Individual Contracts" includes contracts issued under the "group" umbrella of any trust which does not have the discretion to select the insurer(s) on behalf of all the individual insureds.

The specific types of business encompassed by this question include, but are not limited to, the following types of contracts if they contain non-guaranteed elements:

1. Single and periodic premium deferred annuities.
2. Universal Life contracts providing for fixed and/or flexible premiums.
3. Adjustable periodic premium life contracts, also known as Indeterminate premium life contracts.
4. Single and periodic premium life contracts.
5. Renewable and convertible term insurance contracts which do not guarantee the premiums payable upon renewal, or which provide for renewal on the then current premium basis.

STATEMENT 1986-46

The term "non-guaranteed" does not apply to charges or benefits that contractually follow a separate account result or a defined index.

An actuarial opinion similar to the one below shall be provided.

DETERMINATION PROCEDURES

For all contracts subject to this question which were first introduced during the current year and for any other such contracts not previously reported, define the company's policy to be used in the process of determining non-guaranteed elements, with particular reference to the degree of discretion reserved for the company, together with the general methods and procedures which are expected to be used.

INTERROGATORIES

1. Since this statement was last filed, have there been any changes in the values of non-guaranteed elements on new or existing business authorized for illustration by the company? If yes, describe the changes that were made.
2. Since this statement was last filed, have there been any changes in the values of non-guaranteed elements actually charged or credited? If yes, describe the changes that were made.
3. Indicate to what extent any changes described in 1 or 2 vary from the policy and/or general methods and procedures last reported for the affected contracts.
4. Are the anticipated experience factors underlying any non-guaranteed elements different from current experience? If yes, describe in general terms the ways in which future experience is anticipated to differ from current experience and the non-guaranteed element factors which are affected by such anticipation.
5. State whether anticipated investment income experience factors are based on (a) a portfolio average approach, (b) an investment generation approach, or (c) other. If (b) or (c), describe the general basis used, including the investment generation groupings.
6. Describe how the company allocates anticipated experience among its various classes of business.
7. Does the undersigned believe there is a substantial probability that illustrations authorized by the company to be presented on new and existing business cannot be supported by currently anticipated experience? If yes, indicate which classes and explain.
8. Describe any aspects of the determination of non-guaranteed elements not covered above that involve material departures from the actuarial principles and practices of the American Academy of Actuaries applicable to the determination of non-guaranteed elements.

STATEMENT 1986-46

ACTUARIAL OPINION

I, (name, title), am (relationship to company) and a Member of the American Academy of Actuaries. I have examined the actuarial assumptions and methods used in determining non-guaranteed elements for the individual life insurance and annuity policies of the company used for delivery in the United States. The non-guaranteed elements included are those:

- i. paid, credited, charged or determined in (year of statement); and
- ii. authorized by the company to be illustrated on new and existing business during (year of statement).

My examination included such review of the actuarial assumptions and methods of the underlying basic records and such tests of the actuarial calculations as I considered necessary. In my opinion, the non-guaranteed elements described above have been determined in accordance with generally accepted actuarial principles and practices applicable to the determination of non-guaranteed elements, except as described above.

Signature of Actuary

Date"

STATEMENT 1986-47

December 23, 1986

Task Force on Long Term Health Care Policies
c/o Mr. Dennis DeWitt, Executive Director
Room 4406, Health and Human Services North Building
330 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Mr. DeWitt:

In response to the request for your Task Force for comments, the Committee on Health of the American Academy of Actuaries is pleased to submit the attached statement, commenting on four basic considerations with respect to the development of guidelines.

Sincerely,

(signed)

E. Paul Barnhart
Chairperson

STATEMENT 1986-47

STATEMENT FROM THE COMMITTEE ON HEALTH OF THE AMERICAN ACADEMY OF ACTUARIES SUBMITTED TO THE LONG-TERM HEALTH CARE POLICIES TASK FORCE In response to its request for comments

DECEMBER 23, 1986

BACKGROUND ON THE AMERICAN ACADEMY OF ACTUARIES

The American Academy of Actuaries is a professional association of over 8,000 actuaries involved in all areas of specialization within the actuarial profession. Included within the Academy's membership are approximately 85% of the enrolled actuaries certified under the Employee Retirement Income Security Act of 1974 (ERISA), as well as comparable percentages of actuaries specializing in actuarial services for other employee coverages such as life, health and disability programs. As a national organization of actuaries, the Academy is unique in that its members have expertise in all areas of actuarial specialization. Dealing with issues associated with health care financing and insurance is in part the responsibility of the Academy's Committee on Health.

The Academy does not advocate public policy positions which are not actuarial in nature. The Academy views its role in the government relations area as providing information and actuarial analysis to public policy decision-makers, so that policy decisions can be made with informed judgment. It is our belief that the training and experience of Academy members provide for a unique understanding of current practices in insured health care. Our intention is to communicate that understanding in ways that can be of maximum assistance.

It is with this objective that we submit the following comments for your consideration.

1. The first of four principles that we would urge your Task Force to consider carefully is that recommendations as to minimum benefit guidelines should not be too broad or too rigid. Long term care insurance is a relatively recent development. Little is known thus far as to its actuarial cost. Further, increasing availability of such coverage will inevitably have an upward impact on its cost, since it will increase utilization of the care insured.

Private insurers need opportunity to experiment with plan design, as to soundness and marketability, and to learn how to underwrite and price such coverage soundly, before being pushed too quickly into broad benefit provisions that could turn out to be underpriced; or too quickly into rigid standards that would limit experimentation and even have the result that the potentially most successful plan designs, from the perspective of serving public need at reasonable cost, could be overlooked and excluded entirely.

One benefit design guideline that should not be too restricted is the use of front end deductible periods. Relatively long deductible periods, such as

STATEMENT 1986-47

the first 100 days of nursing facility confinement, are already in use, and we would suggest that even longer periods, such as 180 days, can be appropriate. No other single plan design item is more effective in making valuable protection available at reasonable cost than the use of substantial deductible periods. The public tends to WANT immediate first-dollar coverage. But what is usually the most NEEDED is protection against the cost of extended long-term care. Substantial deductibles can bring this coverage within the range of affordability of the average person.

On the other hand, guidelines should also not establish minimum coverage periods that are too ambitious, at least at the outset, because uncertainty of the cost of long coverage periods could get insurers into financial difficulty very quickly. Guidelines need to allow adequate flexibility for experimentation.

2. Secondly, we urge that underwriting standards not be too limited. Long term care insurance, more than almost any other kind of insurance, is potentially subject to enormous antiselection by buyers who expect to use the benefits. Private insurers must be allowed to apply sound underwriting selection, or buyer antiselection of this coverage could easily drive costs out of control. This has already been the result for some insurers.

The ultimate goal, of course, is to render such coverage available to as broad a segment of the public as possible, but excessive limitation on underwriting freedom could drive the cost too high with self-defeating results and even failure of the entire concept.

3. Third, we would urge that guidelines for measuring reasonableness of premiums should not be too demanding. Since the cost of this coverage is little known, insurers will need reasonable risk margins. Pricing guidelines, such as minimum loss ratio requirements, that are too demanding will serve to discourage insurers from entering this field of health insurance.
4. Lastly, we urge that price structures providing for advance funding of future costs be encouraged. An example of this is premiums determined on the basis of entry or issue age. Recent state regulatory restrictions on the pricing of health insurance have tended to force premiums more and more toward very short term funding, such as one year term. The result of this short-sighted regulatory policy is that subsequent rate increases become maximized, encouraging antiselect lapsation among healthier insureds. This leads to steady deterioration of the average health of the continuing body of insured individuals and the cost spiral is further accelerated.

Further, it would be desirable that persons in mid-life (between the ages of 50 and 64) have opportunity and encouragement to purchase this coverage on a basis where the costs of the elderly years can be at least partly prefunded. Americans in the 50-65 age bracket have, relatively, the largest amount of discretionary income and are in the best position to prefund the costs of long-term care in the senior years.

STATEMENT 1986-47

Our Committee would be pleased to answer questions or provide further input as your Task Force might desire.

Respectfully submitted,

American Academy of Actuaries Committee on Health, by

(signed)

E. Paul Barnhart, Chairperson

STATEMENT 1986-48

AN ACTUARY'S GUIDE TO COMPLIANCE WITH STATEMENT OF FINANCIAL ACCOUNTING STANDARDS NO. 87 (FAS87)

DECEMBER 31, 1986

SECTION 1. GENERAL

- 1.1 Background - The Financial Accounting Standards Board (FASB) adopted FAS87, "Employers' Accounting for Pensions," in December, 1985. It made major changes in the way pension information is determined and presented in employers' financial statements (FAS87, pars. 1-6). Much of the information required will have to be furnished by actuaries. Users of this Guide are assumed to be familiar with the content and terminology of FAS87.
- 1.2 Scope - FAS87 and pronouncements of FASB set forth required practices with respect to calculations for FAS87. This guide does not set forth actuarial practice standards, but is believed to accurately represent current understanding of FAS87 as it pertains to actuarial calculations. In the event of a conflict between this document and FAS87 or other guidance from FASB, the actuary should rely on FASB for a definitive determination.
- 1.3 Approximations and materiality - FAS87 allows the use of reasonable approximations (FAS87, par. 10). In addition, materiality is always a consideration when deciding on the amount of effort and expense that should be incurred when complying with any accounting standard.
- 1.4 Determination of materiality - Since the actuary may not be aware of whether (a) the employer maintains other pension plans, (b) pension matters are significant relative to the employer's total operations, or (c) the employer requires a more thorough FAS87 valuation regardless of materiality, he or she should consult with the employer before determining the approximations to use when complying with FAS87. Ultimately, the employer and the auditor are responsible for determining materiality.
- 1.5 Standard of materiality - Actuaries are typically concerned with the valuation of a single plan. An entire plan, however, may not be material in the context of the employer's financial statements. In such case, the actuary may be able to focus primarily on the requirements of ERISA or some other requirement of that plan, and then comply with the requirements of FAS87 in a manner that minimizes the additional effort required. Other plans will be material in total, but have relatively immaterial components of cost or disclosure. In these cases, the actuary may still be able to make use of approximations. Still other plans will be material in all respects, and the actuary should more carefully consider which approximations may be appropriate (FAS87, par. 10).
- 1.6 Materiality of Foreign plans - The recommendations of paragraphs 1.3, 1.4, and 1.5 relating to materiality and approximations may be of special importance with respect to foreign plans. The actuary should be aware that FAS87 applies to foreign plans to the extent that they

STATEMENT 1986-48

are included in U.S. financial statements prepared in accordance with Generally Accepted Accounting Principles (FAS87, par. 72). In most cases, valuations following local practice on these plans will not comply with the requirements of FAS87. In addition, local practice, laws and regulations may prevent a valuation completed for compliance with FAS87 from being useful for local purposes. The actuary for the U.S. plan may be asked to make any calculations required to bring the valuations following local practice into compliance with FAS87. Even if pensions are material in the context of an employer's financial statements, the foreign plan(s) may not be, in which case more extensive use of approximations could be appropriate (FAS87, par. 10). In the extreme case, the plan will not materially affect the employer's financial statements regardless of how the valuation is done.

- 1.7 Required information - Information on balance sheet accruals plays an important part in FAS87 calculations, as it did under APB-8. Under APB-8, however, balance sheet accrual were often zero and could therefore be ignored by the actuary, since pension cost often matched pension funding year after year. Under FAS87, net periodic pension cost is not generally expected to match pension contributions, and balance sheet accruals will therefore become the rule rather than the exception. These balance sheet items should be reflected when performing FAS87 calculations.
- 1.8 Effect on plan financial statements - The actuary's calculations for the plan's financial statements in accordance with FAS87 may be different from the computations for FAS87. Accrued contributions are generally treated as a plan asset for the plan's accounting even if they are not treated as such for the employer's accounting. The interest assumption may differ from the FAS87 discount rate because the former may reflect the types of assets held by the plan and the plan's investment policy. Further, the valuation of insurance contracts may be different. In addition, the projected benefit obligation, which the employer must disclose, is not included in the plan's disclosures.

SECTION 2. ACTUARIAL CALCULATIONS FOR DETERMINING REPORTED NET PERIODIC PENSION COST

- 2.1 Introduction - Under FAS87, pension cost ~~expense~~ is called net periodic pension cost and is composed of the following (FAS87, par. 20):
- Service cost ~~normal cost~~
 - Interest on the projected benefit obligation ~~actuarial accrued liability~~, service cost and distributions
 - Increase (reduction) for actual return on plan assets
 - Amortization of unrecognized prior service cost ~~additional actuarial accrued liability due to amendments~~, if any
 - Loss (gain), to the extent recognized
 - Amortization of unrecognized net obligation (asset) at transition

Each of these is discussed in this section. In particular, see paragraph 2.10.

STATEMENT 1986-48

- 2.2 Basis for costs - For plans with a single uniform formula, the calculation of the service cost is substantively the same as under the Projected Unit Credit Actuarial Cost Method, with benefits prorated based on service and the plan's accrual formula (FAS87, par. 21 and, for special circumstances, par. 40, note 8 and par. 42). The other elements, except for the actual return on plan assets, are determined based on the Projected Benefit Obligation (PBO), which is the actuarial accrued liability under the cited cost method. Except as indicated, the discussion which follows assumes a situation with no significant unusual developments. All calculations should be done on the plan as it exists, including amendments necessary to implement commitments already made for future changes (FAS87, par. 41).
- 2.3 Measurement dates - Net periodic pension cost for an employer's fiscal year is usually determined by values calculated as of the prior fiscal year's measurement date. FAS87 permits consistent use of any measurement date within three months prior to the end of the employer's fiscal year (e.g., for an employer with a calendar fiscal year, the measurement date must be between September 30 and December 31 of the prior calendar year). The measurement period for net periodic pension cost calculations is the year between the beginning of year and end of year measurement dates. The cost for an employer's fiscal year is determined as if that fiscal year were the year between the two measurement dates.* Service cost calculated as of a measurement date represents the value of benefits attributed to employee service in the following measurement year. There may be interim measurements during a year; these do not change the basic measurement year.
- 2.4 Selection of assumptions - The typical demographic assumptions should be selected in accordance with established actuarial standards. The "economic" assumptions, as established for FAS87, are intended to be the employer's best estimate (FAS87, par. 191). Assumptions are required to be individually reasonable (FAS87, par. 43), or "explicit." A salary projection is required for both final pay and career pay plans. The calculations may involve multiple rates rather than a single rate (FAS87, par. 199).
- The discount rate (interest rate or settlement rate) is based on currently available rates (FAS87, par. 44). It is intended to be the rate at which the plan's obligations could be effectively settled on the measurement date. It is independent of the funding level and the plan's investments, and it is expected that the discount rate would change with each measurement if interest rates in general have changed. The discount rate is the rate used for all actuarial calculations under FAS87 except for the expected return on assets. In determining the discount rate, FAS87 permits consideration of a broad range of factors, including annuity or PBGC interest rates and interest rates on long-term high quality

* For example, an employer with a calendar fiscal year may elect a measurement year beginning on October 1. A change made on August 1 would be reflected for 2/12ths of a year, not 5/12ths of a year.

STATEMENT 1986-48

fixed income investments. Assuming no risk of default, interest rates reflect, among other things, both a time value of money and a risk component to compensate for the possibility of changes in interest rates over the relevant time period. The annuity (liability) market usually has a negative risk component (lower rates for longer durations); the bond (asset) market is typically the opposite.

- The expected long-term rate of return on plan assets is intended to be a long-term rate, suitable for projecting the return on plan assets (FAS87, par. 45). It reflects the expected return on assets on hand and new money to be received during the measurement year, as well as the reinvestment of those assets in later years. The present and expected asset mix may also be taken into account. Thus many of the considerations are the same as for selection of interest rates in other pension valuations. However the relevant time frame may be somewhat shorter, as it does not take into account assets which will be contributed after the current year.
 - The inflationary component of the salary scale should be selected on a basis which is consistent with the inflation expectations underlying the discount rate (FAS87, pars. 46 and 202), as should projected automatic cost-of-living increases, changes in Social Security-related items, or other similar factors. Because the discount rate may change while the inflation expectation remains the same, a change in the discount rate does not automatically require a change in the salary or other economic assumptions.
- 2.5 Measurement of assets - For cost purposes, a market-related ~~actuarial~~ value of plan assets is permitted (FAS87, par. 30). The market-related value can be fair (market) value or a formula amount. If a formula is used, spreading of changes in fair value is to be over not more than five years. A corridor could be used to assure that the market-related value remains reasonably related to fair value. The formula must treat positive and negative fluctuations identically. If the initial value at the time FAS87 is adopted is not fair value, special additional adjustments will be required in future years to avoid double-counting the initial difference. These calculations are discussed in paragraph 2.29.
- 2.6 Service cost - Each year's service cost is the Normal Cost, computed as of the measurement date (FAS87, par. 21). Interest on the service cost for some or all of the measurement period may be included as part of the service cost.
- 2.7 Interest cost - The discount rate as of the beginning of the measurement period, applied to the PBO at that time and the service cost and expected distributions for the period, produces the interest cost for the year (FAS87, par. 22). The calculations should reflect appropriate fractions of a year for amounts which are not as of the start of the measurement period. In particular, interest on the service cost must be included in the interest cost to the extent that it has not been included in the service cost.

STATEMENT 1986-48

- 2.8 Expected return on market-related value of plan assets - A reduction in plan costs for expected investment return is determined by applying the expected rate of return on plan assets as of the measurement date to the market-related value at the beginning of the period and, with appropriate fractional adjustment, to the expected contributions less distributions for the year (FAS87, par. 30).

- 2.9 Actual return on fair value of plan assets (FAS87, par. 23) - At the end of the measurement period, the actual return on plan assets is determined based on beginning and ending fair values, as:

Ending fair value - beginning fair value - (contributions - distributions).

Once this amount is calculated, a gain (loss) from return on assets is determined as:

Actual return on fair value of plan assets - expected return on market-related value of plan assets.

- 2.10 Net periodic pension cost (FAS87, par. 20) - The net periodic pension cost is computed at the beginning of the measurement period according to one formula, but it is disclosed at the end of the measurement period using a different formula which produces the same numerical result. There may be more than one measurement in a year -- for example, because of a plan change. The net periodic pension cost for the balance of the year following an interim measurement must reflect the values determined as of that point in time. However, the minimum amortization of the net gain (loss) must be based upon the beginning-of-year measurement.

	<u>Computation at beginning of year</u>	<u>Disclosure at end of year</u>
(a)	Service cost	(a) Service cost
(b)	+ interest cost	(b) + interest cost
(c)	-expected return on market-related value of assets	(e) - actual return on fair value of assets (f) +/- gain (loss) from expected return on assets during year
(d)	+/- principal amortization payments on net obligation (asset) at transition, unrecognized prior service cost, (unrecognized negative prior service cost), and unrecognized net loss (gain)	(d) +/- principal amortization payments on net obligation (asset) at transition, unrecognized prior service cost, (unrecognized negative prior service cost), and unrecognized net loss (gain)

STATEMENT 1986-48

The reported net periodic pension cost is the same computed either way (and may be positive or negative). The first way permits the total to be determined relatively early in the year; the second way is the "final" allocation which is the way FAS87 requires pension cost components to be disclosed. In disclosing the results, items (d) and (f) are combined and called "net amortization and deferral."

- 2.11 Computation of gain (loss) (FAS87, pars. 29-30) - Each year an expected year-end PBO is computed as the beginning PBO plus service cost (par. 2.6) plus interest cost (par. 2.7) less expected distributions plus (minus) adjustments to the PBO on account of changes in prior service cost (par. 2.15) or due to events accounted for under FAS88. An expected year-end fair value is computed as starting fair value plus the expected return on market-related value (par. 2.8) plus actual contributions less expected distributions. The difference can be thought of as the expected unfunded PBO. The difference between that amount and the actual unfunded PBO (year-end PBO less year-end fair value) is the gain (loss) for the year, and any required amortization will first be reflected in the following year's cost. Note that any change in the PBO due to changes in the discount rate or other assumptions becomes part of the computed gain (loss).
- 2.12 Cumulative unrecognized gain (loss) (FAS87, par. 32) - Each year, the previous cumulative unrecognized gain (loss) is increased by the current gain (loss) (par. 2.11) and decreased by any amortization of principal (par. 2.18). No interest adjustments are made in this process, since they are included in the interest cost (par. 2.7).
- 2.13 Gain (loss) subject to amortization (FAS87, par. 31) - Only a portion of the cumulative unrecognized gain (loss) computed under par. 2.12 is subject to being amortized. The excess of fair value over market-related value must be subtracted from the cumulative unrecognized gain (loss) to get the amortizable amount. (See also par. 2.29)
- 2.14 Net obligation (asset) at transition (FAS87, par. 77) - The net obligation (asset) at transition (i.e., at the initial application of (FAS87) is computed as the difference between (a) the PBO and (b) the fair value of plan assets plus any accrued pension liability or less any prepaid pension cost in the employer's balance sheet. An excess of (a) over (b) results in a net obligation which is to be amortized as a component of net periodic pension cost (par. 2.17); an excess of (b) over (a) results in a net asset at transition which is also amortized. Employer contributions receivable by the plan are excluded from plan assets since they are included in the employer's balance sheet accrual. If the measurement date precedes the financial statement date, adjustments will need to be made for accounting entries between the two dates.
- 2.15 Prior service cost (FAS87, pars. 24 and 25) - Since the initial unfunded actuarial accrued liability, as adjusted for accruals, is the net obligation (asset) at transition, and since all experience variations and assumption changes are treated as losses (gains) (FAS87, par. 29), prior service cost consists solely of increases (decreases) in the PBO due to plan changes subsequent to transition*. Prior service costs should be adjusted when the commitment to make the changes is made, even if in

STATEMENT 1986-48

midyear. Bargained, adopted or publicly announced future plan changes should be included, even if they have effective dates deferred beyond the end of the current year or are not yet in the plan. Each net periodic pension cost component reflects a pro-ration for the fraction of a year remaining after the commitment to change is made (par. 2.10).

- 2.16 Amortization patterns - A major departure from standard actuarial practice involves the separation of amortization into principal and interest components. Thus the amortization under FAS87 will not be determined in the same manner as for the ERISA Funding Standard Account. The previous discussion (par. 2.7) includes the interest component. In general, amortization of principal is over the remaining service of those expected to receive benefits (par. 2.20). Each year's amount is simply that year's amortization fraction applied to the total to be amortized; no compound interest factors are involved.
- 2.17 Amortization of net obligation (asset) at transition (FAS87, par. 77) - The net transition amount (par. 2.14) is amortized in equal installments of principal, generally over the average future service of those who, as of the date of transition, are expected to receive benefits (par. 2.20). If this period is less than 15 years, it is permissible to elect to use a 15 year period instead. Where all or almost all of a plan's participants are inactive, an average remaining life expectancy should be used (FAS87, par. 77).
- 2.18 Amortization of gains (losses) (FAS87, pars. 32-33) - The unrecognized gain (loss) subject to amortization (par. 2.13) must be divided by the larger of (a) the PBO and (b) the market-related value of assets. The result determines the smallest amount which can be amortized. If the result is not more than 10%, no amortization is required at all. If the result exceeds 10%, the smallest permissible amortization is the excess of (a) the cumulative unrecognized amount over (b) the 10% result divided by (c) the average expected future service of then present employees expected to receive benefits (or the average remaining life expectancy for plans where all or almost all of the participants are inactive). More rapid amortization, up to full recognition of the gain (loss) in one year, is permitted, if done consistently. Note that the cumulative unrecognized amount, the 10% test, the average expected future service, and the minimum amount to be recognized are recomputed each year and are independent of prior years' amounts, so that it is possible to have amortization in one year but not in the following one.
- 2.19 Amortization of prior service cost (FAS87, par. 25-26) - Whenever benefits for prior service are improved, a prior service cost is computed (par. 2.15). An amortization program for the principal amount is established at the time the commitment is made. Each year's minimum amortization is based on the percentage of the projected future service of employees expected to receive benefits (par. 2.20) which is projected to be worked in that year. Thus if there

* See example in FAS87, par. 48

STATEMENT 1986-48

were three employees expected to receive benefits, and one was assumed to terminate at the end of each year, there would be a total of six future employee-years (three in the first year, two in the second, plus one in the third), and 50% of the prior service cost principal amount would be included in the first year, 33% in the second, and 17% in the third -- a total of 100%. (Again, no interest is involved.) More rapid amortization is permitted, provided the basic concept of matching cost with the period of economic benefit is maintained. Thus equal installments over the average projected future working lifetime of those expected to receive benefits -- 50% per year for 2 years in the example -- is allowable. The entire amortization program is established at the time the commitment is made. Thereafter, it is only changed if a subsequent amendment reduces the PBO (in which case the change in PBO is used to reduce any existing unrecognized prior service cost) (FAS87, par. 28), or if FAS88 is applied (FAS88, par. 9, 12 and 13), or if facts and circumstances lead the employer to conclude that the expected period of economic benefit should be shortened.

- 2.20 Projected future period of service of those active employees expected to receive benefits (FAS87, par. 25) - In order to compute FAS87 principal amortization payments, it is necessary to compute actuarially the projected future years of service of those expected to receive benefits (par. 2.21). Note that the fraction of an employee expected to terminate without benefits is excluded. For a particular employee, the expected future service will be the difference between retirement age and attained age only if there are no pre-retirement decrements. It will be the present value of \$1 per year of future service at a zero interest rate only if there are benefits payable for all decrements at all durations. Otherwise, the computation for a particular employee is:

$$\sum_{t=0}^{r-x-1} \left\{ \sum_{s=t}^{r-x-1} \left[s p^{(T)}_x \sum_d q^{(d)}_{x+s} E^{(d)}_{x+s} \right] \right\}$$

for all decrements d^* , where x is attained age, r is the age where the employee's probability of retirement is 1, and $E^{(d)}_{x+t} = 1$ if a positive employer-provided benefit is projected to be payable based on termination of employment by decrement d at age $x+t$ and $E^{(d)}_{x+t} = 0$ otherwise. If decreasing amortization over the entire working lifetime is contemplated (par. 2.19), subtotals are required for each value of t . If level amortization over the average future years of service is contemplated (pars. 2.17, 2.18 and 2.19), it is also necessary to compute the total number of employees expected to receive benefits. Each employee's contribution to the total is computed as:

* Modifications to these formulas to reflect the time during each year when the decrement is assumed to occur are appropriate.

STATEMENT 1986-48

$$\sum_{t=0}^{r-x-1} \left\{ \sum_d t p_x^{(T)} q_{x+t}^{(d)} E_{x+t}^{(d)} \right\}$$

for all decrements d^* . Approximations will generally be satisfactory, especially where the decrements for which benefits are or are not payable are very small. For example, a plan might provide only a disability benefit for terminations with less than ten years of service, and provide benefits for all terminations except unmarried deaths after ten years of service. It would normally be acceptable to treat "E" for all decrements as 0 in the first 10 years and 1 thereafter under these circumstances.

- 2.21 Employees expected to receive benefits - The amortization period may only recognize service at the time of a decrement where a positive employer-provided benefit is projected to be payable. Thus, for example, $E=0$ if in a contributory plan the projected benefit is worth no more than the value attributable to employee contributions. Likewise, $E=0$ for a "415 excess plan" where the projected benefit for an eligible employee is zero.
- 2.22 Insignificant benefits - Where the benefit provided at termination is not significant (e.g. a \$100 severance benefit), the actuary may optionally ignore such benefit for determining the amortization (i.e. $E=0$ for paragraph 2.20).
- 2.23 Amortization of related plans - In determining the amortization periods to be used, each plan must be treated separately.
- 2.24 Treatment of IRC Section 415 limits (FAS87, par. 46, footnote 11) - Expected future increases in the IRC Section 415 limits due to indexing provided in current law must be included in the service cost and PBO if the plan provides for their automatic inclusion.
- 2.25 Routine updating patterns - A history of regular plan amendments may indicate a period of economic benefit shorter than the future working lifetime of the active participants (FAS87, par. 27). The existence of such a history does not necessarily imply that a shorter period is required. If, however, the employer determines that the period of economic benefit is shorter, then a more rapid amortization period will have to be used. There may also be substantive commitments to make future amendments (FAS87, par. 41). If the employer reports that such commitments exist, the calculations should reflect the commitment.
- 2.26 Projections - Typically, participant information needed as of the measurement date will not be available until some time later. Therefore, in the absence of significant changes, the actuary may be

* Modifications to these formulas to reflect the time during each year when the decrement is assumed to occur are appropriate.

STATEMENT 1986-48

working with a projection from a prior calculation while using current economic assumptions and assets. The projections can be done by one of a number of procedures. The actuary's goal is to minimize the difference between the projection and an actual calculation. Either the data or the present values may be projected. Possible procedures include:

- Assume no change (i.e., a stationary population);
- Assume a one year increase in age and service, with or without new entrants;
- Assume expected experience, with or without new entrants.

The choice of method will depend on the facts and circumstances of each particular case. However it is done, the projection must give a result appropriate to the measurement date. Thus, for example, adjustments to the projection process may be required where there has been a significant change during the year, such as the closing of a large plant or salary increases which differ significantly from the assumed rates.

- 2.27 Insurance contracts - Assets and liabilities represented by annuity contracts should generally be excluded from FAS87 computations.* Other insurance contracts should be valued at "fair value," which is presumed to be the surrender value if the contract were to be terminated (FAS87, par. 62). The "contract value" may be the best available evidence of fair value.
- 2.28 Participating annuities (FAS87, par. 61) - FAS87 requires that plan assets include the value of the participating feature of an annuity contract. Thus the actuary will have to consult with the insurer or make comparisons with other available information (such as PBGC annuity factors) to determine the value of the participation right. A wide variety of systematic procedures are available for reflecting this value.
- 2.29 Use of market-related value for first year's cost - As discussed in paragraph 2.5, certain complications arise when a value other than fair value is used for the first year's pension cost determination. This is because the net obligation (asset) at transition must be based on fair value. As the initial difference gets reflected in future years' market-related values, the portion related to this initial difference will require separate treatment. Specifically, the cumulative unrecognized net loss (gain) subject to amortization (par. 2.13) has to be increased (decreased) by the portion of the initial excess of market-related value over fair value which is not yet reflected in fair value. Note that this requires the actuary to be able to determine at any time how much of the initial difference has been reflected in the then current market-related value. If the formula does not treat each year's asset fluctuation separately, it may be necessary to make an arbitrary allocation (e.g., if the initial difference were \$100, then \$20 of the total adjustment in each of the next five years could be assumed to be

* For exceptions, see FAS87, par. 57, note 14

STATEMENT 1986-48

on account of the initial difference). Once the entire initial difference is assumed to have been reflected, no further special adjustments are necessary.

SECTION 3. ACTUARIAL CALCULATIONS FOR DISCLOSURE AND BALANCE SHEET ITEMS

- 3.1 Introduction - FAS87 requires that employers disclose certain other actuarial information in addition to the net periodic pension cost and its components (FAS87, par. 54). Further, there may be balance sheet entries required in some circumstances (FAS87, par. 35-38). Much of this information is produced as a byproduct of the cost determination (Section 2). This section focuses on additional actuarial calculations beyond those used for calculating the cost item.
- 3.2 Measurement date (FAS87, par. 52) - All disclosure and liability information is to be as of a measurement date not more than three months prior to the employer's financial statement date. Assumptions and asset values as of the measurement date will be used. The results may reflect projections based on prior demographic data if the result is a reasonable reflection of the present values as of the measurement date.
- 3.3 Accumulated benefit obligation - The accumulated benefit obligation (ABO) is determined using the same methodology as the Actuarial Present Value of Accumulated Plan Benefits which the plan is required to disclose under FAS35. It should be calculated in accordance with the calculation methodology of Pension Plan Interpretation 2 of the American Academy of Actuaries. The discount rate used for benefits expected to be paid in any year must be the same for the ABO and PBO, but the resulting weighted average rates may be different.
- 3.4 Vested benefit obligation - Disclosure of the vested benefit obligation (VBO) is also required. This amount is determined using the same methodology as the value of accrued vested benefits reported for the plan in accordance with FAS35, and should be calculated in accordance with the calculation methodology of Pension Plan Interpretation 1 of the American Academy of Actuaries. As with the ABO (par. 3.3) the weighted average discount rate for the VBO may be different from that for the PBO, but the rate applied to each year's projected benefits must be the same.
- 3.5 Contributions not equal to net periodic pension cost - FAS87 governs the accounting for pension costs, but does not change ERISA's funding requirements or the accepted principles and practices for defining appropriate funding levels. A company's financial planning may indicate that the optimum pension contribution is other than the reported pension cost. Bargaining or regulatory considerations may also limit the employer's flexibility with respect to pension contributions. Thus it will not be unusual for the contribution amount to be other than the net periodic pension cost.