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FILE 3130 October 31, 1984

ISSUES PAPER

ACCOUNTING FOR Key-Person Life Insurance

- **1**

PREPARED BY THE INSURANCE COMPANIES COMMITTEE AND CORPORATE-OWNED LIFE INSURANCE TASK FORCE AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

OCTOBER **31**, 1984

ISSUES PAPER

ACCOUNTING FOR Key-Person Life Insurance

PREPARED BY THE INSURANCE COMPANIES COMMITTEE AND CORPORATE-OWNED LIFE INSURANCE TASK FORCE AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

AICPA

American Institute of Certified Public Accountants

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File Ref. No. 3130

October 31, 1984

J.T. Ball Financial Accounting Standards Board High Ridge Park Box 3821 Stamford, CT 06905

Dear J.T.:

Accounting for Key-Person Life Insurance

Enclosed for the FASB's consideration is an issues paper, "Accounting for Key-Person Life Insurance," prepared by the Corporate--Owned Life Insurance Task Force of the AICPA Insurance Companies Committee.

The issues paper discusses various methods of accounting for the cost of key-person life insurance. The paper also discusses a proposed method of accounting for key-person life insurance purchased to fund deferred compensation or other post-employment benefits. AcSEC's advisory conclusions on the issues are in paragraphs 93 through 96 of the paper, and the views of the Insurance Companies Committee and its task force are also described.

Current practices in accounting for key-person life insurance are diverse. Because of this diversity, AcSEC recommends that the FASB consider this matter.

Representatives of the Accounting Standards Division are available to discuss the issues in this paper with members of the Board or its staff at your convenience.

Sincerely,

Roger Cum

Roger Cason Chairman Accounting Standards Executive Committee

Accounting for Key-Person Life Insurance

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ISSUES PAPER

ACCOUNTING FOR KEY-PERSON LIFE INSURANCE

1. The primary purpose of the traditional key-person life insurance policy is to provide protection to an entity in the event of the death of one of its key executives. The entity owns the policy, makes the premium payments, and designates itself as beneficiary. The proceeds provide compensation to the entity for the loss of the executive's services. At the entity's discretion, the proceeds may be used to attempt to replace the skills and abilities lost as a result of the executive's death or to prevent financial losses that might otherwise result from the disruption of the entity's operations. The entity owns the keyperson life insurance policy during the period of insurance coverage and can surrender it for its cash value at any time.

2. Generally, the type of life insurance for key-person indemnification depends on the purpose for which it is bought. If intended only for indemnification in the event of the key-person's death, some form of short-duration life insurance, such as term insurance, may suffice. Often, key-person life insurance is required by contract. It is used as a means of accumulating funds, for example, to finance shareholder buy/sell agreements in the event a principal shareholder dies or withdraws from the business or to finance deferred compensation plans. If, in addition to the death protection, the entity wishes to accumulate funds for other purposes, the entity may select a policy that provides cash surrender value. Until recently, most key-person life insurance policies were not continued in force by the entity beyond termination of the executive's employment. Therefore, based on expected mortality, the face amount of the policy was rarely realized. Because of the business exchange rider now available on many long-duration life insurance policies and the use of such policies to informally fund post-employment benefits, many policies are now continued until death of the insured. Today, the following factors encourage continuation of key-person life insurance policies until the insured's death:

- The business exchange rider permits a policyholder to transfer a policy from one insured to the life of another insurable person without diluting the cash surrender value.
- High current investment yields credited to the policy create cash surrender value in excess of cumulative net premium payments in a relatively shorter period of time.
- Death benefits are tax-free, whereas upon termination of the policy, the excess of cash surrender value over cumulative net premium payments is taxed as ordinary income.
- Lower mortality and higher current investment yields permit more favorable insurance purchase rates and larger death benefits.
- Policy loans at interest rates below current market rates
 can be used to finance premium payments.

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The Nature of Long-Duration Life Insurance

3. The key-person life insurance policies addressed in this issues paper are generally level-premium, long-duration insurance policies. These policies guarantee the payment of the face amount of the policy on the death of the insured, whenever that may occur, in return for periodic premiums of a constant amount. Long-duration policies are a complex product with many varying benefit features, including death benefits, cash surrender values, policy loans, other nonforfeiture benefits, policyholder dividends, settlement options, and special tax attributes. Because of this complexity, a number of different approaches have been used to analyze life insurance, and those different approaches have sometimes influenced arguments supporting various accounting treatments.

4. Long-duration life insurance could be obtained by paying a single premium. Level-premium policies, however, are designed to avoid the very high initial outlay that is needed for a singlepremium policy. Under a level-premium policy, premiums in the early years exceed expected mortality costs, but in later years premiums may be less than expected mortality costs. (Appendix I, table l illustrates mortality costs.) Some have analyzed this by viewing the excess paid in the early years as a fund that grows to cover higher mortality costs in the later years. They view a long-duration life insurance policy as involving a combination of protection and savings (which accumulates a tax-free return if the policy is held to maturity) and have attempted to identify the portions of the premium that are allocated to current life insurance protection and to investment. Some compare the premiums on long-duration life insurance to the amount that would be paid to purchase short-duration term insurance with the balance invested in alternative investments.

5. Others believe that life insurance is not divisible into protection and investment elements. They view level-premium insurance as an installment purchase of the death protection. Long-duration life insurance provides protection regardless of the age of the insured and cannot be duplicated by short-duration insurance and investment. Once the insured reaches an advanced age, short-duration insurance is very costly and may be unobtainable. Many believe that although its investment aspects have sometimes been stressed, long-duration life insurance is designed primarily to provide death protection.

6. These various approaches may be helpful in understanding life insurance. However, it probably cannot be said that one approach necessarily gives a true or a complete picture to the exclusion of the others.

Nonforfeiture Benefit Features

7. Key-person life insurance policies have evolved into sophisticated contracts. However, they all have similar major characteristics in that the entity is both an owner and beneficiary of the policy. The primary benefit feature of life insurance is, of course, the death benefit. However, long-duration keyperson insurance policies, such as whole life, endowment, paid-upat age 65, and certain extended period term insurance policies, provide nonforfeiture benefit options in the event that the policyholder ceases to pay premiums. Those nonforfeiture benefits

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include cash surrender value, loan value, extended term insurance benefits, and reduced paid-up insurance benefits.

8. <u>Cash surrender value</u>. The cash surrender value of a life insurance policy is the net amount the policyholder will receive if the insurance coverage is terminated.

9. Under a level-premium policy, premiums in early years generally exceed expected mortality costs. However, in the first year of a policy, the insurance company usually experiences a net cash outflow due to its high first-year policy acquisition costs. The insurance company expects to recover these costs through future premiums. If policyholders who terminate their policies were allowed to withdraw significant amounts before policy acquisition costs are recovered, those costs would be borne by the continuing policyholders. Therefore, in the early years of a policy, cash surrender values are relatively low.

10. Cash surrender values can vary considerably from one type of policy to another. Cash surrender value is based on factors such as premium rates, expenses, anticipated surrenders, competition, statutory requirements, and the company's view of equitable treatment of its policyholders. Various state statutes, called nonforfeiture laws, define minimum surrender values for policies, but companies are permitted to and often do, provide higher cash surrender values.

11. Loan value benefit. The loan value benefit permits the policyholder to borrow up to a stipulated percentage of the current cash surrender value of the policy. Interest rates on

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such loans may be fixed or may vary in accordance with the policy provisions, and historically they have been below market interest rates. Unlike other types of borrowing, no loan application is required, no restrictive covenants are imposed on the borrower, and the policyholder may repay the loan and the accumulated interest in whole or in part at any time. Normally, on death or termination of the policy, the unpaid loan balance plus the accumulated interest will be deducted from the death proceeds or cash surrender value. Because of this right of offset, in accounting for key-person life insurance the asset for the investment in life insurance is reported net of policy loans and accumulated interest. Some insurers offer, for an additional premium, additional life insurance for the amount of the unpaid loan. Interest paid or accrued on policy loans, subject to certain limitations, is generally deductible in the same manner as the taxpayer's other interest expense.

12. <u>Reduced paid-up insurance benefit</u>. Under the reduced paid-up benefit option, the cash surrender value of the policy is used as a single net premium to purchase paid-up insurance for as large an amount as the cash value will purchase. No further premiums will be payable.

13. <u>Extended term insurance benefit</u>. Under the extended term insurance option, the cash surrender value is also used as a single net premium. It is used to purchase term insurance in the amount of the death benefit currently available under the policy for as long a term as the single premium will provide or for the remaining term of the policy, if shorter. No further premium will be payable.

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Policyholder Dividends

14. Many types of traditional policies are participating policies, which pay policyholder dividends. Future dividends are frequently projected based on the current dividend illustrations or "scales" published by the insurance company. Although dividends are not guaranteed, experience has shown that most insurance companies have been able to attain or exceed their projected dividend scales during the last several decades. The policyholder can elect to have these nonguaranteed benefits used to reduce current premiums, used to purchase additional amounts of life insurance at premium rates specified under the policy, left on deposit to earn additional interest, or paid in cash. If paid-up additional life insurance is elected, the paid-up additions normally have an immediate cash surrender value.

New Types of Policies

15. Policies and policy riders can be structured to meet the needs of the policyholder and the insured. Several new types of life insurance policies have become popular in recent years, including flexible-premium universal life, fixed premium universal life, variable life, adjustable life, and nonguaranteed-premium policies.

16. <u>Flexible-premium universal life insurance</u>. Under flexible premium universal life insurance plans, premiums paid by the policyholder (less certain expense charges) are credited to a fund from which the cost of annual renewable term life insurance

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is deducted (the mortality charge) and to which interest is credited. The balance of the fund represents the cash surrender value of the policy. The interest credited to the policyholder's fund or cash value is generally based on a guaranteed minimum rate (3 to 5 percent) plus additional ("excess") interest at rates determined by the insurance company. The excess is frequently based on current and expected investment experience or an index such as U.S. Treasury bill rates. The policy's cash value is thus directly related to changes in interest rates, premium and benefit levels, and the periodic mortality charge.

17. Unlike traditional life insurance that requires the payment of a stated premium for a fixed amount of coverage, the policyholder can usually change the amount of coverage and the amount and timing of premium payments. The policy will remain in force as long as the cash value is sufficient to permit deductions for the cost of insurance and expense charges. A flexible-premium universal life policyholder can usually choose, subject to certain limits, either a specific amount of (a) death benefit, and insurance is purchased for the difference between the death benefit and the accumulated cash value, or (b) insurance coverage, and the death benefit equals the amount of that coverage plus the accumulated cash value.

18. <u>Fixed-premium universal life insurance</u>. Under the fixed-premium form of universal life insurance the premium cannot be changed by the policyholder nor can the face amount of the insurance coverage be changed except by a change in the dividend option or a change in the option for applying excess interest. Like

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flexible-premium universal life, the expenses, mortality charges, and investment earnings credited to the policy are separately disclosed.

19. <u>Adjustable life insurance</u>. Adjustable life resembles flexible-premium universal life in that the policyholder can vary the face amount and/or the premium. However, it is also like traditional life insurance since the elements that make up the premium are not specified in the policy.

20. <u>Variable life insurance</u>. A variable life policy offers the policyholder the opportunity to specify how the available funds will be invested. Like traditional life insurance there is usually a guaranteed minimum rate or return which the policy will earn, and excess investment earnings can increase the face amount as well as the cash value. Some policies permit the policyholder to redirect part or all of the available funds among the various investment alternatives offered by the insurer.

21. <u>Nonguaranteed-premium life insurance</u>. Under these policies, the benefits are fixed and are not adjustable by the policyholder. However, the premium, subject to a stated maximum, may be decreased or increased by the insurance company. Some policies stipulate that premium changes will be linked to changes in factors such as interest, mortality, persistency, and expense rates. Certain policies are not linked to specific rates or indices and state that the insurance company at its sole discretion can charge the maximum or some lesser premium. In the latter case, premium rate changes are frequently motivated by competition.

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Transferabilty or Business Exchange Rider

22. Many currently written long-duration key-person life insurance policies contain a business exchange or transferability rider and are transferable from one person to another insurable person in the event employment is terminated. The advantage of the business exchange rider is that permits the policy to be reissued without diluting the cash surrender value. When the policy exchange occurs, an adjustment is required if there is a difference in the age of issue between the previous insured and the successor. The adjustment can take the form of a change in a (a) the face amount of the insurance, (b) the cash surrender value, and/or (c) premium rate, depending on the terms of the rider. For example, if an entity hires an executive at age 45, employs him for three years until the age of 48, and hires a new executive who is 38 years old, the policy may be automatically reissued as of the original policy date in the name of the new executive with an entry age of 35. The business exchange rider might maintain the face amount of the policy at the original level and refund to the entity the difference in cash surrender value. Alternatively, the transferability rider may require the insurance company to reissue at a proportionately higher face amount and reduce the premiums as illustrated in Appendix B.

Compensation Plans

23. Key-person life insurance policies frequently have been used in connection with employee compensation plans. Two of the more common plans featuring key-person life insurance

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in which the employer is both an owner and beneficiary of the policy are split dollar plans and supplemental deferred compensation plans.

24. <u>Split dollar plans</u>. Although there are many variations in split dollar plans, they basically provide for a sharing between the employer and employee of the premium payments, ownership, cash values, and death benefits. In some split dollar plans, the entity contributes premiums in an amount equal to the yearly increase in the cash surrender value and the employee contributes the balance. The entity owns the cash value as a security interest for its contributions. On the employee's death, the entity would recover an amount equal to the policy's cash value with the balance of the proceeds going to the employee's heirs.

25. Other split dollar plans provide for the employee to pay the "term cost" of current life insurance protection and the entity to pay the balance of the premium. On the employee's death, the entity would recover an amount equal to cumulative premiums paid with the balance going to the employee's beneficiary. Under these plans, the entity's payments during the early policy years will normally exceed the underlying cash surrender value.

26. <u>Supplemental deferred compensation plans</u>. Under these plans, the entity is the owner and beneficiary of the long-duration key-person life insurance policy. The policy is usually continued in force until the executive's death, at which time the life insurance proceeds realized are expected to be sufficient to enable the entity to recover all premiums paid to date, any after-tax interest on policy loans, the after-tax cost of all supplemental deferred compensation benefits paid to the key-person or his heirs (usually under a "nonqualified" deferred compensation plan), and in some cases, an interest factor for the use of the entity's money.

Current Accounting Standards

27. Accounting for key-person life insurance. The continued appropriateness of an AICPA accounting interpretation, "Accounting for Key-Man Life Insurance," which was issued in November 1970 (see Appendix A), is being questioned. This interpretation specifies that a life insurance policy be carried as an asset at its cash surrender value. Differences between periodic premiums and increases in cash surrender value are to be charged or credited to earnings. This method of accounting has also been applied to split dollar plans.

28. Under a ratable charge method, the total of premiums to be paid in excess of cash surrender value at the end of a selected measurement period is ratably expensed over that period. The interpretation indicates that the principal reason for rejecting a ratable charge method of accounting was the possibility that the key-person might terminate his employment before the policy was paid up. With the advent of features permitting transfer of policies from a terminated executive to a successor some entities have accounted for key-person life insurance using

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a ratable charge method. It is not known the extent to which ratable charge methods have been used or whether the transaction to which they have been applied have been material to the entities.

29. Accounting for key-person life insurance intended to fund deferred compensation and other benefits. The method of accounting for deferred compensation and other post-employment benefits funded by key-person life insurance is also being questioned.

30. APB Opinion No. 8, <u>Accounting for the Cost of Pension</u> <u>Plans</u>, applies to "deferred compensation contracts with individual employees if such contracts taken together are equivalent to a pension plan" (paragraph 8). The method specified by APB Opinion No. 8 takes into account the funding of the plan. The Opinion also applies to unfunded and insured plans. Under this Opinion, "the annual provision for pension cost should be based on an accounting method that uses an acceptable actuarial cost method."

31. APB Opinion No. 12, <u>Omnibus Opinion - 1967</u>, paragraphs 6-8, applies to other deferred compensation contracts, which--

...should be accounted for individually on an accrual basis. The estimated amounts to be paid under each contract should be accrued in a systematic and rational manner over the period of active employment from the time the contract is entered into. The amounts to be accrued periodically should result in an accrued amount at the end of active employment which is not less than the then present value of the estimated payments to be made.

If the compensation agreements provide for the payment of survivor benefits in the event of early death, the "estimates should be based on the life expectancy (based on the most recent mortality tables available) or on the estimated costs of annuity contracts rather than on the minimum payable in the event of early death." The deferred compensation may be expensed on either a straigh-line or discounted present value basis (accrue interest on unfunded liability) over the employee's remaining service life. (See Appendix G.) APB Opinion No. 12 does not discuss the funding of deferred compensation arrangements.

PROPOSED ALTERNATIVE METHODS

Cash Surrender Value Method

32. The cash surrender value method of accounting for traditional key-person life insurance is discussed in the AICPA accounting interpretation in Appendix A. Cash surrender value as used herein refers to the net amount that would be received on termination of the policy after deducting cancellation and similar charges. Under this method, premiums net of the increase in cash surrender value are charged to expense, and the cash surrender value is carried as an asset on the balance sheet. This method results in higher charges to income in the early policy years and, in many cases, credits to income in the later years as the cash surrender value of the policy increases. (See Appendix C, Examples 1 and 2.)

Ratable Charge Methods

33. <u>Pro rata ratable charge method</u>. Under the pro rata ratable charge method, the net cost of the policy is considered to be total premiums to be paid minus the total cash surrender

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value at the end of a selected measurement period. Measurement periods that have been used in practice have been, for example, seven to ten years, to the end of the premium-paying period (that is, when premiums are no longer required to be paid under the policy), or until the key-person's projected retirement date. This cost, if any, is amortized evenly over the measurement period producing a level annual expense. After the measurement period, the cash surrender value method is followed. The measurement period should not extend beyond the projected retirement date in order that the cost will be recognized during the key-person's period of employment. Thus, this method could not be based on expected death benefits under the policy. Under many competitively priced life insurance policies currently being issued, cumulative cash surrender value will exceed cumulative premiums after a relatively short period. In such cases, the excess of the cash surrender value over the cumulative premium payments may (a) be accrued on a ratable basis from inception of the policy or (b) not be recognized until cumulative cash values exceed cumulative premiums. Under the pro rata ratable charge method, premiums in excess of cash surrender values during the early policy years would be recorded as an asset realizable from future increases in cash surrender values. (See Appendix C, Examples 1 and 2.)

34. Some believe that the pro rata ratable charge method of accounting for traditional key-person life insurance is inappropriate since the time of value of money is not recognized. They have proposed that interest-adjusted ratable charge methods be used.

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35. <u>Interest-adjusted ratable charge method based on cash</u> <u>surrender value</u>. Under the interest-adjusted ratable charge method based on cash surrender value, a level annual deposit amount would be determined which, at an assumed interest rate, would accumulate to the projected cash surrender value of the policy at the end of the measurement period, for example at the anticipated retirement age of the executive. The excess of the premium paid over this level deposit amount would be accounted for each year as insurance expense for the death benefit protection obtained under the policy. Interest at the assumed rate on the accumulated deposit amounts would be taken into income each year (see Appendix D). If the policy remains in force after the measurement period, it would thereafter be accounted for under the cash surrender value method.

36. The premise for the interest-adjusted ratable charge method based on cash surrender value is that when an entity pays a premium for a life insurance policy that exceeds the level annual deposit which (at an appropriate assumed interest rate) would accumulate to the projected cash surrender value of the policy, that excess theoretically represents an amount paid for life insurance protection. Such excess should appropriately be treated as expense.

37. <u>Interest-adjusted ratable charge method based on death</u> <u>benefit</u>. When there is intent or a plan or arrangement to keep a policy in force until the key-person's death, some believe it may be appropriate to base the accounting on the anticipated death benefit rather than on cash surrender value. Under many programs in which life insurance is used in conjunction with supplementary retirement income arrangements for executives, the intent is that the policy will be kept in force until death rather than be surrendered prior to the payment of supplemental retirement benefit payments. Financial projections accompanying marketing proposals for such arrangements are invariably based on keeping insurance in force until death. One major reason for this approach is that policy proceeds can be received tax-free upon death, whereas surrendering the policy would result in the recognition of taxable income for the excess of the cash surrender value over premiums paid.

38. The interest-adjusted ratable charge method based on the death benefit is similar to the interest-adjusted ratable charge method based on cash surrender value. However, under the death benefit approach the level annual deposit would not be based on cash surrender value at the end of the measurement period, but would be related to the present value of the expected death benefit as of the key-person's expected retirement date. The anticipated date of death would be based on life expectancy or mortality factors (see Appendix E). After retirement, the present value of the projected death benefit would be increased annually at the assumed interest rate.

Split Dollar Plans

39. Under split dollar plans, the entity expects to recover the portion of the cumulative premiums it has paid either from the cash surrender value or from death benefits. Accordingly,

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the entity's share of the premiums paid under such plans would be accounted for in the same manner as other key-person life insurance policies.

Investment Methods

40. Some view traditional forms of life insurance policies that are intended to be continued in force until an executive's death as an investment, since the policy has a fixed maturity value (the face amount of the policy), and the anticipated investment gain is the excess of the death benefits over the cumulative amount of the premiums payable. Life insurance policies, however, differ from other forms of investments since (a) the maturity date is at the death of the insured (or the endowment date, if earlier); (b) the investment is usually purchaixed installments represented by periodic premium payments, but death of the insured terminates the obligation to make further premium payments; (c) certaieath of n policies ("participating policies") pay dividends, which are essentially a return of premium (however, many policy owners use such dividends to purchase additional paid-up life insurance); (d) the policy can be redeemed at any time for its cash surrender value; (e) instead of surrendering the policy, a policyholder may borrow against the cash surrender value at an interest rate, and there is no obligation to repay policy loans prior to maturity (that is, at death or surrender outstanding policy loans and accrued interest are deducted from the benefits). Some believe that despite such variables, the ultimate gain (excess of death benefits over the cost of policy) on a traditional policy can be estimated by assuming a life

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expectancy and date of death based on current mortality tables or otherwise, and projecting premium payments and policyholder The benefit to be received on death is the face dividends. amount of the basic policy plus the estimated additional amounts of paid-up life insurance purchased with the policyholder dividends and less unpaid policy loans and accrued interest. The cost of the policy is the cumulative premiums payable under the policy less any dividends that will not be used to purchase paid-up additional life insurance and less anticipated policy loans. The investment yield is calculated as if the net cash outflows were deposits in an interest bearing account with interest compounded annually to yield the anticipated net death benefit. The rate of interest is then applied to the carrying value of the policy at any date to develop the amount of investment income to be accrued. The carrying value of the policy would be the cumulative premiums paid, less dividends not used to purchase additional life insurance, and plus accumulated accrued investment The application of this method would also require considerincome. ation of the tax effects and possible timing differences arising from the treatment of interest expense on policy loans. (If policy loans cannot be anticipated, the method could be aplied by recognizing the accrued interest on the actual policy loans as an expense each period and by reducing the carrying value of the accumulated policy loans and accumulated accrued interest on policy loans.)

41. As an alternative, some believe that the estimated proceeds to be received under the investment method should be

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predicated on the policy's anticipated cash surrender value at the end of the measurement period, rather than the death benefit. The anticipated investment gain is the excess of the cash surrender value at the end of the measurement period over the cumulative amount of premiums payable. The investment yield is calculated by treating the net premium payments as deposits in an interest bearing account with interest compounded annually to yield the expected cash surrender value.

42. Although practical application of the investment method may be feasible for traditional life insurance policies, the additional uncertainties inherent in certain newer types of products that permit the policyholder to vary the face amount or premiums (such as long-duration flexible-premium universal life and adjustable life insurance) may prevent reasonable projections of future investment yields on such products.

Receivable Method

43. The receivable method integrates the accounting for life insurance and post-employment benefits. The premiums paid and the accrued after-tax cost of post-employment benefits are recorded as a receivable which is expected to be realized from the proceeds of the life insurance policy on the death of the key person. (See Appendix H.) Proponents believe that this method does not anticipate income but recognizes that certain cost will be recoverable from life insurance proceeds.

44. Some believe that the receivable method is appropriate if long-duration life insurance policies are purchased in connec-

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tion with contractual obligations to pay supplemental deferred compensation or other post-employment benefits. Under these programs, the life insurance policies are frequently kept in force until the key-person's death. The life insurance proceeds are expected to enable the entity to recover the cumulative premiums paid plus the after-tax cost of the supplemental compensation benefits and, in some cases, the after-tax interest cost on policy loans. Some plans even limit the amount of supplemental compensation benefits to an amount that will not exceed the sum of (a) life insurance benefits less cumulative premiums paid and (b) income tax benefits. Under the receivable method, premiums paid and the accrued after-tax cost of post-employment benefits that are expected to be recovered from the life insurance proceeds are recorded as a receivable. Such amounts are readily determinable under traditonal long-duration policies since the cumulative premiums paid, after-tax cost of interest on policy loans (when relevant), and the paid-up life insurance and tax benefits realizable each year as the compensation payments are made can be reasonably estimated. The aggregate receivable may not exceed the amounts reasonably expected to be recoverable from the life insurance policy.

Deferred Taxes

45. Cash surrender value in excess of cumulative premiums paid is taxable to the policyholder when a policy is surrendered. Therefore, under accounting methods that assume that the ultimate benefit of a policy will be the cash surrender value, deferred income taxes should be provided if the carrying value of the asset for investment in life insurance exceeds cumulative premiums paid.

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VIEWS ON PRESENT PRACTICES AND PROPOSED METHODS

Cash Surrender Value Method

46. Advocates of the cash surrender value method of accounting for traditional key-person life insurance believe that the annual net cost of long-duration life insurance is the excess of premiums over the change in cash surrender value and this annual cost should be recorded in the income statement. They believe that the cash surrender value method appropriately recognizes only the cash surrender value of the policy as an economic resource of the entity that should be presented as an asset on the balance sheet. FASB Statement of Concepts No. 3, paragraph 19 defines assets as a "probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events." Cash surrender values represent potential cash inflows available to the entity that are the result of past premium payments. They believe that amounts based on the value of the policy at some future date should not be considered assets since the realization of those amounts depends on future transactions in the form of future gross premium payments.

47. The advocates believe that expense recognition principles under generally accepted accounting principles require that key-person life insurance premiums in excess of the increase in cash surrender value should be charged to expense currently. They believe that the policyholder should not record as an asset an amount in excess of the policy's cash surrender value because

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they believe that those amounts provide no discernible benefits to future periods. They believe that the proposed alternative methods result in the artificial levelling of costs over the future premium-paying periods.

48. Advocates of the cash surrender value method also believe that the existence of a business exchange rider does not alter the substance of the transaction. The business exchange rider may assure that the entity will not be forced to surrender the policy by events beyond its control (such as when the insured quits). Thus, it enhances the entity's ability to keep a policy in force until maturity. However, the probability that an amount will be recoverable in the future does not by itself cause the amount to be considered an asset today. The realization of future policy values still depends on keeping the policy in force.

49. Opponents of the cash surrender value method have proposed alternative methods, which are discussed below.

Ratable Charge Methods

50. There are three variations of ratable charge methods of accounting, which are the pro rata method and the interest-adjusted methods based on cash surrender value and death benefit. Those who support ratable charge methods believe that the net cost of a long-duration life insurance policy (the excess, if any, of the cumulative premiums over the benefits available as of the end of the measurement period) should be expensed on either a pro rata or interest-adjusted basis over the measure-

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ment period of the policy because an entity buying such insurance usually has the intent and ability to keep the policy in force for a considerable period of time. Ordinarily, the entity will continue to pay premiums until (a) the insured retires, (b) the terms of the key-person's contract have been met, (c) the insured dies, or (d) the policy becomes paid up. Thus, they believe that it is appropriate for the entity to charge such excess to expense over the measurement period. In addition, they believe that either a pro rata or interest-adjusted charge to expense is a systematic and rational method that properly allocates costs over the measurement period. In support of that view they cite the following form paragraph 159 of APB Statement No. 4, Basic Concepts and Accounting Principles:

If an asset provides benefits for several periods, its cost is allocated to the periods in a systematic and rational manner in the absence of a more direct basis for associating cause and effect. The cost of an asset that provides benefits for only one period is recognized as an expense of that period (also a systematic and rational allocation). This form of expense recognition always involves assumptions about the pattern of benefits and the relationship between costs and benefits because neither of these two factors can be conclusively demonstrated. The allocation method used should appear reasonable to an unbiased observer and should be followed systematically. Examples of items that are recognized in a systematic and rational manner are depreciation of fixed assets, amortization of intangible assets and allocation of rent and insurance.

51. Some also argue that the excess of the premiums over the cash surrender value during the early policy years represents primarily the costs incurred in acquiring the policy. Paragraphs 28 and 29 of FASB Statement No. 60, <u>Accounting and Reporting</u> <u>by Insurance Enterprises</u>, describe how an insurance company accounts for those costs: Acquisition costs are those costs [incurred by an insurer] that vary with and are primarily related to the acquisition of new and renewal insurance contracts. Commissions and other costs (for example, salaries of certain employees involved in the underwriting and policy issue functions, and medical and inspection fees) that are primarily related to insurance contracts issued or renewed during the period in which the costs are incurred shall be considered aquisition costs.

Acquisition costs shall be capitalized and charged to expense in proportion to premium revenue recognized. . . .

52. Some believe that similar principles should apply to the owner of an insurance policy. Accordingly, the policyholder should not immediately expense the effect on cash surrender value of the issuer's first-year policy acquistion costs but should amortize the effect of those costs in a systematic and rational manner over the measurement period. However, the information required to "unbundle" the insurance premium into its various components and determine the amount related to acquisition costs, mortality charges, and other elements is not available to the policyholder of a traditional long-duration life insurance policy. They believe that even if the policyholder could unbundle the premium and amortize the acquisition costs over the premium paying period as an insurance company does, the results would not differ significantly from a ratable charge method. (See Appendix I for an example of unbundling a premium.)

53. Proponents of the ratable charge methods also believe that the methods properly recognize an additional cost of the insurance, which is the amount of income not realized during each period because funds were invested in key-person life insurance rather than in assets generating current period income.

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It is this absence of income that reflects the additional cost of the key-person life insurance.

54. Many currently written long-duration key-person life insurance policies are transferable from one executive to another insurable executive in the event employment is terminated. Thus, losses from surrender of policies due to executive turnover are ordinarily avoided. If the policies are transferable, proponents of the ratable charge methods contend that the policy has continuing value since the uncertainties regarding whether the policies will remain in force until the end of the measurement period are substantially reduced. It is therefore not necessary to limit the carrying value of the policy to its cash surrender or cancellation value. Such transferable policies came into existence after the AICPA accounting interpretation and were not considered in developing the interpretation.

55. Opponents of the ratable charge methods believe that the business exchange rider does not alter the substance of the transaction. Some also suggest that the effect of a business exchange rider, which permits the transfer of the policy from one employee to another, and another, and so on, may make it more difficult to determine the measurement period and, therefore, the ultimate cash value or death benefit and the number of years on which the ratable charge calculations should be based. For example, if there is a constant turnover of insured executives, the recovery of premiums might be deferred. Supporters of the ratable charge methods believe that the business exchange rider

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makes it likely that the policy will be continued in force until the cash surrender value exceeds cumulative premiums, and it thereby enhances the recoverability of the premium payments. One of the reasons given in the AICPA accounting interpretation for the cash surrender value method was the uncertainty of continuing the policy in force.

56. Supporters of the ratable charge methods contend that when the entity has the intent and ability to continue the policy in force, the cash surrender values of the policy at earlier dates do not represent the value of the policy to the entity. FASB Statement No. 5, Accounting for Contingencies, provides that a loss should be recorded if it is probable that an asset has been impaired or a liability incurred and the amount of loss can be reasonably estimated. If increases in the policy's cash surrender value at the end of the measurement period will exceed cumulative premiums, it is not reasonable to asume that a loss (such as would occur with the surrender of the policy) has been incurred. Some believe, therefore, that recognizing a loss by carrying the key-person life insurance policy at cash surrender or liquidating value is not in accordance with FASB Statement No. 5.

57. A basic feature of financial accounting is the assumption that, in the absence of evidence to the contrary, an entity will continue in operation as a going concern and will not be liquidated. The going concern concept requires the allocation of expenditures for trademarks, patents, goodwill, bond discount

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and debt issue cost, and other items to future accounting periods when it can be reasonable anticipated that such amounts relate to future periods. Supporters of the ratable charge methods argue that traditional key-person life insurance is a long-duration contract, and its cost, if any, should be recognized in a systematic and rational manner over the life of the policy. If short-duration coverage were intended, term life insurance would be substantially more economical. They also believe it is contrary to the going concern concept to carry a noncurrent asset at its cash surrender or current liquidating value when it is not probable that the asset will be liquidated. Carrying the policy at its cash surrender value presumes that the policy will be surrendered. They believe that any loss resulting from surrender of a policy should be recorded in the period the decision is made to cancel the policy, and the loss should not be anticipated by carrying the policy at its surrender or liquidating value.

Pro Rata Ratable Charge Method

58. Advocates of the pro rata ratable charge method believe that there should not be a charge to income in any year if at the end of the measurement period the cumulative cash surrender value will exceed cumulative premiums. When it is the entity's intent to continue the policy in force and the cash surrender value of the policy will exceed cumulative premiums paid, they believe that no expense should be recorded. Some believe, however, that income should not be recognized until the cash surrender value exceeds cumulative premiums. Their reasons are that the purpose of the method is to defer and amortize the effects of

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policy acquisition costs on cash surrender value and that the gains should not be recognized until they can be realized. Others believe it is appropriate to recognize income immediately if the cash surrender value will ultimately exceed cumulative premiums.

59. Proponents of the pro rata ratable charge method believe that the method appropriately defers and amortizes the effect of policy acquisition costs on cash surrender value in a systematic and rational manner. They also believe that the pro rata method is easier to apply than interest-adjusted methods, and it does not require the subjective determination of an interest rate. They further believe that differences between the pro rata and interest-adjusted methods would usually not be material to the entity.

60. Opponents of the pro rata ratable charge method believe that the method does not recognize the present value of the proceeds to be received on maturity of the policy. In the earlier years of the policy, the ratable charge method results in the recording of an asset for cumulative premiums in excess of the underlying cash surrender value. Premiums paid today may not be recoverable from the cash surrender value for many years. They believe that the pro rata ratable charge method artificially levels the policy acquistion and other costs and does not explicitly recognize the time value of money. Supporters of the ratable charge method believe, however, that the method implicitly recognizes the cost of key-person life insurance, which is the foregone income that could have been earned on other investments.

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Interest-Adjusted Ratable Charge Method Based on Cash Surrender Value

61. Advocates of the interest-adjusted ratable charge method based on cash surrender value believe that any excess of premiums paid by an entity for a long-duration life insurance policy over the level annual deposit which, at an appropriate interest rate, would accumulate to the projected cash surrender value of the policy at the end of the measurement period, represents the amount of expense the entity is incurring to acquire life insurance protection. They believe that this accounting method represents a practical way of distinguishing between the expense element and the investment element in a life insurance policy. This method can be implemented without attempting to unbundle the precise elements of any particular insurance premium. They believe that any accounting approach based on unbundling the life insurance premium would not be practical to implement.

62. Opponents of the interest-adjusted ratable charge method based on cash surrender value note that in the early years of the policy the method will typically result in carrying as an asset an amount (accumulated level annual deposits at interest) which will be in excess of its cash surrender value. They believe that any method which results in carrying such a "soft asset" is inappropriate. They also contend that the method results in the development of a level annual amount as insurance expense which is theoretically inconsistent with the results of unbundling, since in actuality the mortality cost charged to the policy by the insurance company can be expected to increase year by year.

Interest-Adjusted Ratable Charge Method Based on Death Benefit

63. Advocates of the interest-adjusted ratable charge method based on death benefit believe that it better conforms to the economics of the typical arrangement when it can be reasonably anticipated that the policy will be continued in force until death. For example, when a policy is used as a funding vehicle for supplementary retirement benefits promised to an executive there is no intention to realize the cash surrender value of the policy. When an entity's intent is to keep the policy in force until the death of the insured, the accounting should be based upon the anticipated death benefit rather than the cash surrender value.

64. Opponents of the interest-adjusted ratable charge method based on death benefit believe that it has the same weaknesses as the interest-adjusted ratable charge method based on cash surrender value. In addition, it introduces a further element of estmation into the accounting, that is, the necessity of having to determine a projected date of death. Opponents also believe that at higher assumed interest rates this method can, in some years, result in carrying the asset at an amount that is less than its cash surrender value. They believe that recording the asset at less than its cash surrender value is unduly conservative.

Interest Rate to be Used in Interest-Adjusted Ratable Charge Methods

65. Interest-adjusted ratable charge methods of accounting for key-person life insurance require the selection of an appro-

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priate interest rate. Although not directly applicable, APB Opinion No. 21, paragraph 13, provides the following guidance in selecting an interest rate for determining the present value of a receivable or payable:

The choice of rate may be affected by the credit standing of the issuer, restrictive covenants, the collateral, payment and other terms pertaining to the debt, and, if appropriate, the tax consequences to the buyer and seller. The prevailing rates for similar instruments of issuers with similar credit ratings will normally help determine the appropriate interest rate for determining the present value of a specific note at its date of issuance. In any event, the rate used for valuation purposes will normally be at least equal to the rate at which the debtor can obtain financing of a similar nature from other sources at the date of the transaction. The objective is to approximate the rate which would have resulted if an independent borrower and an independent lender had negotiated a similar transaction under comparable terms and conditions with the option to pay the cash price upon purchase or to give note for the amount of the purchase which bears the prevailing rate of interest to maturity. [Emphasis added.]

This section discusses these considerations as they relate to key-person life insurance.

66. <u>Credit standing</u>. The choice of a rate requires consideration of the risks associated with the financial stability of the insurance company. Insurance companies are regulated by state authorities, and their solvency is closely monitored to protect the interests of policyholders. Further, in many states, policyholders are protected by state "guarantee funds" in the event of insolvency. Experience has indicated that investments in life insurance bear relatively low credit risk compared to other corporate obligations.

67. <u>Marketability</u>. There are no restrictive covenants, but life insurance policies are not readily marketable in the sense that equity and debt securities are. An interest in a life insurance policy, however, may be transferred to another owner. An owner of a policy would not logically accept less than the cash surrender value for transferring a policy, since the policy can be surrendered at any time for the cash value. A purchaser, on the other hand, might be willing to pay more than the cash value of the policy to avoid the effects of the acquistion costs associated with a new policy.

68. <u>Collateral</u>. There is no collateral required for the issuance of a life insurance policy.

69. <u>Payment and other terms</u>. Key-person life insurance is a long-duration contract that requires periodic payments of premiums. The timing of the receipt of benefits is not fixed, but the amount of benefits that would be received at any future date can be determined.

70. <u>Tax consequences</u>. Life insurance has certain tax advantages over other types of investments. The accumulation of cash surrender value in excess of premiums is not taxed unless and until the policy is surrendered. Tax-free policyholder dividends can be used to buy paid-up additions to the policy. Death benefits are not taxable to the beneficiary.

71. <u>Possible rates</u>. Some believe that the interest rate to be used in interest-adjusted methods that assume the policy will be kept in force until death is a rate comparable to that for a tax-exempt investment (such as a municipal bond) with similar risk and maturity. 72. Some believe that the interest rate to be used in interest-adjusted methods that assume that the policy will be surrendered (for example, at the employee's retirement date) is a rate that is comparable to that for a tax deferred investment of similar maturity and risk.

73. APB Opinion No. 21 states that rates for "similar instruments of issuers with similar credit ratings" and "the rate at which the debtor can obtain financing of a similar nature from other sources" are considered in determining a discount Insurance companies rarely borrow funds in the public rate. market, but obtain their funds through insurance activities. The life insurance business is competitive, and the rates at which amounts are credited to policy values could be expected to be generally comparable for similar policies. However, the rates of return in insurance are difficult to determine because of the varying features of different policies and because of different views as to the basis for determining such rates. Some believe that an alternative financing rate can be approximated by using the current rate at which the insurance company would make policy loans. Some further believe that because interest on policy loans is tax deductible by the policyholder, the alternative financing rate should be an after-tax rate.

Investment Methods

74. Proponents of the investment method based on the expected death benefit believe that if any entity has both the intent and ability to continue a traditional type of life insurance policy in force <u>until the death</u> of the executive, it is preferable

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to account for the key-person life insurance policy as an investment. Accordingly, they believe that the excess of the face amount of the policy, including any paid-up additions to be purchased with policyholder dividends, over the cumulative net premiums payable ("investment gain") should be accrued and credited to income in a systematic and rational manner over the expected life of the policy. Assuming the policy will be held until death of the executive, cash surrender values will never be realized as such and are not considered as they are under cash surrender value and ratable charge accounting methods. Supporters argue that other methods of accounting implicity assume surrender of the policy (for example, at termination or retirement of the executive) and do not comtemplate continuation of the policy in force until death, which in most cases is after the executive's retirement date.

75. In the case of the newer, more flexible forms of insurance products such as flexible-premium universal life and adjustable life insurance policies, the application of the investment method may be impractical because of the many speculative assumptions which would have to be made. These include the elections that the entity could make as to changes in the levels of insurance protection, premium payment amounts, and the like. In the particular case of flexible-premium universal life and adjustable life, a cash value oriented accounting method may be theoretically preferable since the substance of the product can be perceived as a combination of an investment fund with variable amounts of term life insurance protection.

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76. Thus, the investment method might be perceived as appropriate in theory if the insurance product bears a basic similarity to a discount bond with a determinable principle amount, but not if it is essentially similar to the maintenance of a cash fund earning a variable, short-term rate of return.

77. Opponents of the investment method believe that unless there are premature deaths, the cash outflow for payment of premiums will substantially exceed any recoveries during the policy's early years. Such outlays will ultimately be recovered if the assumptions with respect to mortality, policyholder dividends, and interest on policy loans are realized and the entity continues to make premium payments and keeps the policy in force over a fairly long time. Recording an asset for premiums and accrued anticipated income in excess of underlying cash surrender value results in setting up an asset on the balance sheet that may not be fully realized. Because of the magnitude and long-term nature of such uncertainties, some believe that the investment method is not appropriate.

78. Supporters of the alternative investment method based on cash surrender value at the end of the measurement period believe that it is more conservative and eliminates the uncertainty about continuing the policy in force beyond the end of the measurement period until the key-person's death. Opponents of the ratable charge and receivable methods make similar arguments against this method. They also contend that the investment method based on cash surrender value would not be appropriate when cumulative premiums exceed cash surrender value at the

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end of the measurement period. Application of the investment method in that circumstances would require the use of a negative interest rate as illustrated in Appendix F, Example 3.

Receivable Method

79. Proponents of the recievable method believe that it is consistent with APB Opinion No. 8, which requires that the cost of a pension plan be charged in a systematic and rational manner through the use of an acceptable actuarial cost or funding method over the service lives of the employees. Such actuarial methods contemplate future mortality, turnover, and earnings on pension funds in determining current funding requirements and the related accounting costs. Since for a qualified pension plan an entity does not separately account for the pension funding an pension costs, there is no justification for separately accounting for the life insurance and post-employment benefits. The difference between conventional pension funding and post-employment benefits funded by life insurance is that the premiums are advances of the entity's capital that are recoverable. It is the earnings on such advances resulting from cash value increases in excess of premiums, policyholder dividends, and death benefits that fully recover cumulative premiums paid plus the after-tax amount of retirement obligations.

80. Proponents of the receivable method, which integrates the accounting for life insurance and deferred compensation or other post-employment benefits, believe that it is appropriate in those situations when life insurance policies are purchased to recover the after-tax cost of post-employment benefits plus

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the cumulative premiums payable. They argue that it recognizes the integral, long-term nature of the plan and the amounts recoverable under the life insurance policies. There is a contractual obligation to pay the post-employment benefits, and a strong likelihood exists that the policies, which contain business exchange or transferability riders, will be kept in force. The life insurance is designed to recapture the after-tax amount of benefit payments, and it is therefore economically unsound to terminate the policies before death.

81. By recording the liability for post-employment benefits and simultaneously establishing contra assets for the appropriate deferred tax benefit and the amount recoverable from life insurance, the entity's direct obligation to pay the post-employment benefits will be provided for in its financial statements. Proponents of the receivable method believe that it is inconsistent to expense post-employment benefits over the active remaining service life of an employee under the theory that such benefits will be paid subsequent to retirement, and at the same time not recognize until it is collected the amount that will be recovered from the life insurance.

82. FASB Statement No. 5 provides that a loss should be recorded if it is probable that an asset has been impaired or a liability incurred and the amount of loss can be reasonably estimated. Under a properly designed plan, the after-tax amount of post-employment benefits plus the cumulative premiums are recoverable from the life insurance death proceeds. Advocates of the receivable method believe that if the entity has the

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intent and the ability to continue the policies in force it is not reasonable to assume that losses have been incurred by separately accounting for the post-employment benefits and life insurance. Losses may be incurred if (a) policies are prematurely surrendered at some future date, contrary to the entity's current intent; (b) the life insurance company is unable to meet its obligations under the policies when they become due; (c) the employee is terminated and there is no business exchange agreement automatically insuring the successor employee without diluting cash surrender value; or (d) actual experience varies adversely from assumptions to the extent that costs cannot be recovered.

83. Advocates of the receivable method, however, believe that the possibility of such losses occuring can be substantially reduced. The receivable method recognizes that the business exchange or transferability rider substantially reduces the risk of surrender losses. Further, some plans may, by their provisions, be able to eliminate or reduce post-employment benefits if any of the events described in the preceding paragraph occur.

84. Certain plans specifically limit post-employment benefits to the amount remaining after the entity first recovers the cumulative premiums paid and the anticipated tax benefits. Some believe that the receivable method is particularly appropriate for such plans. They believe it would not be appropriate to accrue the liability for post-employment benefits without recognizing that such amounts are not payable unless they are recoverable from the life insurance policies.

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85. Those in favor of the receivable method also believe that the establishment of an asset for premiums in excess of cash surrender values plus the after-tax amount of post-employment benefits, does not result in anticipating income. Such a receivable is theoretically sound and appropriate since realization is reasonably assured. Secondly, a proper matching of income and expense is achieved. Expensing amounts in early years and recording offsetting gains in later years does not properly account for the true cost over the term of the plan. The cost of the plan, which is the amount of income not realizable during each fiscal period because funds were invested in life insurance rather than in assets generating current period income, is properly recognized. It is the absence of this income that reflects the accounting cost of the plan.

86. Opponents of the receivable method believe that compensation should be expensed in the period that it is earned by the employee regardless of when it is paid. They question whether the pattern of foregone interest income reflects the compensation expense in the appropriate periods. Some also believe that the receivable method may inappropriately anticipate tax benefits of deferred compensation. The decision to pay post-employment benefits and the purchase of life insurance are distinct and separate transactions that should not be considered together. The fact that life insurance proceeds may be available to recover

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the after-tax cost of benefits should not eliminate the need for expensing the benefits in the appropriate period. Accounting for life insurance should not be affected by the existence or nonexistence of post-employment benefit plans, and conversely the accounting for post-employment benefits should not be affected by the existence or nonexistence of life insurance.

87. Unless there are premature deaths, the cash outflow for payment of premiums and post-employment benefits will substantually exceed any recoveries during the early years of the plan. Such outlays will utlimately be recovered if the assumptions with respect to mortality, policyholder dividends, income taxes, and interest on policy loans are realized, and the entity does not terminate the insurance coverage. Because of the magnitude and long-term nature of such uncertainties, opponents of the receivable method believe that the post-employment benefits should be expensed over the active service life of the employee and the life insurance should be separately accounted for as traditional key-person life insurance.

88. Opponents of the receivable method believe that establishing a receivable for the after-tax amount of the post-employment benefits and premiums in excess of cash values is equivalent to anticipating future income. The receivable is realizable from future increases in cash surrender values, policyholder dividends, and/or death benefits. Such practice is contrary to the generally accepted accounting principle of not recognizing income until earned.

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89. Life insurance purchased to fund post-employment benefits is similar to traditional key-person life insurance. In both cases the entity pays premiums and receives proceeds either on the death of an employee or surrender of the policy. Opponents of the receivable method believe that the method of accounting for traditional key-person life insurance should be followed.

Costs of Applying Alternative Methods

90. Unbundling of a traditional key-person life insurance premiums, as illustrated in Appendix I, would not be practical for financial accounting purposes. A key-person life insurance premium cannot be divided into its components by a policyholder.

91. The various interest-adjusted ratable charge methods described in this paper require the determination of either the cash surrender value or death benefit under the policy at some future date, the assumption of an interest rate, and the allocation or amortization of amounts over the term of the policy. At the inception of a policy, projected amounts of cash surrender value or death benefit at any selected date would be readily determinable. The imputation of an interest rate and the calculations involved with interest-adjusted ratable charge and investment methods are more complex than the calculations for the pro rata ratable charge and cash surrender value methods. Some believe that a requirement to use a more complex method of accounting would impose a burden, especially on smaller enterprises. Others, however, believe that the interest-adjusted methods are similar to other present value accounting methods, such

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as for receivables and payables under APB Opinion No. 21 and for leases. Although those accounting methods also have been criticized for their complexity, supporters of interest-adjusted methods suggest that insurers would ordinarily be able and willing to assist policyholders in performing the necessary calucalations. The pro rata ratable charge method does, however, require the projection of benefit levels at a future date, and the receivable method requires periodic calculations to test the recoverability of amounts recorded as assets.

92. Opponents of the cash surrender value method of accounting argue that, although the method is simple to apply, it involves costs beyond those of record processing. They believe that the high level of expense recorded under the cash surrender value method in the early years (often the entire premium) has caused many entities to decide not to purchase key-person life insurance even though it might be economically advantageous for the entity to do so. They also believe that the cash surrender value method has led some insurance companies to design policies with high cash values in early years to avoid recording high expenses. They believe that such distortions in the policies are inefficient, can result in inequities with other policyholders, and result in lower levels of benefits in later policy years. They believe, therefore, that the cash surrender value method is costly in that it results in inappropriate business decisions.

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ADVISORY CONCLUSIONS

93. The following are the advisory conclusions recommended by the Accounting Standards Executive Committee. AcSEC's votes on the advisory conclusions are indicated following the conclusions.

Accounting for Key-Person Life Insurance

94. The preferable method of accounting for key-person life insurance is the cash surrender value method. Under this method, premiums, net of the change in cash surrender value, should be charged or credited to income, and the cash surrender value of the policy should be recorded as an asset. (9 yes, 4 no, 1 abstention, 1 absent)

95. Under no circumstances should key-person life insurance be accounted for by a method other than the cash surrender value method. (8 yes, 7 no)

Accounting for Key-Person Life Insurance Purchased to Fund Post-Employment Benefits

96. Disregarding the possible application of APB Opinion No. 8, in accounting for key-person life insurance purchased to fund post-employment benefits, the investment in life insurance should be accounted for separately from the liability for deferred compensation or other post-employment benefits. (13 yes, 1 no, 1 absent)

Views of the Insurance Companies Committee and Its Task Force

97. It was the view of the AICPA Insurance Companies Committee (by a vote of 11 to 2) and its Corporate-Owned Life Insurance Task Force (by a vote of 4 to 0) that key-person life insurance be accounted for by the pro rata ratable charge method when (a) there is a contractual obligation to continue the policy in force or a business exchange rider, and (b) the entity has the ability and intent to continue the policy in force. Those views were not accepted as the advisory conclusions of AcSEC.

98. The views of the Insurance Companies Committee regarding accounting for key-person life insurance purchased to fund post-employment benefits (agreed to by a vote of 7 to 6) are consistent with AcSEC's advisory conclusion (described in paragraph 96) that the investment in life insurance should be accounted for separately from the liability for deferred compensation or other post-employment benefits. The task force favored the receivable method, which integrates the accounting for life insurance and post-employment benefits.

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Glossary

<u>Beneficiary</u> - The person named in the policy to receive the benefits in the event of the insured's death.

Business exchange rider - A provision that permits the insurance coverage to be transferred from one insurable person to another insurable person (also called a transferability rider). Cash surrender value - The net amount that would be received on termination of a policy after deducting cancellation or similar charges, unpaid policy loans, and accumulated interest. Cumulative premiums - The total amount paid as premiums since the inception of a policy less any policyholder dividends not used to purchase additional amounts of life insurance. Dividend scales or illustrations - Projections by the insurance company of the expected amount of policyholder dividends that may be paid under participating policies. Payments of future dividends, however, are not guaranteed by the insurance company. Endowment policy - A life insurance policy that provides life insurance protection equal to the face amount of the policy from the inception date of the policy to the maturity date and provides that if the insured is living at the maturity date the face amount of the policy will be paid at that date. Extended term insurance - Life insurance acquired under a nonforfeiture benefit option in a policy providing for the use of cash surrender value to acquire term insurance for the face amount of the policy for as long a term as the cash surrender value will provide.

Face amount - The amount of death benefit initially guaranteed under a life insurance policy.

In force policy - A policy that has not expired, been cancelled, or surrendered.

<u>Key-person life insurance</u> - Insurance on the life of an executive of an entity when the entity is both a policy owner and a beneficiary.

Long-duration contract - An insurance contract that generally is not subject to unilateral changes in its provisions, such as a noncancelable or guaranteed renewable contract, and requires the performance of various functions and services (including insurance protection) for an extended period.

<u>Measurement period</u> - The period over which benefits and cumulative premiums are projected for purposes of applying the ratable charge methods of accounting. The end of this period is referred to as the measurement date.

<u>Mortality</u> - the relative incidence of death in a given time or place.

<u>Mortality cost</u> - The expected cost to provide for current death benefits based on the probability of death in the current period and the net amount of benefits payable on death of the insured. <u>Nonforfeiture benefits</u> - Those benefits in a life insurance contract that the policyholder does not forfeit, even for failure to pay premiums. Nonforfeiture benefits usually include cash value, policy loan value, paid-up insurance value, or extendedterm insurance value.

Paid-up insurance - Insurance for which no further premiums

are required to be paid for the benefits payable to the beneficiary at the death of the insured or at the maturity date. <u>Participating policy</u> - A policy that is entitled to share in the policyholder dividend distribution.

<u>Permanent life insurance</u> - Insurance that may be kept in force for a person's entire life by paying one or more premiums. It is paid for in one of three different ways: (a) ordinary life insurance (also whole life or straight life; premiums are payable as long as the insured lives), (b) limited-payment life insurance (premiums are payable over a specified number of years), and (c) single-premium life insurance (a lump-sum amount paid at the inception of the insurance contract). The insurance pays a benefit (contractual amount adjusted for items such as policy loans and dividends, if any) at the death of the insured. Permanent insurance contracts also build up nonforfeiture benefits.

<u>Policyholder</u> - The owner of an insurance policy who ordinarily has (a) the right to receive nonforfeiture benefits and name the beneficiary, and (b) the obligation to pay premiums. <u>Policyholder dividends</u> - Payments made or credits extended to the insured by the company under participating policies that result in reducing the net insurance cost to the policyholder. Such dividends may be paid in cash to the insured, applied by the insured as a reduction of the premium due for the next policy year, or used to purchase additional paid-up life insurance. <u>Policy loan</u> - a loan made by a life insurance company to a policyholder on the security of the cash surrender value of the policy.

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<u>Reduced paid-up insurance</u> - A form of insurance available as a nonforfeiture option that provides for continuation of the original insurance plan, but for a reduced face amount with no further payment or premiums.

<u>Short-duration contract</u> - A contract that provides insurance protection for a fixed period of short duration and enables the insurer to cancel the contract or to adjust the provisions of the contract at the end of any contract period, such as adjusting the amount of premiums charged or coverage provided. <u>Split-dollar plan</u> - A plan in which the employer and an employee share in the premium payments and benefits of a life insurance policy.

<u>Term life insurance</u> - Insurance that provides a benefit if the insured dies within the period specified in the contract. The insurance is for level or declining amounts for stated periods, such as 1, 5, or 10 years, or to a stated age. Term life insurance generally has no loan or cash value. <u>Traditional life insurance</u> - Various types of life insurance policies under which the amounts of premiums and face amount cannot be varied at the discretion of the policyholder.

APPENDIXES

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APPENDIX A

AICPA Accounting Interpretation

Deferred Compensation Contracts UNOFFICIAL ACCOUNTING INTERPRETATIONS

1. Accounting for Key-Man Life Insurance

Question—Is the "ratable charge" method of accounting for the cost of nonterm life insurance policies on corporate officers an acceptable accounting method?

Answer-No, the ratable charge method is not acceptable for use by a corporation to account for the cost of officer's life insurance policies. Under this method, the net cost of the policy (total premiums to be paid minus total cash surrender value for a paid-up policy is amortized over the life of the policy) by the straight-line method, producing a "level" annual charge. The method assumes that a critical unknownthe length of time an officer will remain in the corporation's employment-can be predicted with much greater certainty than is usually justifiable. If the policy should be discontinued prior to the payment of all scheduled premiums (for example, because of termination of the officer's employment or a change in management's policies), the ratable charge method would result in a

"writeoff" of a large unamortized deferred charge.

The generally accepted method of accounting for nonterm insurance on the life of a corporate officer is to charge the increase in the cash surrender value of the policy to an asset account and to charge the remaining balance of the annual premium to expense. Advocates of the ratable charge method cite the large charges to expense under the generally accepted method in the early years of a policy as being too conservative and inconsistent with the "matching" and "going concern" concepts in accounting.

Admittedly the generally accepted method is conservative, but it reflects the economic realities of the transaction. And "matching" should not be confused with "leveling." Finally, the going concern concept recognizes that businesses continue in existence, but the fact that a business continues is not an argument for deferring costs unless a future period will in fact be benefited.

[Issue Date: November, 1970]

APPENDIX B

ILLUSTRATION OF BUSINESS EXCHANGE AGREEMENT

The agreement, often called a business exchange rider, permits a policyholder to continue a policy after it no longer has an insurable interest in the life of the original insured by transferring the policy from the life of the original insured to the life of another person. The essential features are that the policy retains the same date of issue, no surrender of the policy results, and there are no new acquisition costs.

Page 54 presents the provisions of an actual business exchange rider. Page 55 shows how the policy can retain its cash value while the face amount and future premiums change based on the age of the new insured at the original date of issuance of the policy. It also comments on typical rider variations. Pages 56 and 57 compare the results of an exchange in year 4 with the surrender of the original policy and the purchase of a new policy.

Business Insurance Exchange Rider

Benefit — You may exchange the named insured on this policy for a new insured, subject to this rider's terms.

Exchange Conditions — Exercise of this exchange will be subject to the following conditions:

- the business relationship which existed between you and the insured as of the policy date is terminated;

- the new insured has the same business relationship to you as of the exchange date that the insured had on the policy date;

- the new insured must submit evidence of insurability satisfactory to us;

- premiums on this policy must be paid to the date of exchange;

- you must make written application for the exchange, return this policy for reissue and pay any costs or charges as determined by us.

Exchange Date — The exchange date is the first monthly anniversary of the policy date on or after the exchange conditions are met.

Coverage on New Insured — Coverage on the new insured will become effective on the exchange date. Coverage on the current insured will terminate on the day before the exchange date.

This policy's policy date will not be changed unless the new insured was born after the policy date. In that case,

the new policy date will be the anniversary of this policy next following the birthdate of the new insured.

The contestable and suicide periods for the new insured will begin on the exchange date.

The premium rate for the new insured will be that rate applicable for the insured's sex, age on the policy date and underwriting class. Riders on the new insured will be added only with our consent and subject to our requirements.

The amount of insurance on the new insured will be such that the cash value before the exchange equals the cash value after the exchange. If there is no cash value, the amount of insurance will be determined by equating reserves.

Effective Date — This rider is effective on the policy date unless otherwise stated hereon. This rider will terminate:

- on termination or lapse of this policy; or
- if ownership is changed; or
- if the option provided by this rider is exercised.

General Conditions — Any indebtedness or assignment outstanding against this policy will not be affected by the exchange. This rider is a part of the policy to which it is attached. All terms of this policy which do not conflict with this rider's terms apply to this rider.

Mutual Life Insurance Company

President

Secretary

ILLUSTRATION OF BUSINESS EXCHANGE AGREEMENT

Examples of the Use of the Business Insurance Exchange Rider

Situation:

Employer owns insurance policy that was issued 3 years ago on the life of an executive now age 48.

Question:

What happens to that policy if it is transferred to an executive now age 38 or 58?

Answer:

The policy retains its original effective date. The policy values will be as follows:

Policy	Original	Reissued To Younger Executive	Reissued to Older Executive
Age at Original Issue Date	45	35	55
Current Age	48	38	58
Cash Value	\$ 3,671	\$ 3,671	\$ 3,671
Face Amount	100,398	164,222	62,178
Premium Hereafter	2,400	2,365	2,541

Typical Variations in the Provisions of Exchange Riders

Exchange rider provisions differ slightly from company to company. The most common is the provision that the cash value of the policy on the new insured equals the cash value of the policy on the old insured. Other common provisions include equal premiums or equal face amounts. COMPARISON OF POLICY EXERCISING THE BUSINESS EXCHANGE RIDER WITH THE PURCHASE OF A NEW POLICY

NEW POLICY

ADVANTAGE OF EXERCISING THE BUSINESS EXCHANGE RIDER

EXAMPLE POLICY ISSUED AT AGE 45 AND THEN TRANSFERRED AFTER 3 YEARS TO AN EXECUTIVE AGE 38 AT THE TIME OF TRANSFER

Ioss on original policy and no duplication of acquisition costs due to purchase a new policy.

Improved long term results:

A.	Results End of 15 Years:	Exchanged Policy	New Policy
	CASH AVAILABLE TO OWNER -		
	Cash Value	\$ 47,836	\$ 37,375
	Cash From Surrender - Compounded at 7% Interest	0	8,268
•	Total Cash	\$ 47,836	\$ 45,643
	- Difference in Premiums - Compounded at 7%	0	7,159
	Net Cash Available	\$ 47,836	\$ 38,484
	DEATH BENEFIT PROCEEDS -		
	Policy Proceeds	\$199,111	\$185,976
	+ Cash From Surrender - Compounded at 7%	0	8,268
	Total Cash	\$199,111	\$194,244
	- Difference in Premiums - Compounded at 7%	0	7,159
	Net Proceeds	\$199,111	\$187,085
Β.	Results End of 30 Years:		
	CASH AVAILABLE TO OWNER -		
	Cash Value	\$192,800	\$169,164
en .	Cash From Surrender of Original Policy - Compounded at 7%	0	22,811
• 	Total Cash	\$192,800	\$191,975
	Difference in Premiums - Compounded at 7%	0	29,807
	Net Cash Available	\$192,800	\$162,168
	DEATH BENEFIT PROCEEDS -		· · · · · · · · · · · · · · · · · · ·
	Policy Proceeds	\$345,948	\$313,478
	Cash From Surrender of Original Policy - Compounded at 7%	0	22,811
	Total Cash	\$345,948	\$336,289
	Difference in Premiums - Compounded at 7%	0	29,807
	Net Proceeds	\$345,948	\$306,482

(a) In		65	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	YEAR END	AGE AT		(1)		
Income is not rec	\$48,000	2400 2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	\$ 2400	PREMIUM	ANNUAL		(2)		
ognized until		66,/84 73,614	60,500	54,530	49,052	43,843	39,078	34,628	30,472	26,592	22,966	· ·	16,480	13,558	10,899	8,290	5,918	3,671	1,643	20	(CSV)	VALUE	SIIRRENDER	(CASH		
cash surrende	73,614	6,830	0/6 [°] 5	5,478	5,209	4,765	4,450	4,156	3,880	3,626	3,387	3,099	2,922	2,659	2,609	2,372	2,247	2,028	1,623	20	VALUE	SURRENDER	TN CASH	(4) INCREASE		•
is not recognized until cash surrender value exceeds	25,614	2,004 4,430	3,5/0	3,078	2,809	2,365	2,050	1,756	1,480	1,226	987	699	522	259	209	(28)	(153)	(372)	(777)	(2,380)	RECOGNIZED	(EXPENSE)	INCOME			CASH S
cumulative		21,10 4 25,614	17,300	13,730	10,652	7,843	5,478	3,428	1,672	192	(1,034)	(2,021)	(2,720)	(3,242)	(3,501)	(3,710)	(3,682)	(3,529)	(3,157)	(2,380)	RECOGNIZED	(EXPENSE)	INCOME	CUMULATIVE	VALUE METHOD	CASH SURRENDER
premiums paid.	25,614	3,004 4,430	3,570	3,078	2,809	2,365	2,050	1,756	1,480	192	0	0	0	0	0	0	0	0	0	0	(a)	RECOGNIZED	(EXPENSE)	INCOME	PRO RATA	
		21,104 25,614	17,300	13,730	10,652	7,843	5,478	3,428	1,672	192	0	0	0	0	0	0	0	0	0	0	RECOGNIZED	(EXPENSE)	INCOME	CUMULATIVE	PRO RATA RATABLE CHARGE METHOD	
		00			00	C			• c	0	1,034	2,021	2,720	3,242	3,501	3,/10	3,682	3,529	3,157	2,380	CSV	0	PREMIUMS IN	CUMULATIVE	E METHOD	

ILLUSTRATION OF CASH SURRENDER VALUE AND PRO RATA RATABLE CHARGE METHODS (CASH SURRENDER VALUE EXCEEDS CUMULATIVE PREMIUMS)

conclusions to a life insurance policy that is paid-up at age 65 for an insured with an entry age of 45. In this policy, the cash surrender This table illustrates the application of the cash surrender value method and pro rata ratable charge method as described in the advisory value exceeds cumulative premiums in the eleventh year.

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APPENDIX C EXAMPLE 1

ILLUSTRATION OF CASH SURRENDER VALUE AND PRO RATA RATABLE CHARGE METHODS

Appendix C Example 2

(Cumulative Premiums Exceed Cash Surrender Value)

				CASH SURRENDER VALUE METHOD	NETHOD	PRO RATABLE CH	PRO RATA Charge Method
AGE AT YEAR END (1)	ANNUAL PREMIUM (2)	CASH SURRENDER VALUE (CSV)	INCREASE IN CASH SURRENDER VALUE (4)	INCOME (EXPENSE) RECOGNIZED (5)	CUMULATIVE INCOME (EXPENSE) RECOGNIZED (6)	INCOME (EXPENSE) RECOGNIZED	CUMULATIVE INCOME (EXPENSE) RECOGNIZED (8)
						4 1,0° *	*** 2**** ***
۲ ۲	\$14,400 14,400	\$ - 3.600	\$ - 3,600	\$(14,400) (10,800)	\$(14,400) (25,200)	\$(5,015) (5,015)	(10,010)
55	14,400	14,400	10,800	(3,600)	(28,800)	(5,015)	(15,045)
56	14,400	25,200	10,800	(3,600)	(32,400)	(5,015)	(20,060)
57	14,400	35,600	10,400	(3,600)	(36,400)	(5,015)	(25,075)
58	14,400	46,400	10,800	(4,000)	(40,000)	(5,015)	(30,090)
59	14,400	57,200	10,800	(3,600)	(43,600)	(5,015)	(35, 105)
6	14,400	67.600	10,400	(4,000)	(47,600)	(5,015)	(40,120)
61	14,400	78,400	10,800	(3,600)	(51,200)	(5.015)	(45,135)
62	14,400	88,800	10,400	(4,000)	(55,200)	(5,015)	(50,150)
63	14,400	100,000	11,200	(3,200)	(58,400)	(5,015)	(55,165)
64	14,400	110,800	10,800	(3,600)	(62,000)	(5,015)	(60,180)
65	14,400	122,000	11,200	(3,200)	(65,200)	(5,020)	(65,200)
	\$187,200		\$122,000	\$65,200		\$65,200	

This table illustrates the application of the cash surrender value method and the pro rata ratable charge method as described in the advisory conclusions to a life insurance policy that is paid-up at age 65 for an insured with an entry age of 52. In this policy, the cumulative premiums exceed the cash surrender value throughout the premium paying period.

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and she and she .

25,614		40,054	st-adjusted ratable	14,440 stion of the intere	48,000 33,560 14,440 40,054 table filustrates the application of the interest-adjusted ratable charge method based on cash surrender value	48,000	
0016	13,614	4,822	68,/9Z	122	8/91	2400	65
600F	6/,114	165' 9	62,723	221	8/ 9T	2400	6
3272	61,045	3,994	57,051	722	1678	2400	5
2900	55,373	3,622	51,751	722	1678	2400	62
2554	50,073	3,276	46,797	722	1678	2400	61
2230	45,119	2,952	42,167	722	1678	2400	60
1927	40,489	2,649	37,840	722	1678	2400	59
1644	36,162	2,366	33,796	722	1678	2400	58
1379	32,118	2,101	30,017	722	1678	2400	57
1132	28,339	1,854	26,485	722	1678	2400	56
106	24,807	1,623	23,184	722	1678	2400	55
685	21,506	1,407	20,099	722	1678	2400	54
483	18,421	1,205	17,216	722	1678	2400	53
295	15,538	1,017	14,521	722	1678	2400	52
118	12,843	840	12,003	722	1678	2400	51
(47)	10,325	675	9,650	722	1678	2400	S 0
(200)	7,972	522	7,450	722	1678	2400	49
(344)	5,772	378	5,394	722	1678	2400	48
(479)	3,716	243	3,473	722	1678	2400	47
\$ (605)	\$ 1,795	\$ 117	\$ 1,678	\$ 722	\$ 1678	\$ 2400	46
(6) - (6)	(5) + (6)	7 1 x (5)	BALANCE	(2) - (3)	PAYNERT	PREMUM	YEAL-DD
INCOME (EXPENSE)	MLANCE	INTEREST	MEGINNING	COST	LEVEL	ANNUAL	ACP AT
(B) Net Insurance	(7)	(6)	(5)	(4)	(2)	(2)	(1)

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ILLUSTRATION OF INTEREST-ADJUSTED RATABLE CHARGE METHOD BASED ON CASH SURRENDER VALUE (Cash Surrender Value Exceeds Cumulative Premiums)

EXMPLE 1 APPENDIX D

(2)(3)(4)(5)(6)(7)ANNUAL PREMIUM 14,400LEVEL 5,661COST 2,661BEGINNING 8,739INTEREST 8,739ENDING 8,739ENDING 8,739ENDING 8,739ENDING 8,739ENDING 8,739ENDING 11,718ENDING 8,200ENDING 12,538ENDING (5)ENDING (6)14,4005,6618,73911,7188,2012,53814,4005,6618,73925,1341,75926,89314,4005,6618,73932,5542,27934,83314,4005,6618,73940,4942,83543,32914,4005,6618,73936,0804,06662,14614,4005,6618,73939,3506,25595,60514,4005,6618,739101,2667,089108,35514,4005,6618,739101,2667,984122,000			\$48,407		\$113,607	\$73,593	\$187,200	
(2)(3)(4)(5)(6)(7)ANNUAL PREMIUMLEVEL COSTCOST COSTBEGINNING BALANCEINTEREST BALANCEENDING BALANCEENDING BALANCE\$ 14,400\$ 5,661\$ 8,739\$ 5,661\$ 396\$ 6,05714,4005,6618,73911,71882012,53814,4005,6618,73913,1991,27419,47314,4005,6618,73932,5142,27934,83314,4005,6618,73932,5542,27934,83314,4005,6618,73940,4942,83543,32914,4005,6618,73948,9903,42952,41914,4005,6618,73958,0804,06662,14614,4005,6618,73978,2145,47583,68914,4005,6618,73978,2145,47583,68914,4005,6618,739101,2667,089108,355	(755)	122,000	7,984	114,016	8,739	5,661	14,400	65
(2)(3)(4)(5)(6)(7)ANNUAL PREMIUMLEVEL PARMIUMINSURANCE PARMENTINSURANCE COST (2)-(3)BEG INNING BALANCEINTEREST T BALANCEENDING TSS (6)\$ 14,400\$ 5,661\$ 8,739\$ 5,661\$ 396\$ 6,05714,400\$ 5,6618,73911,71882012,53814,400\$ 5,6618,73918,1991,27419,47314,400\$ 5,6618,73932,5542,27934,83314,400\$ 5,6618,73940,4942,83543,32914,400\$ 5,6618,73958,0804,06662,14614,400\$ 5,6618,73958,0804,06662,14614,400\$ 5,6618,73978,2145,47583,68914,400\$ 5,6618,73978,2145,47583,68914,400\$ 5,6618,73978,2145,47583,68914,400\$ 5,6618,73978,2145,47583,68914,400\$ 5,6618,73978,2145,47583,68914,400\$ 5,6618,73978,2145,47583,68914,400\$ 5,6618,73978,2145,47583,68914,400\$ 5,6618,73978,2145,47583,68914,400\$ 5,6618,73978,2145,47583,68914,400\$ 6,618,73989,3506,25595,605	(1,650)	108,355	7,089	101,266	8,739	5,661	14,400	64
(2)(3)(4)(5)(6)(7)ANNUAL PREMIUMLEVEL PARMIUMCOST COSTBEGINNING BALANCEINTEREST T BALANCEENDING BALANCE T T BALANCEINTERST T T T S 14,400ENDING BALANCE S 5,661S 396(6)(7)\$ 14,400\$ 5,661\$ 8,739\$ 5,661\$ 396\$ 6,05714,400\$ 5,661 $8,739$ 11,718 820 12,53814,400\$ 5,661 $8,739$ $13,199$ $1,274$ $19,473$ 14,400\$ 5,661 $8,739$ $25,134$ 1.759 $26,893$ 14,400\$ 5,661 $8,739$ $32,554$ $2,279$ $34,833$ 14,400\$ 5,661 $8,739$ $48,990$ $3,422$ $52,419$ 14,400\$ 5,661 $8,739$ $48,990$ $3,422$ $52,419$ 14,400\$ 5,661 $8,739$ $47,807$ $4,746$ $72,553$ 14,400\$ 5,661 $8,739$ $78,214$ $5,475$ $83,669$	(2,484)	95,605	6,255	89,350	8,739	5,661	14,400	63
(2)(3)(4)(5)(6)(7)ANNUAL PREMIUMLEVEL PAYMENTCOST (2)-(3)BEG INNING BALANCEINTEREST INTEREST BALANCEINTEREST (2)-(3)ENDING BALANCE (2)-(3)514,4005,6618,7395,6615,3965,39614,4005,6618,73911,71882012,53814,4005,6618,73918,1991,27419,47314,4005,6618,73925,1341,75926,89314,4005,6618,73932,5542,27934,83314,4005,6618,73948,9903,42952,41914,4005,6618,73958,0804,06662,14614,4005,6618,73967,8074,74672,553	(3,264)	83,689	5,475	78,214	8,739	5,661	14,400	62
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	(3,993)	72,553	4,746	67,807	8,739	5,661	14,400	61
(2)(3)(4)(5)(6)(7)ANNUAL PREMIUMLEVEL PAYMENTCOST (2)-(3)BEG INNING BALANCEINTEREST (2)-(3)ENDING BALANCE (2)-(3)\$ 14,400\$ 5,661\$ 8,739\$ 5,661\$ 396 (5)\$ 6,057 (5)+(6)14,400\$ 5,6618,73911,718820 (12,53814,4005,6618,73918,199 (1,2,5381,274 (2,27919,47314,4005,6618,739 (5,6612,5134 (1,7591,759 (2,83526,893 (2,27914,4005,6618,739 (14,4003,429 (2,8352,2,149 (2,14614,4005,6618,739 (2,2,1463,429 (2,146	1		24 14 M		Norge y in t			
(2)(3)(4)(5)(6)(7)NETANNUAL PREMIUMLEVEL PAYMENTCOST (2)-(3)BEGINNING BALANCEINTEREST (2)-(3)ENDING BALANCE (1,7)INTEREST (5)ENDING BALANCE (5)INTEREST (5)ENDING BALANCE (6)INCOM (6)\$ 14,400\$ 5,661\$ 8,739\$ 5,661\$ 396\$ 6,057\$14,4005,661 $8,739$ 11,718 820 12,53812,53814,4005,661 $8,739$ 25,1341,75926,89314,4005,661 $8,739$ 32,5542,27934,83314,4005,661 $8,739$ 40,4942,83543,32914,4005,661 $8,739$ 48,990 $3,429$ $32,419$	(4,673)	62,146	4,066	58,080	8,739	5,661	14,400	60
	(5,310)	52,419	3,429	48,990	8,739	5,661	14,400	65
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	(5,904)		2,835	40,494	8,739	5,661	14,400	58
(2) (3) (4) (5) (6) (7) ANNUAL PREHIUM LEVEL COST PREHIUM COST (2)-(3) BEGINNING BALANCE INTEREST BALANCE ENDING BALANCE 7% x (5) ENDING BALANCE (5) + (6) \$ 14,400 \$ 5,661 \$ 8,739 \$ 5,661 \$ 396 \$ 6,057 14,400 5,661 8,739 11,718 820 12,538 14,400 5,661 8,739 18,199 1,274 19,473 14,400 5,661 8,739 25,134 1,759 26,893	(6,460)		2,279	32,554	8,739	5,661	14,400	57
(2) (3) (4) (5) (6) (7) ANNUAL PREMIUM LEVEL COST PAREMIUM COST COST (2)-(3) BEGINNING BALANCE INTEREST PARENT ENDING BALANCE \$ 14,400 \$ 5,661 \$ 8,739 \$ 5,661 \$ 396 \$ 6,057 14,400 5,661 8,739 11,718 820 12,538 14,400 5,661 8,739 18,199 1,274 19,473	(6,980)		1,759	25,134	8,739	5,661	14,400	56
(2) (3) (4) (5) (6) (7) ANNUAL LEVEL COST BEGINNING INTEREST ENDING BALANCE PREMIUM PAYMENT (2)-(3) BALANCE 7% x (5) (5) + (6) \$ 14,400 \$ 5,661 \$ 8,739 \$ 5,661 \$ 396 \$ 6,057 14,400 5,661 8,739 11,718 820 12,538 14,400 5,661 8,739 18,199 1,274 19,473	11 2 J 2 J M - A		4. 1	· · ·		4 · · ·		
(2) (3) (4) (5) (6) (7) ANNUAL LEVEL COST BEGINNING INTEREST ENDING BALANCE PREMIUM PAYMENT (2)-(3) BALANCE 78 x (5) (5) + (6) \$ 14,400 \$ 5,661 \$ 8,739 \$ 5,661 \$ 396 \$ 6,057 14,400 5,661 8,739 11,718 820 12,538	(7,465)	19,473	1.274	18,199	8,739	5,661	14,400	55
(2) (3) (4) (5) (6) (7) ANNUAL LEVEL COST BEGINNING INTEREST ENDING BALANCE PREMIUM PAYMENT (2)-(3) BALANCE 7% x (5) (5) + (6) \$ 14,400 \$ 5,661 \$ 8,739 \$ 5,661 \$ 396 \$ 6,057	(7,919)	12,538	820	11,718	8,739	5,661	14,400	54
(2)(3)(4)(5)(6)(7)ANNUALLEVELCOSTBEGINNINGINTERESTENDING BALANCEPREMIUMPAYMENT(2)-(3)BALANCE7% × (5)(5) + (6)	\$ (8,343)	\$ 6,057	\$ 396	\$ 5,661	\$ 8,739	\$ 5,661	\$ 14,400	53
(2) (3) (4) (5) (6) (7)	(6) - (4)	ENDING BALANCE	INTEREST 7% × (5)	BEGINNING	(2)-(3)	LEVEL	ANNUAL PREM I UM	AGE AT YEAR END
	(8)	(7)	(6)	(5)	(4)	(3)	(2)	Ξ

This table issustrates the application of the interest-adjusted ratable charge method based on cash surrender value to a life insurance policy that is paid-up at age 65 for an insured with an entry age of 52. In this policy the cumulative premiums exceed the cash surrender vlaue throughout the premium-paying period. The level payment (3) is calculated as the amount of annual payments which at 7% interest will accumulate to the projected cash surrender value at the end of the measurement period (in this example, at the retirement date), which is \$122,000. Beginning balance (5) is the previous year's ending balance plus the level payment.

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Karango bulentan dooraalah interation

R. T. C. Constant & State of State

APPENDIX D EXAMPLE 2

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APPENDIX E

ILLUSTRATION OF INTEREST-ADJUSTED RATABLE CHARGE METHOD BASED ON DEATH BENEFIT

ASSUMPTIONS:

Male at age 45 \$100,000 policy paid up at age 65 Life expectancy is age 77 7% discount rate	
PRESENT VALUE AT AGE 65 OF DEATH BENEFIT PROCEEDS	
DEATH BENEFIT PROCEEDS	211,251
YEARS OF DISCOUNT TO AGE 65	12 YEARS
DISCOUNT RATE	7%
PRESENT VALUE OF DEATH BENEFIT PROCEEDS AT AGE 65	93,798
LEVEL ANNUAL EQUIVALENT OF PRESENT VALUE AT AGE 65	
PRESENT VALUE OF DEATH BENEFIT PROCEEDS AT AGE 65	93,798
YEARS FROM INCEPTION OF COVERAGE UNTIL AGE 65	20 YEARS
DISCOUNT RATE	7%
LEVEL ANNUAL EQUIVALENT	2,138
LEVEL ANNUAL COST TO AGE 65	
PREMIUM	2,400
LEVEL ANNUAL DISCOUNT	2,138
INTEREST ADJUSTED RATABLE CHARGE	262

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INTEREST-ADJUSTED RATABLE CHARGE METHOD BASED ON DEATH BENEFIT

76 77	71 72 74 75	68 69 70	61 64 65	56 59 60	53 54 55	50 50	(1) Age at Year End
48,000			2400 2400 2400 2400 2400	2400 2400 2400 2400 2400	2400 2400 2400 2400 2400	\$ 2400 2400 2400 2400 2400 2400	(2) ANNUAL PREMIUM
42,760			2138 2138 2138 2138 2138	2138 2138 2138 2138 2138	2138 2138 2138 2138 2138 2138	\$ 2138 2138 2138 2138 2138	(3) LEVEL PAYMENT
5,240			262 262 262 262 262	262 262 262 262 262	262 262 262 262 262	\$ 262 262 262 262 262	(4) INSURANCE COST (2) - (3)
184,487 197,401	131,537 140,744 150,596 161,138 172,418	93,784 100,349 107,373 114,889 122,931	59,625 65,936 72,690 79,916 87,648	33,745 38,246 43,061 48,213 53,726	15,294 18,502 21,935 25,609 29,540	2,138 4,426 6,873 9,493 12,295	(5) BEGINNING BALANCE
12;914 13,818 168.459	9,208 9,852 10,542 11,280 12,069	6,565 7,024 7,516 8,042 8,605	4,174 4,616 5,088 5,594 6,135	2,362 2,677 3,014 3,375 3,761	1,071 1,295 1,535 1,793 2,068	150 310 664 861	(6) INTEREST 7% × (5)
197,401 211,219	140,744 150,596 161,138 172,418 184,487	100,349 107,373 114,889 122,931 131,537	63,798 70,552 77,778 85,510 93,784	36,108 40,923 46,075 51,588 57,487	16,364 19,797 23,471 27,402 31,607	2,288 4,735 7,355 10,157 13,156	(7) ENDING BALANCE (5) + (6)
12,914 13,818 163.219	9,208 9,852 10,542 11,280 12,069	6,565 7,024 7,516 8,042 8,605	3,912 4,354 4,826 5,332 5,873	2,100 2,415 2,752 3,113 3,499	809 1,033 1,273 1,531 1,806	(112) 48 219 402 599	(8) Net Insurance Income (expense) (6) - (4)

-63-

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APPENDIX F

ILLUSTRATION OF INVESTMENT METHOD

To apply the investment method of accounting, a rate of return is determined which, when applied to the scheduled premium payments, will accumulate to the projected death benefit amount under the policy at an assumed date of death.

The illustration in Example 1 is based on a \$100,000 whole life participating policy issued on the life of a person at age 45. Annual premiums will be paid-up at age 65. At age 77 (life expectancy), the death benefit under the policy (including dividend additions) is projected to be approximately \$211,250. The implicit investment rate of return based on these assumptions is 6.5%. The cash surrender value of the policy in each year is also shown for purposes of comparison.

The illustration in Example 2 is based on the same policy with an issue age of 45. In this illustration, the calculations are based on the cash surrender value at retirement date of \$73,614. The implicit investment rate of return based on these assumptions is 3.915%.

The illustration in Example 3 is based on the cash surrender value at the retirement date (\$122,000) of a policy with an entry age of 52. The investment return rate based on these assumptions is 6.33% and results in an expense each year.

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EXAMPLE 1

ILLUSTRATION OF INVESTMENT METHOD

APPENDIX F

		BASED C	N DEATH BENEFI	T	
	(Cash	Surrender Value	Exceeds Cumula	ative Premiums)	
				ENDING	
		BEGINNING	INVESTMENT	INVESTMENT	CASH
AGE AT		INVESTMENT	INCOME	BALANCE	SURRENDER
YEAR END	PREMIUM	BALANCE	(3)×6.5%	(3) + (4)	VALUE
(1)	(2)	(3)	(4)	(5)	(6)
			· · · - •		
46	\$ 2,400	\$ 2,400	\$ 156	\$ 2,556	\$ 20
47	2,400	4,956	322	5,278	1,643
48	2,400	7,678	499	8,177	3,671
49	2,400	10,577	688	11,265	5,918
50	2,400	13,665	888	14,553	8,290
51	2,400	16,953	1,102	18,055	10,899
52	2,400	20,455	1,330	21,784	13,558
53	2,400	24,184	1,572	25,756	16,480
54	2,400	28,156	1,830	29,987	19,579
55	2,400	32,387	2,105	34,492	22,966
56	2,400	36,892	2,398	39,290	26,592
57	2,400	41,690	2,710	44,400	30,472
58	2,400	46,800	3,042	49,842	34,628
59	2,400	52,242	3,396	55,637	39,078
60		· •		61,810	43,843
60	2,400	58,037	3,772	01,010	4),04)
61	2,400	64,210	4,174	68,383	49,052
62	2,400	70,783	4,601	75,384	54,530
63	2,400	77,784	5,056	82,840	60,500
64	2,400	85,240	5,541	90,781	66,784
65	2,400	93,181	6,057	99,237	73,614
66	0	99,237	6,450	105,688	78,672
67	0	105,688	6,870	112,558	84,043
68	0	112,558	7,316	119,874	89,746
69	0	119,874	7,792	127,666	95,787
70	0	127,666	8,298	135,964	102,206
71	0	135,694	8,838	144,802	109,019
72	0	144,802	9,412	154,214	116,229
73	0	154,214	10,024	164,238	123,856
74	Ō	164,238	10,675	174,913	131,917
75	õ	174,913	11,369	186,282	140,431
76	0	186,282	12,108	198,381	149,424
78 77	0	198,391	12,895	211,286	158,895
		• • • • • • • •		,200	
	\$ 48,000		\$163,286		

APPENDIX F

EXAMPLE 2

ILLUSTRATION OF INVESTMENT METHOD BASED ON CASH SURRENDER VALUE (Cash Surrender Value exceeds Cumulative Premiums)

AGE AT YEAR END (1)	PREMIUM (2)	BEGINNING INVESTMENT <u>BALANCE</u> (3)	INVESTMENT INCOME (3) X 3.915% (4)	ENDING INVESTMENT BALANCE (3) + (4) (5)	CASH SURRENDER <u>VALUE</u> (6)
46	\$ 2,400	\$ 2,400	\$ 94	\$ 2,494	\$ 20
47	2,400	4,894	192	5,086	1,643
48	2,400	7,486	293	7,779	3,671
49	2,400	10,179	398	10,577	5,918
50	2,400	12,977	508	13,485	8,290
51	2,400	15,855	622	16,507	10,899
5 2	2,400	18,907	740	19,647	13,558
53	2,400	22,047	863	22,910	16,480
54	2,400	25,310	991	26,301	19,579
55	2,400	28,701	1,124	29,825	22,966
56	2,400	32,335	1,262	33,487	26,592
57	2,400	35,887	1,405	37,292	30,472
58	2,400	39,692	1,554	41,246	34,628
59	2,400	43,646	1,709	45,354	39,078
60	2,400	47,754	1,870	49,624	43,843
61	2,400	52,024	2,037	54,061	49,052
62	2,400	56,461	2,210	58,671	54, 530
63	2,400	61,071	2,391	63,462	60,500
64	2,400	65,862	2,579	68,441	66,784
65	2,400	10,841	2,773	73,614	73,614
	\$48,000		\$25,614		

APPENDIX F

EXAMPLE 3

ILLUSTRATION OF INVESTMENT METHOD BASED ON CASH SURRENDER VALUE

(Cumulative Premiums Exceed Cash Surrender Value)

AGE AT <u>YEAR END</u> (1)	PREMIUM (2)	BEGINNING INVESTMENT BALANCE (3)	INTEREST EXPENSE (3) X 6.33% (4)	ENDING INVESTMENT BALANCE (3) - (4) (5)	··CASH SURRENDER VALUE (6)
53	\$ 14,400	\$ 14,400	\$ (912)	\$ 13,488	\$ 0
54	14,400	27,888	(1,766)	26,122	3,600
55	14,400	40,522	(2,556)	37,956	14,400
56	14,400	52,356	(3,315)	49,041	25,200
57	14,400	63,441	(4,017)	59,423	35,600
58	14,400	73,823	(4,675)	69,148	46,400
59	14,400	83,548	(5,291)	78,258	57,200
60	14,400	92,658	(5,868)	86,790	67,600
61	14,400	101,190	(6,408)	94,782	78,400
62	14,400	109,182	(6,914)	102,268	88,800
63	14,400	116,668	(7,388)	109,280	100,000
64	14,400	123,680	(7,832)	115,848	110,800
65	14,400	130,248	(8,248)	122,000	122,000
•-	\$187,200		\$(65,200)	•	

APPENDIX G

ILLUSTRATION OF DEFERRED COMPENSATION

BEGINNING

Accrual of Deferred Compensation Discounted Present Value Basis

AGE AT <u>YEAR END</u> (1)	OF YEAR CUMULATIVE ACCRUAL (2)	78 <u>INTEREST</u> (3)	BASE PROVISION (4)	TOTAL (5)	50% TAX EFFECT (6)
46	\$ 0	\$ O	\$ 2,377	\$ 2,377	\$ 1,189
47	2,377	166	2,377	2,543	1,272
48	4,920	344	2,377	2,721	1,361
49	7,642	535	2,377	2,912	1,456
50	10,554	739	2,377	3,116	1,558
51	13,670	957	2,377	3,334	1,667
52	17,003	1,190	2,377	3,567	1,784
52	20,571	1,440	2,377	3,817	1,908
54	24,388	1,707	2,377	4,084	2.04
55	28,472	1,993	2,377	4,370	2,185
56	32,842	2,299	2,377	4,676	2,338
57	37,518	2,626	2,377	5,003	2,502
58	42,521	2,976	2,377	5,353	2,677
59	47,874	3,351	2,377	5,728	2,864
60	53,603	3,752	2,377	6,129	3,065
61	59,732	4,181	2,377	6,558	3,279
62	66,290	4,640	2,377	7,017	3,509
63	73,307	5,132	2,377	7,509	3,754
64	80,816	5,657	2,377	8,034	4,017
65	88,850	6,219	2,377	8,596	4,298
		49,906	47,540	97,466	48,723

Present value at end of age 65 of \$150,000 payable in 15 annual installments of \$10,000 is \$97,455.

Column (3) = Column (2) beginning of year cumulative accrual x 7%.

ILLUSTRATION OF ACCRUAL OF DEFERRED COMPENSATION

Computation of Present Value of Deferred Compensation of \$150,000 Payable in 15 annual Installments of \$10,000 Beginning at Age 65.

AGE AT Year end	BEGINNING OF YEAR ACCRUAL	ANNUAL PAYMENT	7% INTEREST	50% TAX EFFECT
66	\$ 97,455	\$ 10,000	\$ 6,122	\$ 3,061
67	93,577	10,000	5,850	2,925
68	89,427	10,000	5,560	2,780
69	84,987	10,000	5,249	2,625
70	80,236	10,000	4,917	2,458
71	75,152	10,000	4,561	2,280
72	69,713	10,000	4,180	2,090
73	63,893	10,000	3,773	1,886
74	57,665	10,000	3,337	1,668
75	51,002	10,000	2,870	1,435
76	43,872	10,000	2,371	1,186
77	36,243	10,000	1,837	9 19
78	28,080	10,000	1,266	633
79	19,346	10,000	654	327
80	10,000	10,000	0	0
		\$150,000	\$52 , 545	\$26,27 3

Present Value of \$150,000 payable in 15 annual installments of \$10,000 = \$97,455.

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ILLUSTRATION OF ACCRUAL OF DEFERRED COMPENSATION ANNUAL LEVEL CHARGE OR STRAIGHT LINE BASIS

BALANCE OF ACCRUAL AT RETIREMENT	\$ 97,455
YEARS UNTIL RETIREMENT	20
ANNUAL EXPENSE	4,873
TAX AT 50%	2,436
ANNUAL ACCRUAL	2,437

ILLUSTRATION OF RECEIVABLE METHOD

APPENDIX H

\$100,000 FACE ANDUNT OF LIFE INSURANCE

\$150,000 SUPPLEMENTAL RETIREMENT BENEFIT PAYABLE ANNUALLY FOR 15 YEARS

REDUCED PAID UP TAKEN AT AGE 65

INTEREST ON UNFUNDED RETIREMENT DENEFIT

				DEFERRED	DEFERRED COMPENSATION ACCRUM	ION ACCRUAL			RETIREMENT DENEFT	NEF IT				
	ENPLOYEE	PRENIUM	ACCRIM	71 INTEREST	TOTA	!	ACCRUAL LESS 501	71 INTEREST	SOL INI Benefit	INTEREST LESS 502	ANNUAL INCREASE	CUMULATIVE RECEIVABLE	DEATH Benefit End Of	CASH SURREN
	E	(2)	3		9	8	(7)	9	(9)	(10)	(11)	(12)	(13)	(10)
	5	2400	2377	•	2377	1189	1189				3589	3589	100058	
	* 1	2400	2377	16	2543	1272	1272				3672	7260	100398	
	47	2400	2377	344	2721	1341	1361				3761	11021	101005	
	=	2400	2377	55	2912	1454	1456				3626	14077	101879	
	3	2400	2377	739	3116	1550	1550				JPSI	19835	103017	
	8	2400	2377	95 7	3334	1667	1447				4067	22902	104421	
	2	2400	2377	1190	3567	1784	1784				4184	27085	106095	
	52	2400	2377	1440	3017	1941	1909				4309	31394	100200	
	ž	2400	2377	1707	1084	2042	2042				4442	35836	110750	
	¥	2400	2377	[99]	4378	2185					1585	40421	113473	
	ន	2400	2377	2299	121	2330					4738	45159	116440	
	¥	2400	2377	2626	5003	2502					4902	50040	119765	
	57	2400	2377	2976	5353	2677					5077	55137	123459	
	×	2400	2377	1321	5728	2864					5244	60401	127529	-
	Ş	2400	2377	3752	6129	3065					5465	65865	131983	
	5	2400	2377	4181	122	3279					5679	71544	154844	-
	; 2	2400	2377	110	7017	3509	3509				5909	77453	142129	
300 2377 4319 600 430 300 2377 4319 600 607 607 300 2377 4319 600 617 600 617 300 422 3041 3041 3041 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500 500<	: 2	2007	23/1	7516	ADC/		5/25					100C	14/044	
SVM SVM <td>5 2</td> <td>24M</td> <td>1311</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1700F</td> <td>SAMAN I</td> <td></td>	5 2	24M	1311									1700F	SAMAN I	
Signed	5							6177		-	1641	99787	128551	
SSA 200 200 200 200 200 SSA 200 200 200 200 200 10540 SA 200 200 200 200 200 1057 106113 14753 SA 200 200 200 200 200 10657 10571 13380 SA 2371 1047 1047 1047 10472 10483 337 1049 1049 1049 10497 10492 10483 337 1049 1049 10497 10492 10493 13380 337 1049 1049 10497 10492 10493 337 1048 1104 110497 10494 17004 337 1049 1049 10497 10494 17004 134 433 433 433 12117 20185 20185 1497 327 327 32244 211251 211251 211251 1497 327 323 433 12244 211251	5								292		2925	102708	134300	
5249 2425 2425 2425 148113 14753 4917 2459 2459 2459 2459 168113 14753 4941 2281 2281 2281 2281 16851 15354 3137 1449 1449 289 1697 11682 16813 3137 1449 1449 1449 11492 16813 14353 2371 1146 1146 11492 16813 144753 1337 1449 1449 11492 16813 144753 1344 433 433 1435 11492 17004 1354 433 433 433 12244 21171 20185 654 327 327 323 133 12244 21171 20185 1497 327 327 322 12244 21171 20185 155 1417 3218 433 433 12244 21125 151 1427 3214 3214 32194 21244 21145	•							5540	278	-	2700	105400	140344	_
4917 2459 2459 2459 116571 15350 4541 2281 2281 2281 2281 116571 15350 3773 1887 1887 1887 1887 116571 15350 3773 1887 1687 1687 11682 16634 3773 1887 1687 11682 16634 3773 1887 1687 11682 16634 3773 1887 1687 11687 11682 16634 3773 1887 1687 1687 11682 16634 3773 1887 1687 1687 1687 16844 3737 1184 1184 1184 11847 16828 17664 1254 433 433 433 133 122644 210121 201854 1353 132 132 122644 221072 210121 21151 1453 1453 12264 221072 12264 212151 21314 1554 152 152 152	3							5249	262	-	2625	100113	146753	-
4541 2281 2281 2281 2281 112852 14643 4180 2090 2090 2090 2090 11047 11047 11047 3337 1449 1449 1449 1449 11047 110472 110473 3337 1449 1449 1449 1449 11047 110472 110474 2371 1104 1104 1104 11047 110472 110474 1257 1104 1104 1104 11047 110472 110474 1254 433 433 1435 11047 110474 110474 1264 433 433 433 1399 122044 21151 12015 327 327 327 122040 21072 21072 1314 12015 12015 122040 21072 21314 140 12214 212143 212143 212143	5							4917	245	-	2459	110571	153504	_
4180 2090 2090 2090 1097 11097 3337 1649 1649 1649 11697 11692 17504 3337 1649 1649 1649 1649 11692 17604 3337 1649 1649 1649 11697 11692 17604 2397 1196 1196 11963 119932 19885 13057 919 919 122934 21072 19885 1264 633 633 132244 21072 210854 21072 6 0 0 0 122994 23134 24153	70							4541	220		2201	112852	160636	
3773 1807 1807 1807 11462 17404 3337 1449 1449 1449 1146 11649 11647 11642 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647 11647	71							4190	2090	-	2090	114942	168134	-
3337 1649 1649 1649 1649 1649 2870 1635 1635 1645 119932 16985 2871 1164 1164 1164 119932 16985 1257 1194 1164 1164 121117 201854 1264 433 633 12264 211251 201854 6 0 0 0 122994 231344 2012 327 327 122994 242143	12							3773	198		1007	116828	176004	
2070 1435 1435 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1194 1117 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201855 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854 201854	27							3337	144	-	1449	118497	184244	
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433 433 433 433 433 122634 221072 327 327 327 122694 231346 0 0 0 122694 24163	2							2371	110	-	1194	121117	201856	
633 633 633 122669 23102 327 327 327 122669 23136 0 0 0 122696 23136	76							1837	9	-	616	122036	211251	. =
0 0 0 327 327 327 327 327 327 327 327 327 327	1							1244	63	-	633	122669	221072	
C0(242								654	32		127	122996	231344	2 7
	Ba							•	_	•	e	122776	201747	

Columes (3), (4), (5) and (6) - See illustration of Accrual of Deferred Compensation - Present Value Basis. (Appendix B)

18000

47540

4994

97444

40722

49722

52547

26274

26274

122996

Columes (8), (9) and (10) - See Illustration of Present Value of Deferred Compensation of \$150,000 Payable it 15 Annual Installments of \$10,000 (Appendix 5)

Eolumn (33) = Column (2) presium + Column (3) deferred compensation accrual less 502 tax hemosit. Ince 502 tax hemosit

aluon (17) Interest on unfunded retirement

APPENDIX I

TABLE 1

ILLUSTRATION OF "UNBUNDLED" PREMIUM METHOD

How a Life Insurance Company Builds a Policy

(Approximate results -- Male age 45 standard nonsmoker)

Ageat Year End		CORPANY EXPENSE AS I OF PREMIUN	COMPANY EXPENSE (1) X (2)	NUUM	PRODADIL.	EXPECTENA MIRTALITY EXPENSE (4) X (5)	81 8C	1121 FLMMS TO INVEST + (1-3-6+7)	PRIOR YR	TOTAL FUNDS TO	(IET OF	INVESTINT IN =CONTRACT-	CASH	EXCESS INVESTINIT IN =CONTRACT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
46	2400	123	1 2752	10003	.0011	119	46.82	-422	•	-622	-5	-673	20	
46 47						_			-673	1205	i 9	B 1302	1643	
	2400	-							1302	3235	26	2 3497	3671	-174
48 49	2400								3477	5275	5 42	7 5724	5718	
49 50	2400 2400				• • • • • • • •		44.23		\$724	7539) 61	L 8150	8290) -140
51	2400	15	340	7252	.003220	302	45.64	1784	6150	9934	80	i 107 38	10077	-163
52	2466			92537			45.16	1919	10730	12657	1025	13683	13558	125
53	2400						44.80		13483	15566	126	16827	14480	347
54	2466	7		91175			44.50	1867	16827	18675	1514	20210	19579	
55	2460	,		9050			44.17	1814	20 210	220 24	1784	23900	22966	842
56	2000		144	8764	.005774	517	43.85	1781	Z1048	25587	2073	27662	26592	
57	2400		144				43.57	1717	27662	27378	230	31758	30472	
58	2400		144				43.35	1644	31758	33401	270	36107	34620	-
59	2400		144				43.16		36107	37668	305		39078	
60	2400		144				43.01		40719	42186	341	7 45603	43843	1760
61	2400		i 120	87794	.01076	2 945	42.84	1378	45603	46781			49052	
62	2400				-	_	42.75	1306	58786	52092			54530	
62 63	2400			-			42.62	1228	56311	57539			60500	
64	2400		-	87211			42.56	1130	62200	43338			66784	
64 65	2400						42.46		68468	69510	563	75140	73614	1526
	48,000		6840 / 20			11,723	3 894				44,81	1		

342

General Steps:

Gross premium

- Company overhead expense charged to policy in year

- Mortality cost (expected mortality x net amount at risk) + Section 818C credit under 1982 tax law (approx, \$.50/1000
 - of net amount at risk)
 - Net premium investment
- + After-tax investment return

Investment in contract

* Expected mortality expense (6) and interest income (11) have been adjusted to approximately allow for federal tax payable by the life insurance company under the tax law in effect for 1983.

TABLE 2

APPENDIX 1

ILLUSTRATION OF "UNBUNDLED" PREMIUM METHOD

COMPUTATION OF ANNUAL INCOME (EXPENSE) PAID-UP LIFE POLICY AT AGE 45 LEVEL AMORTIZATION OF EXPENSES

AGE AT <u>YEAR END</u>	PREMIUM -	EXPENSES	EXPECTED MORTALITY - EXPENSE	+	Sec. 818C ADJUSTMENT	+	8.1% INTEREST	TOTAL (2)-(3)-(4) +(5)+(6)	I NCOME (EXPENSE) (7) - (2)
(1)	(2)	(3)	(4)		(5)		(6)	(7)	(8)
46 47	\$ 2400 2400	\$ 342 342	\$ 119		\$ 49		\$ (50)	\$ 1,938	\$ (462)
48	2400	342	163 203		48		98	2,041	(359)
49	2400	342	240		47		262	2,165	(235)
50	2400	342	271		46		429	2,294	(106)
	2400	372	271		40		611	2,444	44
51	2400	342	302		46		805	2,607	207
52	2400	342	334		45		1,025	2,794	394
53	2400	342	370		45		1,261	2,994	594
54	2400	342	408		45		1,514	3,209	809
55	2400	342	462		44		1,784	3,424	1,024
56	2400	342	519		44		2 072	7 656	1 256
57	2400	342	583		44		2,073	3,656	1,256
58	2400	342	656		43		2,380 2,706	3,899	1,499
59	2400	342	738		43		3,051	4,151 4,414	1,751
60	2400	342	833		43				2,041
	2400	374	655		(۳		3,417	4,685	2,285
61	2400	342	945		43		3,805	4,961	2,561
62	2400	342	1017		43		4,219	5,303	2,903
63	2400	342	1095		43		4,661	5,667	3,267
64	2400	342	1184		43		5,130	6,047	3,647
65	2400	342	1281		42		5,630	6,449	4,049
	\$48000	\$ 6840	\$11,723		\$ 894		\$44,811	\$ 75.142	\$27,142
					Less insurar	hce			
					excess inves		• •	cy (1,526)	(1,526)
								73,616	25,616

Expenses (col. 3) is the level amortization of total company expenses (\$6840) over 20 years (see Table 1, col. 3).

Expected mortality expense (col. 4), section 818c adjustment (col. 5), and interest (col. 6) are taken directly from columns 6, 7, and 11 of Table 1.

The totals of columns 7 and 8 minus the insurance company's excess investment in the policy (Table 1, col. 14), which represents an element of the insurance company's profit, approximate respectively the cash surrender value (\$73,614) and the excess of cash surrender value over cumulative premiums (\$25,614) at the end of the 20-year measurement period.

APPENDIX J

COMPARISON OF RESULTS OF METHODS

This table presents the income statement effects of the various proposed methods that are based on cash surrender value. The illustration is based on the policy with issue age of 45 in which cumulative premiums exceed the cash surrender value at the end of the measurement period.

-ANNUAL INCOME (EXPENSE) NECOGNIZED-

		e j	6 3	2	63	62	61	g	5	6 2	58	57	56	Ĵ	77	Š	53	52	51		50	4 9	48	47	6	Age at Year End
		1400	3400	2400	2400	2400	2400		3400	2400	2400	2400	2400	1400	3400	2400	2400	2400	2400		2400	2400	2400	2400	2400	Annual Premium
	25,614			3884	3570	3078	2809		2365	2050	1756	1480	1226	Ş	987	669	522	607	209		(28)	(153)	(372)		(2380)	Cash Surrender Value Method (App. C, Ex. 1)
	25,614		4430	3884	3570	3078	2809		2365	2050	1756	1480	192		0	0			0 0	,	0	. c	• c			Pro Rata Ratable Charge Method (App. C, Ex. 1)
Less insurance company's excess investment in policy	25,614	2019	3009		1070	2900	2554	2230	1961	1027	1644	1379	1132	TOK	001	685	483	295	118		(47)	(200)	(344)	(479)	(605)	Interest-Adjusted Ratable Charge Method Based on CSV (App. D, Ex. 1)
(1,526) 25,616	27,142	4,049	3,647	3,267	2,903	1907		2,285	2,041	1,751	1,499	1,400	1 366	1,024	608				707	•	(ant)		(326)	(956)	(462)	"Unbundled" Pfemium Method (<u>App. I. Table 2</u>)
	\$25,614	2,773	2,579	2, 391	2,210		2.017	1,870	1,709		1 664	1 405	1.262	1,124	TKK		5.20	740	622	BUG	065	200	100	192	\$ 94	Investment Hethod (App. F, Ex.2)

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