The American Academy of Actuaries is a national organization formed in 1965 to bring together, in a single entity, actuaries of all specializations within the United States. A major purpose of the Academy is to act as a public information organization for the profession. Academy committees, task forces, and work groups regularly prepare testimony and provide information to Congress and senior federal policy-makers, comment on proposed federal and state regulations, and work closely with the National Association of Insurance Commissioners and state officials on issues related to insurance, pensions, and other forms of risk financing. The Academy establishes qualification standards for the actuarial profession in the United States and supports two independent boards. The Actuarial Standards Board promulgates standards of practice for the profession, and the Actuarial Board for Counseling and Discipline helps to ensure high standards of professional conduct are met. The Academy also supports the Joint Committee for the Code of Professional Conduct, which develops standards of conduct for the U.S. actuarial profession.
Reinsurance Attestation Supplement 20-1: Risk Transfer Testing Practice Note

Background and Purpose of Document

The Property and Casualty Annual Statement Instructions for 2005 issued by the National Association of Insurance Commissioners (NAIC) contained a new supplement, Supplement 20-1, titled the “Reinsurance Attestation Supplement: Attestation of Chief Executive Officer and Chief Financial Officer Regarding Reinsurance Agreements” (Reinsurance Attestation Supplement). The 2005 Annual Statement Instructions did not change the scope of the Statement of Actuarial Opinion to include an evaluation of risk transfer. Further, the Reinsurance Attestation Supplement places requirements on the company’s chief executive officer (CEO) and chief financial officer (CFO) and not on the Appointed Actuary. However, the CEO or CFO may seek actuarial support related to the risk transfer analysis and documentation requirements outlined in the Reinsurance Attestation Supplement.

This communication by the American Academy of Actuaries’ Committee on Property and Liability Financial Reporting (COPLFR) is intended to provide advisory, non-binding guidance to property/casualty actuaries regarding testing for risk transfer. It has been written by actuaries, for actuaries, and is not intended to be professional accounting guidance. Further, the guidance is not intended for use in life and health insurance.

This communication is not an Actuarial Standard of Practice. It has not been adopted by the Actuarial Standards Board (ASB) and is not binding on any actuary. It should not be deemed to describe or codify generally accepted actuarial practice. From the perspective of the actuarial profession, meeting the requirements of the Reinsurance Attestation Supplement is an evolving area and a generally accepted practice which may apply does not yet exist.

Changes from November 2005 Risk Transfer Testing Practice Note

Throughout this document, substantive changes from the November 2005 Practice Note are noted by shading text in grey. The primary change to this updated Risk Transfer Testing Practice Note is that additional guidance is provided as to where risk transfer is reasonably self-evident. The guidance provided in the section “Safe Harbors: Where Risk Transfer is Reasonably Self-Evident” from the November 2005 Risk Transfer Testing Practice Note (renamed in this updated Practice Note) has been enhanced in several aspects:

- The guidance more clearly defines the three categories of reinsurance contracts with respect to the level of risk transfer testing required; these include contracts exempt from risk transfer testing standards, contracts for which risk transfer is considered to
be reasonably self-evident, and contracts for which risk transfer is not reasonably self-evident.

- In addition, the concept of “reasonably self-evident” is discussed in the context of the accounting guidance in SSAP 62.

- Furthermore, this section describes three characteristics that would generally identify situations in which risk transfer is reasonably self-evident.

Another change was to remove “a copy of each draft of the reinsurance slip and contract” from the list of items that were considered to be of value for the contract file of the ceding entity based on feedback received by COPLFR.

We updated the answer to Question 15 in the “Frequently Asked Questions” regarding future possible changes to statutory and GAAP accounting related to risk transfer.

Finally, we included sample checklists some companies use for documenting the process of identifying reasonably self-evident contracts.

The Academy expects to reissue the Risk Transfer Testing Practice Note periodically in the future, as practice evolves and as more guidance on certain elements of the process is needed.

Reinsurance Attestation Supplement

The Reinsurance Attestation Supplement is part of the Annual Statement for property/casualty insurance companies and is public information. This supplement is required to be filed by March 1 each year. The requirements of the Reinsurance Attestation Supplement apply to a company’s ceded reinsurance program, and not to any assumed reinsurance.

A complete copy of the Reinsurance Attestation Supplement is included as an attachment to this document. In summary, the supplement requires the CEO and CFO of the company to attest, with respect to active ceded reinsurance contracts, to the following four items:

- There are no separate written or oral agreements between the reporting entity and the assuming reinsurer that would reduce, limit, mitigate, or otherwise affect any actual or potential loss to the parties under the reinsurance contract;

- For each such reinsurance contract entered into, renewed, or amended on or after January 1, 1994, for which risk transfer is not reasonably considered to be self-evident, documentation concerning the economic intent of the transaction and the risk transfer analysis evidencing the proper accounting treatment is available for review;

- The reporting entity complies with the requirements set forth in SSAP 62; and
The reporting entity has appropriate controls in place to monitor the use of reinsurance and adhere to the provisions of SSAP 62.

**Actuarial Involvement in Reinsurance Attestation Supplement**

A copy of the Reinsurance Attestation Supplement is provided as Appendix 3 to this Practice Note. The CEO and CFO are required to attest that a process is in place to fulfill the company’s obligations under SSAP 62 and that the appropriate responsible parties have met their obligations regarding the accounting for reinsurance. Areas of actuarial involvement in support of the Reinsurance Attestation Supplement could include the selection, quantification, and documentation of ceded reinsurance contracts.

The wording of the Reinsurance Attestation Supplement recognizes that cash flow testing is unnecessary for contracts where risk transfer is considered to be reasonably self-evident. However, it does not define or describe the contracts or situations where risk transfer is considered to be reasonably self-evident. “Selection” refers to the evaluation of ceded reinsurance contracts to determine those where risk transfer is not reasonably self-evident, so that such contracts will require a cash flow analysis to evaluate risk transfer.

“Quantification” refers to the development of a cash flow analysis to evaluate the economics of the transaction, including the premiums, losses and other cash flows between the ceding company and the reinsurer under the reinsurance agreement. Two essential items considered by the decision-maker in deciding whether a reinsurance agreement meets the risk transfer requirements of SSAP 62 are as follows:

- the “reasonable possibility of”, where the estimate measures the likelihood or probability of a given loss amount.
- “a significant loss”, where the estimate measures the potential magnitude of an economic loss to the reinsurer, for example using different scenarios or a model.

In this document, we may refer to the quantification of economic losses as “cash flow testing” or “measuring risk transfer.” However, it is typically not the responsibility of the actuary to decide whether a reinsurance contract meets the standards of SSAP 62; for many companies this decision is made by accounting professionals after considering the actuarial evaluation of the economics of the transaction.

“Documentation” refers to written materials, including risk transfer analyses, which are maintained on each reinsurance contract in which risk transfer is not considered to be reasonably self-evident, such that an auditor or regulatory examiner may follow the process used by the company to assess the proper reinsurance accounting treatment as required by SSAP 62.
Contents of Practice Note

The remainder of this document contains the following sections:

- Key excerpts from statutory and GAAP reinsurance accounting standards;
- Documentation files for ceded reinsurance transactions;
- Considerations when evaluating whether risk transfer is self-evident;
- A summary of issues to be considered when performing cash flow testing;
- Appendix 1: Frequently asked questions and answers that may be helpful to the practicing actuary;
- Appendix 2: Sample checklists some companies use for documenting the process of identifying reasonably self-evident contracts; and
- Appendix 3: A copy of the Reinsurance Attestation Supplement.

In several places within the Practice Note, we refer to a report issued by the American Academy of Actuaries (Academy) in August 2005 titled “Risk Transfer in P&C Reinsurance: Report to the Casualty Actuarial Task Force of the National Association of Insurance Commissioners” (the Academy risk transfer report).

The report can be downloaded from the Academy website at the following addresses:


COPLFR appreciates the comments it has received since the issuance of the Risk Transfer Testing Practice Note in November 2005, and has incorporated many of them in this update. COPLFR would also welcome any suggested improvements for future updates of this practice note. Suggestions may be sent to Lauren Pachman, Staff Liaison to the Committee on Property and Liability Financial Reporting, with the American Academy of Actuaries.
### Committee on Property and Liability Financial Reporting  

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Nancy Watkins, Chair (2005-2006)  
Robert Wainscott, Vice Chair  

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Excerpts from Reinsurance Accounting Standards

SSAP 62

Guidance for the accounting underlying the completion of an insurer Annual Statement is provided in the Statement of Statutory Accounting Principles (SSAPs) issued by the NAIC and published in the NAIC’s *Accounting Practices and Procedures Manual*. Guidance regarding the recording of reinsurance transactions is provided in *SSAP 62: Property and Casualty Reinsurance*. The actuary may find the following excerpts from SSAP 62 helpful when considering the issue of risk transfer.

Paragraphs 9 through 16 of SSAP 62 are subtitled “Reinsurance Contracts Must Include Transfer of Risk.”

In paragraph 9 of SSAP 62 it is stated that “The essential ingredient of a reinsurance contract is the transfer of risk….Unless the agreement contains this essential element of risk transfer, no credit shall be recorded.”

Paragraph 10 of SSAP 62 includes the statement that “Actual or imputed investment returns are not an element of insurance risk.”

Paragraph 12 of SSAP 62 reads as follows:

“12. Indemnification of the ceding entity against loss or liability relating to insurance risk in reinsurance requires both of the following:

a. The reinsurer assumes significant insurance risk under the reinsured portions of the underlying insurance agreements; and

b. It is reasonably possible that the reinsurer may realize a significant loss from the transaction.”

In paragraph 13 of SSAP 62 it is stated that “A reinsurer shall not have assumed significant insurance risk under the reinsured contracts if the probability of a significant variation in either the amount or timing of payments by the reinsurer is remote.”

Paragraph 14 of SSAP 62 states that “The ceding entity’s evaluation of whether it is reasonably possible for a reinsurer to realize a significant loss from the transaction shall be based on the present value of all cash flows between the ceding and assuming companies under reasonably possible outcomes, without regard to how the individual cash flows are described or characterized. An outcome is reasonably possible if its probability is more than remote. The same interest rate shall be used to compute the present value of cash flows for each reasonably possible outcome tested. A constant interest rate shall be used in determining those present values because the possibility of investment income varying from expectations is not an element of insurance risk. Judgment is required to identify a reasonable and appropriate interest rate.”
Paragraph 15 of SSAP 62 contains a description of one instance where cash flow testing is not required to demonstrate risk transfer. Paragraph 15 contains the comment that “In this narrow circumstance, the reinsurer’s economic position is virtually equivalent to having written the insurance contract directly.”

**FAS 113**

*Statement of Financial Accounting Standards, No. 113: Accounting and Reporting for Reinsurance of Short-Duration and Long-Duration Contracts...* (FAS 113) was published in December 1992 and provides guidance regarding the accounting and reporting for reinsurance contracts under U.S. Generally Accepted Accounting Principles (GAAP). The actuary will likely also find this document helpful when considering the issue of risk transfer. There are many parallels between SSAP 62 and FAS 113. Of particular interest are paragraphs 9 and 11. Paragraph 9, similar to paragraph 12 of SSAP 62, reads as follows:

“9. Indemnification of the ceding enterprise against loss or liability relating to insurance risk in reinsurance of short-duration contracts requires both of the following, unless the condition in paragraph 11 is met:

a. The reinsurer assumes significant insurance risk under the reinsured portions of the underlying insurance contracts.

b. It is reasonably possible that the reinsurer may realize a significant loss from the transaction.”

Paragraph 11 of FAS 113, similar to paragraph 15 of SSAP 62, reads as follows:

“11. Significance of loss shall be evaluated by comparing the present value of all cash flows, determined as described in paragraph 10, with the present value of the amounts paid or deemed to have been paid to the reinsurer. If, based on this comparison, the reinsurer is not exposed to the reasonable possibility of significant loss, the ceding enterprise shall be considered indemnified against loss or liability relating to insurance risk only if substantially all of the insurance risk relating to the reinsured portions of the underlying insurance contracts has been assumed by the reinsurer.”

In describing the type of testing required to demonstrate significance of loss, paragraph 11 also describes a case where such testing is not required. When discussing this case, we will use the term “paragraph 11 exception,” which is a commonly used term that refers back to FAS 113.

The above excerpts from FAS 113 and SSAP 62 are not intended to be a complete treatment of risk transfer as discussed in these documents. For example, in evaluating risk transfer the decision-maker normally considers such issues as the definitions of “significant,” “reasonably possible” and “remote.” Such issues involve interpretation of accounting guidance and are outside the scope of this Practice Note. The actuary may wish to read the remaining portions of SSAP 62 and FAS 113, including the questions
and answers to these statements. The actuary should also consider consulting with accounting and/or legal professionals as he or she deems appropriate to assist in understanding the issue of risk transfer in reinsurance contracts.
Documentation Files for Ceded Reinsurance Transactions

Among other requirements, the Reinsurance Attestation Supplement contains the attestation that there is documentation concerning the economic intent of the transaction and the risk transfer analysis for certain contracts. According to a recent survey of insurers described in the Academy’s risk transfer report, the following items were considered to be of value for the contract file of the ceding entity:

a. Relevant correspondence between the ceding and assuming entities. This might include any related agreements, including but not limited to interlinked reinsurance contracts or trust agreements.

b. A memorandum or other appropriate documentation from management describing the business purpose and the economic intent for the reinsurance cession.

c. A statement regarding risk transfer, either that the risk transfer is considered to be reasonably self-evident or a copy of the analysis that displays the possible outcomes, their likelihood, and their economic impact.

d. Signoff from management that risk transfer has been demonstrated or is believed to be reasonably self-evident.

e. Copy of signoff from an external auditor or other party as to risk transfer, if applicable and available.

To the extent the actuary is asked to quantify the risk transfer described in c. above, it might be helpful to have available documentation supporting the analysis and calculations sufficient for another actuary practicing in the area to follow. The risk transfer documentation will be available to state regulators and auditors. In developing such documentation, the actuary might wish to refer to Actuarial Standard of Practice (ASOP) 9, Documentation and Disclosure in Property and Casualty Insurance Ratemaking, Loss Reserving and Valuations.
Where Risk Transfer May Be Reasonably Self-Evident

The Reinsurance Attestation Supplement, and in particular its second paragraph, identifies several circumstances whereby contracts are excluded from all or a portion of the scope of the attestation:

- **Contracts with No Amounts Recoverable:** The introduction to the attestation statement identifies its scope as “all reinsurance contracts for which the reporting entity is taking credit on its current financial statement”. As such, contracts that are not active, or where there are no unearned premiums, losses or other amounts recognized as recoverable as of the Annual Statement date, are excluded from the scope of the attestation.

- **Certain Older Contracts:** With regard to maintaining documentation evidencing risk transfer, the attestation statement requires that management only consider “each such reinsurance contract entered into, renewed, or amended on or after January 1, 1994,” since this is the date when the current statutory accounting rules surrounding risk transfer in reinsurance contracts became effective. Prior to that date, no risk transfer analysis was required under statutory accounting rules. Note that this exception only relates to the second paragraph of the attestation statement.

- **Risk Transfer Is Reasonably Self-Evident:** Also with regard to evidencing risk transfer under the second paragraph, the attestation statement requires that management maintain documentation with respect to contracts “for which risk transfer is not reasonably considered to be self-evident.” It is our understanding that the purpose of this clarification is to eliminate and/or avoid the time and expense associated with unnecessary analyses.

While the first two bullet point exclusions are self-explanatory, the last bullet point is not. Accordingly, the discussion below provides guidance to actuaries when assisting management in making the determination as to whether or not risk transfer is reasonably self-evident.

This section of the Practice Note summarizes certain approaches observed by practitioners in determining whether or not risk transfer is reasonably self-evident. In practice, there will be contracts and classes of contracts in addition to those identified in this section in which it can be determined that risk transfer is reasonably self-evident. In making this determination, important considerations include an evaluation of the substance of the arrangement, the existence, impact, and role of risk-limiting features, and the use of professional judgment.

The evaluation of reinsurance contracts as to whether risk transfer is reasonably self-evident is principles based, and therefore there is no bright line that can be used for its application. As a matter of practice, it would be more conservative to evaluate contracts for risk transfer when there is any doubt as to whether or not risk transfer is reasonably self-evident.
Also, the regulators of individual states may have other and different views regarding risk transfer testing. Actuaries may find it beneficial to discuss this issue with their domiciliary regulators as questions arise.

“Reasonably Self-Evident” and SSAP 62 / FAS 113

The concept of “reasonably self-evident” was introduced by the NAIC during 2005 as part of the Reinsurance Attestation Supplement. It addresses contracts for which the risk transfer standard applies, but for which detailed risk transfer testing is not required in order to conclude that that standard has been met. As such, the concept of “reasonably self-evident” is not a change to the accounting standards promulgated in SSAP 62 and FAS 113, but rather a way to define reasonable levels of analysis and documentation in applying those standards.

While “reasonably self-evident” is not explicitly referenced in either SSAP 62 or FAS 113, it is implicitly accepted based on the common practice of company management, auditors, and regulatory authorities. Since the adoption of the current accounting rules surrounding risk transfer, it has been common practice that risk transfer analyses and related documentation be completed only for contracts considered to be “finite” or “structured,” as opposed to “traditional.” In most cases, these analyses and documentation have not been completed for many traditional reinsurance contracts, presumably because risk transfer was deemed to be self-evident. Furthermore, risk transfer cash flow tests generally have not been required for traditional contracts by auditors or financial examiners performing regulatory functions. However, since there are no universally accepted definitions of the terms “finite” and “traditional,” and the same contract features and/or structures may be present in either finite or traditional contracts, there is no simple way to divide the two groups.

The following discussion describes “reasonably self-evident” in the context of SSAP 62. There are many parallels between SSAP 62 and FAS 113, and as such the discussion below is applicable for FAS 113 as well.

SSAP 62 specifies that all contracts other than those meeting the limited exception provisions of paragraph 15 are required to meet the criteria for risk transfer listed in paragraphs 12a and 12b. (Paragraph 15 is similar to paragraph 11 of FAS 113, and both are referred to in this Practice Note as the “paragraph 11 exception”. This exception is introduced in the section Excerpts from Reinsurance Accounting Standards, and more information on this exception is provided subsequently in this Practice Note under the “Exempt Contracts” heading in this section.) Paragraphs 14 and 15 of SSAP 62 include guidance on how the risk transfer would be evaluated:

“14. The ceding entity’s evaluation of whether it is reasonably possible for a reinsurer to realize a significant loss from the transaction shall be based on the present value of all cash flows between the ceding and assuming companies under reasonably possible outcomes, without regard to how the individual cash flows are described or characterized . . .”
“15. Significance of loss shall be evaluated by comparing the present value of all cash flows, determined as described in paragraph 14, with the present value of the amounts paid or deemed to have been paid to the reinsurer.”

One possible interpretation of these portions of paragraphs 14 and 15 of SSAP 62 (and the corresponding language in FAS 113) could be that a quantitative cash flow analysis must be performed on every contract to support that the contract transferred insurance risk. However, a more commonly applied view is that these paragraphs simply emphasize that risk transfer evaluations should be based on present values and should contemplate all contractual cash flows.

In summary, the concept of “reasonably self-evident” does not imply that risk transfer analysis is not required. Rather, it means that in situations where the fundamental structure and substance of the contract would obviously result in compliance with the criteria defined in paragraphs 12a and 12b of SSAP 62, substantive contract-specific calculations are not necessary. Rather, in these instances a company may reach its conclusions about a contract by evaluating its adherence to risk transfer characteristics and/or the cash flow characteristics of the class of contracts to which it belongs.

**Risk Transfer Characteristics Underlying “Reasonably Self-Evident”**

There are several defining characteristics of those contracts for which risk transfer is considered to be reasonably self-evident:

- The potential loss to the reinsurer is much larger than the premium for the coverage provided;
- The contractual terms and conditions of coverage are standardized for the classification or type of contract; and
- The contract does not include provisions that enable the reinsurer to recover all or a significant portion of the covered losses.

In most instances, if a contract satisfies all three of these characteristics, the substance and economic purpose of the contract is generally considered to be risk transfer. Conversely, if a contract has any of the following features, it is unlikely that risk transfer is reasonably self-evident:

- The premium approaches the present value of the coverage provided;
- The contract is “manuscripted” using terms of coverage that are not standard for contracts within the classification or type of contract; or
- The contract includes provisions that enable the reinsurer to recover all or a significant portion of the covered losses.

There are reinsurance contracts that, in effect, comply with the “reasonably self-evident” principle by virtue of their membership in a particular classification of reinsurance contracts. For example, it is commonly understood that traditional high-layer property...
catastrophe contracts transfer risk and should be accounted for as reinsurance. Few practitioners would feel they need a detailed probabilistic cash flow analysis to reach that conclusion because risk transfer would be considered to be reasonably self-evident.

In order to evaluate whether risk transfer for a particular contract is reasonably self-evident, management may wish to assess whether the contract, by virtue of its basic characteristics, meets the three risk transfer characteristics above.

For contracts that are not otherwise exempt from risk transfer testing, and for which risk transfer is not reasonably self-evident, some degree of contract-specific risk transfer testing is required. In general, the required rigor of such analyses is a function of the complexity of the contractual terms, and the degree to which the characteristics of the contract differ from the risk transfer characteristics listed above.

There is currently no standard or minimum practice as regards documentation of whether or not risk transfer is reasonably self-evident. As discussed above even for classes for which risk transfer is deemed to be reasonably self-evident, it may be appropriate to confirm and document how management arrived at this conclusion. Some companies have prepared checklists for this purpose; we have provided examples of a few checklists as Appendix 2 to this Practice Note.

**Categorization of Contracts**

With respect to the level of risk transfer testing required, this Practice Note groups contracts into the following three categories:

- **Exempt**: contracts exempt from risk transfer testing standards;
- **Reasonably Self-Evident**: contracts for which risk transfer is considered to be reasonably self-evident by virtue of the class and/or the individual characteristics of the contract; and,
- **Not Reasonably Self-Evident**: contracts for which risk transfer is not reasonably self-evident, so that some type of quantitative cashflow analysis must be performed in order to assess risk transfer.

There are other ways to categorize and describe contracts as well. We have avoided the use of the term “safe harbor” because it has multiple definitions and appears to cause confusion.

**Exempt Contracts**

Within FAS 113 and SSAP 62, the only contracts explicitly exempted from the risk transfer testing standards are contracts where “substantially all of the insurance risk relating to the reinsured portions of the underlying contracts has been assumed by the reinsurer”, introduced in the section *Excerpts from Reinsurance Accounting Standards*, as the “paragraph 11 exception”.

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In a footnote to paragraph 11 of FAS 113, the paragraph 11 exception is further clarified as follows: “This condition is met only if insignificant insurance risk is retained by the ceding enterprise on the reinsured portions of the underlying insurance contracts.” (SSAP 62 – Exhibit A, contains similar language in its response to Question 20, except that the word “insignificant” is replaced with “trivial”.) The reinsurer in such instances acts as if it stands in the shoes of the original insurer. While it remains a matter of informed professional judgment as to what is insignificant, this footnote also defines insignificant to mean “having little or no importance; trivial.”

There may be some diversity in practice in the application of the paragraph 11 exception and in the determination of when the criteria are met. Under the most restrictive criteria, the only type of contract for which the exception applies is a straight quota share, with all fixed terms and no risk-limiting or variable terms (including no sharing of positive experience), and with a fixed ceding commission that adequately compensates the ceding company for all acquisition costs. A less restrictive but generally accepted set of criteria for the paragraph 11 exception is the case of a straight quota share reinsurance contract with no risk-limiting features, other than a very high loss ratio cap with negligible effect on the economics of the transaction.

There are other suggested criteria for contracts that meet the paragraph 11 exception. In particular, one common interpretation is that the existence of a profit sharing arrangement that affects only positive experience would not by itself disqualify a quota-share contract from the paragraph 11 exception. Other ideas are contained in the CAS Working Party Paper on Risk Transfer, which was included in the appendix of the Academy risk transfer report issued in August 2005. However, as of the time of issuance of this practice note, the profit sharing and CAS Working Party paper interpretations are not widely accepted in practice.

In summary, straight quota-share contracts are typically exempt from risk transfer requirements under the paragraph 11 exception. However, the introduction of risk-limiting features to a quota-share contract, such as a loss ratio cap (other than one that is so high its effect on the economics of the contract is de minimis), a loss retention corridor, or a sliding scale commission, often prevents the contract from qualifying for the exception.

Also, as previously stated, the Reinsurance Attestation Supplement requirements further exempt contracts with no amounts recoverable and contracts entered into, renewed, or amended before January 1, 1994. While they are not exempt from risk transfer testing under SSAP 62 or FAS 113, documentation of risk transfer testing for contracts with no recoverables would rarely be required in practice. Further, SSAP 62 became effective in 1994 and FAS 113 became effective in 1992, so contracts older than those dates would not be subject to the provisions in those accounting standards.
Reasonably Self-Evident

Risk transfer is reasonably self-evident in most traditional per-risk or per-occurrence excess of loss reinsurance contracts. For these contracts, a predetermined amount of premium is paid and the reinsurer assumes all or nearly all of the potential variability in the underlying losses, and it is evident from reading the basic terms of the contract that the reinsurer can incur a significant loss. In many cases, there is no aggregate limit on the reinsurer’s loss. The existence of certain experience-based contract terms, such as experience accounts, contingent commissions, and additional premiums, may reduce the amount of risk transfer and/or make it less likely that risk transfer is reasonably self-evident. Typically, the more risk retained by the ceding company through these terms, the less likely that risk transfer is self-evident.

Also, the “rate on line” is an important consideration with excess of loss reinsurance contracts that have aggregate limits. (“Rate on line” is defined here by dividing the premium paid to reinsure 100 percent of a layer of coverage divided by the aggregate limits of the layer of coverage.) Excess of loss contracts with no or minimal risk-limiting features and with relatively low rates on line are typically deemed to transfer risk. However, even if a contract has no risk-limiting features, as the premium approaches the present value of the limit of coverage, risk transfer is usually no longer deemed to be reasonably self-evident.

Based on the previously mentioned risk transfer characteristics, contracts in the following classes would typically be presumed to have met the risk transfer standards without individual quantitative analysis, because risk transfer is reasonably self-evident:

• Single year property catastrophe and casualty clash contracts with little or no risk-limiting features (e.g. sub-limits, exclusions, etc.) apart from a reinstatement premium common to these types of contracts;

• Most facultative and treaty per risk excess of loss arrangements with premium well below the present value of the aggregate limit of coverage, and without unusual provisions such as sub-limits, experience accounts or other risk-limiting contingent features.

Of course, as noted above, this list is not intended to be an exclusive or exhaustive list.

A company may have contracts for which risk transfer is determined to be reasonably self-evident even though they do not fall into a particular class. In these instances the company may support its risk transfer decisions by showing how the contracts adhere to the risk transfer characteristics outlined previously in this Practice Note.

As shown in the sample checklists provided in Appendix 2, companies may categorize their contracts based on some combination of contract type, contract features and degree of adherence to the risk transfer principles. It is important to note that the checklists in Appendix 2 are provided for illustrative purposes only, and the Academy does not endorse any particular approach or make any representation that the checklists can assure adherence to risk transfer principles. For any given company, management must
consider the specifics of its own business and reinsurance program in order to develop an appropriate categorization and documentation procedure.

Not Reasonably Self-Evident

While there are often exceptions, contracts that would not typically qualify for risk transfer being reasonably self-evident include:

- Aggregate excess of loss contracts--most of these contracts either contain significant risk-limiting features, and/or attach in an expected layer of loss so that the premium approaches the present value of the coverage provided;

- Contracts with experience accounts, experience rating refunds, or similar provisions, if such provisions have a significant impact on the contract’s economics;

- Multiple year contracts--many of these have provisions that protect the reinsurer from changes in exposure over the contract period and make the analysis complicated, and/or have features that adjust the terms of later years explicitly or implicitly based on results in earlier years;

- Quota share contracts with risk-limiting features such as loss retention corridors, sliding scale commissions, loss ratio caps and/or sub-limits that significantly impact the amount of risk being transferred.

For a given reinsurance contract, once the determination is made that risk transfer is not reasonably self-evident, management will need to evaluate the amount of risk transferred and prepare documentation supporting the business rationale for the contract. In most cases, it would be expected that the rigor of the analysis and documentation would increase to the extent that the contract transfers less risk. The following section provides guidance for actuaries to consider when performing cash flow testing for reinsurance contracts.

A final observation is that failure to satisfy the “reasonably self-evident” standard does not necessarily mean that a contract has insufficient risk to qualify as reinsurance, nor that it is a finite risk contract. It simply means that more analysis is required in order to make a determination of risk transfer. In the context of the attestation by the CEO and CFO, it also means that there is a requirement for management to maintain documentation of that analysis, as described in the next section.
Risk Transfer Cash Flow Testing

For contracts where risk transfer is not deemed to be reasonably self-evident, management will need to have documentation supporting risk transfer available for regulatory review. This section will focus on the cash flow testing as part of the risk transfer analysis and the issues to consider, current industry practice as it relates to incorporating parameter risk and handling various exposures, and the value of judgment to the process. It should be noted that the risk transfer measurement process is intended to be a prospective analysis, to be completed at the time of entering into the reinsurance contract.

When documenting risk transfer, there will likely be many instances in which management looks to its internal or external actuaries for assistance as regards the measurement of risk. While SSAP 62 is an accounting statement, and thus the need for risk transfer cash flow testing arises from the application of accounting rules, actuaries may provide significant input in, or even take the lead in, the evaluation and quantification of insurance risk. Nevertheless, despite the actuaries’ role in quantifying a contract’s risk, the final determination of whether that risk is sufficient is typically an accounting decision.

Risk transfer analyses may range from very simple premium to loss limit approaches for certain contracts, to highly sophisticated stochastic models with many inputs and variables for other contracts. Typically, the required rigor of such analyses increases as the contractual terms become more complex, and/or to the extent that risk transfer becomes more limited through risk-limiting contract features. In cases where the actuary is asked to perform cash flow tests as part of the risk transfer analysis, the actuary may wish to review the steps outlined in the remainder of this document before undertaking such an evaluation.

In reading this section, it is important to note that there are currently no actuarial standards of practice on risk transfer analysis, and practice is evolving rapidly. Though the goal of evaluation of risk transfer differs to some extent from the goals in pricing reinsurance contracts or setting loss reserves, parts of the approach and development of estimates require some of the same considerations that are outlined in existing statements of principles and standards of practice regarding property/casualty ratemaking and loss reserving. Though not directly applicable, these statements might be used as a resource by actuaries when performing cash flow tests for risk transfer.

Understand the Substance of the Agreement

In order to understand the substance of the agreement before evaluating and quantifying the amount of the economic losses being transferred, the actuary may wish to do the following:
• Obtain and review as much background to the transaction as practicable, including the business purpose and the substance of the transaction. In this regard, the actuary may wish to have discussions with management or other key personnel as applicable. Furthermore, the actuary may wish to obtain and review internal accounting memoranda or other relevant internal documentation.

• Obtain and read the entire agreement, as well as any related agreements, including but not limited to interlinked reinsurance contracts or trust agreements.

If it is not clear how certain contractual terms operate, the actuary might choose to seek assistance from accounting and legal professionals, as applicable. Should the actuary rely on the interpretation of contractual language from another person or party, the actuary usually discloses such reliance in his/her documentation.

In reviewing the contract, the actuary may encounter contract provisions which may create contingent rights or obligations that appear to reduce risk if applied. These include special termination clauses, warranties, and adjustable limits or deductibles. In some cases, these provisions are worded in indefinite or ambiguous ways that make modeling difficult and, perhaps, impossible unless one were to make assumptions about the behavior of one or both parties to the contract. In those cases, if it is not possible to clarify the intent of the parties, the actuary might not be able to complete a quantification of the economic losses transferred under the agreement. Further, if the actuary does make assumptions about the behavior of parties to the contract, it may be appropriate to incorporate documentation of these assumptions in the analysis documentation.

**Develop Cash Flow/Scenario Testing of Subject Losses**

Once the actuary understands the substance of the contract, the next step is usually to determine what losses or loss events subject to the contract are reasonably possible. As with any actuarial analysis, the use of informed judgment is critical when developing cash flow analyses under reinsurance agreements.

In some cases, in particular for those contracts in which a single event, such as a large catastrophe, is required to produce a significant loss to the reinsurer, an analysis of what is reasonably possible is sometimes limited to the identification of one scenario or several alternative scenarios, and discussion as to whether or not those are reasonably possible.

In other cases, the actuary may develop a stochastic model that projects estimates of subject losses using thousands of scenarios. In these models, there are several key assumptions that the actuary normally selects, such as:

- A mean and coefficient of variation of losses;
- An assumed distribution of such losses;
- Selected payout patterns, as well as variation in such patterns;
- Adjustments for parameter risk.
The modeled distributions may be based on aggregate losses, individual frequency and severity distributions, or some combination of these.

In many cases, the mean is selected by reviewing historical data where available, supplemented by industry or competitor company data when appropriate. There is often less data available to estimate the coefficient of variation of losses; while historical data is often used as a starting point, in many cases it is appropriate to supplement such data with other information and judgment.

Similar to a pricing application, it might be appropriate to adjust historical data to make it an unbiased estimator of results for the prospective analysis period. Possible adjustments might include: trending losses, on-leveling premiums, adjusting for changes in exposure, and adjusting for the presence or absence of large losses or catastrophic events.

When determining a loss distribution, a positively skewed distribution such as the lognormal distribution is often used. Again, this is largely a matter of judgment and will depend on the individual situation.

Payout patterns are usually determined from historical payout patterns, if available, or from industry patterns. While variation in such patterns is a feature that is modeled by actuaries, there is little, if any, practical guidance on how to vary a payout pattern, or how much variation could be reasonably expected. It is normally a matter of actuarial judgment to determine whether the resultant approach and amount of variation in the payout pattern is reasonable.

Finally, the inclusion of parameter risk is usually an important element to cash flow testing. Parameter risk in this context refers to the potential inaccuracy in the form and parameters of the loss distribution. The sources of parameter risk are typically numerous in a reinsurance risk transfer analysis; there is a very good discussion of this in the Casualty Actuarial Society (CAS) white paper contained in Appendix 2 of the Academy’s risk transfer report.

By definition, parameter risk is very difficult to model and measure. In many cases, the actuary will account for parameter risk by increasing the coefficient of variation (CV) in the modeled analysis. In other cases, the actuary might adjust the mean or weigh together multiple models, each having its own mean and CV, to encompass parameter risk. More elaborately, parameter risk can be incorporated by explicitly treating the parameters of the loss distribution as stochastic variables themselves. In any case, the selection and application of parameter risk is complex and usually involves the significant application of professional judgment on the part of the actuary.¹

¹ A possible resource for understanding and modeling parameter uncertainty is Parameter Uncertainty in (Log) Normal Distributions, by Rodney E. Kreps.
Overlay the Contractual Terms

Whether determined through the selection of a single scenario or through thousands of scenarios via stochastic simulation, the actuary normally considers the amount and timing of cash flows that would be ceded under the contract for each loss scenario that is being modeled. Cash flow items may include loss payments, loss adjustment expense payments, initial premiums, additional premium payments, payment of profit or experience-based commissions, and other related cash flows. An appropriate quantification of the economics under an agreement includes contractual terms to the extent they affect cash flows between ceding company and reinsurer.

For certain contracts, modeling of contractual terms can become very difficult. This is often the case when there are notional experience accounts, funds-held accounts, and other accounts where there are interest credits and charges. Further, the impact of commutation, cancellation, or similar clauses may also significantly complicate the analysis.

For some contracts, there might be more than one applicable term for a given scenario. For example, the reinsurance company might have the option to cancel a contract, or not cancel and receive more premium. Usually, for purposes of evaluating risk transfer, it is appropriate to presume that the company with the option (in this case the reinsurer) will act in its financial best interest. Often the reinsurer will be required by the contract to exercise its option before it is clear how losses will ultimately develop. In those cases it is common practice to attribute “perfect knowledge” to the reinsurer. While computationally easier, this assumption might inappropriately understated the reinsurer’s risk. If it is not clear how such contractual terms interact with each other, the actuary may find it prudent to seek clarification or other assistance from accounting and legal professionals.

There are other circumstances in which the actuary may choose to seek assistance from accounting and legal professionals. These include contracts with the following provisions:

- Multiple year arrangements--some multiple year contracts, particularly those covering more than two years, contain contractual features that reduce the risk to the reinsurer through clauses that are very difficult to reflect when modeling the contractual cash flows.

- For crediting funds-held and/or experience accounts, interest rates that are significantly below or above risk-free rates, and/or different from the rate that is used to present-value the cash flows.

- Ceding commissions paid in the future or at the expiration of the contract.

- Consideration of maintenance fees--while such fees are usually considered to be additional consideration to the reinsurer in an evaluation of risk transfer, it might depend on the contract language.
• Existence of commutation clauses, cancellation rights, or similar clauses—the existence of such clauses in some contracts provides either or both parties with rights that might appropriately be considered in the quantification of the economics under an agreement.

Sometimes, the existence of the above features can significantly complicate the actuary’s ability to appropriately quantify cash flows.

Once the loss scenarios are determined and the contractual terms are applied, the actuary may present-value the cash flows and quantify the economics of the reinsurance agreement under various scenarios.

**Interest Rate Used to Present-Value Cash Flows**

SSAP 62 does not specify a method for choosing the interest rate to be used for discounting; it specifically refers to this as an area to which judgment should be applied. SSAP 62 does, however, require that a single interest rate be used to present-value the cash flows, and that the interest rate reflect the time value of money.

While not specified in the regulations, a commonly used approach is to use a risk-free interest rate, with duration approximately equal to that of the net cash flows. Based on current industry practice, an interest rate is often selected based on U.S. Treasury securities with similar durations. Typically, this is either performed based on a weighted average of the cash flows with U.S. Treasury yield curve analysis using zero-coupon securities, or through the selection of a single rate based on a simple review of U.S. Treasury rates and judgment.

**Summary of Ceded Cash Flows**

According to SSAP 62, significance of loss shall be evaluated by comparing the present value of all cash flows with the present value of the amounts paid or deemed to have been paid to the reinsurer. This comparison is frequently developed through a ratio comparison whose numerator and denominator are developed as follows:

• The numerator reflects the present value of the cash flows between the parties. This would include premiums less losses, ceding commissions if applicable, and other contractually determined cash flows, if any.

• The denominator reflects the present value of the total consideration to the reinsurer regardless of how it is characterized. This may include the initial premium, plus additional premiums, reinstatement premiums, maintenance fees, etc., less experience-based profit commissions or similar cash flows. Such premiums are typically not reduced for ceding commissions, brokerage payments, or other fees.
There are several items that are specifically not considered--brokerage paid to an intermediary, investment risk, and general and other expenses of the reinsurance company that are not cash flows between the parties.

Where the actuary performed stochastic testing, estimated cash flow would typically be presented by percentile in a manner similar to the following:

<table>
<thead>
<tr>
<th>Percentile or Scenario</th>
<th>Nominal Total Ceded Premium</th>
<th>NPV Total Ceded Premium</th>
<th>Nominal Ultimate Ceded Loss</th>
<th>NPV Ultimate Ceded Loss</th>
<th>NPV Reinsurer’s Profit / (Loss)</th>
<th>NPV Profit / (Loss) to NPV Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0%</td>
<td>44,586</td>
<td>46,718</td>
<td>43,386</td>
<td>41,718</td>
<td>5,000</td>
<td>10.7%</td>
</tr>
<tr>
<td>10.0%</td>
<td>50,062</td>
<td>51,983</td>
<td>48,862</td>
<td>46,983</td>
<td>5,000</td>
<td>9.6%</td>
</tr>
<tr>
<td>15.0%</td>
<td>54,305</td>
<td>56,062</td>
<td>53,105</td>
<td>51,062</td>
<td>5,000</td>
<td>8.9%</td>
</tr>
<tr>
<td>20.0%</td>
<td>57,960</td>
<td>59,577</td>
<td>56,760</td>
<td>54,577</td>
<td>5,000</td>
<td>8.4%</td>
</tr>
<tr>
<td>25.0%</td>
<td>61,179</td>
<td>62,672</td>
<td>59,979</td>
<td>57,672</td>
<td>5,000</td>
<td>8.0%</td>
</tr>
<tr>
<td>30.0%</td>
<td>64,027</td>
<td>65,411</td>
<td>62,827</td>
<td>60,411</td>
<td>5,000</td>
<td>7.6%</td>
</tr>
<tr>
<td>35.0%</td>
<td>67,224</td>
<td>68,485</td>
<td>66,024</td>
<td>63,485</td>
<td>5,000</td>
<td>7.3%</td>
</tr>
<tr>
<td>40.0%</td>
<td>70,223</td>
<td>71,368</td>
<td>69,023</td>
<td>66,368</td>
<td>5,000</td>
<td>7.0%</td>
</tr>
<tr>
<td>45.0%</td>
<td>73,392</td>
<td>74,415</td>
<td>72,192</td>
<td>69,415</td>
<td>5,000</td>
<td>6.7%</td>
</tr>
<tr>
<td>50.0%</td>
<td>76,845</td>
<td>77,735</td>
<td>75,645</td>
<td>72,735</td>
<td>5,000</td>
<td>6.4%</td>
</tr>
<tr>
<td>55.0%</td>
<td>79,781</td>
<td>80,559</td>
<td>78,581</td>
<td>75,559</td>
<td>5,000</td>
<td>6.2%</td>
</tr>
<tr>
<td>60.0%</td>
<td>83,308</td>
<td>83,950</td>
<td>82,108</td>
<td>78,950</td>
<td>5,000</td>
<td>6.0%</td>
</tr>
<tr>
<td>65.0%</td>
<td>86,874</td>
<td>87,379</td>
<td>85,674</td>
<td>82,379</td>
<td>5,000</td>
<td>5.7%</td>
</tr>
<tr>
<td>70.0%</td>
<td>90,774</td>
<td>91,100</td>
<td>89,544</td>
<td>86,100</td>
<td>5,000</td>
<td>5.5%</td>
</tr>
<tr>
<td>75.0%</td>
<td>95,970</td>
<td>96,125</td>
<td>94,770</td>
<td>91,125</td>
<td>5,000</td>
<td>5.2%</td>
</tr>
<tr>
<td>80.0%</td>
<td>100,000</td>
<td>100,000</td>
<td>99,613</td>
<td>95,781</td>
<td>4,219</td>
<td>4.2%</td>
</tr>
<tr>
<td>85.0%</td>
<td>100,000</td>
<td>100,000</td>
<td>106,301</td>
<td>102,213</td>
<td>(2,213)</td>
<td>-2.2%</td>
</tr>
<tr>
<td>87.5%</td>
<td>100,000</td>
<td>100,000</td>
<td>112,109</td>
<td>107,797</td>
<td>(7,797)</td>
<td>-7.8%</td>
</tr>
<tr>
<td>90.0%</td>
<td>100,000</td>
<td>100,000</td>
<td>117,391</td>
<td>112,876</td>
<td>(12,876)</td>
<td>-12.9%</td>
</tr>
<tr>
<td>92.5%</td>
<td>100,000</td>
<td>100,000</td>
<td>120,000</td>
<td>115,385</td>
<td>(15,385)</td>
<td>-15.4%</td>
</tr>
<tr>
<td>95.0%</td>
<td>100,000</td>
<td>100,000</td>
<td>120,000</td>
<td>115,385</td>
<td>(15,385)</td>
<td>-15.4%</td>
</tr>
<tr>
<td>97.5%</td>
<td>100,000</td>
<td>100,000</td>
<td>120,000</td>
<td>115,385</td>
<td>(15,385)</td>
<td>-15.4%</td>
</tr>
<tr>
<td>Mean</td>
<td>76,180</td>
<td>77,096</td>
<td>77,939</td>
<td>74,941</td>
<td>2,155</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

Following is a brief summary of the columns in the table:

- “Percentile or Scenario” represents a common way to present results of stochastic simulation. For this particular table, outcomes from stochastic simulation are ordered in terms of losses ceded to the reinsurer.

- “Nominal Total Ceded Premium” reflects the total premium under the contract. These amounts are stated gross of ceding commissions, and are increased for additional premiums and reduced for experience-based profit commissions, as applicable, for each of the respective scenarios presented in the table. “NPV Total...
Ceded Premium” reflects these amounts discounted to present value. The fact that the NPV Total Ceded Premium is sometimes greater than the Nominal Total Ceded Premium, while unexpected, is a function of the particular terms of the contract represented by this table.

- “Nominal Ultimate Ceded Loss” reflects the total losses and expenses, as applicable, for which the reinsurer would be obligated to pay under the contract. “NPV Ultimate Ceded Loss” reflects these amounts discounted to present value.

- The “NPV Reinsurer’s Profit or Loss” column is the difference between the NPV Total Ceded Premium and the NPV Ultimate Ceded Loss columns. This amount is then divided by the “NPV Total Ceded Premium” column to generate the percentages in the final column.

There are a variety of ways one might show the results of such testing; the above chart is an illustration only.

**Quantification of Cash Flows**

The information in the above table could be used as input to the method used to quantify the economics under an agreement, the results of which could provide meaningful input to decision-makers when deciding whether the reinsurance agreement meets the risk transfer requirements of SSAP 62. No one method for evaluating risk transfer may be appropriate for use in all cases. Company management must decide which method or methods on which to rely, and in this decision they may be aided by the advice of an actuary. It is typically not the responsibility of the actuary to decide whether the risk transfer so measured is sufficient to meet the standards of SSAP 62; for many companies this decision is made by accounting professionals after considering the actuarial input.

Methods that have been proposed or used by actuarial practitioners include relative risk approaches, Value at Risk (VaR) methods, and Tail Value at Risk (TVaR) methods, including an Expected Reinsurer Deficit method. For a description and discussion of various methods, please see the Academy’s risk transfer report, in particular Appendix 2. It is important to note that such proposed or used methods may or may not be suitable for evaluating risk transfer under any given agreement. Therefore, the decision-maker may want to consult with actuaries and accounting professionals when considering which method or methods are suitable for evaluating risk transfer under a specific agreement.
Appendix 1: Questions and Answers on Risk Transfer

**Question 1**: Which contracts should be subject to a risk transfer cash flow analysis?

**Answer**: Beginning with the 2005 Annual Statement, insurance companies are required to attest that they maintain risk transfer analysis documentation. This requirement applies to all ceded reinsurance contracts that satisfy the following criteria:

1. The contract is effective or amended after Jan. 1, 1994;
2. The ceding company is “taking credit for” the contract in its current financial statement (i.e. has either established an asset or reduced a liability);
3. Risk transfer is not “reasonably self-evident.”

**Question 2**: What is the “reasonably self-evident” standard and how is it applied?

**Answer**: The CEO and CFO of the ceding company are required to attest that they maintain documentation of the risk transfer analysis for certain contracts. Contracts for which risk transfer is reasonably self-evident are exempt from this requirement. This exemption relieves the burden of requiring risk transfer analysis for all contracts.

“Reasonably self-evident” is a principles-based standard. Thus, judgment needs to be applied. In addition, this particular standard has not been tested. The *Where Risk Transfer May Be Reasonably Self-Evident* section of this Practice Note contains more guidance with respect to this area. In the event of uncertainty, it may be wise to err on the side of performing a risk transfer analysis. Nevertheless, it is possible to make a number of observations about the application of the standard.

The first observation is that risk transfer would normally be reasonably self-evident for most traditional reinsurance contracts that are written using standard contract features and for which the motivation is simple risk transfer. For these contracts, it may be easy to conclude that it is reasonably possible (i.e. more than remote) that the reinsurer can incur a significant loss.

A second observation is that even for traditional reinsurance contracts, it is normally prudent to pay particular attention to contracts with aggregate limits that cap the reinsurer’s total loss. For these contracts it is often useful to compare the reinsurer’s premium to the present value of its aggregate limit.

A final observation is that failure to satisfy the “reasonably self-evident” standard does not necessarily mean that a contract has insufficient risk to meet the requirements of SSAP 62, nor that it is a finite risk contract. It simply means that a risk transfer analysis is required in order to evaluate whether the reinsurance agreement meets those accounting requirements. In the context of the attestation by the CEO and CFO, it also means that there is a requirement to maintain documentation of that analysis.
**Question 3:** Who determines the meaning of “reasonably self-evident”?

**Answer:** The “reasonably self-evident” standard is a principles-based standard, and as such, judgment is required in its application. It is also consistent with the guidance of SSAP 62. As with any statutory rule, company management is responsible for making this judgment, although the judgment may be made after consultation with internal and/or external advisors.

**Question 4:** What is the actuary’s responsibility in the risk transfer analysis process?

**Answer:** Actuaries can be expected to play several roles, depending on the circumstances.

In-house actuaries are likely to be asked to help company management develop guidelines for the risk transfer analysis process, including operational procedures for determining which contracts are reviewed, the methods used for the analysis, and the format of the documentation. It is also likely that actuaries will provide significant input in, or even take the lead in, the evaluation and quantification of insurance risk.

Actuaries will also likely be involved in supporting the review work performed by external auditors and regulators.

Nevertheless, while actuaries may take the lead role in quantifying a contract’s risk, it is important to remember that the determination of whether that risk is sufficient for a given accounting treatment is typically an accounting rather than an actuarial decision.

**Question 5:** Will the Appointed Actuary need to certify certain elements of risk transfer?

**Answer:** No, this is not a responsibility of the Appointed Actuary. The guidance on the Statement of Actuarial Opinion Instructions from the NAIC Casualty Actuarial Task Force (CATF) specifically notes that the scope of the opinion does not include an evaluation of risk transfer.

The selection of the individual who is to perform the risk transfer analysis is the responsibility of management. It need not be the Appointed Actuary, nor need it be an actuary at all. Although an actuary may be asked to play a role in cash flow testing for risk transfer, there is no requirement to this effect.

**Question 6:** What is the 10/10 rule and how does it relate to the quantification of sufficient risk transfer in a reinsurance contract?

**Answer:** SSAP 62 includes a risk transfer standard that states that a contract has sufficient risk for reinsurance accounting treatment if the reinsurer has a “reasonable probability” of a “significant loss.” SSAP 62 goes on to define “reasonably probable” as
“not remote.” No further guidance is provided and the SSAP 62 risk transfer test remains a principles-based rather than a bright-line test.

The 10/10 rule is a frequently cited test for determining if there is enough risk in a contract to satisfy the risk transfer standard laid out in SSAP 62. Specifically, the 10/10 rule equates “reasonable possibility” with “at least a 10 percent chance” and “significant loss” with “a net present value loss at least equal to 10 percent of the reinsurer’s net present value premium.” The 10/10 rule may be thought of as a specific case of a more general Value at Risk method for measuring economic losses under a reinsurance agreement.

The Academy’s risk transfer report notes that many actuaries believe the 10/10 rule is inadequate for purposes of testing across the spectrum of all reinsurance agreements, particularly for agreements that reinsure low frequency/high severity risks. Further, COPLFR does not believe a bright-line approach, without allowance for judgment, is optimal. These conclusions were supported by the NAIC’s CATF in its comment letter on the Academy’s risk transfer report.

**Question 7:** What interest rate should be used in each evaluated scenario to make the present value calculation?

**Answer:** Paragraph 14 of SSAP 62 states that “The same interest rate shall be used to compute the present value of cash flows for each reasonably possible outcome tested. … Judgment is required to identify a reasonable and appropriate interest rate.” Similarly, paragraph 66 of FAS 113 states that “A constant interest rate is used in determining these present values because the possibility of investment income varying from expectations is not an element of insurance risk. The Board concluded that it was not necessary to specify in detail the interest rate used in the calculation; judgment is required to identify a reasonable and appropriate rate.”

While not specified in the regulations, a common approach is to use a risk-free interest rate, with duration approximately equal to that of the net cash flows. Based on current industry practice, an interest rate is selected based on U.S. Treasury securities with similar durations. Typically, this is either performed based on a weighted average of the cash flows with U.S. Treasury yield curve analysis using zero-coupon securities, or through the selection of a single rate based on a simple review of U.S. Treasury rates and judgment.

Some contracts may specify interest rates for crediting funds-held and/or experience accounts that are significantly below or above risk-free rates, and/or different from the rate that is used to present-value the cash flows. In these situations, the actuary may choose to seek assistance from accounting and legal professionals in determining how to model the contract terms.

**Question 8:** Let us assume our company plans to improve the content and documentation in the underwriting file prospectively, and we discover that some currently in-force
contracts meet the risk transfer standard but are not sufficiently documented in the file. What could we do?

**Answer:** According to regulators who drafted the Reinsurance Attestation Supplement, it is permissible to add explanatory memoranda to the underwriting file as long as it is clear that this material is dated after entering into the contract and is being provided for ease of explanation purposes.

**Question 9:** If a company did not complete a risk transfer analysis at the time the reinsurance contract was written and then retrospectively constructs a risk transfer analysis for inclusion in the documentation file, would it base the analysis on the most current information and loss experience?

**Answer:** No. The analysis would be completed as though it were prospective, using the information available to the company at the time at which it entered into the contract. As noted in the answer to Question 8, the analysis would be dated when completed, noting that it has been added to the documentation file for ease of explanation purposes.

As a separate matter, such retrospective analyses should only be completed when necessary. It is the view of regulators that compliance with SSAP 62 requires that documentation supporting risk transfer be prepared at the time the contract is agreed upon between the parties.

**Question 10:** May a ceding company use a risk transfer analysis performed by a third party, such as a reinsurance intermediary, as support in satisfying the requirements of the Reinsurance Attestation Supplement?

**Answer:** Yes. Management may obtain expert advice from third parties. However, company management must select the appropriate parties to advise them, must take ownership of the results of the analysis, and must be responsible for maintaining the documentation. These responsibilities cannot be delegated to an outside entity.

**Question 11:** May a ceding company and a reinsurer reach different conclusions regarding risk transfer on a reinsurance contract?

**Answer:** Yes, it is possible that this may happen. A reinsurer and a ceding company may reach agreement on the terms of a reinsurance contract without agreement upon the expected loss ratio or the potential distribution of results on the subject business. Each company is responsible for its own assessment of risk transfer. Typically, the ceding company and the reinsurer do not share their analyses of risk transfer. Given the potential for a difference in knowledge of the subject business and in factors that may affect ceded experience between the ceding company and the reinsurer, and given the amount of subjective judgment that may be involved in the analysis, there is a reasonable possibility that two entities might reach different conclusions regarding risk transfer on the same reinsurance contract.
**Question 12:** Does a risk transfer analysis always need to include probability distributions of cash flow estimates?

**Answer:** No. Sometimes it may be sufficient to generate one or several scenarios to support the risk transfer analysis. The amount of work that is appropriate is a matter of judgment. It typically depends on factors such as the level of complexity of the reinsurance contract, the materiality of the contract, and the nature of any risk-limiting features.

**Question 13:** If a prospective risk transfer analysis indicates that there is significant risk under a treaty, but subsequent loss experience is different than estimated, does that mean the risk transfer analysis is faulty and that the company may need to revise its accounting treatment?

**Answer:** No. The fact that loss experience is different than originally estimated, even if no losses are sustained under the contract, does not imply that there was not risk transfer at inception.

**Question 14:** Where may I find additional information from the CAS or Academy regarding risk transfer standards and testing?

**Answer:** In August 2005, the Academy issued its risk transfer report. The report contains the results of a survey on current industry practices in the evaluation of risk transfer. It includes a variety of alternatives to evaluating risk transfer suggested by actuarial professionals practicing in the area as well as the thoughts of professionals on the subject of which types of contracts should qualify for reinsurance accounting without a risk transfer cash flow analysis. It also includes thoughts on how risk transfer could be measured. Among the attachments to the report is a paper produced by a Research Working Party on Risk Transfer formed by the CAS, as well as insights from 18 individuals who responded to a June 2005 letter asking respondents to address the following four questions: What is an effective test for risk transfer? What criteria should be used to determine whether a reinsurance contract transfers significant risk to the reinsurer? What safe harbors, if any, should be established so that a full risk transfer analysis does not have to be completed for each and every reinsurance contract? What are the advantages and disadvantages of the suggested approach versus other approaches commonly used?

The actuary may also find it helpful to review a paper produced by the CAS Valuation, Finance and Investments Committee (VFIC), “Accounting Rule Guidance Statement of Financial Accounting Standards No. 113 – Considerations in Risk Transfer Testing”. The paper may be found in the 2002 fall edition of the CAS Forum. The paper was written to provide some considerations to CAS members on risk transfer testing.
As the questions of risk transfer and “reasonably self-evident” are principles-based conclusions, the actuary may find this material useful when measuring risk and giving advice on issues surrounding the Reinsurance Attestation Supplement. However, it is important to note that the material in these publications falls in the category of research ideas and does not constitute official guidance.

**Question 15:** I understand that the NAIC is exploring possible changes to statutory accounting for ceded reinsurance. What changes have been made for 2005 and 2006, and what is the NAIC considering for 2007 and beyond? Is the FASB considering similar changes for US GAAP accounting?

**Answer:** During 2005, the NAIC adopted certain changes to SSAP 62 effective beginning with the 2005 Annual Statement. In addition to the Reinsurance Attestation Supplement described herein, the NAIC also increased disclosure requirements for property/casualty insurance companies. The Reinsurance Attestation Supplement and the new disclosures are part of the Annual Statement for property/casualty insurance companies and are public information. These disclosure requirements were revisited in 2006 and some changes are expected for the 2007 annual statement.

In addition, during 2005 the NAIC’s Property and Casualty Reinsurance Study Group considered a proposal to change SSAP 62 to require bifurcation of reinsurance agreements that meet certain criteria. As described in the proposal, bifurcation of a reinsurance agreement would entail accounting for a reinsurance transaction in two parts, such that the part of the transaction transferring insurance risk is accounted for as reinsurance and the part of the transaction financing losses and not transferring insurance risk is accounted for as a deposit. This change was not adopted by the NAIC.

During 2005 and 2006, the FASB also engaged in a project to clarify what constitutes transfer of significant insurance risk in insurance and reinsurance contracts, and to improve accounting by more clearly defining which contracts, or portions thereof, should be accounted for as insurance versus deposits. The FASB issued an Invitation to Comment on bifurcation and other topics during 2006. The primary topic was a comprehensive bifurcation model for reinsurance contracts.

The majority of the comment letters did not support a bifurcation model for insurance and reinsurance contracts, and the FASB is no longer pursuing a comprehensive bifurcation model. However, beginning in 2006 and continuing in 2007, the FASB is considering editorial changes to FAS 113 to clarify the level of insurance risk transfer required for a contract to be accounted for as reinsurance. The FASB will also be considering changes to clarify that non-insurance company policyholders must evaluate whether contracts they hold transfer significant insurance risk. In addition, the FASB is developing improved insurance and reinsurance disclosure requirements.
Appendix 2: Sample Checklists

The sample checklists in Appendix 2 were provided by individual companies and were not developed or substantively modified by COPLFR. The purpose of providing these checklists is to provide examples of how certain companies address their internal compliance monitoring with respect to the evaluation and documentation of risk transfer in reinsurance agreements. The checklists are provided for illustrative purposes only, and the Academy does not endorse any particular approach or make any representation that the checklists assure adherence to risk transfer principles or are sufficient to meet the requirements of the Reinsurance Attestation Supplement. Accordingly, the sample checklists should only be considered in conjunction with the guidance contained in the main portions of this practice note. For any given company, management must consider the specifics of its own business and reinsurance program in order to develop an appropriate categorization and documentation procedure.
Checklist #1
Risk Transfer Evaluation for Reinsurance Contracts

Account Name:  
Agency or Certificate #(s):  
Contract Effective Date:

Underwriter:  
Evaluation Date:

As outlined within the Reinsurance Compliance Policy and the Guidelines for Determining Risk Transfer document, and in conjunction with Accounting Principles, a risk transfer evaluation is to be completed to ensure compliance with FAS 113 and SSAP 62 & 75 requirements for reinsurance contracts.

This document has been compiled to help identify reinsurance contract conditions that highlight if a contract or subsequent amendment may not pass the FAS 113 or SSAP 62 & 75 risk transfer tests. It also is utilized to document the conclusions reached related to whether or not risk transfer exists for a specific reinsurance placement. Conclusions should be documented within the "Risk Transfer Conclusion Statement" section of this document and stored with the underwriting files.

Risk transfer determination can be subjective. A complete understanding of the contract and its underlying business is required before that determination can be made.

**Contract Evaluation Checklist:**

The following checklist has been established to help bring consistency and more objectivity around identifying potential reinsurance agreements that may not pass risk transfer. If any of the "Underwriting Review of Contract Terms/Conditions" are noted as a "Y", meaning they apply to the contract under review, then the rationale as to why the condition does not inhibit significant insurance risk (underwriting and timing) from occurring should be clearly documented in the "Risk Transfer Conclusion Statement" section of this document. The existence of any of the following features should not be construed as confirmation that a contract does not pass the risk transfer guidelines.

<table>
<thead>
<tr>
<th>#</th>
<th>Underwriting Review of Contract Terms/Conditions</th>
<th>Y=Yes, N=No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is the reinsurance contract written with features that limit the reinsurer from suffering a combined ratio greater than x%?</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Is the reinsurance contract written with features that delay the timing of premium, commission or loss payments under the contract?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Does the reinsurance contract include a retrospective premium adjustment feature (e.g. swing rating)?</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Is the reinsurance contract written in a manner that no cash is transferred between the reinsurer and the reinsured?</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Does the reinsurance contract contain an aggregate limit feature applicable to the principle coverage provided within the contract (this includes any feature which limits coverage to a maximum amount, e.g. limited reinstatements)? If yes, answer question 5.a. for short tail business or 5.b. for long tail business.</td>
<td></td>
</tr>
<tr>
<td>5.a</td>
<td>For short tail business, is the reinsurance premium x% or greater of the total aggregate limit?</td>
<td></td>
</tr>
<tr>
<td>5.b</td>
<td>For long tail business, is the reinsurance premium x% or greater of the total aggregate limit?</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Does the reinsurance contract contain a loss corridor feature?</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Does the reinsurance contract contain an annual aggregate deductible feature?</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Does the reinsurance contract contain a loss ratio cap feature?</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Does the reinsurance contract contain a payback feature for losses from prior years?</td>
<td></td>
</tr>
</tbody>
</table>
## Checklist #1
### Risk Transfer Evaluation for Reinsurance Contracts

<table>
<thead>
<tr>
<th>#</th>
<th>Underwriting Review of Contract Terms/Conditions</th>
<th>Y=Yes, N=No</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.</td>
<td>Does the reinsurance contract contain a profit, contingent or sliding scale commission feature?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>11.</td>
<td>Does the reinsurance contract contain a no claims bonus feature?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>12.</td>
<td>Does the reinsurance contract have an unusually high commission rate?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>13.</td>
<td>Does the reinsurance contract contain a mandatory commutation feature (i.e., commutation can be forced by either party, completed on a specific date, or tied to experience account provisions)? *</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>14.</td>
<td>Does the reinsurance contract contain a funds withheld or experience account feature?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>15.</td>
<td>Does the reinsurance contract contain an interest rate feature where the interest rate differs (i.e., is higher) from the prevailing market rate?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>16.</td>
<td>Is the reinsurance contract term continuous, for an extended period of time or renew automatically?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>17.</td>
<td>Is the reinsurance coverage provided on a retroactive basis (including loss portfolio transfers)?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>18.</td>
<td>Does the reinsurance contract contain a carryover feature of experience or benefits from one contract period to another?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>19.</td>
<td>Is there a linkage of experience between different reinsurance contracts?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>20.</td>
<td>Are you aware of circularity between this reinsurance contract and any other reinsurance contract(s) (i.e. exposure ceded under one contract and reassumed under another)?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>21.</td>
<td>Are there any verbal or written side-agreements in conjunction with this reinsurance contract?</td>
<td>Y=Yes, N=No</td>
</tr>
<tr>
<td>22.</td>
<td>Does the reinsurance contract have any unusual triggers or provisions?</td>
<td>Y=Yes, N=No</td>
</tr>
</tbody>
</table>

* Note: The Xxx standard treaty commutation clause providing Xxx with the sole right to demand commutation subject to specific triggers described as Termination Events relating to financial conditions of the reinsurer is deemed not to impede risk transfer. Therefore if the only commutation provision is that provided by Xxx's standard clause, the question above relating to commutations may be answered "N".

For all captive reinsurance contract placements, financial modeling to assess risk transfer must be completed. An exception to this rule is for 100% quota share contracts containing no limitations changing the nature of the exposure thereby allowing for an application of the paragraph 11 rule within FAS 113. Such exception should be designated by checking the box indicating such within the Risk Transfer Conclusion Statement.

For all other reinsurance contracts, if any of the items within the "Underwriting Review of Contract Terms/Conditions" have been answered with a "Y" and a reasonable explanation as to applicability of risk transfer can not be provided, or for some other reason there is question as to whether it is reasonably possible that the reinsurer may realize a significant loss, then financial modeling should be completed to assess risk transfer.

<table>
<thead>
<tr>
<th>#</th>
<th>Risk Transfer Analysis Financial Modeling</th>
<th>Y=Yes, N=No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Has modeling of the nature described in paragraphs 10 &amp; 11 of FAS 113 been completed that reveals the reinsurer may have at least a x% probability of incurring at least a x% net present value underwriting loss from the transaction?</td>
<td>Y=Yes, N=No</td>
</tr>
</tbody>
</table>

****Complete the Risk Transfer Conclusion Statement based upon the following criteria.****

If the above condition is answered as a "Y", such analysis and related documentation should become part of the underwriting file and the conclusion should be documented within the "Risk Transfer Conclusion Statement" section below.

If the above condition is answered as an "N" due to the conclusion that the numerical analysis is not prescribed based on the "Underwriting Review of Contract Terms/Conditions" analysis, documentation of such should be included within the "Risk Transfer Conclusion Statement" section below. Note, this option is not applicable for captive reinsurance contracts.
If the numerical analysis has been completed and the above condition is answered as an "N", determination must be given as to whether the transaction passes risk transfer. This is still possible, as all the facts and conditions of the contract must be considered. Documentation should be completed within the "Risk Transfer Conclusion Statement", as appropriate. By falling within this category, the contract falls within the "grey zone" as defined by the Xxx Accounting Principles Policy and therefore must be referred to the following for approval: (1) Business Unit CUO & CFO; (2) Corporate Assistant Controller (3) Head of Reinsurance. Additionally, notification must be made to Reinsurance Operations. All analysis, related documentation, conclusions and approvals should be documented within the "Risk Transfer Conclusion Statement" section below.

If it is determined that the contract does not pass risk transfer the presumption is to not pursue the contract. Other considerations may be taken into account however, as to the desirability of writing the contract, which would require the following levels of approval: (1) Business Unit CUO & CFO; (2) Head of Reinsurance; (3) Corporate Assistant Controller. Additionally, Reinsurance Operations must be notified to ensure the application of proper accounting procedures (i.e. deposit accounting). Any such contract considerations, conclusions and approvals must be documented.

**Risk Transfer Conclusion Statement:**

<table>
<thead>
<tr>
<th>Mark the box to the right with an X if the statement below is applicable to the contract being analyzed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>As the contract herein referenced is a 100% quota share containing no conditions changing the nature of the exposure, it is deemed that Risk Transfer Analysis Financial Modeling was not prescribed to verify the level of risk transfer through application of the paragraph 11 rule within FAS 113.</td>
</tr>
</tbody>
</table>

Signature of Underwriter: ________________________________________________

Approvals/Notifications (as required above for "grey zone" issues and/or deposit accounting):

BU CUO: _______________________________        Corp. Asst. Controller: _______________________________

BU CFO: _______________________________        Head of Re: _______________________________

RO notification provided to: _______________________________
Section I: Account Information and Identification of Characteristics

Treaty Name: _______________________________
Treaty Number: _______________________________
Effective Dates: _______________________________
Treaty Type: _______________________________
Lines of Coverage: _______________________________
Summary of Policy Limits: _______________________________
Named Insured Loss Retention: _______________________________

As part of the risk transfer evaluation for the treaty noted above, answer all questions to document whether the treaty has any of these characteristics.

_____ (Yes/No) **Experience accounts:** These arrangements allow the reinsured to share in the favorable experience of the underlying contracts by reference to an “experience account” that typically tracks premiums, less losses incurred (i.e. paid plus any outstanding reserve), less applicable expenses, plus interest. Experience provisions also can require the reinsured to share in unfavorable experience by requiring additional payments to the reinsurer in the event that the experience account is negative. Experience accounts can be referred to under different terms, such as experience balances or profit sharing accounts (beyond those described below).

_____ (Yes/No) **Profit and loss sharing provisions:** Profit and loss sharing agreements where the reinsured can share in excess of x% of the net profits after an allocation of reinsurers expenses, not to exceed x% of the written premium. Net profits are generally defined to be premiums written less losses incurred less commissions incurred.

_____ (Yes/No) **Claims Bonuses or Sliding Scale Commissions:** Any provisions that include No Claim Bonuses or Sliding Scale Commissions which can vary the ultimate net profit by more than x% of Premium Written.

_____ (Yes/No) **Non-standard cancellation provisions:** These provisions can be structured to reduce the risk to the reinsurer, for example, by allowing, under certain circumstances, the reinsurer to terminate the policy without paying all of the losses that would otherwise be covered under the policy.

_____ (Yes/No) **High Premium-to-Limits Ratio:** An aggregate loss limit or caps on loss limits where the premium relative to the limits exposed is greater than the following per line of coverage: Property Coverages (x%), Short Tail Casualty Lines (x%), and Long Tail Casualty Lines (x%). These thresholds may indicate that the premium may begin to approximate the present value of the limit.
Checklist #2

_____ (Yes/No)  *Funds held provisions:* Any funds withheld other than provided by the terms of the Company’s Long-tail or Short-tail Security Clause or pursuant to local law or regulation.

_____ (Yes/No)  *Loss corridors:* This feature, which may exist in various forms including inner aggregate retentions, serves to eliminate or limit the risk of loss for a specified percentage or dollar amount of claims within the contract coverage. For example, in a contract providing coverage for a policyholder’s first $3,000,000 of losses, the reinsurer will pay the first million and last million of losses but will exclude the corridor from $1,000,000 to $2,000,000.

_____ (Yes/No)  *Premium adjustment features:* Any provision that requires the payment of additional premiums in the event of claims may mitigate the amount of risk to the reinsurer. In particular, retrospective rating features that do not have minimum or maximum premium amounts nor a per occurrence limitation on the amount of losses that affect the premium adjustment are more likely to mitigate risk transfer. Premium adjustment features include reinstatement premiums, whereby the contract may require the reinsured to pay for reinstated coverage for the balance of the contract period, although reinstatements that are at the option of the reinsured are less likely to have an adverse effect on the risk transfer analysis. This does not apply to adjustments driven by changes in assumed exposure base (As respects reinstatement premiums on excess of loss treaties, a “yes” answer will require completion of Section II (Risk Transfer Documentation) only where: (i) the ratio of the treaty’s expected premium to the treaty limit is more than x%; or (ii) the additional premium for any reinstatement is more than x% of the original premium. However, any “yes” answer must be considered in the development of the Risk Transfer Conclusion (Section III).)

_____ (Yes/No)  *Deferred premium or claim payments:* Features that delay timely receipt of premiums or reimbursement of losses may act to mitigate the transfer of insurance risk by affecting the present value of contractual cash flows. This does not include scheduled installment premiums as long as the premiums are due before they are earned. It also does not include provisions that call for claim payments that, for administrative ease, are due according to a periodic schedule, as long as the payments are at least as frequent as annual and are not fixed as to amount.
<table>
<thead>
<tr>
<th>Checklist Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retroactive coverage</td>
<td>Any coverage of events that are known to have occurred, excluding “roll forward” provisions within the termination clause of the agreement.</td>
</tr>
<tr>
<td>Adjustable (or floating) limits and/or attachment points and/or retentions</td>
<td>These features are generally intended to modify terms and conditions as a result of the emergence of facts not (precisely) known at the inception of the treaty. To the extent the emerging facts relate to claims experience, there is likely to be some mitigation of risk transfer. Evaluating the potential effect on risk transfer may be complicated, but it is necessary.</td>
</tr>
<tr>
<td>Commutation provisions</td>
<td>While the parties to an agreement can always negotiate a modification or commutation of the agreement, a commutation agreement is generally bilateral in nature. To the extent that the commutation allows the reinsured a unilateral provision to commute the agreement and/or specify the amount, or a formula for determining the amount, to be paid upon commutation, it may serve to mitigate risk transfer.</td>
</tr>
<tr>
<td>Mandatory renewals</td>
<td>Treaties that must be renewed or that mandate the exercise of extended reporting provisions may be designed to assure that the reinsurer does not suffer a significant loss.</td>
</tr>
<tr>
<td>Multi-year treaties or reinsurance agreements</td>
<td>Treaties and reinsurance agreements with terms longer than one year may reduce the risk of loss to the reinsurer particularly where the terms and conditions call for the interim adjustment of premium. Continuous treaties should not be deemed multi-year.</td>
</tr>
<tr>
<td>Dual trigger provisions</td>
<td>Treaties or reinsurance agreements that require more than one loss event and/or the combination of a covered loss event with other qualifying conditions generally reduce the risk to the reinsurer.</td>
</tr>
<tr>
<td>Blended coverages</td>
<td>Any reinsurance contract that blends clearly unrelated coverages not triggered by a common loss event or multi-line or multi-peril policies, for the express purpose of justifying risk transfer.</td>
</tr>
<tr>
<td>Embedded Derivatives</td>
<td>Where the contract contains an embedded derivative, as defined in SFAS No. 133, the risk transfer assessment must be performed independent of the embedded derivative.</td>
</tr>
</tbody>
</table>
Checklist #2

_____ (Yes/No)  **Affiliated Reinsurance:** Any contracts between a Company affiliate and a non-affiliate where it is known that the non-affiliate intends to retrocede back to the same or other affiliated Company.

**Other Concerns:** Please describe

If any of the items above have a "yes" answer, the following risk transfer documentation (Section II) is required, otherwise proceed to Section III.

**Section II: Risk Transfer Documentation**

Items 1-10 list required documentation to be placed in the placement or underwriting file (to the extent applicable):

1) ☐ Treaty year experience exhibits with losses
2) ☐ Historic Large Loss Exhibits that shows excess losses have occurred
3) ☐ Policy profiles that show any number of risks exposed in the treaty
4) ☐ Loss Triangles available in file
5) ☐ Market quotes based upon Rate-on-Line (ROL)
6) ☐ Aggregate summaries showing exposed limits
7) ☐ All available cash flows
8) ☐ Rating model output with estimates of 1 in 100/250 year events
9) ☐ Industry experience for similar type insurance products

_____ NONE OF THE ABOVE ITEMS APPLY
Checklist #2

Section III: Risk Transfer Evaluation and Conclusion

Description of transaction including economic intent:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Risk Transfer Conclusion (ensure all “Yes” answers are considered in the development of the conclusion):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Sufficient Risk Transfer: ______ (Yes/No)

Section IV: Sign-Offs:

By my signature below I hereby certify that: i) I have read and understand the Risk Transfer Policy, ii) I agree with the risk transfer conclusion, and iii) I have no reason to believe that the reinsured is trying to achieve a misleading financial result. I have not been a party to any side agreement and am not aware of any such agreements associated with this contract.

If no “Yes” answers to above questions:

Reinsurance Manager: ______________________
Date: ______________________

If “Yes” answers to above questions:

Reinsurance Officer: ______________________
Date: ______________________

Business Unit Chief Financial Officer (or designee) ______________________
Date: ______________________
Reinsurance Contract Review

Contract Name: ________________________________

Stated Effective Date: __________________________

Date Contract Entered Into: ______________________

Expiration Date: _________________________________

Business Covered: _______________________________

Type of Contract (Q/S, XL): _________________________

Review performed on: _____________________________

A. Determination of Contract Terms Impacting Analysis:

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Contract Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does the contract include normal indemnity features against loss and liability relating to insurance risk? (SFAS 113, para. 6)</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

If the answer is “No,” the contract does not constitute a reinsurance agreement and is not subject to FAS 113. If “Yes,” continue on with Question 2.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Does the contract have more than one layer of coverage with substantially different reinsurer and different probabilities of loss on each layer?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>3. Does the contract cover more than one type of business (i.e. prop. &amp; liab.) and contain separate limits for each?</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>
4. Are there any other contracts that cover substantially the same business that should be combined with the contract for risk analysis?  

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is there more than a remote probability of a significant variation in the ultimate amount received from the reinsurer in all layers? (SFAS 113, para. 9a)</td>
<td>Yes/No</td>
</tr>
<tr>
<td>2. Is there timely reimbursement of covered losses from the reinsurer (at least quarterly in most cases)? (SFAS 113, para. 9a)</td>
<td>Yes/No</td>
</tr>
<tr>
<td>3. Does the contract provide for stipulated payment schedules, accumulating retention or other features which reduce the variability of the timing of loss reimbursement? (SFAS 113, para 9a.)</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

If the answer to either Questions 2 and 3 is “Yes,” consider whether there is a need for each layer of the contract to be separately analyzed for risk transfer. If the answer to Question 4 is “Yes,” multiple contracts may need to be combined for the risk transfer analysis. The specific contract terms and the availability of data will be the determining factors. Continue on with analysis using appropriate contract segmentation.

Refer to assumptions/procedures document for further instructions on completing the risk determination section.

**B. Determination of Risk Transfer**

If the answer to Question 1 or 2 is “No” OR if the answer to Question 3 is “Yes,” the contract does not meet the risk transfer test to qualify for accounting as reinsurance and must be recorded as a deposit. Skip to Section (E). Otherwise, continue on with Question 4.
4. Can it be readily determined that the reinsurer has assumed substantially all of the insurance risk relating to the reinsured portion of the underlying contract? (SFAS 113, para 11) | Yes/No

If the answer to Question 4 is “Yes,” continue on with Questions 5-11 to identify the contract provisions that may require accruals and then skip to Section (C). Otherwise complete all of Section (B) (Questions 5-16).

<table>
<thead>
<tr>
<th>Provision</th>
<th>Contract Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. What is the annual premium?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>6. Is there a profit sharing arrangement?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>7. In the event of a loss, can coverage be reinstated? At what cost?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>8. Are there any additional retrospective premium adjustments based on contract experience?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>9. Is there any contractual obligations to pay back losses?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>10. Are there any changes to contract limits with no corresponding change in cost?</td>
<td>Yes/No</td>
</tr>
<tr>
<td>11. Other</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>
12. Based on the above provisions plus expected loss recoveries, is it readily apparent that at least x% of the time, the present value of expected cash flows from the reinsurer exceed the present value of all amounts paid or deemed to have been paid to the reinsurer by more than x%? (SFAS 113, para. 10) | Yes/No

If the answer to Question 12 is “Yes,” skip to Section (C); otherwise perform a cash flow analysis and continue on with Question 13.

| 13. Based on the cash flow analysis, are there scenarios where the ratio of the present value of expected cash flows from the reinsurer to the present value of all amounts paid or deemed to have been paid to the reinsurer exceeds x% (i.e. the reinsurer has experienced at least a x% loss)? | Yes/No |

| 14. Is the total probability of the occurrence of the “x% loss” scenarios referenced in Question 13 greater than x%? | Yes/No |

If the answer to Question 14 is “Yes,” it is reasonably possible for the reinsurer to realize a significant loss, the contract meets the risk transfer test and it should be recorded as reinsurance. Skip to Section (C). If the answer is “No,” continue on with Question 15.

| 15. Can the contract be categorized as a “Catastrophe cover?” | Yes/No |

| 16. After review of the contract terms (i.e. funding provisions, arms length status, other variability-restricting provisions), can it be determined that risk has been transferred? | Yes/No |
If the answer to Questions 15 or 16 is “No,” the contract does not qualify for accounting as reinsurance and must be recorded as a deposit, skip to Section (E). If the answer to both questions is “Yes,” the contract meets the risk transfer test and should be recorded as reinsurance. Continue on to Section (C).

C. Determination of Prospective vs. Retroactive Classification:

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Contract Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does the contract cover only losses incurred as a result of future insurable events? (SFAS 113, para. 5)</td>
<td>Yes/No</td>
</tr>
<tr>
<td>2. Does the contract cover only losses incurred as a result of past insurable events? (SFAS 113, para. 95)</td>
<td>Yes/No</td>
</tr>
<tr>
<td>3. If the contract covers losses incurred as a result of both future and past insurable events, can the respective provisions be accounted for separately? (SFAS 113, para. 99)</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

If the answer to Question 1 is “Yes,” the contract is prospective and should be recorded as reinsurance. Skip to Section (D). If the answer is “No,” continue on with Question 2.

If the answer to Question 2 is “Yes,” the contract is retroactive and should be recorded using modified deposit accounting. Skip to Section (D). If the answer is “No,” continue with Question 3.

If the answer is “No,” the entire contract is considered retroactive and should be recorded using modified deposit accounting. If the answer is “Yes,” then each provision should be accounted for accordingly, continue with Section (D).
D. Determination of Future Obligations:

<table>
<thead>
<tr>
<th>Provision</th>
<th>Accrual Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Profit Sharing</td>
<td>Yes/No</td>
</tr>
<tr>
<td>2. Reinstatement Premium</td>
<td>Yes/No</td>
</tr>
<tr>
<td>3. Additional retrospective premium adjustments</td>
<td>Yes/No</td>
</tr>
<tr>
<td>4. Payback of losses</td>
<td>Yes/No</td>
</tr>
<tr>
<td>5. Reduced limits</td>
<td>Yes/No</td>
</tr>
<tr>
<td>6. Other</td>
<td>Yes/No</td>
</tr>
</tbody>
</table>

If any of the above items require accrual, provide responsible area with appropriate procedures. Continue with Section (E).

E. Related Arrangements:

1. Reinsurance Operations acknowledges that the contract constitutes the entire understanding between the parties and does not provide any financial guarantees to the assuming company. Yes  __  No  ____

F. Additional Procedures

If a document other than the final contract was used for the review, the following additional procedures should be completed upon receipt of the final agreement:

1. Compare terms in the final contract to those in the document used in the initial review to make sure there are no significant differences.

   Note: Significant differences should be treated as contract amendments; therefore, risk transfer and the reporting of accruals must be reassessed.

2. Update the Reinsurance Contract Review form deleting references to the previous document and adding references to the new contract.

G. Conclusion:

Contract meets risk transfer criteria: Yes  ____  No  ____
Contract is: Prospective  ____  Retroactive  ____  Both  ____
Contract accounted for as: Reinsurance  ____  Deposit  ____
Checklist #4: Checklist for Risk Transfer and Self-Evident Contracts

If any items are checked yes, or are questionable, refer contract to ___ prior to placement.
Include completed checklist with referral and copy of proposed contract

Name of Company: 

<table>
<thead>
<tr>
<th>Y</th>
<th>N</th>
<th>Art.#</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Aggregate Stop Loss Contracts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aggregate limit or loss ratio cap (not including traditional cat covers or clash covers)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loss retention corridor in either Q.S. or XOL contract</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sliding scale or other loss experience based adjustments to commission</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loss sensitive rating features, including but not limited to premium swing plan, experience refund, experience account, profit sharing &gt; x%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sub-limits (this does not apply to occurrence caps for natural or terrorism events, or sub-limits for DJ expense, ECO, XPL, LAE)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multi-year contract protecting the reinsurer from exposure changes and/or adjusting terms in later years based on results in earlier years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retentions accumulated from multiple years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Profitable lines of business added to the contract to compensate for riskier lines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total potential premium that approaches the present value of the total aggregate limit (this does not apply to per risk limit but rather aggregate limit). When in doubt, refer if maximum premium to aggregate coverage limit is &gt; x% for clash, x% for property per risk and cat, and x% for all casualty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conditional cancellation clause when coverage already provided is reduced or removed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commutation clause that reduces the risk of the Reinsurer under some event</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This does not apply to traditional commutation where payment is present value of liability at reasonable terms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loss portfolio transfer, retroactive contract or novation (other than name change)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any provision that could be perceived as a delay in loss payments or does not provide for at least quarterly reporting and settlement of losses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When in doubt, refer if payments are permitted &gt; x days from account or billing or upon presentation of satisfactory proof of loss</td>
</tr>
</tbody>
</table>

ALL DOUBTS SHOULD BE RESOLVED IN FAVOR OF REFERRAL
“Items to consider when determining whether or not a reinsurance contract is Reasonably Self-Evident of risk transfer”:

1. COPLFR, Nov 2005 Risk Transfer Testing Practice Notes, Common Safe Harbors section, pg 11, Typically Considered Safe Harbors
   o “A straight quota share with no risk-limiting features other than a loss ratio cap with negligible effect on the economics of the transaction;”
   o “Single year property catastrophe and casualty clash contracts with little or no risk limiting features apart from reinstatement premium common to these types of contracts.” Casualty clash structures are addressed in the bullet point: COPLFR, Nov 2005 Risk Transfer Testing Practice Notes, Common Safe Harbors section, pg 10, paragraph 3.
   o “Most facultative and treaty per risk excess of loss arrangements with rates on line well below the present value of the limit of coverage, or without aggregate limits, sub-limits, or contingent features.” These structures are also addressed in the bullet point: COPLFR, Nov 2005 Risk Transfer Testing Practice Notes, Common Safe Harbors section, pg 10, paragraph 3.

   To follow COPLFR, risk transfer is reasonably self-evident.

2. COPLFR, Nov 2005 Risk Transfer Testing Practice Notes, Common Safe Harbors section, pg 11, Contracts Not Typically Considered Reasonably Self-Evident
   o “Aggregate excess of loss contracts—most of these contracts either contain significant risk-limiting features, and/or attach in an expected layer of loss so that the premium approaches the present value of the coverage provided.” Risk transfer analysis is recommended on all aggregate excess of loss contracts.
   o “Contracts with experience accounts, experience rating refunds, or similar provisions, if such provisions have a significant impact on the contract’s economic.” Risk transfer analysis is recommended on all accounts with loss sensitive premium, swing commissions unless the structure at the minimum commission satisfies the underwriting margin comparison test criteria (see attached example), profit commissions unless the structure before a profit commission satisfies the underwriting margin comparison test criteria, loss corridors, caps/limits at levels having greater than minimal impact on contract expected loss and variability. This provision will require the judgment of the accountant and actuary in determining self-evidence.
   o “Multiple year contracts—many of these have provisions that protect the reinsurer from changes in exposure over the contract period and make the analysis complicated, and/or have features that adjust the terms of later
years explicitly or implicitly based on results in earlier years.” Risk transfer analysis is recommended on all multi-year contracts with termination provisions based on mutual consent of the cedent and reinsurer. Otherwise, the contract may be viewed as an annual contract in determining self-evidence. If an agreement is considered to be multi-year, the terms are to be modeled on a multi-year basis. Modeling is to take place before the first contract year incepts. Repeat modeling in subsequent years of a multi-year agreement is only necessary when there is a change in contract terms.

- “Quota share contacts with risk limiting features such as loss retention corridors, sliding scale commissions, loss ratio caps and/or sub-limits that significantly impact the amount of risk being transferred.” Risk transfer analysis is recommended for contracts with loss corridors, loss-sensitive commissions, caps/limits at levels having greater than minimal impact on contract expected loss and variability.

3. Further expansion on property per risk and casualty per occurrence structures.

**COPLFR, Nov 2005 Risk Transfer Testing Practice Notes, Common Safe Harbors section, pg 10, paragraph 3** - “Risk transfer is reasonably self-evident in most traditional per-risk and per-occurrence excess of loss reinsurance contracts. For these contracts, a predetermined amount of premium is paid and the reinsurer assumes nearly all or all of the potential variability in the underlying losses, and it is evident from reading the basic terms of the contract that the reinsurer can incur a significant loss. In many cases, there is no aggregate limit on the reinsurer’s loss. The existence of certain experience-based contract terms, such as experience accounts, profit commissions, and additional premiums, generally reduce the amount of risk transfer and make it less likely that risk transfer is reasonably self-evident.”

To follow COPLFR, risk transfer for property per risk, casualty per occurrence excess of loss contracts is:

- Reasonably self-evident for contracts with no loss-sensitive features, no experience funds, caps/limits at levels having minimal impact on contract expected loss and variability.
- Is not reasonably self-evident for contracts with loss-sensitive features, caps/limits at levels having greater than minimal impact on contract expected loss and variability, sub-limits for exposures (ex. Terrorism) that are not the primary exposure intended for cession.
- Gray areas that will require judgment of the accountant and actuary as to whether self-evident:
  - Occurrence and aggregate limits on per risk (Aggregate limits on per occurrence contracts) contracts with relatively low rate on line,
Checklist #5

particularly if the limit significantly caps exposure to loss of the entire contract. The same can be applied to sub-limits for exposures (Ex. Terrorism) that are not the primary exposure intended for cession.

- Contracts with reinstatement premiums where the likelihood of a reinstatement is not minimal. A more extreme example: It is uncommon, but reinstatement wording has appeared on lower layers in order to spread the premium collection over a longer period of time to benefit the cedent’s cash flow. In these scenarios, it can be the norm, and not the exception, to pay reinstatement premiums.

- Additional Multi-Year Determinations Beyond Multi-Year Contracts: Contract terms may seem reasonably self-evident on a one-year basis. Factoring in termination provisions may introduce the need to look at a contract on a multi-year basis. This may cause a contract not to be interpreted as self-evident.
  - Continuous Contracts – Notice of cancellation by either party within a specified period of time ends the relationship. There is no guarantee that either party will continue the reinsurance relationship. The contract should be viewed on an annual basis for the determination of self-evident and for risk transfer analysis if not deemed self-evident.
  - Multi-Year Block Adjustments or deficit/credit carryforwards on loss sensitive premiums and ceding commissions, annual term/continuous contract – Risk transfer analysis is recommended on blocks and carryforwards. There is no guarantee that either party will continue the reinsurance relationship. As a result, it is recommended that the contract be modeled on an annual basis, but the impact of historical contract years on the pending contract year should be modeled. In other words, the loss sensitive element from prior contract years, that will impact the pending contract year, should be incorporated into the modeling for the pending contract year. In the first year of a block or carryforward provision, only the one year should be considered. In the second year, the impact and the variability of the impact of the first year should be considered when modeling the second year,... In modeling prior year(s) impact, the emerged years should be considered according to how the experience has actually emerged.
Methodologies to Determine Risk Transfer for Contracts Determined to NOT be reasonably self-evident

Many methodologies have been proposed and are under development to replace the 10-10 rule due to its inadequate handling of low frequency/high severity risks.

COPLFR, Nov 2005 Risk Transfer Testing Practice Notes, Risk Transfer Cash Flow Testing section, pg 13, paragraph 3 – “Risk transfer analysis may range from very simple premium to loss limit approaches for certain contracts, to highly sophisticated stochastic models with many inputs and variables for other contracts. Typically, the required rigor of such analysis increases as the contractual terms become more complex, and/or to the extent that risk transfer becomes more limited through risk-limiting contract features.”

COPLFR, Nov 2005 Risk Transfer Testing Practice Notes, Risk Transfer Cash Flow Testing section, pg 14, paragraph 6 – “In some cases, in particular for those contracts in which a single event, such as a large catastrophe, is required to produce a significant loss to the reinsurer, an analysis of what is reasonably possible is sometimes limited to the identification of one scenario or several alternative scenarios, and discussion as to whether or not those are reasonably possible.”

COPLFR, Aug 2005 Risk Transfer in P&C Reinsurance: Report to the Casualty Actuarial Task Force of the NAIC, Risk Transfer Alternatives section, pg 16, paragraph 8/Risk metric – “Some tests recommended in various submissions that focus on the reinsurer’s results are as follows: CAS Working Party: Expected Reinsurer Deficit.”

To follow COPLFR/CAS Working Party:
- Scenario testing, UW margin comparison, payback calculation and other simplistic methods can be relied upon to perform risk transfer testing. See UW margin comparison example on a subsequent page.
- In cases where full-blown cash flow analysis is warranted, the expected reinsurer deficit method appears to be a much improved method over the 10-10 rule. The proposed threshold for the ERD method is x% or greater deficit. See example on a subsequent pages.
- Actuarial judgment on a case-by-case basis must be applied to determine the most appropriate method of testing risk transfer.
- As appropriate methodologies evolve in the insurance industry, they should be incorporated into risk transfer testing.
Underwriting Margin Comparison Example

Cedent direct expense ratio = 20%
Cedent direct breakeven loss ratio = 1 - 20% = 80%

Quota Share Reinsurance structure:
Min  CC / LR = 19.5% / 73.0%
Prov CC / LR = 30.0% / 62.5%
Max  CC / LR = 39.0% / 50.5%

<table>
<thead>
<tr>
<th>Subject Loss Ratio</th>
<th>Cedent Expense Ratio</th>
<th>Cedent Margin</th>
<th>Reinsurance Ceding Commission</th>
<th>Reinsurance Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.5%</td>
<td>20%</td>
<td>29.5%</td>
<td>39.0%</td>
<td>10.5%</td>
</tr>
<tr>
<td>62.5%</td>
<td>20%</td>
<td>17.5%</td>
<td>30.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>73.0%</td>
<td>20%</td>
<td>7.0%</td>
<td>19.5%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Breakeven</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80.0%</td>
<td>20%</td>
<td>0.0%</td>
<td>19.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>80.5%</td>
<td>20%</td>
<td>-0.5%</td>
<td>19.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>90.0%</td>
<td>20%</td>
<td>-10.0%</td>
<td>19.5%</td>
<td>-9.5%</td>
</tr>
<tr>
<td>100.0%</td>
<td>20%</td>
<td>-20.0%</td>
<td>19.5%</td>
<td>-19.5%</td>
</tr>
</tbody>
</table>

If the cedent’s direct margin equals or is greater than the reinsurer’s margin beyond breakeven, the reinsurer has assumed substantially all of the cedent’s downside risk.
Expected Reinsurer Deficit

\[ \text{Expected Reinsurer Deficit} = \text{Probability of (Frequency of a Present Value Underwriting Loss)} \times \text{Average Severity of a Loss Given There is a Loss} \]

Example:

<table>
<thead>
<tr>
<th>Trial Number</th>
<th>NPV of Profit/(Loss) As Pct of PV of Prem</th>
<th>Trial Number</th>
<th>NPV of Profit/(Loss) As Pct of PV of Prem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-21.8%</td>
<td>11</td>
<td>7.3%</td>
</tr>
<tr>
<td>2</td>
<td>8.0%</td>
<td>12</td>
<td>17.7%</td>
</tr>
<tr>
<td>3</td>
<td>-5.0%</td>
<td>13</td>
<td>-36.8%</td>
</tr>
<tr>
<td>4</td>
<td>31.1%</td>
<td>14</td>
<td>7.3%</td>
</tr>
<tr>
<td>5</td>
<td>13.4%</td>
<td>15</td>
<td>16.7%</td>
</tr>
<tr>
<td>6</td>
<td>1.4%</td>
<td>16</td>
<td>11.7%</td>
</tr>
<tr>
<td>7</td>
<td>7.3%</td>
<td>17</td>
<td>9.2%</td>
</tr>
<tr>
<td>8</td>
<td>20.5%</td>
<td>18</td>
<td>15.7%</td>
</tr>
<tr>
<td>9</td>
<td>-1.2%</td>
<td>19</td>
<td>5.5%</td>
</tr>
<tr>
<td>10</td>
<td>11.7%</td>
<td>20</td>
<td>-15.8%</td>
</tr>
</tbody>
</table>

Frequency of Loss: 5 of 20 = 25%

Severity of Loss Given A Loss: -16.1% or the average of -21.8%, -5.0%, -1.2%, -36.8%, -15.8%

Expected Reinsurer Deficit: 3.95% deficit or 25% \( \times \) -16.1%
Sources for this document include:

SSAP 62 and SSAP 5

Risk Transfer in P&C Reinsurance: Report to the Casualty Actuarial Task Force of the National Association of Insurance Commissioners
American Academy of Actuaries, Committee on Property and Liability Financial Reporting August 2005

Risk Transfer Testing of Reinsurance Contracts: Analysis and Recommendations
CAS Research Working Party on Risk Transfer Testing August 2005
A copy can be found at: http://www.casact.org/research/risk-transfer-wp-report.pdf
Checklist #6
Ten Characteristics Triggering Risk Transfer Testing

1) Quota Share:
   i. If terms include any type of loss sensitive or loss limiting feature, including but not limited to sliding scale commissions, loss corridors, deductibles, profit commissions, profit sharing, occurrence caps (if less than x% of assumed premium), aggregate caps, or experience accounts. Note that a fixed ceding commission in itself would not trigger risk transfer testing under these guidelines, unless the commission is below the ceding company’s acquisition costs.
   ii. If the ceding commission is below the ceding company’s acquisition costs.

2) Aggregate Excess (or Aggregate Stop Loss), except for the following cases:
   i. The ceding entity is a non-insurance company or does not file an NAIC statutory financial statement, or
   ii. The transaction is not otherwise triggered by these characteristics.

The eight characteristics below apply to all contract types, whether quota share, excess, or aggregate excess.

3) Retroactive coverage, including but not limited to Adverse Development Covers and Loss Portfolio Transfers.

4) Any transaction containing a profit sharing mechanism, including but not limited to profit commissions, sliding scales, swing rating, and experience accounts.

5) Any transaction containing additional premium features, whereby additional premium or fees are due the reinsurer as a result of either ceded losses or other contingent events, except if the following applies:
   i. If the transaction is either a Property Catastrophe cover, a stand-alone Clash cover, a Catastrophic Worker’s Compensation cover, a Surety Excess of Loss cover (provided that the cedant purchases multiple layers of coverage and MRAm assumes equal shares on all excess layers), or a stand-alone Terrorism cover, AND
   ii. The transaction is not otherwise triggered by the characteristics listed in this document.

6) Any transaction containing a term longer than x months, unless it is a first party Builders Risk transaction and does not meet any of the other nine characteristics.
7) Any transaction containing terms for reporting or payment of losses less frequently than a quarterly basis.

8) Any transaction containing a loss payment schedule, accumulating or variable retentions, or any feature designed to delay timing of reimbursement.

9) Any transaction containing a unilateral right to commute by either party, other than in the event of a downgrade.

10) Any transaction containing a cancellation, termination or commutation provision requiring the reporting entity or its affiliates to enter into another reinsurance transaction.
Checklist #7

The following are illustrative. For each contract, think about individual circumstances and exercise judgment

<table>
<thead>
<tr>
<th>Feature</th>
<th>Analyst Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>single year casualty clash cover</td>
<td>check rate-on-line, show &lt; x%</td>
</tr>
<tr>
<td>single year property cat cover</td>
<td>check rate-on-line, show &lt; x%</td>
</tr>
<tr>
<td>quota share with fixed ceding commission</td>
<td>show that company's actual expense ratio is less than or approximates ceding commission</td>
</tr>
<tr>
<td>any feature</td>
<td>show that price with feature approximates price without feature</td>
</tr>
<tr>
<td>xol, with limitations</td>
<td>premium (incl. 1st reinst. prem) to full single npv limit (non cat/clash layer) &lt; x%</td>
</tr>
<tr>
<td>xol, free &amp; unlimited</td>
<td>premium (incl. 1st reinst. prem) to full single npv limit (non cat/clash layer) &lt; x%</td>
</tr>
<tr>
<td>quota share</td>
<td>show pv losses reasonably exceed premium by curve fitting or examination of experience</td>
</tr>
</tbody>
</table>

Notes:
- Always confirm that the treaty is exposed to loss under the scenarios considered (consider policy limits, potential of loss hitting layer, exclusions, sublimits, etc.)
- If contract has more than one risk-mitigating feature, must satisfy Analyst Action for each
- Perform calculations for self-evidence consideration with premium net of ceding commission, but for cash flow testing, use premium gross of ceding commission
- Contracts with swing rates will generally need to be cash flow tested
Appendix 3: Copy of Reinsurance Attestation
Insurers are required to file a supplement to the annual statement titled “Reinsurance Attestation Supplement” by March 1 each year. All insurers are required to complete and file a signed attestation including those that do not utilize reinsurance. However, if an insurer does not take any credit for reinsurance on its current financial statement the attestation should be filed with those facts.

The following terms or phrases are used within this attestation and are defined as follows to encourage consistent reporting.

**All reinsurance contracts for which the reporting entity is taking credit** - As discussed in SSAP No. 62, Property and Casualty Reinsurance, Exhibit A question 10, a contract is not defined but is essentially a question of substance. For purposes of this attestation, the insurer should utilize this same guidance. This specifically excludes involuntary pools as defined in SSAP No. 63, Underwriting Pools and Associations Including Intercompany Pools, as well as residual market mechanisms including Fair Plans and the National Flood Insurance Program, that are included in the mandatory pool section of Schedule F of the Annual Financial Statement.

**Current financial statement** - Represents the annual statement that this attestation applies to. However, even though the current financial statement is prepared on a comparative basis, the current financial statement is not meant to apply to the prior year and should ONLY apply to the current year.

**Documentation available for review** - SSAP No. 62, Property and Casualty Reinsurance, Exhibit A, question 7 states that the determination of risk transfer is made at contract inception. This attestation requires that all contracts for which risk transfer is not reasonably self-evident, entered into, renewed, or amended on or after January 1, 1994 should have documentation concerning risk transfer and economic intent available for review. To the extent that risk transfer is not considered reasonably self-evident and if documentation for the contract(s) is not available for review, a statement to this effect should be included in the exceptions section of this attestation.

**Entered into, renewed, or amended on or after January 1, 1994** - This language is included because the risk transfer requirements as set forth in SSAP No. 62, Property and Casualty Reinsurance, (and the Q&A Appendix) were actually adopted by the NAIC in 1994 with this language. Therefore, these requirements have been in place for some time. It applies for all contracts entered into, renewed, or amended on or after January 1, 1994 and the company is taking credit on it’s current financial statements.

**Economic intent** - Means the risk that is intended to be transferred to the assuming reinsurer under the reinsurance contract.

**Taking credit** - As discussed in Appendix A-785 of the Accounting Practices and Procedures Manual, credit for reinsurance represents either the establishment of an asset or a reduction of a liability.

**There are no separate written or oral agreements** - A reinsurance agreement consists of the wording itself (including the reinsurers’ individual Interest and Liability Agreements), any amendments, and any documents expressly incorporated by reference in the wording or amendments and considered in the transfer of risk or amendments. All other documents will be considered separate written or oral agreements for the purpose of the attestation.
The below provides a list of what is required within this filing.

The Chief Executive Officer and Chief Financial Officer shall attest, under penalties of perjury, with respect to all reinsurance contracts for which the reporting entity is taking credit on its current financial statement, that to the best of their knowledge and belief after diligent inquiry:

(I) Consistent with SSAP No. 62, Property and Casualty Reinsurance, there are no separate written or oral agreements between the reporting entity (or its affiliates or companies it controls) and the assuming reinsurer that would under any circumstances, reduce, limit, mitigate or otherwise affect any actual or potential loss to the parties under the reinsurance contract, other than insuring contracts that are explicitly defined in the reinsurance contract except as disclosed herein;

(II) For each such reinsurance contract entered into, renewed, or amended on or after January 1, 1994, for which risk transfer is not reasonably considered to be self-evident, documentation concerning the economic intent of the transaction and the risk transfer analysis evidencing the proper accounting treatment, as required by SSAP No. 62, Property and Casualty Reinsurance, is available for review;

(III) The reporting entity complies with all the requirements set forth in SSAP No. 62, Property and Casualty Reinsurance; and

(IV) The reporting entity has appropriate controls in place to monitor the use of reinsurance and adhere to the provisions of SSAP No. 62, Property and Casualty Reinsurance.

If there are any exception(s), it should be noted in the attestation filed electronically with the NAIC and the details of the exceptions shall be filed in hard copy with the domestic regulator.

Signed:

__________________________  ______________________________
Chief Executive Officer  Chief Financial Officer