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FINANCIAL REPORTING FOR NEW GENERATION LIFE AND ANNUITY PRODUCTS

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This session, developed by the Life Insurance Company Financial Reporting Section, will examine financial reporting for new generation life and annuity products, such as universal life and flexible premium annuities. Topics include:

1. Statutory reporting
2. GAAP reporting
3. Management reporting
4. Accounting treatment of rollovers and replacements.

MR. FRANK W. KLINZMAN: Good afternoon, I am Frank Klinzman of General Reassurance Corporation. I will be the moderator of this panel discussion on "Financial Reporting for New Generation Life and Annuity Products" which was developed by the Financial Reporting Section. The panelists are Jan Pollnow, Vice President and Actuary of The Hartford Life Insurance Company, Kriss Cloninger, Principal of Peat Marwick & Mitchell in their Atlanta Office and Virgil Wagner, Actuary of the American Council of Life Insurance. Our Recorder for this afternoon's session will be Sue Collins of General Reassurance Corporation.

During this panel discussion, we are going to concentrate on financial reporting problems and possible solutions with regard to the new life and annuity products that have been developed in recent years. The types of financial reporting to be discussed will be Statutory Reporting, GAAP Reporting and Management Reporting. We will also be discussing the special problem of accounting for rollovers and replacements and we will be hearing an updated report on the activities of the Committee on Life Insurance Financial Reporting Principles of the American Academy of Actuaries.

When the Audit Guide for financial reporting in accordance with generally accepted accounting principles for life insurance companies was adopted by the AICPA back in 1972 it appeared to be satisfactory and meet the needs for all concerned based upon the situation and the products being marketed by the industry at that time. However, nothing ever remains the same and this is certainly true within the life insurance industry. Certain new products that have been developed such as indeterminate premium, universal life, and flexible premium annuities, along with much greater emphasis being placed on certain old products, such as the single premium deferred annuities, have raised questions about how these products are to be reported for GAAP financial statements. It also raises questions regarding some of the original GAAP philosophy about the pattern of reporting GAAP earnings as a constant percentage of revenue. It has even raised the question of "What is revenue"?

Likewise in Statutory Reporting there are new challenges regarding the determination of statutory reserves for products where future premium is unknown such as universal life. A model valuation and nonforfeiture law has been recently proposed by the NAIC at its meeting last December which encompasses reserving for the universal life product.

However, the industry has had these products for several years and it would be interesting to see just what companies have been doing in practice; what they will be doing in the future; and how they will reconcile what they will be doing with the AICPA Audit Guide and the new Model Valuation Law.

Jan will talk first about what The Hartford Life is doing about these problems in the area of New Life products. Kriss Cloninger will talk next about these same problem areas regarding the annuity products. Virgil Wagner, Chairman of the American Academy of Actuaries Committee on Life Insurance Financial Reporting Principles, will then give us an update on what is happening within his committee regarding Statutory Actuarial Certifications.

MR. JAN L. POLLNOW: To begin, I'd like to give a brief overview of what I intend to cover. First of all, I'm going to touch briefly on accounting for indeterminate premium products. Then I plan to look at universal life in a bit more depth, addressing Statutory Accounting, GAAP Accounting and finally the problem of replacements.

As you probably know, the initial incentive for developing indeterminate premium products was to eliminate deficiency reserves. This alone could make stock companies more competitive with the mutuals. In addition, by anticipating premiums which are lower than those guaranteed in the contract, a safety margin is provided for these non-par products. This helps to reduce the price.

I personally don't know of any statutory problems with these particular products. In fact, we haven't treated them any differently than any of our traditional products. There was a tax question of whether the difference between the guaranteed premium and the current premium was a "phantom" dividend. This was clarified under Stopgap, which indicated that there definitely was a dividend. Of course, at the same time it provided for at least an 85% deduction of the dividends. Stopgap has stopped and again the issue is open. Our hope is that Stark-Moore will clarify the situation.

On the GAAP side, we've treated our indeterminate premium product, called Mini-Max, in pretty much the same way as we treat our traditional products. By this, I mean that we set-up our assumptions so that profits emerge as a level percent of premium. In fact, the margins that we built in for adverse deviation were for the most part implicit rather than explicit.

Fortunately, the Academy of Actuaries has come out with Interpretation I-1 of the Financial Reporting Recommendations and Interpretations. This specifies that if the gross premiums are changed after the product is issued, the GAAP assumptions should also be adjusted, at least prospectively. When this change occurs, the reserves and the deferred

acquisition costs should remain at the same level as under the original assumptions, but assumptions for future years should be adjusted to be consistent with new pricing assumptions. The Interpretation also contains a statement which indicates that no adjustment is necessary if the actuary is satisfied that the old assumptions will continue to produce a pattern of earnings which is not materially different or distorted from those that would be produced by the use of new, more current assumptions.

At the Hartford, we have no problem with this Interpretation and we plan to adjust our assumptions in the future if we change our premium patterns. Of course, all of the normal GAAP rules, with regard to loss recognition, would apply if the premiums either are not adjusted or can't be adjusted upward enough to cover the cost of all future benefits and expenses.

For further information on this subject, I would like to refer you to a paper written by my colleague, Kriss Cloninger, titled "GAAP for Non-Guaranteed Premium Life Insurance." It can be found in Volume XXXIII of the TSA's.

Universal life has many of the same elements as an indeterminate premium product, such as the mortality charge, but it's a much more sophisticated and flexible product, with much more room for creative accounting, as well as abuse. I assume you are all familiar with this product, which allows for flexible premiums, and specifically identifies the investment, expense and mortality charges. Normally this product has at least two items which are within the control of the company. These are the mortality charge and the interest rate credited on the account values. The mortality charge is established to cover the mortality risk, but, in general, it also covers some of the expenses and generally provides for a large portion of the profit. This charge normally utilizes an indeterminate-premium approach with a guaranteed rate and with the expectation that a lower rate will be charged. The other element which is in control of the company, the interest credited, is normally one of the sources of profit. The profit is the difference between the earned rates and the credited rates. This can, of course, be easily eroded by competition.

For statutory accounting of universal life, we now have an NAIC Model Regulation, approved last December by the NAIC, which specifies a CRVM method of accounting for universal life reserves. This regulation contains some "real" actuarial formulas, but, it boils down to the fact that you can hold the account value plus some additional reserves for future interest or mortality guarantees. It's my understanding that this particular formula was derived because of at least one particular product with long-term guarantees that required special handling. As usual, the New York Department has its own regulation and it specifically mentions that holding the account value is acceptable in most instances.

At the Hartford, we are currently holding reserves equal to the account value plus a mortality reserve equal to one-half of the monthly net premium on the amount at risk. This mortality reserve is really an unearned premium, and it's my understanding that some actuaries believe it can be ignored. Perhaps someone can comment on this later. At the present time, we're not making any adjustments to recognize future surrender charges. Overall, our hope is that this method will also be an acceptable tax-reserve method under the new Stark-Moore tax bill.

I might also mention that we only account for premiums when they're actually collected. The lack of any deferred or uncollected premiums on the Universal Life product recognizes the flexible nature of the product and the uncertainty of collecting future premiums.

Statutory Accounting seems pretty straight forward, but GAAP is much more complicated and can really become a mess. As you all know, the Audit Guide was developed in much more stable economic times and only addressed traditional products. Today we're trying to apply it to universal life products and are coming up with some very interesting results. The same type of thing is true for annuities and Kriss is going to address this later.

In discussing the GAAP accounting for universal life, I will address two distinct points. One is choosing assumptions and their relationship to the philosophy of how profits should emerge. The other is the mechanics of implementing GAAP accounting for universal life and how adjustments can be made to account for actual experience.

As indicated, the first thing I'd like to address is profit emergence. Much of the discussion that I've heard has involved the concept of how the product is marketed and what services the insurance company is providing. Traditional GAAP assumed that revenue should be defined as premium since this pretty much reflected the services being provided by the insurance company. To the extent that universal life products are being sold to the same type of customers and in the same manner, it could be argued that traditional GAAP theory should apply and that profit should emerge in proportion to premiums. However, it is difficult to believe that, with all the ads touting high interest rates and tax deferrals, universal life is being sold like ordinary life. If it is and traditional GAAP concepts are used, the profit pattern would be similar to that shown in Chart 1 which is a definite decline in profits over the duration of the contract.

This example is based on a typical universal life product which has both front-end loads and surrender charges. One of the things I've done in the charts is I've eliminated the first year of profit which is labeled the zero year profit. This is because, in the first year, the non-deferrable acquisition costs create extremely negative results. In this example, the non-deferrables are worth \$3.36 per \$1,000, or 19% of premium. They drive the first year as far negative as it is positive in the second year.

Near the other end of the philosophical spectrum of GAAP theory is profit emerging as realized, or as experience develops. I noticed that the Academy of Actuaries has worked on a paper on this particular subject and they call it the full margin approach. One particular case would be to have no profit emerging in proportion to premium, and instead, to have all the profit emerge either in proportion to the mortality charge or the asset buildup. This approach can be easily implemented by eliminating all of the assumed lift-off from the GAAP valuation assumption and by reducing the mortality charge to the level which will cause the GAAP net premium to equal the gross premium. Thus, as shown in Chart 2, part of the profit emerges in proportion to the reserves and part of the profit will emerge in proportion to the mortality charge. This approach would indicate the service being provided by the company is a combination of protection and investment advice.

An even more extreme case, which I think is a bit overly conservative, would be to assume all of the service is investment related and force all profits to emerge in proportion to reserves. This can be done by projecting all transactions without any margin for adverse deviation and then discounting back at a rate which would cause the product to break-even. In other words, all profit is going to emerge in proportion to reserves. This is the recommendation that has been made for SPDA's. Although I do agree with that particular approach for SPDA's, I don't believe it should be the approach used for universal life.

The current industry problem, the source of which will be discussed by Mr. Virgil Wagner later, is to determine a method of choosing assumptions which will produce results somewhere between these extremes, but which will take some of the subjectiveness away from the individual companies. Choosing proper assumptions takes us back to the concept of defining the services being provided by the company. I have to believe that selling universal life still requires a great deal of sales effort. If you asked your sales staff, you'll find that this is true. This would indicate that some of the profit should emerge in proportion to premium or the premium loads. On the other hand, I agree that a large portion of the profit should emerge in proportion to the reserves and the mortality charges as these earnings are realized.

In choosing assumptions for universal life, we developed margins for adverse deviation in the mortality charge and interest lift-off which tended to level out the profits as shown in Chart 3. We still have slightly higher profits in the early years as some of the profit is emerging in proportion to premium. Of course, in the first year, there are large amounts of non-deferrable acquisition expenses which drive the profits negative.

Our ultimate goal is to have profits emerge in such a way as to produce a reasonable Return on Total Capital (ROTC) for every year over the life of the contract. We measure the Return on Total Capital for each of our lines of business and, as a result, we wish to have the flow of GAAP net income for each product produce relatively stable ROTC's.

For those who aren't familiar with this concept, I'll give you a brief overview. I assume that all of you know that Return on Total Capital is one measure of management performance. At the Hartford, since we do apply it to each line of business, we need to make sure that our pricing and our GAAP work reflect our goal of roughly a 15% return over the life of the contract.

Our approach is to start with statutory profit tests and adjust the book profits to produce GAAP earnings. At the same time, we project GAAP capital for that product, where GAAP capital is defined as statutory Benchmark Surplus plus GAAP adjustments. The earnings are then related to the GAAP capital to obtain an expected ROTC.

Since, over time, GAAP and statutory results must be equal, the pattern of ROTC's must, over the life of the contract, have an average equal to the internal rate of return (IRR) which is a statutory pricing and profit-testing measure. With the proper choice of GAAP assumptions, you could actually produce level ROTC's exactly equal to the internal rate of return.

For details on the concept I refer you to two papers written by Mr. Donald R. Sondergeld. One is "Profitability as a Return on Total Capital" which was published recently in the TSA's, Volume XXXIV. This paper shows how to analyze profit runs and translate them into ROTC's. A previous paper, titled "The Internal Rate of Return Method of Accounting", showed how to establish accounting procedures so that the returns that emerged each year would be equal to the internal rate of return which was inherent in the product pricing.

Chart 4 shows ROTC patterns under the various GAAP approaches that we have been discussing. For your information this particular product was priced with a 16.4% statutory internal rate of return. Thus we would expect our ROTC's to average out around that figure. As I explained before, what's missing from the chart is the very adverse consequences in the first year. The non-deferrables drive down the first year ROTCs by 33%. For instance, where we have an 18% ROTC in the second year for the as-realized situation, the first year ROTC would be a -15%. With growth in new business, it takes a fair number of years before this large negative number can be completely offset. This is one of the reasons why a percent of premium approach might be preferred. For your information, if we assume level sales for five years, the ROTC after five years on the entire bloc is only 11% under the as-realized approach; is roughly 15% under the 1983 assumptions; and is 18% under the percent of premium approach.

Perhaps as important as the theory are the mechanics of implementing GAAP for universal life. The main problem in implementing GAAP accounting is that there are neither fixed premiums nor guaranteed cash values. I suppose there are guaranteed cash values but, it is expected that excess interest will be credited and render them meaningless. This means that you just can't calculate a factor per \$1,000 because all of your future benefits will be affected by what has happened in the past. The result is that we came up with eight different factors which are applied to various pieces of the universal life product. There are three separate factors on the asset side and five on the benefit side. The idea is to calculate net level premium factors which, when applied to the various units, will automatically adjust for actual experience. The factors we used on the expense side are: 1) per gross premium; 2) per policy; and 3) per \$1,000 of face amount. On the benefit side we use those three factors plus factors for per \$1,000 amount at risk and per account value.

This is a complicated approach and we're trying to simplify it. With today's computer power this formula can work, but sometimes unusual results are produced which are difficult to analyze. The trade-off will probably be to have simpler analyses, but not as accurate results.

Lastly, I would like to touch briefly on replacements. Our company is not actively promoting internal replacements, although we have considered doing so.

What we are doing is identifying, as best we can, the policies that are being replaced internally. On these contracts we are determining the amount of the deferred acquisition cost remaining and carrying it forward to the new contract. We do reduce the deferred acquisition cost by any excess of the GAAP reserve over the cash value on the old contract. This net deferred acquisition cost is then written off using the assumptions of the new contract, as long as it is recoverable.

This carry-forward is in addition to the normal acquisition costs for the contract. If we did have an active internal replacement program, we would determine the cost of replacing the policies and add this to the net deferred acquisition cost that is being carried forward. This entire amount would then be written off using current assumptions for the new universal life product.

MR. KRISS CLONINGER, III: When I woke up this morning there was a tornado watch to the south and thunderstorms over my house. I thought it is a very appropriate day to talk about the very stormy subject of the financial reporting for single premium deferred annuities. Let me assume for a moment the role of a Vice President for External Affairs for a company that's making a press release. This announcement will be for immediate release.

"The SPDA Insurance Company announced today that it has reached an understanding with the office of the Chief Accountant of the SEC regarding the accounting treatment for a single premium deferred annuity. As of January 1, 1984, the Company will establish its policy reserve assumptions in a manner such that no profit is recognized at the time these contracts are issued. This action does not change the accounting principle applied nor does it affect the total profit that will be recognized over the life of the contract, but it will affect the timing of the recognition of such profit. In addition, the Company will disclose the effects from 1981, 1982 and 1983 earnings had this accounting policy been effective in those periods."

Several companies have recently issued press releases of this type. The SEC is taking a firm position regarding the application of GAAP to SPDA's and is requiring all major writers to conform to the no profit at issue accounting policy.

First, I want to review the background leading up to the present situation. Then I'll summarize the contents of the Draft Issues Paper on accounting for SPDAs that's been developed by the Non-guaranteed Premium Products Task Force of the AICPA Insurance Companies Committee with the assistance of the Academy's Committee on Financial Reporting Principles. Finally, I plan to discuss some problem areas that have not yet been addressed in the literature.

The SPDA product has been controversial for some time. The first issue related to the product was whether or not it was a security or an insurance product. In April 1979, the SEC issued a general policy statement on the factors that should be considered in determining the status of contracts issued by insurance companies. Essentially, the burden of proof that a contract is not a security was put on each company. It's my understanding that the SEC has had discussions with certain companies regarding their conclusions as to the insurance products' status of their contracts.

In 1981 when interest rates skyrocketed, a number of companies wrote substantial amounts of the product, both through regular insurance agents and through agents associated with brokerage houses. By substantial amounts, I mean premium volumes in the hundreds of millions or even low billions of dollars.

The accounting practices of the major SPDA writers varied significantly. In the fall of 1982, a Fortune magazine article contrasted the accounting policies of two of the major writers noting that one recognized a significant amount of the expected profit at the date of issue and the other did not. It obviously raised some questions in the mind of the SEC, accounting firms and all interested parties.

The companies that recognized some profit at the date of issue did so by strictly applying the accounting model described in the Audit Guide. The premium income was recognized as revenue, acquisition costs were expensed and a reserve for the present value of future benefits and maintenance expenses was established. In calculating the reserve, a spread between the earned interest rate and the credited interest rate was assumed. There is a spread at which the resulting reserve is equal to the net cash retained by the company. If the assumed spread is greater than the break-even spread, the reserve is less than the net cash retained by the company and the difference flows through as profit. It's interesting to note that two companies could assume exactly the same spread in calculating reserves and one might break-even at issue while the other might recognize profit because it incurred lower acquisition costs.

Other companies used different accounting models. Some took the position that acquisition costs should be deferred and amortized against a revenue stream that consists of investment spreads and surrender charges. This approach usually results in producing a break-even situation at issue. On the balance sheet, some companies showed the DAC as an asset and the accumulated value as the reserve. Others showed the net liability and no asset.

The accounting profession has been trying to promulgate an authoritative pronouncement on GAAP for SPDAs through the activities of its Non-Guaranteed Premium Products Task Force. The Task Force has approved a draft issues paper but the Insurance Companies Committee which oversees them has not taken final action. The SEC has, however, effectively pre-empted further substantive changes to the issues paper by requiring the major SPDA writers to conform to the accounting principles described in the current draft.

The current draft of the issues paper first defines SPDAs and then discusses the various accounting policies that have developed in practice. It refers to the method I discussed earlier that results in some profit recognition at issue as the Audit Guide practice. It describes the other two alternatives I discussed that result in no profit recognition at issue as the prospective practice and the retrospective practice.

It concludes that a practice which results in no gain or loss at issue should be utilized. Both the prospective practice and the retrospective practice are deemed acceptable. Guidance for accounting for settlement options is also provided. I will summarize these practices and point out some differences between them.

Under the prospective practice, future benefits and expenses are projected using normal assumptions as to mortality, withdrawal and credited interest rates over the future assumed life of the SPDA

contracts. No assumption as to future settlement options is permitted. It is then necessary to solve for the interest rate at which the present value of the projected benefits and expenses equals the gross premium less deferrable acquisition costs. Following the date of issue, reserves are similarly calculated at that break-even interest rate.

For financial statement presentation purposes, the paper requires that the gross accumulated contract values before adjustment for any surrender charges be shown as the policy reserve. The difference between the policy reserve and the prospective reserve is shown as a deferred acquisition cost.

Under the retrospective practice, policy reserves are set equal to the gross accumulated values before surrender charges. Deferred acquisition costs in excess of any front-end expense loads should be capitalized and amortized in relation to reasonably anticipated future investment margins and anticipated surrender charges. Assumptions as to terminations from death and full or partial surrender are also necessary in the projection of these future revenues.

The paper also stipulates that the resulting amortization pattern should be made sensitive to the actual termination experience of the business. While the paper doesn't say so, I think the amortization schedule might also need to be sensitive to significant changes in the level of excess interest.

The draft issues paper says that assumptions as to future settlement option elections are to be excluded from the reserve calculation under the prospective practice and from the amortization calculation under the retrospective practice. At the point an actual settlement option is elected, the reserve for future benefits and maintenance expenses should be set equal to the net GAAP reserves released by the change in status of the deferred annuity contract. Under this approach, no gain or loss is recognized and the interest assumption is set at the break-even interest rate. Obviously, the break-even rate would have to be less than expected earned rates or a loss should be recognized. The paper covers this issue by stipulating that the provisions of FASB 60 relating to premium deficiencies on long duration contracts apply to SPDAs. There are certain significant issues in accounting for SPDAs that are not addressed in the issues paper. One of the most significant of those issues is this treatment of "rollovers."

By "rollovers" in the SPDA environment, I mean policyholders who have a current contract paying a credited interest rate that's basically less than the available new money interest rate. Some of those people are going to realize that it's economically advantageous over a very short break-even period to go ahead and pay the surrender charge and to get the higher credited rate. Hence, they go ahead and pay the surrender charge and roll the proceeds into the new contract at the current new money rate. If these policies are lapses and new issues, premium income and surrender expense is recorded and the difference between the GAAP reserve and the cash value flows through as a gain or loss. If, on the other hand, these policies are viewed as restructurings of existing contracts, the balance sheet would not change at the date of rollover, and no gain or loss would be recognized.

The distinction may be important in evaluating recoverability (or reserve adequacy) for the current year's issues and in testing for loss recognition for the line of business. Generally, there is at least a short term loss associated with a rollover of an SPDA because the yield on invested assets underlying those contracts may fall below the initial credited rate. The question is whether these losses can be offset in a loss recognition test against future profits on other SPDA policies written in prior years that did not roll.

If the rollover is treated as a new issue, the losses could only be offset against expected gains on new business. Even if inadequate future profits were available to cover the future loss on rollovers, it would seem reasonable to reverse any profit that might emerge on rollovers to avoid recognizing a gain on a transaction that impairs the company's future earnings capacity. Similar problems must be dealt with in dealing with rollovers in the universal life scenario.

Another question that's difficult to deal with relates to the period of time for which it is necessary or appropriate to project inadequate or negative future spreads in a loss recognition situation. This is very similar to dealing with guaranteed renewable A&H loss recognition situations. If a company has a workout plan to increase premium rates, it might be more reasonable to establish an additional reserve that would be released over the period of the expected loss rather than over the remaining life of the contracts.

My final comment pertains to the interest assumption used for DAC amortization under the retrospective practice described in the issues paper. Under the prospective method it is common to use a precalculated factor as a percentage of the actual accumulated value to determine the net reserve. Then these precalculated factors are used against the actual accumulated values to get a self-correcting adjustment for the difference between the actual rates that are credited and those assumed in the original calculation.

Under the retrospective method where DAC is amortized with interest, it is likely that the initial assumed interest rate will be used in the calculation. There is no self-correcting feature in the DAC calculation that will reflect future changes in earned or credited rates. Since there is a tendency to write more SPDA business when interest rates are high, it seems to me that on the average for SPDAs, the average earned and credited rates will tend to decline over time. Consequently, I would recommend that graded interest rates be assumed in calculating the amortization schedules.

MR. VIRGIL D. WAGNER: A new requirement for actuaries appeared in the NAIC Statutory Statement Blank beginning in 1975. The requirement and illustrative language for an actuarial opinion was outlined in Instruction 10 to the Statement and had been adopted by the NAIC in June of that year. Later, The American Academy of Actuaries Committee on Life Insurance Financial Reporting Principles, which had worked with the NAIC in developing the opinion requirement, issued financial reporting Recommendation 7 to provide guidance for the actuary in preparing this opinion relative to reserves and other actuarial items in the Statement. In this presentation, I will discuss recent developments, current activity and future direction relative to this opinion.

Note that in specifying reserves and other actuarial items, the opinion clearly addresses the liability side of the balance sheet. There was considerable discussion among actuaries during the time that this opinion requirement was being developed as to whether or not an actuary must consider the asset side of the balance sheet in order to make the statement that reserves make "good and sufficient" provision for the future contractual obligations of the company. This language is part of the current opinion statement. Although there was not unanimous agreement on this subject, it was viewed as an opinion on the nominal value placed on the liabilities. That opinion language remains unchanged in the instructions to the Statutory Statement to this day.

Since 1975 we have seen drastic changes in economic stability, accompanied by higher interest rates than most of us imagined possible in 1975. We all became familiar with rapidly increasing withdrawal rates, decreased market values of assets and new terms such as disintermediation. As a part of this new world, we saw the increased use of flexible products by life insurance companies. These products separately identify interest credits and charges for various risks and expenses. Actuaries and company managements became much more interested in cash flow statements relating investment income and maturity to maturity of the company's obligations under its contracts. Those actuaries who had always believed that a statement relative to reserves being "good and sufficient" could not be made without considering the assets underlying those reserves were again heard and their ranks were increasing. The Society of Actuaries' C-3 Risk Committee became increasingly active and one thing seemed clear: Something about the role of the valuation actuary was changing.

During the past two years, the Academy Committee began to seriously revisit its Recommendation 7 with an eye toward clarifying that the actuary must consider the assets in support of reserves in rendering an opinion about the sufficiency of those reserves. The Academy Committee did not believe that it should be proactive in suggesting such a change to the NAIC or to the industry, but the pressures were mounting, both inside and outside, for the Committee to develop modifications which would be ready when needed.

Two major events which had the effect of both side-tracking the Academy Committee from its direct course, but at the same time advancing its cause, occurred during this time. In 1982 a circular letter in New York required that, provided an actuarial opinion is included, interest rates used to value guaranteed investment contracts may exceed the maximum statutory rates otherwise applicable. This was an early glimpse of reliance on actuarial judgement to add flexibility to valuation laws.

In 1983, the NAIC exposed a proposed regulation for universal life insurance. As a part of that regulation, an actuarial opinion is required with respect to indexed universal life insurance. The Academy Committee devoted most of 1983 to working with the NAIC Industry Advisory Committee on that opinion and regulation. The Model Regulation for Universal Life Insurance was adopted by the NAIC in December of 1983. The Academy Committee is in the process of exposing a new Financial Reporting Recommendation No. 11 and interpretations relating to the actuarial opinion required by that regulation. This work has taken the

Academy Committee off its main course of revising Recommendation 7 relative to the general actuarial opinion, but certainly has given some valuable insight into the needs and approaches which could then be applied to that larger project.

While this is not a session on universal life insurance, per se, examining the opinion required in the universal life guideline offers valuable insight and bridges the gap between the background which I have just covered and the current activities of the Academy Committee and others. As such, it also provides a view of the future. Therefore, I will spend some time on that regulation and the actuary's opinion which is a part of it.

First, let's look at the initial filing requirements contained in Article X of the Regulation. These requirements were worked out in part by the Academy Committee and other actuaries to provide information which the actuary would need in forming his opinion. These initial filing requirements are to be submitted in connection with any filing of interest indexed universal life policies. As a filing requirement, the information is more likely to be available in suitable form for the actuary's use. Generally, these initial filing requirements include a description of how interest credits are determined and the insurer's investment policy. The regulation also requires initial filing of the following descriptions: 1) the method contemplated to determine interest credits following the expiration of the index period; 2) any guarantee above or in lieu of the index; and 3) any maximum premium limitations and their conditions.

The most significant disclosure to us is a filing of the insurer's investment policy. This includes a description of how the insurer addressed certain risks, such as reinvestment risks, the risks of capital loss on cash out flows, the risks that appropriate investments may not be available in sufficient quantities in the future and the risk that the indexed rate may fall below minimum guaranteed rates. Also disclosed in this initial filing of the investment policy are the amount and type of assets currently held and expected to be acquired in the future for interest indexed products.

There are two additional filing requirements which are annual. These are the statement of actuarial opinion itself and the amount and type of assets currently held by the insurer with respect to its interest indexed policies. A third additional filing is required prior to implementation of any material change in the insurer's investment strategy or method of determining interest credits.

As an illustration of the thinking behind this and a possible view of the future, let me read the note following this section of the guideline. The note I'm about to read and the guideline itself, of course, are worded in terms of interest indexed products, but could be stated in much the same way for all products. The note reads as follows:

Interest indexed products present unique aspects which, due to the unknown future values of the index, are not precisely addressed by current valuation laws. The drafters have considered and rejected

approaches to valuation which would require the setting of arbitrary reserves and/or the arbitrary dedication of specific amounts of surplus as being neither logical or workable. In requiring the filing and evaluation of the above items, together with an annual actuarial opinion, the drafters have attempted to preserve the basic principle of the valuation laws, which is to maintain the ability of the insurer to meet his future contractual obligations.

The implications of this language are clear. The role of the actuary is changing. His opinion, based on his professional analysis, is being substituted for the setting by law of arbitrary reserves and/or arbitrary dedication of specific amounts of surplus. The further implication of this is that the actuary clearly must do something more than render an opinion relative to a nominal value for reserves entered on the liability side of the balance sheet. It's with this knowledge that the Academy Committee believes that it is extremely important to review the current Recommendation 7 in preparation for the expanded responsibility.

Let's take a quick look at the illustrative opinion itself which is contained in the guideline. First, note that it is illustrative. The actuary can modify the language as he deems necessary in a particular situation. The opinion contains the normal expected scope statement relative to policy identification and what was examined. The portion of this opinion which is not so normal to the actuary is that, as a part of the scope, the actuary has examined the characteristics of the assets and the investment policy adopted by the insurer as they effect future insurance and investment cash flows. The statement of opinion then follows that anticipated insurance and investment cash flows make good and sufficient provision for the contractual obligations of the insurer. A reliance statement is included to show that the actuary has relied on the investment policy of the insurer and if the actuary chooses, he may indicate reliance on the projected investment cash flows provided by the chief investment officer.

This presentation is not meant to make you aware of these developments and is not a how to session. However, just a note in passing, one difficulty to actuaries working on the development of these requirements was that it was product specific and does not apply to the entire company. This requires a segregation of assets and resulted in some aborted attempts to write the opinion in terms of either the reserves, or the assets, relative to the indexed products. Hence, the final statement relative to cash flows. On the other hand, since this opinion is product specific, and, therefore, supplementary to the opinion already contained in the Statutory Statement relative to the entire company, dealing with the cash flows only was a concept more easily accepted. The sufficiency of the total reserves is handled elsewhere. In developing an actuarial opinion which considers the adequacy of cash flows for the entire company, it will be necessary to have, in effect, a two part opinion. One part would deal with the adequacy of cash flows just as this opinion does; a second part would still need to deal with the adequacy of total reserves. This is the type of thing the Academy Committee is currently grappling with.

The final step in the universal life opinion is for the Academy Committee to develop, as promised, some guidance in the form of a new recommendation for the practicing actuary. This new recommendation, No. 11, and associated interpretations are currently being readied for exposure to the Academy membership.

We don't have time to go into this recommendation in any detail, but I might say it is somewhat more specific than Recommendation 7. It suggests specific characteristics of invested assets which should be considered by the actuary or the investment officer in projecting investment cash flows and it gives similar examples of contractual provisions and assumptions which should be considered by the actuary. In projecting insurance cash flows, it gives fairly specific guidance. It points out that investment cash flows are projected based on both current assets and from assets to be acquired after the valuation date, including the possibility of borrowing money. The interpretations make clear that the paths of future interest rates used in the projections are extremely important assumptions. While specific quantification of interest rate variations are not included, several possible types of variations are suggested. It is made clear that one path is not sufficient and that simple extrapolations are not sufficient. It does leave to the judgement of the actuary the ultimate choice of alternative paths which he feels are necessary to form the opinion.

With that background on a requirement already in place, let's look at current and future activity. As stated, a new Recommendation 11 is being exposed relative to indexed universal life. The NAIC's Technical Advisory Group and others have made it clear they believe the current Statutory Statement of Actuarial Opinion should be extended to include reference to the adequacy of a life insurance company's future cash flows. However, as I said earlier, it is not clear to all actuaries whether the actuary's responsibility presently includes any consideration of the degree of matching of assets and liabilities. Many actuaries now believe that Financial Reporting Recommendation 7 should be formally changed to recognize increased professional responsibility in evaluating a company's exposure to the risk of loss from changes in the interest rates.

The Academy Committee has established a task force to: 1) communicate our desire to the NAIC to participate in any change in the current statement of actuarial opinion; 2) develop an extended Recommendation 7 and supporting interpretations for review by the Academy Committee and, ultimately, the entire Academy membership; 3) communicate this direction and our expected future plans to as broad a group as possible, so others may consider what supporting or additional steps they may wish to take. This includes the Academy membership, the NAIC, other Academy Committees that would be affected, the Society of Actuaries, LOMA, ACLI, etc; and 4) coordinate with the Society of Actuaries Financial Reporting Section and Program Committee to encourage broad discussion of this issue at the 1984 meetings.

Any individual actuaries who have comments on the general direction of the Academy Committee are encouraged to write to the Academy Committee on Life Insurance Financial Reporting Principles. There will also be many opportunities at the 1984 Society of Actuaries' meetings for actuaries to comment on the direction that I have just described.

MR. KLINZMAN: I would like to summarize briefly the topics that were covered. Jan discussed the Financial Reporting problems regarding the new life products. In discussing GAAPing the Indeterminate Premium product Jan pointed out the concept of changing the GAAP Assumptions when there has been a premium change. This is covered in Interpretation 1-I of Recommendation 1 in the Academy's Financial Reporting Recommendations and Interpretations.

Regarding the Universal Life product, as Jan mentioned, the NAIC has just come out with a new model valuation law which requires calculations of a Guaranteed Maturity Premium and Guaranteed Maturity Fund. The reserve is then equal to a factor r times the present value of future benefits minus the present value of future valuation premiums and r is equal to the ratio of the Policy Fund to the Guaranteed Maturity Fund but not to be greater than one. However, in spite of all of that if you set the guarantees equal to the valuation assumptions then the entire process is greatly simplified and the statutory reserve is equal to the Policy Fund plus or minus an adjustment for the difference between the excess first year load and the CRVM allowance if you want a CRVM type of reserve. Therefore, I imagine that most companies are setting their guarantees equal to their valuation assumptions to greatly simplify the statutory reserve. It is this type of statutory reserve that Jan was referring to in his remarks. That is the statutory reserve would be equal to the policy fund with some minor adjustments.

For the Flexible Premium Universal Life GAAP Benefit Reserve one could have it being equal to the Policy Fund with some minor modification such as eliminating any excess first year load that was charged against the fund. This type of modified fund accumulation would be producing GAAP profits under an experience as realized approach as opposed to a percentage of premium approach. If you wanted some of the GAAP profits to fall through as a percentage of premium you would then have to further modify the Policy Fund so that it would reflect an accumulation of a GAAP valuation premium that was less than the gross premium. Either way it would seem to me the GAAP benefit reserve could be based on some modification of the Policy Fund. The excess first year expenses that are deferrable would then be written off using a worksheet approach.

Also, on GAAPing the Universal Life product Jan pointed out a new approach The Hartford is using which is to GAAP their Universal Life product so that to the extent possible it would produce GAAP earnings which would tend to produce a constant rate of return on total capital.

In Kriss' discussion he highlighted the GAAP problems associated with the Single Premium Deferred Annuity. Everybody including the accountants and the SEC agree that GAAP profit should not be front-ended on the Single Premium Deferred Annuities but spread over the life of the contract. Kriss then pointed out two ways one could accomplish this. One method uses a prospective approach and the other method a retrospective approach.

Kriss also discussed the GAAP problems arising from establishing settlement options under the Single Premium Deferred Annuity contract and he covered the problem of handling rollovers of SPDA's and how they should be treated for GAAP purposes. Also highlighted were the investment problems that can arise with rollovers of old SPDA's into a new SPDA contract.

Virgil gave an update on what is happening with respect to Actuarial Certification. It appears that the industry (through the NAIC) wants to rely more heavily on the actuary to assure the commissioners that companies will be able to meet their obligations. Due to these new generation type products where more emphasis has been placed on the investment aspects of the product many in the Industry would like to expand the Actuarial Certification to include an actuarial opinion regarding the testing of cash flows under different scenarios regarding future interest rates and rates of lapsation. This portion of the Actuarial Certification would state that it was or was not the opinion of the actuary that the cash flows would be adequate for the company to meet its obligations. In fact this certification has already been added to the NAIC model law for Index Linked Universal Life products. Virgil will be interested in hearing your comments about possible extension of this type of opinion to the regular statutory annual statement certification.

Now let's have questions and comments from the floor.

MR. HOWARD L. ROSEN: I have a question regarding the treatment of the commission on contributions after the first on either a flexible universal life or flexible premium deferred annuity. Mr. Pollnow, with respect to your eight factor GAAPing approach, how does that eight factor GAAPing approach handle these commissions since presumably you would have amortization and capitalization going along? What happens if the things that are planned don't happen? Kriss, with respect to flexible premium annuities, I've seen two approaches to the handling of secondary contributions: one would treat them as a series of SPDA's and, the logic which follows that, would be to capitalize all the commissions; the second approach would be to treat it as one policy form and, therefore, only treat the excess of commission as deferrable. Can you comment on this?

MR. POLLNOW: Within our formula we've made assumptions for persistency suspensions, as well as lapse rates. If they deviate significantly, we would have to look at the product again. It would not automatically adjust for this.

MR. ROSEN: Let's make an assumption that X percent of the premium returns in the 2nd year, the 3rd year, the 4th year, etc. which requires amortizations going along in each year and capitalizations of the appropriate amount in the 2nd, 3rd, and 4th year. What happens if premiums don't occur that way and the result is really a non-matching of assumptions with actual experience?

MR. POLLNOW: The intent is that in using the factors, some of those things would adjust out so you would get a reasonable pattern of earnings. Those are the types of things that I indicated could be a problem, particularly on the asset side if you're just using factors in terms of premium income. If you do have a stop and go situation, you could get some unusual results.

MR. CLONINGER: This answers the second part of Mr. Rosen's question related to renewal commissions on flexible annuities. It's simplistic to say you should only defer and amortize what you spend. If the structured approach automatically assumes that you spend the renewal commission if

you spend a certain amount of first year commission, then you have to make an adjustment. I have a personal bias against assuming that flexible products can be GAAPed using a structured approach. The approach failed on the only flexible annuity product that we attempted to GAAP as a structured predictable product. We had to basically adjust DAC as we went along to only defer what was capitalized. The question was, should any of the portion of what was capitalized in renewal years have an implicit amortization prior to the date that amount was capitalized. That's where we get to Mr. Rosen's concept that this is really just a string of SPDAs. The other point is that the renewal commission rate on flexible products has been flattened out substantially and you don't see that many heaped renewal schedules.

MR. KLINZMAN: I would be interested in knowing how many companies are determining their universal life GAAP benefit reserve by basing it upon some modification of the policy fund as opposed to a calculation of a factor times the number of units in force. This factor involves a prospective valuation which assumes a certain level of future premium payments. How many use the policy fund or some modification of the policy fund? How many use the prospective valuation factor approach? It appears the fund approach is more popular by about a 12 to 2 vote with the rest of the audience not having the product, not having to GAAP the product or are uncommitted.

MR. LEONARD K. HELFGOTT: Our subsidiary sells our Single Premium Deferred Annuity product. We are currently in the midst of switching over to GAAP valuation and will be speaking with accountants both inside the company and outside. Quite frankly, my head is spinning with the variety of methods that they are suggesting and the conflicting statements that they are making. I have a couple of questions for Mr. Cloninger. Is there any preferred duration to viewing the SPDA in a prospective sense? We have used fifteen years in most of our pricing and assume that it will work out on the average. I am not sure whether we still have the freedom to choose fifteen years or whether there is some other mandated duration or rule for this particular product?

MR. CLONINGER: The answer depends on the valuation approach. I have seen two different valuation approaches utilized in practice. Under one practice the company utilized the actual issue age in the valuation and did its accumulating to the expected maturity date in the policy. In another situation an average issue age was determined and the period that was utilized in the GAAP calculation of DAC amortization was the difference between the average issue age and the expected maturity date. So it's either done on an average basis or it is done on a policy specific basis.

MR. HELFGOTT: My second question relates to the deferral of the initial acquisition costs. Assume that the duration used for the valuation is greater than the duration of the surrender charge period, wherein the cash values are less than the annuity value. Is it appropriate, or even correct, to defer the initial acquisition cost only over the surrender charge period in the sense that the surrender charge is your protection against advanced disintermediation?

MR. CLONINGER: It is conservative knowing you will never go over the surrender charge period and it does protect the company against future GAAP losses. However, theoretically, what is being done apparently more and more in practice is that the surrender charge is not the determining factor in coming up with the expected amortization period. People are trying to make their best guess as to what is going to happen between the date of issue and the expected maturity date of the contract.

MR. ROSEN: I think that there may be a reason why the surrender period may not be appropriate. It is entirely possible that if you use the surrender period, your best expectation of future experience will be markedly different than what you actually do. Therefore, you'll be in conflict with one of the primary tenets of GAAP because even if you take a conservative stand, you materially misrepresent what you can reasonably expect to happen.

MR. DOUGLAS A. SZPER: I recently struggled with the question of GAAPing our SPDAs. One of the things that puzzled me is what I consider a fairly simplistic question. If Company A and Company B are both selling widgets and they have the same cost of materials and Company A can sell it for a dollar more per widget, then they should be able to reflect a dollar more in profits at the point of sale. If two companies are selling SPDAs, with essentially identical benefits and identical expenses, and one company can sell its SPDA for \$10.00 more, why would it not be able to reflect a \$10.00 profit at issue assuming that Company B is selling for \$10.00 less and has no profit at issue?

MR. CLONINGER: Because the SEC says we can't. Companies can calculate benefit reserves as present value of future benefits and expenses using exactly the same assumptions, exactly the same spread between the earned and credited rate, calculate exactly the same benefit reserve at issue, use the traditional Audit Guide approach and if one company has a lower acquisition cost, one company would show a breakeven situation, one company would show a gain. The SEC is saying, regardless of that, even if you have the same benefit reserves, if you have lower selling costs you can't recognize them as profit at the date of issue.

MR. S. VINCENT ZINK: Did the SEC make reference to single premium immediate annuities, or just single premium deferred annuities? If they didn't say so, is it on the horizon that the application to immediate annuities, specifically structured settlement annuities, would similarly follow? The second part of my question is going to touch upon graded interest rates on single premium business. Is this a function of reinvestment interest rates?

MR. CLONINGER: I believe that it explicitly says in the Audit Guide that you ought to breakeven immediate annuities at the date of issue. The same thing is true with variable annuities. For some reason individual deferred annuities were just so different at the time the Audit Guide was written than they are now, that the Audit Guide made a number of statements like, relatively little provision for adverse deviation is necessary in calculating the reserve.

Regarding the graded interest question, any model which you build for reserving SPDAs has to utilize internally consistent assumptions. That is, if you assume that earned rates are going to do a particular thing, you need to focus on your expected spread in terms of expected credited rates. The models that I've seen for SPDA reserving have tended to utilize level interest rates because the actuaries were uncomfortable in predicting the future course of interest rates. Technically we've got all the money at issue except as it relates to reinvestment type problems. If you start assuming that future new money interest rates are going to take a certain course, and, therefore, the reinvesting of funds is going to be done at either lower or higher interest rates, then that says something about the other assumptions you are utilizing in determining your model. And it may say something about expected future withdrawals. In other words, if you assume new money rates are going to go down to 9%, that may say something about the level of withdrawal rates.

I made the comment relative to graded interest rates because of what I've seen in the last two or three years where companies put on tremendous amounts of SPDAs at the interest peaks, at the availability of 16.75-17% investments with initial credited rates of 15.75%. Companies collected huge amounts of money at those times and are collecting much lower amounts presently, though still fairly significant amounts. Maybe my observations are clouded by the negative publicity that surrounded some of the SPDA companies, because I really think that the withdrawals that we've seen lately are higher than they would be absent negative publicity. I don't necessarily think that that makes any statement about what a new company might expect once some of the clouds are removed from this product. I really think internal consistency is the key relative to future assumptions, particularly once you get involved in loss recognition testing and in overall reserve adequacy testing. You can come up with really disastrous scenarios, or you can come up with just incredible profit scenarios with modest variations in future interest rates.

MR. DONALD D. CODY: I am the Cody that was mentioned in reference to the Society's Committee on Valuation and Related Problems. The related problems are many in number, but the major ones that we've been facing are handled by four sub-committees or task forces: The C-1 risk which is the default risk; the C-2 risk which is normal actuarial claim type variation risk; the C-3 risk which is what is causing all the discussion here and a fourth task force on the Combination of Risk. Pursuing some of the things that Mr. Wagner mentioned, I want to mention the Society of Actuaries activity in these areas. I mentioned this Committee which is one of the many committees you'll see parading through the Society's structure. This joint committee called the Committee on the Role of the Valuation actuary is a joint Academy-Society Committee. Its purpose is to develop principles and provide education. The NAIC is waiting for us to do the right things so they can do a proper job of regulation. It's quite clear that no longer can you issue a proper opinion as to good and sufficient reserves just by meeting standard valuation laws. You simply have to look at all of these risks and particularly you have to examine the relationship of the asset lengths and the liability lengths and your investment policy, your reinvestment policy, how you're segmented, how you're separated in your accounts. I think that the problem on some of these answers is that we are dealing in form and we simply have to get

back to substance. The substance is, how is the company operating, how is it going to operate? What is its guarantee? What are its obligations? When are you going to recognize profits? And more importantly, when are you going to recognize losses? There will have to be a careful determination of what the valuation actuaries are responsible for. I personally don't see how we can fail to be responsible for all the things I'm talking about in principle.

There is a new element here that I would like to ask a question about. There is a great deal of discussion going on as to the relative relationship of auditors and actuaries. Is the actuary independent? Can the auditor accept his opinion without questioning it seriously and looking into the detail, or is the auditor going to be in a position, if the actuary doesn't treat this thing, of saying I don't know whether my own opinion ought to be unqualified. Since we have a number of members of accounting firms in the audience, I thought I might get a response from one or more of them on this score.

MR. CLONINGER: It seems to me that there is a fundamental difference in actuarial opinion that we are talking about here versus the auditors' opinion. The auditor is making a statement that the financial statements fairly present the financial position of the company in the results of operations for the year then ended. The auditor is not saying that those same results will be achieved in the future or that materially dissimilar results will be achieved in the future. Auditors are not making any statement as to the future at all. The actuary is and this is the fundamental difference in my view.

MR. CODY: Suppose a bank gets its liabilities and asset cash flows out of line and gets into serious trouble. This has nothing to do with the risk of default, like the oil loans, but just unbalance of cash flows. I don't recall that the auditors were held blameless for this. Can you now transfer that situation into the insurance industry?

MR. CLONINGER: I am not a CPA and, therefore, I don't know all the ins and outs of accounting pronouncements. I hear a lot about them that the auditor's charge is to deal with all facts that are readily ascertainable at the date he renders his opinion. If there are facts available to him that indicate that things like certain bank loans are likely not to be collectible, then he is required to make an adjustment at the date he issues his report. However, in certain bank failure instances, the events that precipitated the failure of the bank were not readily ascertainable at the date of an audit report.

Certainly, the auditors that issue opinions on insurance companies are making a statement as to the future in that they embrace the actuary's determination of the reserve for future policy benefits and the recoverability of the unamortized deferred acquisition cost. I can tell you from dealing with auditors on a one-to-one personal level, that they counsel with us, they evaluate reserve assumptions and they raise very fundamental questions that I have to try to respond to and then they make their own judgement and determination. But when an auditor issues his opinion, I'm not sure that the auditor is trying to cover the range of possible scenarios that we apparently are being charged with as professional actuaries. Frankly, I have got some concern about what we

are trying to make actuaries do, relative to statements that the assets and expected future cash flows etc., are adequate. I know the concern that auditors have about that relative to the amount of information available to them at the time they issue a report. I've seen situations particularly in these SPDA companies where it's difficult to tell what is going to happen three months from now relative to your investment opportunities for the \$500,000,000 collected last December.

MR. CODY: You are aware that in Canada and England the valuation actuary has a quasi governmental status. He is appointed by the Board and recognized by the insurance authorities and is not easily replaced. The auditor is now in that position; if he is replaced there has to be an explanation given. My own personal feeling is that for actuaries to be independent, and this is necessary both inside and outside, as both consulting actuaries and corporate valuation actuaries, it is necessary that he have such a status. There is consideration being given to this exact claim: should the valuation actuary be a particular person that has responsibilities within management and outside of management, and be recognized by management as having it, as the auditor is. There are limits beyond which auditors can't go just because management asks them to, and believe me, that is true of actuaries too. You always have a right to resign. But better, it should be recognized as to what your responsibilities are and they should be honored. And I think this is all part of what Mr. Wagner very cautiously got into that I wanted to energize a little more, because it is very important and things will develop along these lines. Something has to be done; somebody has to be responsible. There have to be specific individuals that will bring all this together in my opinion.

MR. ROSEN: I find it very hard to think about the possibility where the actuary is given the responsibility of signing off on the adequacy of the reserves vis-a-vis the assets, when in all probability, he does not have direct control over the investments.

MR. WILLIAM T. TOZER: As has been mentioned earlier in this discussion, Article X was the part of the NAIC model valuation law concerned with an Actuarial Opinion on interest indexed universal life. As that discussion was going on before the NAIC, the NAIC was actually changing the language in that article and was applying it to all indexed products, universal life, annuities, and other types of products. It was only when it was brought to their attention that it was on the agenda as a universal life discussion, not as a discussion of all products, that they have backed off and limited their analysis and recommendation to universal life only. So I want to emphasize what Mr. Cody has been saying and that the work that Mr. Wagner's committee is doing covers things we are discussing here and they are not academic discussions. The NAIC and other groups are very anxious to look at cash flow problems and other types of problems in the insurance industry. They are looking to professional actuaries to give them guidance and assistance in this area. I want to emphasize again, that every regulator that I have been exposed to is just as upset when a company becomes insolvent as the management is. They feel it is a failure, very often of regulation when a company goes insolvent and, as a result, they wish to develop regulations and guidance as much as possible to head that possibility off in advance. They are looking to us to give that help and assistance.

I want to thank the Section for having this delightful and informative discussion. I want to suggest that this group and their contacts with the various actuarial clubs encourage their actuarial clubs to take a look at the valuation section of the NAIC universal model regulation. It is a complex piece of regulation. I'd like to give a little background on it. The regulation started out much simpler than the final result, but as work developed on the regulation, the charge and responsibility of the group that worked on it felt it was essential not to establish higher valuation requirements for universal life than traditional policies anymore than necessary. As they worked to try to get the two minimum reserve standards as close as possible, the universal life regulation became more and more complex. A lot of the complexity in that regulation is the work of that group to try to not set artificially high regulations for universal life in the name of simplicity.

We have a wealth of 50 or 60 years of knowledge of how to handle traditional products from a valuation standpoint. We do not have that wealth and knowledge in the flexible and universal type products. We are only going to get that depth of knowledge when we have open discussions. The regulation, for example, is tied only to the concept of a minimum terminal reserve which is a concept that is in the statute. It does not address itself to the questions of mid-terminals, pro-rata, means, deferred premiums and all the day to day actual problems you have in implementing that type of regulation. We only get help in those areas when we have discussions in actuarial clubs and in other bodies. We need to develop that group of knowledge and experience.

I'd like to make one other comment and that is in reference to the account value and using it for a valuation standard. This works only on one limited scenario and I'm not even sure that it works on that scenario. I guess that I am trying to emphasize not to underestimate the complexity of the model regulation. Even though you have valuation standards and guarantees that are matching, I think an r factor will develop even in that scenario where you have products that quit paying premiums and start to go into a lapse status. The reason is that now you have an account balance that is not equal to your projected guaranteed maturity fund and all of a sudden you've developed an r . I think even in the limited scenario we were talking about earlier, the r factor enters.

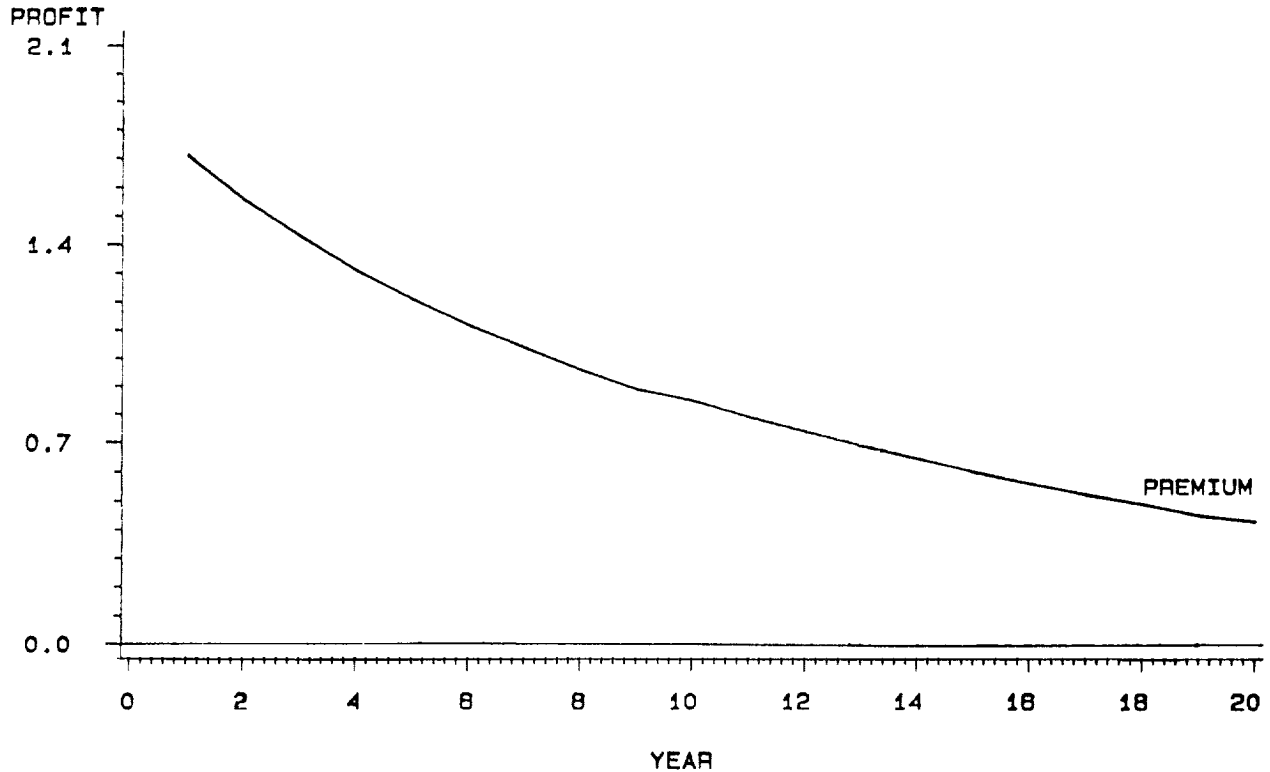
Another area that has not been discussed in the model regulations is the whole area of deficiency reserves and the problems that develop there. Again, I just want to emphasize that the model regulation was put together as a standard to work from and to build off, and I would recommend highly that more and more discussions like this be held in various actuarial clubs to try to develop the base of information and knowledge we need in implementing these things.

MR. KLINZMAN: The role of the actuary is changing. You had better look at it or all at once you are going to wake up and have many additional responsibilities you had not realized before.

MR. WAGNER: I just want to mention that a lot was said here about the SEC and their interest in SPDAs. I want to point out that they consider SPDAs history. Their interest right now is universal life and they have had discussions with the AICPA Insurance Companies Committee. There is an agreement that the Insurance Companies Committee will have some solution for universal life accounting by the end of this year. If not, the SEC has promised that they will have some if the AICPA doesn't meet its schedule.

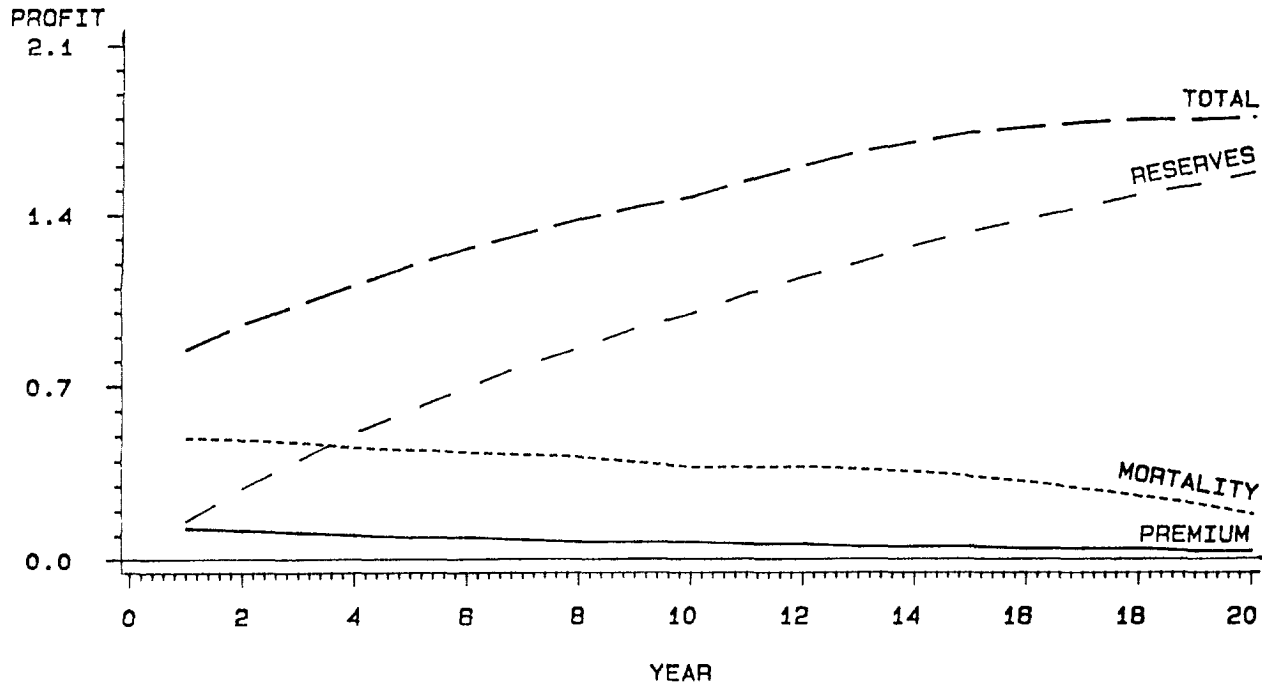
BOOK PROFIT ILLUSTRATIONS

ASSUMPTIONS=PCT OF PREMIUM



BOOK PROFIT ILLUSTRATIONS

ASSUMPTIONS=AS REALIZED



BOOK PROFIT ILLUSTRATIONS

ASSUMPTIONS=1983 ASSUMPTIONS

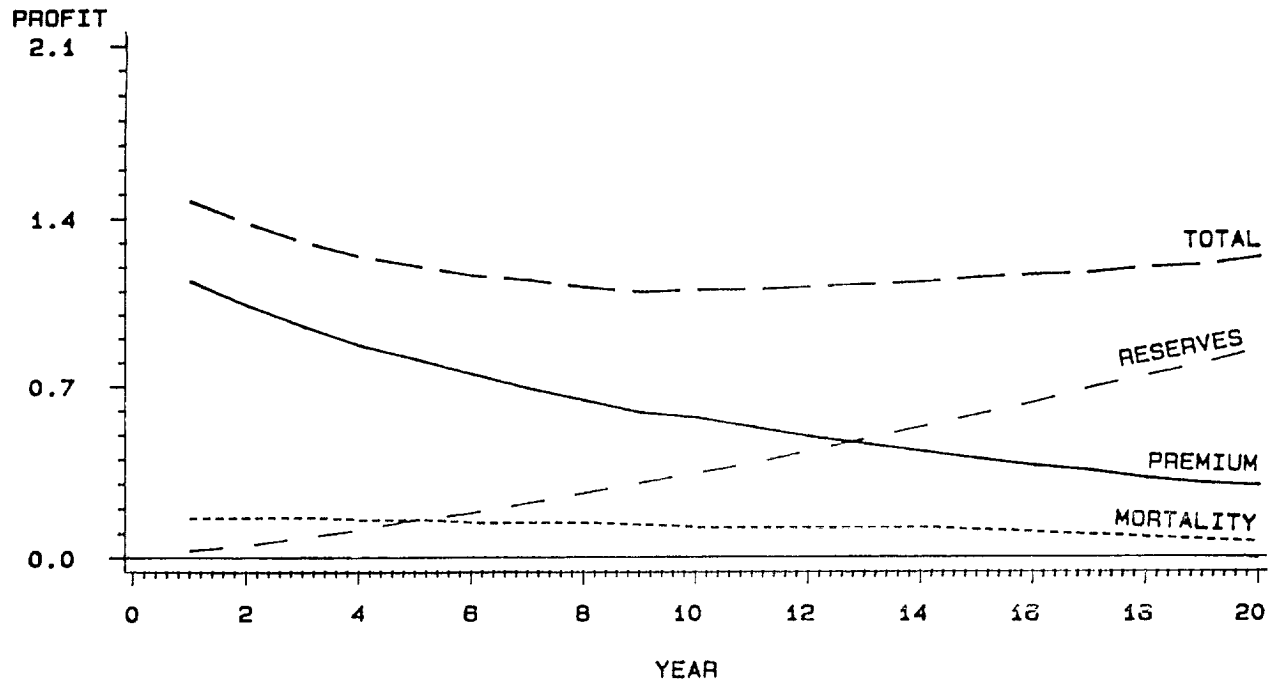
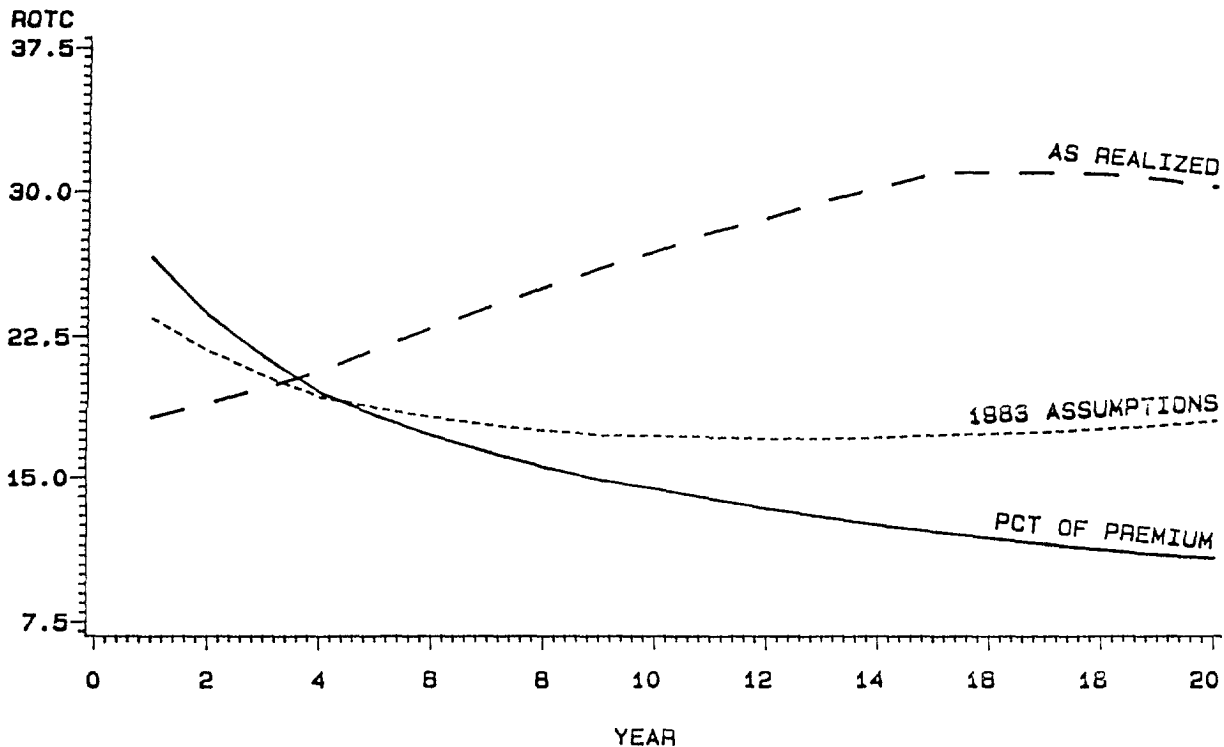


CHART 4

RETURN ON TOTAL CAPITAL



FINANCIAL REPORTING

