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Actuarial computation of multiemployer pension plan withdrawal liability

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ACTUARIAL COMPUTATION
OF MULTIEMPLOYER PENSION PLAN WITHDRAWAL LIABILITY

Senior Thesis
Advisor: Mr. John Cross
April 24, 1991

Report prepared by:
Kelly A. Renze

BACKGROUND

Inasmuch as most pension plans begin operations with a supplemental liability and additional layers of supplemental liability may be created from time to time, there is no assurance that the accrued benefits of a typical defined benefit pension plan could be paid in full if the plan should terminate. Over the years, thousands of plans, mostly small and in operation for only a few years, have terminated, many with loss of some benefits by the participants as a group. To deal with this situation and to assure participants that their vested benefits will be paid, up to a limit, irrespective of the funded status of the plan at the time of termination, Title IV of the Employee Retirement Income Security Act of 1974 (ERISA) established a program of plan benefits insurance, officially entitled "plan termination insurance".

The plan benefits insurance program is administered by a self-financed public corporation named the Pension Benefit Guaranty Corporation (PBGC). It functions under a board of directors made up of the Secretaries of Commerce, Labor, and Treasury. The insurance program covers, with certain exceptions, all qualified defined benefit pension plans and all other defined benefit pension plans affecting interstate commerce that, for the preceding five years, have in practice met all the requirements of a qualified plan. A defined benefit plan contains a benefit formula that determines an employee's prospective monthly pension. Typical formulas provide for: A) A pension related to service, such as five dollars of monthly pension for each year of service; B) A pension related to pay and service, such as one percent of base pay for each year of service; C) A pension integrated with Social Security. Some examples of plans excluded by ERISA include profit sharing, church plans, and government plans.

ERISA allowed a plan sponsor to determine when a plan should be terminated. In such event, the PBGC would guarantee the appropriate benefits and bill the plan sponsor for the insufficiency (the gap between guaranteed benefits and the plan's assets). The plan sponsor would then be liable for the insufficiency up to thirty percent of its net worth.

It soon become apparent to many that it would be impracticable to extend the program in its original form to multiemployer plans. At the heart of the difficulties was the procedure specified in the law for the allocation of the unfunded actuarial liabilities of a multiemployer plan, especially as between those employers who withdraw from the plan before it terminates and those who remain to the date of termination. Also, Congress felt that a termination program like the one established by ERISA did little to strengthen financially weak plans. Because of systematic funding standards, plans were unable to call for increased funding in times of financial distress. This encouraged early terminations.

The Multiemployer Pension Plan Amendments Act of 1980 (MPPAA), which was signed into law on September 26, 1980, substantially revised Title IV of ERISA as it applies to multiemployer pension plans. Practically every multiemployer pension plan has had to take some action as a result of this amendment.

PROVISIONS OF MPPAA

1) Definition of Multiemployer Plan

The MPPAA defines a multiemployer plan as one to which more than one employer was required to contribute under a collective bargaining agreement between an employee organization and more than one employer. Generally, the term is more narrowly defined to embrace only those plans where the employing firms are not financially related. The more narrow definition excludes plans of a parent corporation which cover the employees of affiliated or subsidiary corporations and the multiplant plans of one employer. Furthermore, the term is properly reserved for those arrangements under which contributions, usually at uniform rates, are payable into one common fund, and benefits on a uniform scale are payable to eligible claimants from pooled assets of the fund.

The multiemployer plan has emerged principally in industries characterized by skilled craftsmen, numerous small employers, intense competition, and a high rate of business failure. It offers the overriding advantage of making pensions available to employees who, because of their employment relationship or the business environment in which they earn their livelihood, would not have access to this form of economic security. This type of plan standardizes pension costs for competing employers, stabilizes the experience of the pension fund, affords the economies of large-scale operations, and provides for transferability of pension credits among the participating firms. Some examples of multiemployer plans include: Amalgamated Clothing Workers of America, International Brotherhood of Carpenters and Joiners, and the Laborers Union.

2) Plan Termination

A multiemployer plan may be terminated by amendment or by withdrawal of every employer (mass withdrawal). The adoption of either of two types of amendments will cause a termination of a plan: A) An amendment that provides that participants will receive no credit for vesting or benefit accrual under the plan for any period of service with an employer after the date specified by the amendment, or B) an amendment that causes a plan to become a defined contribution plan (A plan that contains a contribution formula under which the employer contributes an annual sum, such as ten percent of base pay, to each employee's account).

A plan terminated because of "mass withdrawal" is terminated on the earlier of the date the last employer withdraws or the first day of the first plan year for which no employer contributions were required. A mass withdrawal is presumed if substantially all the employers withdraw within three years. The Trustees of a plan terminated by "mass withdrawal" must limit the payment of benefits to those that are nonforfeitable as of the date of the termination. Benefits attributable to employer contributions (other than death benefits) may only be paid in the form of an annuity, unless the plan assets are distributed in full satisfaction of all nonforfeitable benefits under the plan, or unless the value of the annuity does not exceed $1750. The value of nonforfeitable benefits and the value of the assets of the plan must be determined in writing as of the end of the plan year of the termination, and each plan year thereafter. If the value of nonforfeitable benefits exceeds the value of plan assets, the plan sponsor must reduce benefits under the plan, but only to the extent necessary to pay all of the nonforfeitable benefits when due and to the extent that those benefits are not eligible for the PBGC's guarantee.

A plan terminated by an amendment stops the accrual of benefits, but the plan continues for the purpose of paying out the frozen benefits. Employers remain obligated to contribute at a rate not less than the highest rate applicable during the five preceding plan years.

3) Guaranteed Benefits

Multiemployer plan benefits are guaranteed only if the plan becomes insolvent, that is, its available resources are not sufficient to pay benefits under the plan. The monthly benefit of a participant or beneficiary that is guaranteed by the PBGC is 100% of the accrual rate up to five dollars plus 75% of the lesser of fifteen dollars or the accrual rate in excess of five dollars, times the number of years of the participant's credited service. Benefit increases in effect for fewer than sixty months are not included in this guarantee. In addition, for certain "underfunded" plans, the maximum guarantee is 100% of the first five dollars of benefit accrual plus 65% of the accrual rate greater than five dollars but not exceeding fifteen dollars. (An underfunded plan is one which did not meet minimum funding requirements in the ten years before ERISA became effective and it becomes insolvent before the year 2000 and had to reduce or suspend benefits as an insolvent or terminated plan.) MPPAA also directs the PBGC to establish a program of supplemental guarantees so that multiemployer plans meeting qualifying conditions to be set by the PBGC and paying an additional premium will be able to get coverage for a higher guarantee.

For example, suppose a participant has thirty years of credited service in a plan that provides benefits of twenty-five dollars per year of credited service. His guaranteed benefits would be $487.50 per month {($5+75% of $15)x30}, deferred to Normal Retirement Age. Thus, of the total accrued benefit of $750, only 65% will be guaranteed. If the plan was "underfunded", the next $15 would qualify for 65% guarantee (rather than 75%), resulting in a guaranteed monthly benefit of $442.50 {($5+65% of $15)x30}. If the plan was amended two years ago to increase the benefit accrual from twenty-five to thirty dollars per year, the participant's guaranteed benefits will be the same as described above, because the benefit increase was not in effect at least sixty months and is therefore not eligible for the guarantee.

4) <u>Premiums</u>

The PBGC is authorized to establish premium rates and bases for the application of those rates. The basic benefit rates must be uniform for all multiemployer plans insured by the PBGC. The annual premium rate for the plan year in which September 26, 1980, falls is the prorata portion of the fifty cent premium for the number of months in such year ending on or before September 26, 1980, plus the prorata portion of the one dollar premium for the number of months in the plan year ending after September 26, 1980. The premium for each of the first four plan years beginning after September 26, 1980 is $1.40; for the fifth and sixth plan years it is $1.80; for the seventh and eighth plan years, $2.20; for the ninth and succeeding plan years $2.60.

5) Withdrawal from a Multiemployer Plan

Any employer who withdraws (totally or partially) after September 26, 1980 is generally required to continue funding a proportional share of the plan's unfunded vested benefits. A complete withdrawal from a multiemployer plan occurs when an employer A) permanently ceases to have an obligation to contribute under the plan, or B) permanently ceases all covered operations under the plan. The date of complete withdrawal is the date of the cessation of the obligation to contribute or the cessation of covered operations. The obligation to contribute arises under one or more collective bargaining agreements or as a result of a duty under applicable labor management relations law.

A partial withdrawal from a multiemployer plan occurs on the last day of the plan year in which there is either A) a 70% decline in the contribution base units, or B) a partial cessation of the employer's obligation to contribute. The liability for partial withdrawal is a pro-rata portion of the liability in the event of a complete withdrawal.

6) Determination of Withdrawal Liability

Prior to MPPAA withdrawal liability was not automatic. A contributing employer had contingent termination liability on termination of a plan based on the plan's unfunded guaranteed benefits. MPPAA, however, requires a withdrawing employer to share in the plan's unfunded vested benefits, which will almost always be greater than the plan's unfunded guaranteed benefits. The first step in determining an employer's withdrawal liability is to determine the amount of the plan's unfunded vested benefits. The next step will be to allocate to the withdrawing employer a share of those unfunded vested benefits.

To determine the unfunded vested benefits of a plan, it is necessary to compute the "present value of vested benefits" and the value of the plan's assets. The present value of vested benefits depends upon the identification of the benefits that are considered vested for this purpose, as well as the actuarial assumptions and methods. A benefit is treated as vested and nonforfeitable if the participant has met all of the conditions for entitlement, except generally for the submission of an application, retirement, or completion of a waiting period, even though the benefit might subsequently be reduced.

The Act authorizes the PBGC to prescribe by regulation actuarial assumptions and methods which a plan actuary may use in determining an employer's withdrawal liability. The actuary may use different actuarial assumptions and methods provided that, in the aggregate, they are reasonable and represent the actuary's best estimate of anticipated experience under the plan. Some assumptions made include investment return, retirement age, mortality rates, and administrative expense.

The basic method provided for calculating a withdrawing employer's liability is the presumptive method. Under this method a withdrawing employer's share of a plan's unfunded vested benefits equals the sum of: A) Its share of the unamortized portion of the liability for unfunded vested benefits at the end of the last plan year ending before September 26, 1980, B) Its share of the unamortized portion of the liability for changes in unfunded vested benefits for plan years ending after September 26, 1980, and C) Its share of reallocated liabilities which are left by withdrawing employers.

Unfunded vested benefits are assumed to be written down at the rate of five percent per year. The change in unfunded vested benefits for a plan year ending after September 26, 1980 is determined as the difference between A) the unfunded vested benefits as of the end of the plan year, and B) the sum of the unamortized amount of the plan's unfunded vested benefits on the last day of the plan year ending before September 26, 1980, and the unamortized portions of the changes in the unfunded vested benefits for each preceding plan year ending after September 26, 1980.

Reallocated unfunded vested benefits are the sum of the amounts the Trustees determine, in the plan year, to be A) Uncollectible from an employer because of bankruptcy or similar proceedings, B) Not assessable against a withdrawn employer to whom a bill for liability was sent because of the deminimus rule, the twenty year payment cap, or the dollar limitations on liability that apply in certain sale and insolvency situations, or C) Uncollectible or unassessable for other reasons, under standards adopted by the Trustees that are not inconsistent with regulations prescribed by the PBGC. These liabilities are also reduced five percent per year.

A withdrawing employer will share in each pool of liability by multiplying the unamortized amount of the liability by a ratio as follows: A) The ratio for the pre September 26, 1980 liability is the total contributions required to be made by the withdrawing employer for the last five plan years ending before September 26, 1980 divided by the total contributions for the same five plan years actually made by all employers who were required to contribute on or after September 26, 1980 and had not withdrawn from the plan before that date. B) The ratio for allocating the changes in liability after September 26, 1980, and the reallocated liability is the withdrawing employer's required contributions for the five year period ending on the date of the establishment of the liability, divided by the contributions made by all employers for the same five year period, reduced by contributions made in those years by employers who withdrew from the plan by the year ended on the date of establishment of the liability.

In order to ease the burden on small employers and employers who have had only limited contact with the plan, the law provides for liability to be excused or reduced if a withdrawing employer's share of the unfunded vested benefits is small. The law establishes a deminimis amount which is used to determine a deductible in the calculation of withdrawal liability. The deminimus is an amount equal to the lesser of

$50,000 or 3/4 of one percent of a plan's unfunded vested benefits. The deductible amount is the deminimus amount reduced, dollar-for-dollar, as an employer's allocated share of unfunded vested benefits exceeds $100,000.

Withdrawal liability is to be paid to the plan over a period of years. The law provides for a determination of the annual payment as well as the duration of payments. An employer's annual withdrawal liability payment is equal to the average number of contribution base units (hours worked, for example) for the three consecutive plan years in which the number of units was highest out of the last ten plan years preceding the plan year of withdrawal, multiplied by the highest contribution rate (cents per hour, for example) at which the employer had an obligation to contribute under the plan during the ten plan years ending with the plan year of the withdrawal.

The law also calls for payments to continue until the liability is fully amortized. In calculating the duration of payments there is a requirement that interest be charged at the valuation interest assumption. Further, in computing the duration it is assumed that payments are made on an annual basis and that the first payment is made the first day of the plan year following the plan year in which the withdrawal takes place. An employer is not required to make liability payments to the plan for more than twenty years. This twenty year cap does not apply, however, in the event of a mass withdrawal.

6) Minimum Funding Requirements

ERISA requires that certain changes in the accrued liability are to be amortized in equal installments over specified periods. MPPAA has changed two of the amortization periods as they apply to multiemployer plans, to match with those required for single employer plans. These are: 1) any change in liability due to a plan amendment must be amortized in equal installments over thirty years (instead of the prior forty years), and 2) any change in liability due to an experience gain or loss must be amortized over a period of fifteen years (instead of the prior twenty years).

In a plan which has a very large proportion of retirees and inactive vested participants MPPAA requires additional funding. Such plans are labelled "in reorganization". MPPAA requires that the funding target for each year that a plan is in reorganization be set at a level sufficient to fund the unfunded benefit obligations attributable to participants in pay status over ten years, and the unfunded obligations attributable to all other participants over twenty-five years, plus an additional amount for increases in normal cost made while a plan is in reorganization.

The minimum contribution requirement is: 1) the payment required to amortize the unfunded vested liabilities of participants in pay status over ten years, plus 2) the payment required to amortize the unfunded vested liabilities of all other participants over twenty-five years, plus 3) the increase in normal cost for the plan year determined under the entry age normal funding method, that is attributable to plan amendments adopted while the plan was in reorganization, less 4) an overburden credit.

A plan is overburdened if 1) the average number of pensioners in the base plan year exceeds the average of the number of active participants in the base plan year and the two preceding plan years, and 2) the rate of employer contributions under the plan is at least equal to the greater of the rate of contributions for the preceding plan year or the rate for the plan year preceding the first year in which the plan is in reorganization. The amount of the credit is the product of one-half of the average "guaranteed" benefit paid in the base plan year and the overburden factor for the plan year. The overburden factor is the average number of pensioners for the base plan year, minus the average number of active participants in the last three years.

7) Merger/Transfer of Plan Assets or Liabilities

Unless PBGC regulations provide otherwise, a multiemployer plan is permitted to merge with another multiemployer plan or to transfer assets or liabilities to or from another multiemployer plan if: 1) the plan sponsor of each plan notifies the PBGC of a merger or transfer at least 120 days before the effective date of the merger or transfer; 2) the accrued benefit of any participant or beneficiary is not lower after the effective date of a merger or transfer than it was immediately before that date; 3) the benefits of participants and beneficiaries are not reasonably expected to be suspended under the plan insolvency provisions; and 4) an actuarial valuation of assets and liabilities of each of the affected plans for the plan year preceding the effective date of the merger or transfer has been performed based on the most recent data available as of the day before the start of that plan year.

Upon the transfer of assets or liabilities between, or a merger of, a multiemployer plan and a single-employer plan, the accrued benefits of any participant may not be lower immediately after the transfer or merger than it was immediately before the merger. However, if the single-employer plan terminates within 60 months after the transfer to the single employer plan, the multiemployer plan is liable to the PBGC for an amount which is the lesser of: 1) The amount of the plan asset insufficiency of the terminated single-employer plan less thirty percent of the net worth of the single-employer plan sponsor, or 2) The value, at the time of the transfer, of the unfunded benefits transferred to the single-employer plan and guaranteed by the PBGC.

However, a multiemployer plan is not liable because of the transfer of liabilities to a single-employer plan if the liabilities had previously accrued under a single-employer plan that merged with a multiemployer plan. The multiemployer plan is also not liable if the value of the liabilities transferred to the single-employer plan does not exceed the value of the liabilities for benefits which accrued before the single-employer plan merged with the multiemployer plan. In addition, the multiemployer plan is not liable if the value of assets transferred with the liabilities are substantially equal to the value of the assets which would have been in the single-employer plan if the employer had maintained and funded it as a separate plan under which no benefits accrued after the merger.

The PBGC may, on its own initiative or upon the request of the plan sponsor, order the partition of a plan so that a portion of its assets and liabilities is segregated and held as a separate plan. The PBGC may order the partition of a plan only if notice has been given to the plan sponsor and the plan participants whose vested benefits will be affected. The PBGC must also find that there will be a substantial reduction in the contributions to the plan due to a bankrupt employer, the plan may become insolvent, the contributions will have to be increased significantly to meet the minimum contribution requirement and prevent insolvency, and a partition would prevent the plan from becoming insolvent. If the PBGC orders the partition, the benefits transferred can be no greater than the nonforfeitable benefits directly attributed to service with the employer involved in the bankruptcy proceeding and offset by an equitable share of the plan's assets.

If a bargaining unit shifts from one multiemployer to another because of a certified change in the Union representing the group, the old plan must transfer the vested benefits of the employees in that unit, plus assets to the new plan in accordance with several rules. The old plan sponsor must be notified of the change, by the employer, within thirty days after the change occurs. The old plan must notify the employer of the amount of the employer's withdrawal liability, the intent to transfer the nonforfeitable benefits to the new plan, and the amount of assets determined by statutory formula and liabilities which is to be transferred to the new plan. The old plan must also notify the new plan of the benefits, liabilities, and assets to be transferred to the new plan. Unless the employer or the new plan objects within sixty days, the old plan must promptly transfer the assets and liabilities to the new plan. Finally, the employer's withdrawal liability with respect to the old plan is reduced by the value of the vested benefits transferred to the new plan less the value of the assets transferred. The two plans may agree to a different mix of liabilities and assets to be transferred, but the employer is entitled to a withdrawal liability credit at least equal to what he would have gotten if the plans had followed the statutory procedure.

EXPLANATION OF PROGRAM

The enclosed APL program and sample output demonstrates how the Principal Financial Group deals with calculating withdrawal liability for employers who withdraw from multiemployer pension plans (Section 6 above). This program was written under the guidance of John Hamilton, a systems analyst at the Principal, and Marilyn Janzen, an actuary at the Principal. It is currently being used in their actuarial department to generate the reports shown.

APL is an acronym for A Programming Language, which is the title of a book by Dr. K.E. Iverson defining a notation for mathematics which has evolved to APL programming language today. Not only is APL similar in many respects to algebraic notation, but it also contains many useful functions not expressible concisely with conventional symbols. It has proven to be very efficient for describing algorithms and is useful where fast answers are needed for one-time problems and modeling applications, especially when the application is expected to undergo frequent change.

The power of APL comes from its direct manipulation of aggregates of data in the form of arrays. Computers excel where aggregates are manipulated, where the descriptive details of a function do not grow with the size of the aggregates being manipulated, and where one description suffices to cover a large population of aggregates. Most other languages require their programs to penetrate these structures and manipulate the components individually. It is not surprising that APL programs are much shorter and more lucid than programs in other languages. Because of its power in aggregate and component manipulation, APL has many more primitive functions than other languages. Rather than adding to complexity, this multiplicity actually simplifies. When a typical processing need arises, APL has a primitive function that naturally performs it.

CONCLUSION

This project helps to demonstrate how pension actuaries must keep a constant eye on new laws. The pension industry is constantly bombarded with new laws which force them to alter policies and procedures. Because of the huge number of laws, it is difficult for all employees to fully understand every law. During my stay at the Principal, I discovered that many passages are interpreted differently by different people. I also uncovered some details through my research that other employees were not aware of.

Because of this complexity, it is often necessary to assign to one person, such as myself, the job of understanding and becoming an "expert" on the law. Hence, these laws obviously result in an increased expense for insurance companies, and because of their complexity, an increased confusion on the part of their clients.

I feel that the passage of MPPAA was a very necessary and overdue addition to ERISA. Before its passage, employers of multiemployer plans could withdraw without assuming responsibility for the benefits promised to their employees. Also, the provisions for accelerated funding of plans in financial distress has resulted in more financially stable plans. Although many people may complain about the increased paperwork and research involved in the passage of MPPAA, the bottom line is that it helps to protect the "little people" which is very necessary in today's world of large corporations.

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MULTI-EMPLOYER WITHDRAWAL LIABILITY CALCULATIONS

PROGRAM DOCUMENTATION

APL Workspace: MEWL
Programmed By: Kelly A. Renze

FLOWCHART OF
MULTIEMPLOYER WITHDRAWAL LIABILITY PROGRAM

```
* If entering data for a new contract:
    - NEW.DATA
        - GET.OPTIONS
        - GET.INPUT
            - If RESP='A' or RESP='C'
                - GET.INIT.YEAR1
            - Else
                - GET.INIT.YEAR2
            - GET.PRES
                - GET.CONTRIB
                - MORE.PRES
            - GET.PREV
                - GET.CONTRIB
            - GET.REALL
                - GET.CONTRIB
            - GET.HIST
            - GET.TOTCONTRIB
            - GET.CL
                - SPELL.MONTH
        - CHANGE.INPUT
            - CHECK.INPUT
        - CALCULATE
            - TABLE1.CALCS
            - TABLE2.CALCS
            - TABLE3.CALCS
            - WS.CALCS
                - POOL.CALCS
                    - CURR.UVB.CALC
                    - FIVE.DUE.CALC
                    - DIV.CALC
                - REALL.CALCS
                    - UNAM.WD.YEAR.CALC
                - ADJ.CALCS
                    - LAST.UVB.CALC
                    - DEM.FAC.CALC
                    - DEM.ADJ.CALC
                    - AD.WL.CALC
        - OUTPUT
            - WS.OUT
                - WRITE
                - WORKSHEET
                    - WS.SEC1
                        - WS.SEC1A
                            - WS.NEWPAGE.A
                        - WS.SEC1B
                            - UNDER.HEAD
                            - WS.NEWPAGE
                                - UNDER.HEAD
                        - WS.SEC1C
```

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                - UNDER.HEAD
                - WS.NEWPAGE
                    - UNDER.HEAD
        - WS.POOLS
            - WS.SEC2
                - WS.SEC2A
                    - WS.NEWPAGE.A
                - WS.SEC2B
                    - WS.NEWPAGE
                        - UNDER.HEAD
                - WS.SEC2C
                    - WS.NEWPAGE
                        - UNDER.HEAD
            - WS.SEC3
                - WS.SEC3A
                    - WS.NEWPAGE.A
                - WS.SEC2B
                    - WS.NEWPAGE
                        - UNDER.HEAD
                - WS.SEC2C
                    - WS.NEWPAGE
                        - UNDER.HEAD
        - WS.REALL
            - WS.REALL.A
                - WS.NEWPAGE.A
            - WS.REALL.B
                - WS.NEWPAGE
                    - UNDER.HEAD
            - WS.REALL.C
                - WS.NEWPAGE.A
            - WS.REALL.D
                - WS.NEWPAGE
                    - UNDER.HEAD
        - WS.ADJWL
            - WS.ADJWL.A
                - WS.NEWPAGE.A
            - WS.ADJWL.B
                - WS.NEWPAGE
                    - UNDER.HEAD
            - WS.ADJWL.C
                - WS.NEWPAGE.A
            - WS.ADJWL.D
                - WS.NEWPAGE
                    - UNDER.HEAD
- TABLE1.OUT
    - WRITE
    - TABLE1
        - TABLE1A
            - CHECK.NEWPAGE
        - TABLE1B
            - CHECK.NEWPAGE2
            - BLANKLINES
                - CHECK.NEWPAGE2
- CON.HIST.OUT
```

```
          - WRITE
          - CON.HIST
               - CON.HISTA
                    - WS.NEWPAGE.A
               - CON.HISTB
                    - UNDER.HEAD
                    - WS.NEWPAGE
     - TABLE2.OUT
          - WRITE
          - TABLE2
               - TABLE2ROWS
               - TABLE2B
               - TABLE2C
     - TABLE3.OUT
          - WRITE
          - TABLE3
     - CL.OUT
     - ANOTHER.WS
          - CALCULATE
               - TABLE1.CALCS
               - TABLE2.CALCS
               - TABLE3.CALCS
               - WS.CALCS
                    - POOL.CALCS
                         - CURR.UVB.CALC
                         - FIVE.DUE.CALC
                         - DIV.CALC
                    - REALL.CALCS
                         - UNAM.WD.YEAR.CALC
                    - ADJ.CALCS
                         - LAST.UVB.CALC
                         - DEM.FAC.CALC
                         - DEM.ADJ.CALC
                         - AD.WL.CALC
          - WS.OUT
- SAVE.CASES
```

* If entering data for a pre-existing contract:
  - GET.CASE
  - CHECK.INPUT

  - If adding or deleting data:
    - UPDATE.INPUT
      - GET.OPTIONS
      - ADD.YEARS
      - DELETE.YEARS
      - CHANGE.PREV
        - GET.CONTRIB
      - CHANGE.ER
        - GET.CONTRIB
      - MORE.PRES
      - CHANGE.REALL
        - GET.CONTRIB
      - GET.CL
    - CHANGE.INPUT
      CHECK.INPUT
    - CALCULATE
      - TABLE1.CALCS
      - TABLE2.CALCS
      - TABLE3.CALCS
      - WS.CALCS
        - POOL.CALCS
          - CURR.UVB.CALC
          - FIVE.DUE.CALC
          - DIV.CALC
        - REALL.CALCS
          - UNAM.WD.YEAR.CALC
        - ADJ.CALCS
          - LAST.UVB.CALC
          - DEM.FAC.CALC
          - DEM.ADJ.CALC
          - AD.WL.CALC
    - OUTPUT
      - WS.OUT
        - WRITE
        - WORKSHEET
          - WS.SEC1
            - WS.SEC1A
              - WS.NEWPAGE.A
            - WS.SEC1B
              - UNDER.HEAD
              - WS.NEWPAGE
                - UNDER.HEAD
            - WS.SEC1C
              - UNDER.HEAD
              - WS.NEWPAGE
                - UNDER.HEAD
          - WS.POOLS
            - WS.SEC2

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                        - WS.SEC2A
                            - WS.NEWPAGE.A
                        - WS.SEC2B
                            - WS.NEWPAGE
                                - UNDER.HEAD
                        - WS.SEC2C
                            - WS.NEWPAGE
                                - UNDER.HEAD
                    - WS.SEC3
                        - WS.SEC3A
                            - WS.NEWPAGE.A
                        - WS.SEC2B
                            - WS.NEWPAGE
                                - UNDER.HEAD
                        - WS.SEC2C
                            - WS.NEWPAGE
                                - UNDER.HEAD
                - WS.REALL
                    - WS.REALL.A
                        - WS.NEWPAGE.A
                    - WS.REALL.B
                        - WS.NEWPAGE
                            - UNDER.HEAD
                    - WS.REALL.C
                        - WS.NEWPAGE.A
                    - WS.REALL.D
                        - WS.NEWPAGE
                            - UNDER.HEAD
                - WS.ADJWL
                    - WS.ADJWL.A
                        - WS.NEWPAGE.A
                    - WS.ADJWL.B
                        - WS.NEWPAGE
                            - UNDER.HEAD
                    - WS.ADJWL.C
                        - WS.NEWPAGE.A
                    - WS.ADJWL.D
                        - WS.NEWPAGE
                            - UNDER.HEAD
        - TABLE1.OUT
            - WRITE
            - TABLE1
                - TABLE1A
                    - CHECK.NEWPAGE
                - TABLE1B
                    - CHECK.NEWPAGE2
                    - BLANKLINES
                        - CHECK.NEWPAGE2
        - CON.HIST.OUT
            - WRITE
            - CON.HIST
                - CON.HISTA
                    - WS.NEWPAGE.A
                - CON.HISTB
```

```
                    - UNDER.HEAD
                    - WS.NEWPAGE
        - TABLE2.OUT
            - WRITE
            - TABLE2
                - TABLE2ROWS
                - TABLE2B
                - TABLE2C
        - TABLE3.OUT
            - WRITE
            - TABLE3
        - CL.OUT
        - ANOTHER.WS
            - CALCULATE
                - TABLE1.CALCS
                - TABLE2.CALCS
                - TABLE3.CALCS
                - WS.CALCS
                    - POOL.CALCS
                        - CURR.UVB.CALC
                        - FIVE.DUE.CALC
                        - DIV.CALC
                    - REALL.CALCS
                        - UNAM.WD.YEAR.CALC
                    - ADJ.CALCS
                        - LAST.UVB.CALC
                        - DEM.FAC.CALC
                        - DEM.ADJ.CALC
                        - AD.WL.CALC
            - WS.OUT

    - SAVE.CASES

- If changing values:
    - CHANGE.INPUT
        - CHECK.INPUT
    - CALCULATE
        - TABLE1.CALCS
        - TABLE2.CALCS
        - TABLE3.CALCS
        - WS.CALCS
            - POOL.CALCS
                - CURR.UVB.CALC
                - FIVE.DUE.CALC
                - DIV.CALC
            - REALL.CALCS
                - UNAM.WD.YEAR.CALC
            - ADJ.CALCS
                - LAST.UVB.CALC
                - DEM.FAC.CALC
                - DEM.ADJ.CALC
                - AD.WL.CALC
    - OUTPUT
        - WS.OUT
```

```
- WRITE
- WORKSHEET
    - WS.SEC1
        - WS.SEC1A
            - WS.NEWPAGE.A
        - WS.SEC1B
            - UNDER.HEAD
            - WS.NEWPAGE
                - UNDER.HEAD
        - WS.SEC1C
            - UNDER.HEAD
            - WS.NEWPAGE
                - UNDER.HEAD
    - WS.POOLS
        - WS.SEC2
            - WS.SEC2A
                - WS.NEWPAGE.A
            - WS.SEC2B
                - WS.NEWPAGE
                    - UNDER.HEAD
            - WS.SEC2C
                - WS.NEWPAGE
                    - UNDER.HEAD
        - WS.SEC3
            - WS.SEC3A
                - WS.NEWPAGE.A
            - WS.SEC2B
                - WS.NEWPAGE
                    - UNDER.HEAD
            - WS.SEC2C
                - WS.NEWPAGE
                    - UNDER.HEAD
    - WS.REALL
        - WS.REALL.A
            - WS.NEWPAGE.A
        - WS.REALL.B
            - WS.NEWPAGE
                - UNDER.HEAD
        - WS.REALL.C
            - WS.NEWPAGE.A
        - WS.REALL.D
            - WS.NEWPAGE
                - UNDER.HEAD
    - WS.ADJWL
        - WS.ADJWL.A
            - WS.NEWPAGE.A
        - WS.ADJWL.B
            - WS.NEWPAGE
                - UNDER.HEAD
        - WS.ADJWL.C
            - WS.NEWPAGE.A
        - WS.ADJWL.D
            - WS.NEWPAGE
                - UNDER.HEAD
```

- TABLE1.OUT
  - WRITE
  - TABLE1
    - TABLE1A
      - CHECK.NEWPAGE
    - TABLE1B
      - CHECK.NEWPAGE2
      - BLANKLINES
        - CHECK.NEWPAGE2
- CON.HIST.OUT
  - WRITE
  - CON.HIST
    - CON.HISTA
      - WS.NEWPAGE.A
    - CON.HISTB
      - UNDER.HEAD
      - WS.NEWPAGE
- TABLE2.OUT
  - WRITE
  - TABLE2
    - TABLE2ROWS
    - TABLE2B
    - TABLE2C
- TABLE3.OUT
  - WRITE
  - TABLE3
- CL.OUT
- ANOTHER.WS
  - CALCULATE
    - TABLE1.CALCS
    - TABLE2.CALCS
    - TABLE3.CALCS
    - WS.CALCS
      - POOL.CALCS
        - CURR.UVB.CALC
        - FIVE.DUE.CALC
        - DIV.CALC
      - REALL.CALCS
        - UNAM.WD.YEAR.CALC
      - ADJ.CALCS
        - LAST.UVB.CALC
        - DEM.FAC.CALC
        - DEM.ADJ.CALC
        - AD.WL.CALC
  - WS.OUT

- SAVE.CASES

- If leaving data the same:
  - CALCULATE
    - TABLE1.CALCS
    - TABLE2.CALCS
    - TABLE3.CALCS
    - WS.CALCS

```
        - POOL.CALCS
            - CURR.UVB.CALC
            - FIVE.DUE.CALC
            - DIV.CALC
        - REALL.CALCS
            - UNAM.WD.YEAR.CALC
        - ADJ.CALCS
            - LAST.UVB.CALC
            - DEM.FAC.CALC
            - DEM.ADJ.CALC
            - AD.WL.CALC
- OUTPUT
    - WS.OUT
        - WRITE
        - WORKSHEET
            - WS.SEC1
                - WS.SEC1A
                    - WS.NEWPAGE.A
                - WS.SEC1B
                    - UNDER.HEAD
                    - WS.NEWPAGE
                        - UNDER.HEAD
                - WS.SEC1C
                    - UNDER.HEAD
                    - WS.NEWPAGE
                        - UNDER.HEAD
            - WS.POOLS
                - WS.SEC2
                    - WS.SEC2A
                        - WS.NEWPAGE.A
                    - WS.SEC2B
                        - WS.NEWPAGE
                            - UNDER.HEAD
                    - WS.SEC2C
                        - WS.NEWPAGE
                            - UNDER.HEAD
                - WS.SEC3
                    - WS.SEC3A
                        - WS.NEWPAGE.A
                    - WS.SEC2B
                        - WS.NEWPAGE
                            - UNDER.HEAD
                    - WS.SEC2C
                        - WS.NEWPAGE
                            - UNDER.HEAD
            - WS.REALL
                - WS.REALL.A
                    - WS.NEWPAGE.A
                - WS.REALL.B
                    - WS.NEWPAGE
                        - UNDER.HEAD
                - WS.REALL.C
                    - WS.NEWPAGE.A
                - WS.REALL.D
```

```
                    - WS.NEWPAGE
                         - UNDER.HEAD
          - WS.ADJWL
               - WS.ADJWL.A
                    - WS.NEWPAGE.A
               - WS.ADJWL.B
                    - WS.NEWPAGE
                         - UNDER.HEAD
               - WS.ADJWL.C
                    - WS.NEWPAGE.A
               - WS.ADJWL.D
                    - WS.NEWPAGE
                         - UNDER.HEAD
- TABLE1.OUT
     - WRITE
     - TABLE1
          - TABLE1A
               - CHECK.NEWPAGE
          - TABLE1B
               - CHECK.NEWPAGE2
               - BLANKLINES
                    - CHECK.NEWPAGE2
- CON.HIST.OUT
     - WRITE
     - CON.HIST
          - CON.HISTA
               - WS.NEWPAGE.A
          - CON.HISTB
               - UNDER.HEAD
               - WS.NEWPAGE
- TABLE2.OUT
     - WRITE
     - TABLE2
          - TABLE2ROWS
          - TABLE2B
          - TABLE2C
- TABLE3.OUT
     - WRITE
     - TABLE3
- CL.OUT
- ANOTHER.WS
     - CALCULATE
          - TABLE1.CALCS
          - TABLE2.CALCS
          - TABLE3.CALCS
          - WS.CALCS
               - POOL.CALCS
                    - CURR.UVB.CALC
                    - FIVE.DUE.CALC
                    - DIV.CALC
               - REALL.CALCS
                    - UNAM.WD.YEAR.CALC
               - ADJ.CALCS
                    - LAST.UVB.CALC
```

```
                        - DEM.FAC.CALC
                        - DEM.ADJ.CALC
                        - AD.WL.CALC
                - WS.OUT
```

```
      )FNS
ADDYEARS       ADJCALCS       ADWLCALC       ANOTHERWS      BLANKLINES
CALCULATE      CHANGEER       CHANGEINPUT    CHANGEPREV     CHANGEREALL
CHECKDAY       CHECKEMPTY     CHECKINPUT     CHECKMONTH     CHECKNEWPAGE
CHECKNEWPAGE2  CHECKNUM       CHECKYEAR      CLOUT  CONHIST
CONHISTA       CONHISTB       CONHISTOUT     CURRUVBCALC    DELETEYEARS
DEMADJCALC     DEMFACCALC     DIVCALC        FIVEDUECALC    GETCASE
GETCL  GETCONTRIB     GETHIST        GETINITYEAR1   GETINITYEAR2
GETINPUT       GETOPTIONS     GETPRES        GETPREV        GETREALL
GETTOTCONTRIB  LASTUVBCALC    LEFTAL MOREPRES       NEWDATA        NOPAD
OUTPUT  POOLCALCS      REALLCALCS     RTALIGN        SAVECASES
SPELLMONTH     TABLE1  TABLE1A TABLE1B TABLE1CALCS    TABLE1OUT      TABLE2
TABLE2B TABLE2C TABLE2ROWS     TABLE2CALCS    TABLE2OUT      TABLE3
TABLE3CALCS    TABLE3OUT      UNAMWDYEARCALC        UNDERHEAD
UPDATEINPUT    WITHDRAW       WORKSHEET      WRITE  WSADJWL
WSADJWLA       WSADJWLB       WSADJWLC       WSADJWLD       WSCALCS
WSNEWPAGE      WSNEWPAGEA     WSOUT  WSPOOLS        WSREALL
WSREALLA       WSREALLB       WSREALLC       WSREALLD       WSSEC1 WSSEC1A
WSSEC1B        WSSEC1C        WSSEC2 WSSEC2A        WSSEC2B        WSSEC2C
WSSEC3 WSSEC3A
```

```
      )VARS
A       ACTUARY ADMIN   ADWL    ASSETS  CITYSTATE       CL      CONTRACT
CONTRIBDUE      CONTRIBLESSWITH         CURRDATE        CURRUVB         DAY1
DEMADJ  DEMFAC  DIV     ER      FIRSTCOL        FIVECONTRIB     FIVEDUE
G       GROUPNAME       GROUPOFF        HYPDATE         HYPYEAR
I[illegible]REALL       INITDAY INITMONTH       INITYEAR        INITREALL       LASTCOL
LASTYEAR        LASTUVB         MIDCOLS MONTH1  MULT    NETCHANGE       PHONE
PLANNAME        PREVER  REALLDATE       REALLER         REALLYEAR       RESP
SECTION SPONSOR STREET  TOTCONTRIB      TOTER   TOTFIRSTCOL     TOTREALLUVB
UNADPOR         UNADWL  UNAM    UNAMWDYEAR      UVB     VESTBEN WITHDATE
WITHYEAR        WS3START        YEAR1
```

DESCRIPTION OF VARIABLES

A	- A is 1 if a cover letter is to be sent to the plan administrator, and 0 otherwise.
ACTUARY	- The name of the sender of the cover letter.
ADMIN	- The name of the pension administrator.
AD.WL	- The adjusted individual employer withdrawal liability. - Stored as a vector with each element representing one employer for whom withdrawal calculations are being made.
ASSETS	- The amount of plan assets for each year from INITYEAR to LASTYEAR. - Stored as a vector with each element representing one year.
CITY.STATE	- The city, state, and zip code of the plan sponsor.
CL	- CL is 1 if the cover letter is to be produced and 0 otherwise.
CONTRACT	- The 5-digit contract number of the plan.
CONTRIB.DUE	- The amount of contributions due for all previous employers and for those for whom withdrawal calculations are being made for each year from YEAR1+1 to LASTYEAR. - Stored as a matrix with each row representing a year and each column representing an employer.
CONTRIB.LESS.WITH	- The total plan year contributions less any withdrawals. - Stored as a matrix with each column representing a year from INITYEAR to LASTYEAR, and each row representing five year intervals of years.

<u>CURR.DATE</u>	- The current date to be listed on the cover letter.
<u>CURR.UVB</u>	- The net change value of the UVB which corresponds to each plan year from INITYEAR to LASTYEAR. - Stored as a vector with each item representing one year.
<u>DAY1</u>	- The beginning day of the plan year.
<u>DEM.ADJ</u>	- The amount of DeMinimus Adjustment. - Stored as a vector with one value for each employer for whom withdrawal calculations are being made.
<u>DEM.FAC</u>	- The amount of DeMinimus Factor. - Stored as a vector with one value for each employer for whom withdrawal calculations are being made.
<u>DIV</u>	- The total contributions required to be paid by the individual employer for five year periods divided by the total accumulated contributions for all employers for five year periods. (FIVE.DUE/FIVE.CONTRIB) - Stored as a vector with each element representing one five year time period.
<u>ER</u>	- The names of the current employers for whom withdrawal calculations are being made. It contains at most seven employers in order to fit all on a page. It is a partial list of TOT.ER. - Stored as a character matrix with each row representing one employer name.
<u>FIRSTCOL</u>	- The amount of contributions due for each current employer for whom withdrawal calculations are being made (Corresponds to ER.) - Stored as a matrix with each column representing one employer and each row representing one year from INITYEAR to LASTYEAR.

FIVE.CONTRIB	- The sum of CONTRIB.LESSWITH for five year time intervals (sum the columns). - Stored as a vector with one element for each five year segment.
FIVE.DUE	- The sum of CONTRIB.DUE for five year time intervals. - Stored as a matrix with each column representing one employer for whom withdrawal calculations are being made, and each row representing one year from INITYEAR to LASTYEAR.
G	- G is 1 if the cover letter is to be sent to the group office, and 0 otherwise.
GROUP.NAME	- The name of the person in charge of the plan in the group office.
GROUP.OFF	- The name of the group office in charge of the plan.
HYP.DATE	- The date for which liability is to be determined for non-withdrawing employers. - Stored in the form of '12-01-90'.
HYP.YEAR	- The ending year of the last plan year ending before HYP.DATE.
IND.REALL	- The individual employers share of reallocated UVB. - Stored as a matrix with each column representing one employer for whom withdrawal calculations are being made, and each row representing one year from INITYEAR to LASTYEAR.
INITDAY	- The day of the last day of the plan year.
INITMONTH	- The month of the last day of the plan year.
INITYEAR	- The ending year of the later of the last day of the plan year ending before 9-26-80 or the last day of the plan year during which the withdrawing employer first contributed.

INIT.REALL	- The initial amount of UVB to be reallocated for previously withdrawn employers. - Stored as a vector with one item for each previously withdrawn employer.
LASTCOL	- The amount of contributions due for the withdrawing employer for each year from YEAR1+1 to LASTYEAR. - Stored as a matrix with 1 column, where each row represents one year.
LASTYEAR	- The ending year of the last plan year ending before the current employer's withdrawal or the date ending before the date for which we are calculating potential withdrawal liability.
LAST.UVB	- The current year UVB for each employer for whom withdrawal calculations are being made. - Stored as a vector with one element for each employer for whom withdrawal calculations are being made.
MIDCOLS	- The amount of contributions due for each previously withdrawn employer from YEAR1+1 to LASTYEAR. - Stored as a matrix with each column representing an employer and each row representing one year.
MONTH1	- The month on which the plan year begins.
MULT	- LAST.UVB x .0075 - Stored as a vector with one element for each element for whom withdrawal calculations are being made.
NETCHANGE	- The UVB net change value for each year from INITYEAR+1 to LASTYEAR. - Stored as a vector with one value for each year.
PHONE	- The phone number of the sender of the cover letter.

PLAN.NAME	- The plan name.
PREV.ER	- The name of the current withdrawing employer.
	- Stored as a one row matrix twenty characters long.
REALL.DATE	- The dates of withdrawal for previously withdrawn employers.
	- Stored as a matrix with each row being a date for the corresponding row in REALL.ER.
REALL.ER	- The names of the previously withdrawn employers.
	- Stored as a matrix with each row being the name of one employer.
RESP	- 'A', 'B', or 'C', depending upon which option was chosen in the GET.OPTIONS function.
SECTION	- The section number of the section of the plan document referring to the withdrawal calculations.
SPONSOR	- The name of the plan sponsor.
STREET	- The street address of the plan sponsor.
TOTCONTRIB	- The total accumulated contributions by all employers.
	- Stored as a vector with one value for each year from YEAR1+1 to LASTYEAR.
TOT.ER	- The list of all employer names for whom potential withdrawal liability calculations are being made.
	- Stored as a matrix with each row representing the name of an employer.
TOT.FIRSTCOL	- The total amount of contributions due for all the names in TOT.ER.
	- Stored as a matrix with each row representing a year from YEAR1+1 to

	LASTYEAR and each column representing one employer.
TOT.REALL.UVB	- The total of individual employer's share of reallocated vested benefits. - Stored as a vector with one value for each employer for whom withdrawal calculations are being made.
UNAD.POR	- The individual employer's unadjusted portion of withdrawal liability for each year from INITYEAR to LASTYEAR. - Stored as a matrix with each row representing an employer and each column representing a year.
UNAD.WL	- The Unadjusted individual employer withdrawal liability. - Stored as a vector with one value for each employer for whom withdrawal calculations are being made.
UNAM	- The unamortized values of UVB as seen in Table I. (Uses a 5% amortization). - Stored as a matrix with each row representing the yearly 5 percent amortization (from INITYEAR+1 to LASTYEAR) for each year from INITYEAR to LASTYEAR.
UNAM.WD.YEAR	- The unamortized amount of reallocated vested benefits for employers withdrawn in each year from INITYEAR to LASTYEAR. - Stored as a matrix with each column representing an employer and each row representing a year.
UVB	- Unfunded Vested Benefits for each plan year from INITYEAR to LASTYEAR. - Stored as a vector with one value for each year.
VESTBEN	- The total plan vested benefits for each plan year from INITYEAR to LASTYEAR.

	- Stored as a vector with one value for each year.
WITH.DATE	- The date of withdrawal of PREV.ER. - Stored as a 1x8 matrix.
WITH.YEAR	- The ending year of the last plan year ending before WITH.DATE.
WS3.START	- The ending year of the later of the first plan year ending after 9-26-80, or the year the withdrawing employer first contributed.
YEAR1	- The beginning year of the first plan year ending five years prior to INITYEAR.

```
    ∇ WITHDRAW;REDO;PRE;R;OPT;NUM∆MAT;SP;ORIGINAL;NOPRINT;DRIVE;MAXLINE1;MAXPAGE
[1]  ⍝ THIS FUNCTION IS THE MAIN PROGRAM.
[2]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[3]   INTRO
[4]   ⍝ IF RUNNING ON HARD DRIVE DRIVE←2 ELSE DIRVE←1
[5]  BEGIN:DRIVE←2 ◇ NOPRINT←ORIGINAL←0
[6]   ⎕TCFF
[7]   →(0=1↑⍴⎕LIB DRIVE)/NEW
[8]   'THE FOLLOWING CONTRACT NUMBERS CURRENTLY HAVE DATA STORED ON THE SYSTEM:'
[9]   NUM∆MAT←((1↑⍴⎕LIB DRIVE),1)⍴⍳1↑⍴⎕LIB DRIVE ◇ SP←((1↑⍴⎕LIB DRIVE),3)⍴' ')  '
[10]  ' ' ◇ (((1↑⍴⎕LIB DRIVE),2)⍴' '),(⍕NUM∆MAT),SP,(0 5 ↓(0 ¯4 ↓⎕LIB DRIVE))
[11]  ' '
[12]  'PLEASE CHOOSE ONE OF THE FOLLOWING OPTIONS: '
[13]  '   A) ALTER OR USE THE DATA FROM ONE OF THE ABOVE CONTRACT NUMBERS'
[14]  '   B) ENTER NEW DATA'
[15]  ' '
[16] P1:⍞←'PLEASE ENTER A OR B: ' ◇ ⎕ARBOUT '' ◇ OPT←⍞
[17]  →(0=1↑⍴OPT)/P1
[18]  →(OPT∊'Aa')/ALTER
[19]  →(OPT∊'Bb')/NEW
[20]  →P1
[21] NEW:⎕TCFF
[22] P0:' ' ◇ 'PLEASE ENTER (WITHOUT ANY SPACES) THE 5 DIGIT CONTRACT NUMBER OF
      THE PLAN '
[23]  ⍞←'THAT YOU ARE ENTERING NEW DATA FOR: ' ◇ ⎕ARBOUT '' ◇ CONTRACT←⍞
[24]  →(5=⍴CONTRACT)/NUM
[25]  'PLEASE USE 5 DIGITS. ' ◇ →P0
[26] NUM:CONTRACT←⍕CHECK∆NUM CONTRACT
[27] B1:→(5=⍴CONTRACT)/NEW2
[28]  CONTRACT←'0',CONTRACT ◇ →B1
[29] NEW2:NEW∆DATA ◇ →END
[30] ALTER:GET∆CASE
[31] SHOW:96 WRITE 'CHECK∆INPUT'
[32]  ⎕TCFF ◇ 'WOULD YOU LIKE TO: '
[33]  '   A) ADD AND/OR DELETE YEARS OR EMPLOYERS FROM THIS CONTRACT''S DATA'
[34]  '   B) CHANGE VALUES IN THIS CONTRACT''S DATA'
[35]  '   C) LEAVE THE DATA AS IS' ◇ ' '
[36] P2:⍞←'PLEASE ENTER A, B, OR C: ' ◇ ⎕ARBOUT '' ◇ OPT←⍞
[37]  →(0=1↑⍴OPT)/P2
[38]  →(OPT∊'Aa')/UPDATE
[39]  →(OPT∊'Bb')/CHANGE
[40]  →(OPT∊'Cc')/SAME
[41]  →P2
[42] UPDATE:UPDATE∆INPUT ◇ CHANGE∆INPUT ◇ CALCULATE ◇ OUTPUT ◇ →END
[43] CHANGE:NOPRINT←1 ◇ CHANGE∆INPUT ◇ NOPRINT←0 ◇ CALCULATE ◇ OUTPUT ◇ →END
[44] SAME:CALCULATE ◇ OUTPUT ◇ →JUMP
[45] END:SAVE∆CASES
[46] JUMP:⎕TCFF ◇ 'PLEASE CHOOSE ONE OF THE FOLLOWING OPTIONS: '
[47]  '  A) RUN THE PROGRAM AGAIN USING THE SAME CONTRACT NUMBER AND DATA JUST E
      NTERED'
[48]  '      (CHOOSE IF YOU WISH TO UPDATE OR CHANGE VALUES FOR THIS CONTRACT.)'
[49]  '  B) RUN THE PROGRAM AGAIN USING A NEW CONTRACT NUMBER'
[50]  '  C) QUIT' ◇ ' '
[51] P3:⍞←'PLEASE ENTER A, B, OR C: ' ◇ ⎕ARBOUT '' ◇ OPT←⍞
[52]  →(0=1↑⍴OPT)/P3
[53]  →(OPT∊'Aa')/SHOW
[54]  →(OPT∊'Bb')/BEGIN
[55]  →(OPT∊'Cc')/0
[56]  →P3
    ∇
```

```
  ∇ INTRO;T
[1]  ⍝ THIS FUNCTION DISPLAYS AN INTRODUCTORY MESSAGE DESCRIBING THE PROGRAM.
[2]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[3]   ⎕TCFF
[4]   'This program calculates withdrawal liability for employers who withdraw'
[5]   'from a multi-employer pension plan and/or for one or more current employers'
[6]   'who wish to know what their withdrawal liability would be if they were to'
[7]   'withdraw from a multi-employer pension plan.'
[8]   ' '
[9]   'The program uses the presumptive method of calculating withdrawal liability.'
[10]  'It does not apply for mass withdrawal.'
[11]  ' '
[12]  'There are several ways to input information for the program:'
[13]  '    1) Input the data from scratch.'
[14]  '    2) Update information already stored on the hard drive by adding or deleting'
[15]  '       years of data, or by changing the employers used in the calculations.'
[16]  '    3) Changing values that are already stored on the hard drive.  This'
[17]  '       requires that a small section of the input items be re-entered.'
[18]  ' '
[19]  'Please note that if you make a mistake while entering values, you will be'
[20]  'given the opportunity later to change values by re-entering a section of the '
[21]  'input items, instead of having to re-enter all of them.  Also, at the end of the'
[22]  'program you are given the opportunity to add and delete years and employers.'
[23]  ' '
[24]  'For more information about withdrawal liability please see Chapter 24 of'
[25]  'Fundamentals of Private Pensions by Dan M. McGill.'
[26]  ' '
[27]  'PLEASE HIT ENTER WHEN YOU ARE READY TO BEGIN.' ⋄ T←⎕
  ∇
```

```
  ∇ NEW∆DATA
1]  ⍝ THIS FUNCTION GETS ORIGINAL DATA AND PERFORMS THE CALCS AND OUTPUT.
2]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
3]   ORIGINAL←1
     GET∆OPTIONS
5]   GET∆INPUT
6]   CHANGE∆INPUT
7]   CALCULATE
8]   OUTPUT
  ∇
```

```
    ∇ GET∆CASE;T;NUM∆MAT;NUM
[1]  ⍝ THIS FUNCTION COPIES THE VARIABLES FROM A SPECIFIC CASE INTO THE
[2]  ⍝ ACTIVE WORKSPACE.
[3]  ⍝
[illegible] VARIABLES NEEDED: DRIVE
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   ' ' ⋄ ' '
[7]   NUM∆MAT←((1↑⍴⎕LIB DRIVE),1)⍴⍳1↑⍴⎕LIB DRIVE
[8]  P1:⍞←'PLEASE ENTER THE NUMBER OF THE CASE THAT YOU WISH TO USE: '
[9]   ⎕ARBOUT '' ⋄ NUM←CHECK∆NUM ⍞
[10]  →(~NUM∊,NUM∆MAT)/P1
[11]  CASE←(⍕DRIVE),' ',(2↓(¯4↓(⎕LIB DRIVE)[NUM;]))
[12]  ⎕TCFF ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ '                PLEASE WAIT . . .'
[13]  T←⎕COPY CASE
    ∇
```

```
    ∇ UPDATE∆INPUT;ADD;OLDPREV;OLDWITH;OLDDATE
[1]  ⍝ THIS FUNCTION CALLS THE PROCEDURES TO UPDATE STORED INFORMATION BY
[2]  ⍝ ADDING OR DELETING DATA.
[3]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[4]   OLDPREV←PREV∆ER ⋄ OLDWITH←WITH∆YEAR ⋄ OLDDATE←WITH∆DATE
[5]   GET∆OPTIONS
[6]   ADD∆YEARS
[7]   →(ADD=1)/NEXT
[8]   DELETE∆YEARS
[9]  NEXT:CHANGE∆PREV
[10]  CHANGE∆ER
[11]  MORE∆PRES
[12]  CHANGE∆REALL
[13]  CONTRIB∆DUE←FIRSTCOL,MIDCOLS,LASTCOL
[14]  GET∆CL
    ∇
```

```
    ∇ ADD∆YEARS;R;YEAR;ROW1;ROW2;I;J;OLDYEAR;OLDHYP;OLDWITH
[1]  ⍝ THIS FUNCTION ADDS YEARS OF DATA TO STORED INFORMATION.
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED: LASTYEAR, RESP, HYP∆YEAR, WITH∆YEAR, VESTBEN, ASSETS,
[    ⍝                   TOTCONTRIB, TOT∆ER, TOT∆FIRSTCOL, REALL∆ER, MIDCOLS,
[5]  ⍝                   PREV∆ER, LASTCOL, ADD
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   ⎕TCFF ⋄ ADD←0
[8]  BEGIN:' ' ⋄ 'DO YOU WISH TO UPDATE THE CURRENT DATA BY ADDING ADDITIONAL YEARS OF'
[9]   'INFORMATION? (THE CURRENT DATA ENDS WITH THE PLAN YEAR ENDING ',(⍕LASTYEAR),'.)' ⋄ ' '
[10] P1:⍞←'PLEASE ENTER Y OR N: ' ⋄ ⎕ARBOUT '' ⋄ R←1↑⍞
[11]  →(R∊'Nn')/0 ⋄ →(~R∊'Yy')/P1
[12]  ADD←1
[13]  OLDYEAR←YEAR←LASTYEAR ⋄ OLDHYP←HYP∆YEAR ⋄ OLDWITH←WITH∆YEAR
[14]  →(RESP∊'Aa')/NEXT
[15]  ' ' ⋄ 'ENTER THE ENDING YEAR OF THE LAST DAY OF THE PLAN YEAR ENDING PRIOR'
[16]  'TO THE DATE FOR WHICH YOU WISH TO CALCULATE POTENTIAL LIABILITY. '
[17]  ⍞←'(PLEASE USE FOUR DIGITS): ' ⋄ ⎕ARBOUT ''
[18]  LASTYEAR←HYP∆YEAR←CHECK∆NUM ⍞ ⋄ →VERIFY
[19] NEXT:' ' ⋄ 'ENTER THE ENDING YEAR OF THE LAST DAY OF THE PLAN YEAR ENDING PRIOR'
[20]  'TO THE DATE OF THE NEW EMPLOYER''S WITHDRAWAL.'
[21]  ⍞←'(PLEASE USE FOUR DIGITS): ' ⋄ ⎕ARBOUT ''
[22]  WITH∆YEAR←'' ⋄ LASTYEAR←CHECK∆NUM ⍞
[23]  WITH∆YEAR←WITH∆YEAR,LASTYEAR
[24] VERIFY:→(LASTYEAR≥OLDYEAR)/VERIFY2
[25]  ' ' ⋄ 'YOU ARE NOT ADDING ANY YEARS WITH THIS DATE.' ⋄ →AGAIN
[26] VERIFY2:→(LASTYEAR≠OLDYEAR)/LOOP
[27]  ' ' ⋄ 'THE DATA IS ALREADY CURRENT UPTO THE YEAR ENDING ',(⍕OLDYEAR)
[28] AGAIN:LASTYEAR←OLDYEAR ⋄ HYP∆YEAR←OLDHYP ⋄ WITH∆YEAR←OLDWITH ⋄ →BEGIN
[29] LOOP:YEAR←YEAR+1 ⋄ ⎕TCFF
[3    'ENTER THE FOLLOWING INFORMATION AS OF THE LAST DAY OF THE PLAN YEAR ENDING ',(⍕YEAR),':'
[31]  ⍞←'    TOTAL VESTED BENEFITS: '
[32]  ⎕ARBOUT '' ⋄ VESTBEN←VESTBEN,CHECK∆NUM ⍞
[33]  ⍞←'    TOTAL ASSETS: '
[34]  ⎕ARBOUT '' ⋄ ASSETS←ASSETS,CHECK∆NUM ⍞
[35]  ⍞←'    TOTAL CONTRIBUTIONS BY ALL EMPLOYERS: '
[36]  ⎕ARBOUT '' ⋄ TOTCONTRIB←TOTCONTRIB,CHECK∆NUM ⍞
[37]  I←J←0 ⋄ ROW1←ROW2←''
[38] ER∆LOOP:→(0=1↑⍴TOT∆ER)/NEXT1 ⋄ I←I+1
[39]  ⍞←'    TOTAL CONTRIBUTIONS DUE FOR ',(NOPAD TOT∆ER[I;]),': '
[40]  ⎕ARBOUT '' ⋄ ROW1←ROW1,CHECK∆NUM ⍞
[41]  →(I≠1↑⍴TOT∆ER)/ER∆LOOP
[42]  TOT∆FIRSTCOL←TOT∆FIRSTCOL,[1]ROW1
[43]  →PREV∆LOOP
[44] NEXT1:TOT∆FIRSTCOL←TOT∆FIRSTCOL,[1]0 ⋄ MORE∆PRES
[45] PREV∆LOOP:→(0=1↑⍴PREV∆ER)/NEXT2
[46]  ⍞←'    TOTAL CONTRIBUTIONS DUE FOR ',(NOPAD PREV∆ER[1;]),': '
[47]  ⎕ARBOUT ''
[48]  LASTCOL←LASTCOL,[1]CHECK∆NUM ⍞ ⋄ →REALL∆LOOP
[49] NEXT2:LASTCOL←LASTCOL,[1]0
[50] REALL∆LOOP:→(0=1↑⍴REALL∆ER)/NEXT3 ⋄ J←J+1
[51]  ⍞←'    TOTAL CONTRIBUTIONS MADE BY ',(NOPAD(RT∆ALIGN REALL∆ER[J;])),': '
[52]  ⎕ARBOUT '' ⋄ ROW2←ROW2,CHECK∆NUM ⍞
[53]  →(J≠1↑⍴REALL∆ER)/REALL∆LOOP
[54]  MIDCOLS←MIDCOLS,[1]ROW2
[55   →END
[5    EXT3:MIDCOLS←MIDCOLS,[1]0
[57] END:→(YEAR≠LASTYEAR)/LOOP
    ∇
```

```
    ∇ DELETE∆YEARS;R;YEAR;ROW1;ROW2;I;J;OLDYEAR;OLDHYP;OLDWITH;DROP
[1]   ⍝ THIS FUNCTION ADDS YEARS OF DATA TO STORED INFORMATION.
[2]   ⍝
[3]   ⍝ VARIABLES NEEDED: LASTYEAR, RESP, HYP∆YEAR, WITH∆YEAR, VESTBEN, ASSETS,
[[illegible]   ⍝                    TOTCONTRIB, TOT∆ER, TOT∆FIRSTCOL, MIDCOLS, LASTCOL
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   ⎕TCFF
[7]  BEGIN:' ' ◊ 'DO YOU WISH TO ALTER THE CURRENT DATA BY DELETING YEARS OF'
[8]   'INFORMATION? (THE CURRENT DATA ENDS WITH THE PLAN YEAR ENDING ',(⍕LASTYEAR),'.)' ◊ ' '
[9]  P1:⍞←'PLEASE ENTER Y OR N: ' ◊ ⎕ARBOUT '' ◊ R←1↑⍞
[10]  →(R∊'Nn')/0 ◊ →(~R∊'Yy')/P1
[11]  OLDYEAR←LASTYEAR ◊ OLDHYP←HYP∆YEAR ◊ OLDWITH←WITH∆YEAR
[12]  →(RESP∊'Aa')/NEXT
[13]  ' ' ◊ 'ENTER THE ENDING YEAR OF THE LAST DAY OF THE PLAN YEAR ENDING PRIOR'
[14]  'TO THE DATE FOR WHICH YOU WISH TO CALCULATE POTENTIAL LIABILITY. '
[15]  ⍞←'(PLEASE USE FOUR DIGITS): ' ◊ ⎕ARBOUT ''
[16]  LASTYEAR←HYP∆YEAR←CHECK∆NUM ⍞ ◊ →VERIFY
[17] NEXT:' ' ◊ 'ENTER THE ENDING YEAR OF THE LAST DAY OF THE PLAN YEAR ENDING PRIOR'
[18]  'TO THE DATE OF THE NEW EMPLOYER''S WITHDRAWAL.'
[19]  ⍞←'(PLEASE USE FOUR DIGITS): ' ◊ ⎕ARBOUT ''
[20]  WITH∆YEAR←'' ◊ LASTYEAR←CHECK∆NUM ⍞
[21]  WITH∆YEAR←WITH∆YEAR,LASTYEAR
[22] VERIFY:→(LASTYEAR<OLDYEAR)/DELETE
[23]  ' ' ◊ 'YOU ARE NOT DELETING ANY YEARS WITH THIS DATE.'
[24]  LASTYEAR←OLDYEAR ◊ HYP∆YEAR←OLDHYP ◊ WITH∆YEAR←OLDWITH ◊ →BEGIN
[25] DELETE:⎕TCFF ◊ DROP←OLDYEAR-LASTYEAR
[26]  VESTBEN←(-DROP)↓VESTBEN
[27]  ASSETS←(-DROP)↓ASSETS
[28]  TOTCONTRIB←(-DROP)↓TOTCONTRIB
[29]  TOT∆FIRSTCOL←(-DROP,0)↓TOT∆FIRSTCOL
[3[illegible]  LASTCOL←(-DROP,0)↓LASTCOL
[31]  MIDCOLS←(-DROP,0)↓MIDCOLS
    ∇
```

```
    ∇ CHANGE∆PREV;R;NUM∆MAT;SPACES;NUM;TEMP∆ER;TEMP∆CONTRIB;Y;TEMP;SWITCH;OLDCOL
[1]  ⍝ THIS FUNCTION ALTERS SAVED DATA BY CHANGING THE WITHDRAWING EMPLOYER.
[2]  ⍝ (THIS EMPLOYER MAY BE ONE OF THE EMPLOYERS IN THE POTENTIAL LIAB LIST.)
[3]  ⍝ IT ALSO MOVES THE OLD EMPLOYER TO THE LIST OF PREVIOUS EMPLOYERS IF
[    ⍝ REQUIRED.
[5]  ⍝
[6]  ⍝ VARIABLES NEEDED: RESP, PREV∆ER, TOT∆ER, LASTYEAR, YEAR1, TOT∆FIRSTCOL,
[7]  ⍝                   LASTCOL, WITH∆DATE, WITH∆YEAR, INITYEAR, REALL∆ER,
[8]  ⍝                   REALL∆DATE, REALL∆YEAR, INIT∆REALL, MIDCOLS
[9]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[10]  OLDCOL←LASTCOL
[11]  SWITCH←0
[12]  →(RESP∊'Bb')/JUMP
[13]  →(0=1↑⍴PREV∆ER)/ER∆SWITCH
[14]  ⎕TCFF ◇ 'CURRENTLY THIS PROGRAM IS SET UP TO CALCULATE WITHDRAWAL LIABILITY FOR'
[15]  'THE WITHDRAWING EMPLOYER ',(NOPAD PREV∆ER[1;]),'.'
[16]  ' ' ◇ 'WOULD YOU LIKE TO CALCULATE WITHDRAWAL LIABILITY FOR A DIFFERENT '
[17]  'WITHDRAWING EMPLOYER?'
[18] P1:' ' ◇ ⍞←'ENTER Y OR N: ' ◇ ⎕ARBOUT '' ◇ R←1↑⍞ ◇ →(R∊'Nn')/0
[19]  →(~R∊'Yy')/P1
[20] ⍝ MOVE AN EMPLOYER FROM POTENTIAL LIAB TO ACTUAL LIAB
[21] ER∆SWITCH:→(0=1↑⍴TOT∆ER)/NEW∆PREV
[22]  NUM∆MAT←((1↑⍴TOT∆ER),1)⍴⍳1↑⍴TOT∆ER
[23]  SPACES←((1↑⍴TOT∆ER),3)⍴'  '
[24]  ⎕TCFF ◇ 'IS THE NEW WITHDRAWING EMPLOYER ANY ONE OF THE FOLLOWING EMPLOYERS?'
[25]  (((1↑⍴TOT∆ER),6)⍴'      '),(⍕NUM∆MAT),SPACES,TOT∆ER ◇ ' '
[26] P2:' ' ◇ ⍞←'ENTER Y OR N: ' ◇ ⎕ARBOUT '' ◇ R←1↑⍞ ◇ →(R∊'Yy')/PP2
[27]  →(~R∊'Nn')/P2 ◇ ' '
[28] NEW∆PREV:⎕TCFF ◇ 'ENTER THE NAME OF THE WITHDRAWING EMPLOYER (USING 20 CHARACTERS OR LESS):
      '
[2    TEMP←⍞ ◇ SWITCH←0 ◇ PREV∆ER← 0 20 ⍴''
[30] C1:→(0≠⍴TEMP)/C2
[31]  ⍞←'PLEASE ENTER A NAME: ' ◇ ⎕ARBOUT '' ◇ TEMP←⍞ ◇ →C1
[32] C2:→(20≥⍴TEMP)/C3
[33]  ⍞←'PLEASE ABBREVIATE TO 20 CHARACTERS OR LESS: ' ◇ ⎕ARBOUT '' ◇ TEMP←⍞ ◇ →C1
[34] C3:TEMP←((20-⍴TEMP)⍴' '),TEMP ◇ PREV∆ER←PREV∆ER,[1]TEMP
[35]  →P3
[36] PP2:' ' ◇ ⍞←'ENTER THE LINE NUMBER OF THE NEW WITHDRAWING EMPLOYER: ' ◇ ⎕ARBOUT ''
[37]  NUM←CHECK∆NUM ⎕ ◇ SWITCH←1 ◇ →(NUM>1↑⍴TOT∆ER)/PP2
[38]  TEMP∆ER← 1 20 ⍴TOT∆ER[NUM;]
[39]  TEMP∆CONTRIB←((LASTYEAR-YEAR1),1)⍴TOT∆FIRSTCOL[;NUM]
[40]  TOT∆ER←(~NUM=,NUM∆MAT)⌿TOT∆ER
[41]  TOT∆FIRSTCOL←(~NUM=,NUM∆MAT)/TOT∆FIRSTCOL
[42]  PREV∆ER←TEMP∆ER ◇ LASTCOL←TEMP∆CONTRIB
[43] P3:' ' ◇ 'ENTER THE WITHDRAWAL DATE OF THIS EMPLOYER: '
[44]  ⍞←'          ENTER THE MONTH (USING 2 DIGITS): '
[45]  ⎕ARBOUT '' ◇ TEMP←CHECK∆MONTH ⍞
[46]  ⍞←'          ENTER THE DAY   (USING 2 DIGITS): '
[47]  ⎕ARBOUT '' ◇ TEMP←TEMP,'-',CHECK∆DAY ⍞
[48]  ⍞←'          ENTER THE YEAR  (USING 4 DIGITS): '
[49]  ⎕ARBOUT '' ◇ Y←CHECK∆YEAR ⍞
[50]  WITH∆DATE← 1 8 ⍴TEMP,'-',2↓⍕Y
[51] P4:' ' ◇ 'ENTER THE ENDING YEAR OF THE LAST PLAN YEAR ENDING BEFORE THE '
[52]  ⍞←'WITHDRAWAL: ' ◇ ⎕ARBOUT '' ◇ WITH∆YEAR←'' ◇ WITH∆YEAR←WITH∆YEAR,CHECK∆YEAR ⍞
[53]  →(WITH∆YEAR[1]≥INITYEAR)/CHECK
[5    'INVALID ENTRY -- THIS DATE MUST COME AFTER THE LATER OF THE PLAN YEAR'
[5    'ENDING BEFORE 9-26-80 OR THE PLAN YEAR THE EMPLOYER FIRST CONTRIBUTED.'
[56]  →P3
[57] CHECK:→((WITH∆YEAR[1]=Y)∨(WITH∆YEAR[1]=Y-1))/CHECK2
[58]  'INVALID ENTRY -- THIS YEAR MUST EQUAL OR BE ONE YEAR LESS THAN THE '
[59]  'LAST YEAR ENTERED.' ◇ →P4
[60] CHECK2:→(WITH∆YEAR[1]≤LASTYEAR)/REALL∆SWITCH
[61]  'INVALID ENTRY -- THIS YEAR MUST EQUAL OR BE LESS THAN ',(⍕LASTYEAR),'.'
[62]  →P3
```

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[63] ⍝ MOVE OLD PREVIOUS WITHDRAWING EMPLOYER TO PREVIOUSLY WITHDRAWN LIST
[64] REALL∆SWITCH:→(SWITCH=1)/HOP
[65]  ⎕TCFF ⋄ LASTCOL←GET∆CONTRIB PREV∆ER[1;]
[66] HOP:→(0=1↑ρOLDPREV)/END
[67]  →(WITH∆YEAR≤OLDWITH)/END
[[illegible]  →SKIP
[69] JUMP:→(0=1↑ρOLDPREV)/END ⋄ →(LASTYEAR≤OLDWITH)/END
[70] SKIP:REALL∆ER←REALL∆ER,[1](LEFT∆AL OLDPREV[1;])
[71]  REALL∆DATE←REALL∆DATE,[1]OLDDATE[1;]
[72]  REALL∆YEAR←REALL∆YEAR,OLDWITH[1]
[73]  ⎕TCFF ⋄ 'ENTER THE AMOUNT OF UVB TO BE REALLOCATED FOR ',(NOPAD OLDPREV[1;])
[74]  ⍞←'(IF NONE, ENTER 0.): ' ⋄ ⎕ARBOUT ''
[75]  INIT∆REALL←INIT∆REALL,CHECK∆NUM ⍞
[76]  ' ' ⋄ MIDCOLS←MIDCOLS,GET∆CONTRIB(,REALL∆ER[(1↑ρREALL∆ER);])
[77] END:→(RESP∊'AaCc')/0
[78] BLANK:PREV∆ER← 0 20 ρ'' ⋄ WITH∆DATE← 0 8 ρ'' ⋄ WITH∆YEAR←''
[79]  LASTCOL←((LASTYEAR-YEAR1),0)ρ''
    ∇
```

```
    ∇ CHANGE∆ER;I;R;NUM;NUM∆MAT;SPACES;TEMP
[1]  ⍝ THIS FUNCTION ALTERS SAVED DATA BY ADDING OR DELETING THE EMPLOYERS
[2]  ⍝ FOR WHOM THE USER WISHES TO CALCULATE POTENTIAL LIABILITY FOR.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED: RESP, TOT∆ER, TOT∆FIRSTCOL, LASTYEAR, YEAR1
[5] ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]  →(RESP='Aa')/BLANK
[7]  ⎕TCFF ◇ 'ENTER THE DATE FOR WHICH YOU WISH TO CALCULATE POTENTIAL WITHDRAW
     AL LIABILITY: '
[8]  ⍞←'             ENTER THE MONTH (USING 2 DIGITS): '
[9]  ⎕ARBOUT '' ◇ HYP∆DATE←CHECK∆MONTH ⍞
[10] ⍞←'             ENTER THE DAY   (USING 2 DIGITS): '
[11] ⎕ARBOUT '' ◇ HYP∆DATE←HYP∆DATE,'-',(CHECK∆DAY ⍞),'-',2↓⍕LASTYEAR
[12] →(0≠1↑⍴TOT∆ER)/BEGIN
[13] ⎕TCFF ◇ 'PRESENTLY THIS PROGRAM HAS NO CURRENT EMPLOYERS LISTED FOR WHOM T
     O CALCULATE'
[14] 'POTENTIAL WITHDRAWAL LIABILITY.' ◇ ' ' ◇ →ADD∆MORE
[15] BEGIN:⎕TCFF ◇ 'CURRENTLY THIS PROGRAM IS SET UP TO CALCULATE POTENTIAL WITH
     DRAWAL'
[16] 'LIABILITY FOR THE FOLLOWING EMPLOYERS:'
[17] NUM∆MAT←((1↑⍴TOT∆ER),1)⍴⍳1↑⍴TOT∆ER
[18] SPACES←((1↑⍴TOT∆ER),3)⍴')  '
[19] (((1↑⍴TOT∆ER),6)⍴'      '),(⍕NUM∆MAT),SPACES,TOT∆ER ◇ ' '
[20] ' ' ◇ 'DO YOU WISH TO DROP ANY OF THESE NAMES FROM THE CALCULATIONS?'
[21] P1:' ' ◇ ⍞←'ENTER Y OR N: ' ◇ ⎕ARBOUT '' ◇ R←1↑⍞ ◇ →(R∊'Nn')/ADD
[22] →(~R∊'Yy')/P1
[23] P2:' ' ◇ 'ENTER THE LINE NUMBER OF THE EMPLOYER TO BE DROPPED '
[24] ⍞←'OR ENTER 0 IF THERE ARE NO MORE: ' ◇ ⎕ARBOUT ''
[25] NUM←CHECK∆NUM ⍞ ◇ →(NUM>1↑⍴TOT∆ER)/P2 ◇ →(NUM=0)/ADD
[26] TOT∆ER←(~NUM=,NUM∆MAT)⌿TOT∆ER
[27] TOT∆FIRSTCOL←(~NUM=,NUM∆MAT)/TOT∆FIRSTCOL
[28] →(0=1↑⍴TOT∆ER)/ADD
[29] NUM∆MAT←((1↑⍴TOT∆ER),1)⍴⍳1↑⍴TOT∆ER ◇ SPACES←((1↑⍴TOT∆ER),3)⍴')  '
[30] ⎕TCFF ◇ (((1↑⍴TOT∆ER),6)⍴'      '),(⍕NUM∆MAT),SPACES,TOT∆ER ◇ ' '
[31] →P2
[32] ADD:⎕TCFF
[33] ADD∆MORE:'DO YOU WISH TO ADD ANY CURRENT EMPLOYERS TO THE LIST OF THOSE'
[34] 'FOR WHOM YOU WISH TO CALCULATE POTENTIAL WITHDRAWAL LIABILITY?'
[35] P3:' ' ◇ ⍞←'ENTER Y OR N: ' ◇ ⎕ARBOUT '' ◇ R←1↑⍞ ◇ →(R∊'Nn')/0
[36] →(~R∊'Yy')/P3
[37] I←1↑⍴TOT∆ER
[38] LOOP:⎕TCFF ◇ 'ENTER THE NAME OF ONE OF THE ADDITIONAL EMPLOYERS, OR Q IF TH
     ERE ARE NO MORE:'
[39] TEMP←⍞ ◇ I←I+1
[40] C1:→(0≠⍴TEMP)/NO
[41] ⍞←'PLEASE ENTER A NAME: ' ◇ ⎕ARBOUT '' ◇ TEMP←⍞ ◇ →C1
[42] NO:→((∧/TEMP='Q')∨(∧/TEMP='q'))/0
[43] N1:→(20≥⍴TEMP)/N2
[44] ⍞←'PLEASE ABBREVIATE TO 20 CHARACTERS OR LESS: ' ◇ ⎕ARBOUT ''
[45] TEMP←⍞ ◇ →C1
[46] N2:TEMP←((20-⍴TEMP)⍴' '),TEMP
[47] TOT∆ER←TOT∆ER,[1]TEMP
[48] ⎕TCFF ◇ TOT∆FIRSTCOL←TOT∆FIRSTCOL,GET∆CONTRIB TEMP
[49] →LOOP
[50] BLANK:TOT∆ER← 0 20 ⍴'' ◇ HYP∆DATE← 0 8 ⍴'' ◇ HYP∆YEAR←''
[51] FIRSTCOL←TOT∆FIRSTCOL←((LASTYEAR-YEAR1),0)⍴''
```

```
    ∇ CHANGE∆REALL;I;R;NUM∆MAT;NUM;SPACES;TEMP;TEMP1;TEMP2;Y
[1]   ⍝ THIS FUNCTION ALTERS SAVED DATA BY ADDING TO OR DELETING FROM THE
[2]   ⍝ LIST OF PREVIOUSLY WITHDRAWN EMPLOYERS.
[3]   ⍝
[[illegible] ⍝ VARIABLES NEEDED: REALL∆ER, MIDCOLS, REALL∆YEAR, REALL∆DATE, INIT∆REALL
[5]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]    →(0≠1↑⍴REALL∆ER)/BEGIN
[7]    ⎕TCFF ⋄ 'PRESENTLY THIS PROGRAM DOES NOT HAVE ANY EMPLOYERS LISTED AS HAVI
       NG '
[8]    'PREVIOUSLY WITHDRAWN FROM THE PLAN BEFORE THE PLAN YEAR ENDING ',(⍕LASTYE
       AR),'.'
[9]    ' ' ⋄ →ADD∆MORE
[10]  BEGIN:⎕TCFF ⋄ 'THE FOLLOWING EMPLOYERS ARE LISTED IN THIS PROGRAM AS HAVING
        PREVIOUSLY'
[11]   'WITHDRAWN FROM THE PLAN BEFORE THE PLAN YEAR ENDING ',(⍕LASTYEAR),': '
[12]   NUM∆MAT←((1↑⍴REALL∆ER),1)⍴⍳1↑⍴REALL∆ER
[13]   SPACES←((1↑⍴REALL∆ER),3)⍴')  '
[14]   (((1↑⍴REALL∆ER),6)⍴'      '),(⍕NUM∆MAT),SPACES,REALL∆ER ⋄ ' '
[15]   ' ' ⋄ 'DO YOU WISH TO DROP ANY OF THESE NAMES FROM THIS LIST?'
[16]  P1:' ' ⋄ ⍞←'ENTER Y OR N: ' ⋄ ⎕ARBOUT '' ⋄ R←1↑⍞ ⋄ →(R∊'Nn')/ADD
[17]   →(~R∊'Yy')/P1
[18]  P1∆5:' ' ⋄ ⍞←'ENTER THE LINE NUMBER OF AN EMPLOYER TO BE DROPPED: '
[19]   ⎕ARBOUT '' ⋄ NUM←CHECK∆NUM ⍞ ⋄ →(NUM>1↑⍴REALL∆ER)/P1∆5 ⋄ →DELETE
[20]  P2:' ' ⋄ 'ENTER THE LINE NUMBER OF THE NEXT EMPLOYER TO BE DROPPED '
[21]   ⍞←'OR ENTER 0 IF THERE ARE NO MORE: ' ⋄ ⎕ARBOUT ''
[22]   NUM←CHECK∆NUM ⍞ ⋄ →(NUM>1↑⍴REALL∆ER)/P2 ⋄ →(NUM=0)/ADD
[23]  DELETE:REALL∆ER←(~NUM=,NUM∆MAT)⌿REALL∆ER
[24]   MIDCOLS←(~NUM=,NUM∆MAT)/MIDCOLS
[25]   INIT∆REALL←(~NUM=,NUM∆MAT)/INIT∆REALL
[26]   REALL∆YEAR←(~NUM=,NUM∆MAT)/REALL∆YEAR
[2[illegible] REALL∆DATE←(~NUM=,NUM∆MAT)⌿REALL∆DATE
[28]   →(0=1↑⍴REALL∆ER)/ADD
[29]   NUM∆MAT←((1↑⍴REALL∆ER),1)⍴⍳1↑⍴REALL∆ER ⋄ SPACES←((1↑⍴REALL∆ER),3)⍴')  '
[30]   ⎕TCFF ⋄ (((1↑⍴REALL∆ER),6)⍴'      '),(⍕NUM∆MAT),SPACES,REALL∆ER
[31]   →P2
[32]  ADD:⎕TCFF
[33]  ADD∆MORE:' ' ⋄ 'DO YOU WISH TO ADD ANY EMPLOYERS TO THE LIST OF THOSE EMPLO
       YERS'
[34]   'WHO HAVE WITHDRAWN PRIOR TO THE PLAN YEAR ENDING ',(⍕LASTYEAR),'?'
[35]  P3:' ' ⋄ ⍞←'ENTER Y OR N: ' ⋄ ⎕ARBOUT '' ⋄ R←1↑⍞ ⋄ →(R∊'Nn')/0
[36]   →(~R∊'Yy')/P3
[37]   I←1↑⍴REALL∆ER
[38]  LOOP:⎕TCFF ⋄ 'ENTER THE NAME OF ONE OF THE ADDITIONAL EMPLOYERS, OR Q IF TH
       ERE ARE NO MORE:'
[39]   TEMP←⍞ ⋄ I←I+1
[40]  C1:→(0≠⍴TEMP)/NO
[41]   ⍞←'PLEASE ENTER A NAME: ' ⋄ ⎕ARBOUT '' ⋄ TEMP←⍞ ⋄ →C1
[42]  NO:→((∧/TEMP='Q')∨(∧/TEMP='q'))/0
[43]  N1:→(20≥⍴TEMP)/N2
[44]   ⍞←'PLEASE ABBREVIATE TO 20 CHARACTERS OR LESS: ' ⋄ ⎕ARBOUT ''
[45]   TEMP←⍞ ⋄ →C1
[46]  N2:REALL∆ER←REALL∆ER,[1](TEMP,(20-⍴TEMP)⍴' ')
[47]  P4:' ' ⋄ 'ENTER THE WITHDRAWAL DATE OF THIS EMPLOYER: '
[48]   ⍞←'        ENTER THE MONTH (USING 2 DIGITS): '
[49]   ⎕ARBOUT '' ⋄ TEMP1←CHECK∆MONTH ⍞
[50]   ⍞←'        ENTER THE DAY   (USING 2 DIGITS): '
[5[illegible]⎕ARBOUT '' ⋄ TEMP2←TEMP1,'-',CHECK∆DAY ⍞
[52]   ⍞←'        ENTER THE YEAR  (USING 4 DIGITS): '
[53]   ⎕ARBOUT '' ⋄ Y←CHECK∆YEAR ⍞
[54]   TEMP←TEMP2,'-',2↓⍕Y
[55]  P5:' ' ⋄ 'ENTER THE YEAR OF THE LAST PLAN YEAR ENDING BEFORE THIS WITHDRAWA
       L DATE: '
```

```
[56]  ⎕ARBOUT '' ⋄ REALL∆YEAR←REALL∆YEAR,[1]CHECK∆YEAR ⍞
[57]  →((Y=REALL∆YEAR[⍴REALL∆YEAR])∨((Y-1)=REALL∆YEAR[⍴REALL∆YEAR]))/N3
[58]  'INVALID ENTRY -- THIS YEAR MUST EQUAL OR BE ONE LESS THAN THE LAST'
[59]  'YEAR ENTERED. ' ⋄ REALL∆YEAR←¯1↓REALL∆YEAR ⋄ →P5
[60] N3:→(REALL∆YEAR[I]≤LASTYEAR)/NEXT
[     'INVALID ENTRY -- THIS EMPLOYER MUST HAVE WITHDRAWN BEFORE ',⍕LASTYEAR
[62]  'PLEASE REENTER THE WITHDRAWAL DATE.' ⋄ REALL∆YEAR←¯1↓REALL∆YEAR ⋄ →P4
[63] NEXT:REALL∆DATE←REALL∆DATE,[1]TEMP
[64]  ' ' ⋄ 'ENTER THE AMOUNT OF UVB TO BE REALLOCATED FOR THIS EMPLOYER. '
[65]  ⎕ARBOUT '' ⋄ INIT∆REALL←INIT∆REALL,⌊0.5+CHECK∆NUM ⍞
[66]  ⎕TCFF
[67]  MIDCOLS←MIDCOLS,GET∆CONTRIB(20⍴REALL∆ER[I;])
[68]  I←I+1
[69]  →LOOP
    ∇
```

```
    ∇ SAVE∆CASES;I;CASE;R;T;STR
[1]  ⍝ THIS FUNCTION SAVES THE DATA THAT HAS BEEN INPUT IF THE USER SO DESIRES
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED: DRIVE, ORIGINAL, CONTRACT
[4]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[5]   ⎕TCFF
[6]   →(ORIGINAL=0)/OLD
[7]   CASE←(⍕DRIVE),(' MWL',CONTRACT)
[8]  NEW:'DO YOU WISH TO SAVE A COPY OF THE DATA THAT YOU HAVE ENTERED?'
[9]  P1:' ' ⋄ ⍞←'PLEASE ENTER Y OR N: ' ⋄ ⎕ARBOUT '' ⋄ R←1↑⍞
[10]  →(R∊'Nn')/0 ⋄ →(~R∊'Yy')/P1
[11]  T←⎕EX ⎕NL 3
[12]  ORIGINAL←0
[13]  ⎕TCFF ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ '                                PLEAS
      E WAIT . . .'
[14]  I←0 ⋄ STR←''
[15]  →(0=1↑⍴⎕LIB DRIVE)/GO
[16] LOOP:I←I+1 ⋄ STR←STR,∧/('B:MWL',(CONTRACT),'.AWS')=(⎕LIB DRIVE)[I;]
[17]  →(I≠1↑⍴(⎕LIB DRIVE))/LOOP
[18]  →(1=∨/STR)/OLD
[19] GO:'RESET' ⎕SAVE CASE ⋄ T←⎕COPY 'MEWL'
[20]  →0
[21] OLD:' ' ⋄ 'DO YOU WANT THE NEW DATA THAT YOU HAVE ENTERED TO OVERWRITE WHAT
       HAS '
[22]  'ALREADY BEEN SAVED ON THE HARD DRIVE?'
[23] P2:' ' ⋄ ⍞←'PLEASE ENTER Y OR N: ' ⋄ ⎕ARBOUT '' ⋄ R←1↑⍞
[24]  →(R∊'Nn')/0 ⋄ →(~R∊'Yy')/P2
[25]  ⎕TCFF ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ '                                 PLEA
      SE WAIT . . .'
[26]  CASE←(⍕DRIVE),(' MWL',CONTRACT)
[27]  T←⎕EX ⎕NL 3
[28] ⍝ IF RUNNING PROGRAM WITHOUT HARD DRIVE, NEED TO SWITCH DISKS
[29]  →(DRIVE=2)/SKIP1
[30]  ' ' ⋄ 'MAKE SURE DRIVE 0 CONTAINS A DOS DISK. HIT ENTER WHEN READY.' ⋄ T←⍞
[31] SKIP1:⎕CMD 'REN B:',(2↓CASE),'.AWS ZZZZZZZZ'
[32]  'RESET' ⎕SAVE CASE
[33]  ⎕CMD 'DEL B:ZZZZZZZZ'
[34]  →(DRIVE=2)/SKIP2
[35]  ' ' ⋄ 'MAKE SURE DRIVE 0 CONTAINS THE DISK WITH THE PROGRAM ON IT. HIT ENT
      ER WHEN READY.' ⋄ T←⍞
[36] SKIP2:T←⎕COPY 'MEWL'
    ∇
```

```
    ∇ ANOTHER∆WS
[1]  ⍝ THIS FUNCTION PRODUCES ANOTHER WORKSHEET IF THE FIRST ONE
[2]  ⍝ DID NOT CONTAIN ALL THE EMPLOYERS.
[3]  ⍝
[4]  ⍝ VARIALBES NEEDED: RESP, TOT∆ER, NEXT∆ER, FIRSTCOL, NEXT∆FIRSTCOL,
[5]  ⍝                   MIDCOLS, LASTCOL, CONTRIB∆DUE, ER
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   →((RESP∊'Cc')∧(6≥1↑⍴TOT∆ER))/0
[8]   →((RESP∊'Bb')∧(7≥1↑⍴TOT∆ER))/0
[9]   →(RESP∊'Aa')/0
[10] ER∆LOOP:→((RESP∊'Cc')∧((1↑⍴NEXT∆ER)>6))/SIX
[11]  →((RESP∊'Bb')∧((1↑⍴NEXT∆ER)>7))/SEVEN
[12]  ER←NEXT∆ER ⋄ FIRSTCOL←NEXT∆FIRSTCOL
[13]  CONTRIB∆DUE←FIRSTCOL,MIDCOLS,LASTCOL
[14]  CALCULATE ⋄ WS∆OUT
[15]  →0
[16] SIX:ER← 6 20 ↑NEXT∆ER ⋄ FIRSTCOL←(1↑⍴NEXT∆FIRSTCOL,6)↑NEXT∆FIRSTCOL
[17]  NEXT∆ER←((6-1↑⍴NEXT∆ER),20)↑NEXT∆ER
[18]  NEXT∆FIRSTCOL←((1↑⍴NEXT∆FIRSTCOL),6-1↓⍴NEXT∆FIRSTCOL)↑NEXT∆FIRSTCOL
[19]  →REST
[20] SEVEN:ER← 7 20 ↑NEXT∆ER ⋄ FIRSTCOL←(1↑⍴NEXT∆FIRSTCOL,7)↑NEXT∆FIRSTCOL
[21]  NEXT∆ER←((7-1↑⍴NEXT∆ER),20)↑NEXT∆ER
[22]  NEXT∆FIRSTCOL←((1↑⍴NEXT∆FIRSTCOL),7-1↓⍴NEXT∆FIRSTCOL)↑NEXT∆FIRSTCOL
[23] REST:CONTRIB∆DUE←FIRSTCOL,MIDCOLS,LASTCOL
[24]  CALCULATE ⋄ WS∆OUT
[25]  →ER∆LOOP
    ∇
```

```
    ∇ GET∆OPTIONS
[1]  ⍝ THIS FUNCTION GETS THE USERS CHOICE OF PROGRAM OPTIONS
[2]  ⍝
[3]  ⍝ VARIABLES CREATED: RESP
[4]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[5]   ⎕TCFF
[6]   ' ' ⋄ 'SECLECT ONE OF THE FOLLOWING OPTIONS: '
[7]   ' ' ⋄ '   A) TO CALCULATE WITHDRAWAL LIABILITY FOR ONE WITHDRAWING EMPLOYER ONLY.'
[8]   ' ' ⋄ '   B) TO CALCULATE WHAT ONE OR MORE PRESENT EMPLOYER''S WITHDRAWAL LIABILITY '
[9]   '      WOULD BE IF THEY WERE TO TERMINATE. '
[10]  ' ' ⋄ '   C) TO CALCULATE WITHDRAWAL LIABILITY FOR ONE WITHDRAWING EMPLOYER AND'
[11]  '      ALSO TO CALCULATE POTENTIAL WITHDRAWAL LIABILITY FOR OTHER EMPLOYERS'
[12]  '      IN THE PLAN.'
[13] P1:' ' ⋄ ⍞←'PLEASE ENTER A, B, OR C: '
[14]  ⎕ARBOUT '' ⋄ RESP←⍞
[15]  →(1≠⍴RESP)/P1
[16]  →(~RESP∊'ABCabc')/P1
    ∇
```

```
    ∇ GET∆INPUT;NOFIRST;NOLAST
[1]  ⍝ THIS FUNCTION GATHERS INPUT ABOUT THE EMPLOYERS, VARIOUS DATES, AND
[2]  ⍝ PLAN HISTORY.
[3]  ⍝
[4]  ⍝ VARIABLE NEEDED  : RESP
[5]  ⍝ VARIABLES CREATED: ER, PREV∆ER, REALL∆ER, WITH∆DATE, HYP∆DATE, YEAR1
[6]  ⍝                    HYP∆YEAR, CONTRIB∆DUE, LASTYEAR, INITMONTH, INITDAY,
[7]  ⍝                    INITYEAR, VESTBEN, ASSETS, TOTCONTRIB, WITH∆YEAR
[8]  ⍝                    DAY1, MONTH1, INIT∆REALL, WS3∆START, REALL∆DATE,
[9]  ⍝                    REALL∆YEAR, CURR∆DATE, SPONSOR, CITY∆STATE, ZIP,
[10] ⍝                    STREET, PLAN∆NAME, CONTRACT, SECTION, ACTUARY,
[11] ⍝                    PHONE, GROUP∆OFF, GROUP∆NAME, ADMIN, TOT∆ER, TOT∆FIRST
      COL
[12] ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[13]  REDO←0
[14] ⍝ INITIALIZATIONS
[15]  CL←'N'
[16]  NOFIRST←NOLAST←0
[17]  ER←PREV∆ER←REALL∆ER←TOT∆ER← 0 20 ρ''
[18]  WITH∆DATE←HYP∆DATE←REALL∆DATE← 0 8 ρ''
[19]  WITH∆YEAR←REALL∆YEAR←HYP∆YEAR←''
[20] ⍝ COLLECT INPUT
[21]  →((RESP='B')∨(RESP='b'))/B
[22]  GET∆INIT∆YEAR1
[23]  →HOP
[24] B:GET∆INIT∆YEAR2
[25] HOP:GET∆PRES
[26]  GET∆PREV
[27]  GET∆REALL
[28]  GET∆HIST
[29]  GET∆TOTCONTRIB
[30]  →(NOLAST=0)/SKIP
[31]  LASTCOL←((LASTYEAR-YEAR1),0)ρ0
[32] SKIP:→(NOFIRST=0)/NEXT
[33]  TOT∆FIRSTCOL←FIRSTCOL←((LASTYEAR-YEAR1),0)ρ0
[34] NEXT:CONTRIB∆DUE←FIRSTCOL,MIDCOLS,LASTCOL
[35]  ⎕TCFF
[36]  →(RESP∊'Bb')/0
[37]  GET∆CL
    ∇
```

```
    ∇ GET∆INIT∆YEAR1
  ⍝ THIS FUNCTION GATHERS THE VALUES FOR INITMONTH, INITDAY, INITYEAR, AND
  ⍝ WS3∆START FOR A WITHDRAWING EMPLOYER.
  ⍝
  ⍝ VARIABLES CREATED: INITMONTH, INITDAY, INITYEAR, WS3∆START
  ⍝                    DAY1, MONTH1, YEAR1
  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
  ⍝ GET MONTH1, DAY1
   ⎕TCFF
   ' ' ◇ 'ENTER THE DATE ON WHICH THE PLAN YEAR BEGINS: '
   ⍞←'          ENTER THE BEGINNING MONTH (USE 2 DIGITS SUCH AS 03 OR 12): '
   ⎕ARBOUT '' ◇ MONTH1←CHECK∆MONTH ⍞
   ⍞←'          ENTER THE BEGINNING DAY   (USE 2 DIGITS SUCH AS 03 OR 31): '
   ⎕ARBOUT '' ◇ DAY1←CHECK∆DAY ⍞
  ⍝ GET INITDAY, INITMONTH
   ' ' ◇ 'ENTER THE DATE ON WHICH THE PLAN YEAR ENDS: '
   ⍞←'          ENTER THE ENDING MONTH     (USE 2 DIGITS SUCH AS 03 OR 12): '
   ⎕ARBOUT '' ◇ INITMONTH←CHECK∆MONTH ⍞
   ⍞←'          ENTER THE ENDING DAY       (USE 2 DIGITS SUCH AS 03 OR 31): '
   ⎕ARBOUT '' ◇ INITDAY←CHECK∆DAY ⍞
   ⎕TCFF
   →(REDO=1)/0
  ⍝ GET INITYEAR
   ' ' ◇ ' ' ◇ 'ENTER THE ENDING YEAR OF THE LATER OF: '
   '   THE LAST PLAN YEAR ENDING BEFORE 9-26-80, OR '
   '   THE PLAN YEAR DURING WHICH THE WITHDRAWING EMPLOYER FIRST CONTRIBUTED.
  '
   ⍞←'   (PLEASE USE 4 DIGITS): '
   ⎕ARBOUT '' ◇ INITYEAR←CHECK∆YEAR ⍞
   YEAR1←INITYEAR-5
  ⍝ GET WS3∆START
  P1:' ' ◇ ' ' ◇ 'ENTER THE ENDING YEAR OF THE LATER OF: '
   '   THE FIRST PLAN YEAR ENDING AFTER 9-26-80, OR '
   '   THE PLAN YEAR DURING WHICH THE WITHDRAWING EMPLOYER FIRST CONTRIBUTED.
  '
   ⍞←'   (PLEASE USE 4 DIGITS): '
   ⎕ARBOUT '' ◇ WS3∆START←CHECK∆YEAR ⍞
   →((WS3∆START=INITYEAR)∨(WS3∆START=INITYEAR+1))/0
   'INVALID ENTRY -- THIS VALUE MUST BE THE SAME OR ONE YEAR GREATER THAN'
   'THE LAST YEAR ENTERED.'
   →P1
    ∇
```

```
    ∇ GET∆INIT∆YEAR2
[1]   ⍝ THIS FUCTION GATHERS INPUT FOR INITMONTH, INITDAY, INITYEAR, AND
[2]   ⍝ WS3∆START FOR A PRESENT EMPLOYER.
[3]   ⍝
[4]   ⍝ VARIABLES CREATED: INITMONTH, INITDAY, INITYEAR, WS3∆START
[5]   ⍝                    MONTH1, DAY1, YEAR1
[6]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   ⍝ GET MONTH1, DAY1
[8]    ⎕TCFF
[9]    ' ' ◇ 'ENTER THE DATE ON WHICH THE PLAN YEAR BEGINS: '
[10]   ⍞←'          ENTER THE BEGINNING MONTH (USE 2 DIGITS SUCH AS 03 OR 12): '
[11]   ⎕ARBOUT '' ◇ MONTH1←CHECK∆MONTH ⍞
[12]   ⍞←'          ENTER THE BEGINNING DAY   (USE 2 DIGITS SUCH AS 03 OR 31): '
[13]   ⎕ARBOUT '' ◇ DAY1←CHECK∆DAY ⍞
[14]  ⍝ GET INITMONTH, INITDAY
[15]   ' ' ◇ 'ENTER THE DATE ON WHICH THE PLAN YEAR ENDS: '
[16]   ⍞←'          ENTER THE ENDING MONTH     (USE 2 DIGITS SUCH AS 03 OR 12): '
[17]   ⎕ARBOUT '' ◇ INITMONTH←CHECK∆MONTH ⍞
[18]   ⍞←'          ENTER THE ENDING DAY       (USE 2 DIGITS SUCH AS 03 OR 31): '
[19]   ⎕ARBOUT '' ◇ INITDAY←CHECK∆DAY ⍞
[20]   ⎕TCFF
[21]   →(REDO=1)/0
[22]  ⍝ GET INITYEAR
[23]   ' ' ◇ ' ' ◇ 'ENTER THE ENDING YEAR OF THE LATER OF: '
[24]   '   THE LAST PLAN YEAR ENDING BEFORE 9-26-80, OR '
[25]   '   THE PLAN YEAR DURING WHICH THE FIRST EMPLOYER CONTRIBUTED. '
[26]   ⍞←'   (PLEASE USE 4 DIGITS): '
[27]   ⎕ARBOUT '' ◇ INITYEAR←CHECK∆YEAR ⍞
[28]   YEAR1←INITYEAR-5
[29]  ⍝ GET WS3∆START
[3[illegible]1:' ' ◇ ' ' ◇ 'ENTER THE ENDING YEAR OF THE LATER OF: '
[31]   '   THE FIRST PLAN YEAR ENDING AFTER 9-26-80, OR '
[32]   '   THE PLAN YEAR DURING WHICH THE FIRST EMPLOYER CONTRIBUTED. '
[33]   ⍞←'   (PLEASE USE 4 DIGITS): '
[34]   ⎕ARBOUT '' ◇ WS3∆START←CHECK∆YEAR ⍞
[35]   →((INITYEAR=WS3∆START)∨(WS3∆START=INITYEAR+1))/0
[36]   'INVALID ENTRY -- THIS VALUE MUST EQUAL OR BE ONE YEAR GREATER THAN THE'
[37]   'LAST VALUE ENTERED.'
[38]   →P1
    ∇
```

```
    ∇ GET∆PRES;TEMP;I;Y
 ⍝ THIS FUNCTION GATHERS INFORMATION ABOUT PRESENT EMPLOYERS THAT WISH
 ⍝ TO CALCULATE THEIR POTENTIAL WITHDRAWAL LIABILITY.
 ⍝
 ⍝ VARIABLES NEEDED:  RESP, FIRST
 ⍝ VARIABLES CREATED: FIRSTCOL, LASTYEAR, HYP∆YEAR, CONTRIB∆DUE, HYP∆DATE, ER
 ⍝                    TOT∆FIRSTCOL, TOT∆ER, NEXT∆FIRSTCOL, NEXT∆ER
 ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
 ⍝ INITIALIZATIONS
  →(~RESP∊'Aa')/DO
  NOFIRST←1 ⋄ →0
DO:TOT∆ER←ER← 0 20 ⍴''
  HYP∆DATE← 0 8 ⍴''
  HYP∆YEAR←''
  I←0
  ⎕TCFF
 ⍝ GET HYPOTHETICAL WITHDRAW DATE
P1:' ' ⋄ 'ENTER THE DATE AS OF WHICH YOU WOULD LIKE TO CALCULATE THE EMPLOYER(S)'
  'POTENTIAL WITHDRAWAL LIABILITY.'
  ⍞←'              ENTER THE MONTH (USING 2 DIGITS): '
  ⎕ARBOUT '' ⋄ HYP∆DATE←CHECK∆MONTH ⍞
  ⍞←'              ENTER THE DAY   (USING 2 DIGITS): '
  ⎕ARBOUT '' ⋄ HYP∆DATE←HYP∆DATE,'-',CHECK∆DAY ⍞
  ⍞←'              ENTER THE YEAR  (USING 4 DIGITS): '
  ⎕ARBOUT '' ⋄ Y←CHECK∆YEAR ⍞
  HYP∆DATE←HYP∆DATE,'-',2↓⍕Y
  →(REPEAT=1)/LOOP
P2:' ' ⋄ ⍞←'ENTER THE ENDING YEAR OF THE LAST PLAN YEAR ENDING BEFORE THIS DATE: '
  ⎕ARBOUT '' ⋄ HYP∆YEAR←CHECK∆YEAR ⍞
  →(HYP∆YEAR≥INITYEAR)/CHECK
  'INVALID ENTRY -- THIS DATE MUST COME AFTER THE DATE OF THE LATER OF THE'
  'PLAN YEAR ENDING BEFORE 9-26-80 OR THE YEAR THE EMPLOYER FIRST CONTRIBUTED.' ⋄ →P1
CHECK:→((HYP∆YEAR=Y)∨(HYP∆YEAR=Y-1))/SKIP
  'INVALID ENTRY -- THIS DATE MUST BE EQUAL TO OR ONE LESS THAN THE LAST'
  'YEAR ENTERED.' ⋄ →P2
SKIP:→((RESP≠'A')∧(RESP≠'a'))/NEXT
  →LOOP
NEXT:LASTYEAR←HYP∆YEAR
  FIRSTCOL←TOT∆FIRSTCOL←((LASTYEAR-YEAR1),0)⍴0
LOOP:I←I+1
 ⍝ GET THE CURRENT EMPLOYERS
  ⎕TCFF
  ' ' ⋄ 'ENTER THE NAME OF ONE OF THE CURRENT EMPLOYERS FOR WHOM YOU WISH TO '
  'CALCULATE WITHDRAWAL LIABILITY (IN 20 CHARACTERS OR LESS), OR IF THERE ARE'
  'NO MORE TO LIST, ENTER Q: '
  TEMP←⍞
C1:→(0≠⍴TEMP)/NO
  ⍞←'PLEASE ENTER A NAME: ' ⋄ ⎕ARBOUT '' ⋄ TMEP←⍞ ⋄ →C1
NO:→((∧/TEMP='Q')∨(∧/TEMP='q'))/END
N1:→(20≥⍴TEMP)/N2
  ⍞←'PLEASE ABBREVIALTE TO 20 CHARACTERS OR LESS: ' ⋄ ⎕ARBOUT '' ⋄ TEMP←⍞ ⋄ →C1
N2:TEMP←((20-⍴TEMP)⍴' '),TEMP
  ER←ER,[1]TEMP
 ⍝ GET THE CONTRIBUTIONS
  ⎕TCFF
  FIRSTCOL←FIRSTCOL,GET∆CONTRIB ER[I;]
  →LOOP
 ⍝ IMPROVISE IF ALL ERs WILL NOT FIT ON A PAGE
END:TOT∆ER←ER ⋄ TOT∆FIRSTCOL←FIRSTCOL
  MORE∆PRES
    ∇
```

```
    ∇ MORE∆PRES;TEMP;I;Y
[1]   ⍝ THIS FUNCTION LIMITS THE EMPLOYER DATA SO THAT IT MAY ALL FIT ON A
[2]   ⍝ PAGE.  IT INITIALIZES ER TO THE FIRST 6 OR 7 EMPLOYERS.
[3]   ⍝
[4]   ⍝ VARIABLES NEEDED:  RESP, TOT∆FIRSTCOL, TOT∆ER, FIRSTCOL, ER
[5]   ⍝ VARIABLES CREATED: NEXT∆FIRSTCOL, NEXT∆ER
[6]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]    NEXT∆ER← 0 20 ρ'' ◊ NEXT∆FIRSTCOL← 0 0 ρ''
[8]    ER←TOT∆ER ◊ FIRSTCOL←TOT∆FIRSTCOL
[9]    →(RESP∊'Bb')/B
[10]   →(RESP∊'Cc')/C
[11]  B:→(7≥1↑ρTOT∆ER)/0
[12]   ER← 7 20 ↑TOT∆ER
[13]   NEXT∆ER←((7-1↑ρTOT∆ER),20)↑TOT∆ER
[14]   FIRSTCOL←((1↑ρTOT∆FIRSTCOL),7)↑TOT∆FIRSTCOL
[15]   NEXT∆FIRSTCOL←((1↑ρTOT∆FIRSTCOL),7-1↓ρTOT∆FIRSTCOL)↑TOT∆FIRSTCOL
[16]   →0
[17]  C:→(6≥1↑ρTOT∆ER)/0
[18]   ER← 6 20 ↑TOT∆ER
[19]   NEXT∆ER←((6-1↑ρTOT∆ER),20)↑TOT∆ER
[20]   FIRSTCOL←((1↑ρTOT∆FIRSTCOL),6)↑TOT∆FIRSTCOL
[21]   NEXT∆FIRSTCOL←((1↑ρTOT∆FIRSTCOL),6-1↓ρTOT∆FIRSTCOL)↑TOT∆FIRSTCOL
    ∇
```

```
    ∇ GET∆PREV;R;TEMP;Y;I
⍝ THIS FUNCTION GATHERS INPUT DATA ABOUT THE WITHDRAWING EMPLOYER
⍝
⍝ VARIABLES NEEDED:  RESP, INITYEAR, (LASTYEAR)
⍝ VARIABLES CREATED: LASTCOL, WITH∆YEAR, LASTYEAR, PREV∆ER, WITH∆DATE
⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
⍝INITIALIZATIONS
 →(~RESP∊'Bb')/DO
 NOLAST←1 ⋄ →0
DO:PREV∆ER← 0 20 ⍴''
 WITH∆DATE← 0 8 ⍴''
 I←1
 ⎕TCFF
⍝ GET THE WITHDRAWING EMPLOYER'S NAME
 ' ' ⋄ 'ENTER THE NAME OF THE WITHDRAWING EMPLOYER USING 20 CHARACTERS OR LESS:'
 TEMP←⍞
C1:→(0≠⍴TEMP)/N1
 ⍞←'PLEASE ENTER A NAME: ' ⋄ ⎕ARBOUT '' ⋄ TEMP←⍞ ⋄ →C1
N1:→(20≥⍴TEMP)/N2
 ⍞←'PLEASE ABBREVIATE TO 20 CHARACTERS OR LESS: ' ⋄ ⎕ARBOUT '' ⋄ TEMP←⍞ ⋄ →C1
N2:TEMP←((20-⍴TEMP)⍴' '),TEMP
 PREV∆ER←PREV∆ER,[1]TEMP
P1:WITH∆YEAR←'' ⋄ WITH∆DATE← 0 8 ⍴''
⍝ GET THE WITHDRAWAL DATE
 ' ' ⋄ 'ENTER THE DATE OF THE EMPLOYER''S WITHDRAWAL: '
 ⍞←'          ENTER THE MONTH (USING 2 DIGITS): '
 ⎕ARBOUT '' ⋄ TEMP←CHECK∆MONTH ⍞
 ⍞←'          ENTER THE DAY   (USING 2 DIGITS): '
 ⎕ARBOUT '' ⋄ TEMP←TEMP,'-',CHECK∆DAY ⍞
 ⍞←'          ENTER THE YEAR  (USING 4 DIGITS): '
 ⎕ARBOUT '' ⋄ Y←CHECK∆YEAR ⍞
 TEMP←TEMP,'-',(2↓⍕Y)
 WITH∆DATE←WITH∆DATE,[1]TEMP
 →(REPEAT=1)/HOP
 WITH∆YEAR←''
P2:' ' ⋄ 'ENTER THE ENDING YEAR OF THE LAST PLAN YEAR ENDING BEFORE THE'
 ⍞←'WITHDRAWAL: '
 ⎕ARBOUT '' ⋄ WITH∆YEAR←WITH∆YEAR,CHECK∆YEAR ⍞
 →(WITH∆YEAR[1]≥INITYEAR)/CHECK
 'INVALID ENTRY -- THIS DATE MUST COME AFTER THE LATER OF THE PLAN YEAR'
 'ENDING BEFORE 9-26-80 OR THE PLAN YEAR THE EMPLOYER FIRST CONTRIBUTED.'
 →P1
CHECK:→((WITH∆YEAR[1]=Y)∨(WITH∆YEAR[1]=Y-1))/NEXT
 'INVALID ENTRY -- THIS YEAR MUST EQUAL OR BE ONE YEAR LESS THAN THE '
 'LAST YEAR ENTERED.' ⋄ WITH∆YEAR←'' ⋄ →P2
⍝ GET THE CONTRIBUTIONS
NEXT:→(~RESP∊'Aa')/HOP
 LASTYEAR←WITH∆YEAR[1]
HOP:LASTCOL←((LASTYEAR-YEAR1),0)⍴0
 ⎕TCFF
 LASTCOL←LASTCOL,GET∆CONTRIB PREV∆ER[I;]
    ∇
```

```
    ∇ GET∆REALL;R;TEMP;TEMP1;TEMP2;Y;FIRST;I
[1]   ⍝ THIS FUNCTION GATHER INFORMATION ABOUT EMPLOYERS WHO NEED TO HAVE
[2]   ⍝ UVBs REALLOCATED.
[3]   ⍝
[4    ⍝ VARIABLES NEEDED:  LASTYEAR
[5]   ⍝ VARIABLES CREATED: MIDCOLS, REALL∆DATE, REALL∆YEAR, INIT∆REALL, REALL∆ER
[6]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]    ⎕TCFF
[8]   ⍝ INITIALIZATIONS
[9]    I←0 ◊ FIRST←1
[10]   REALL∆ER← 0 20 ⍴''
[11]   REALL∆DATE← 0 8 ⍴''
[12]   REALL∆YEAR←INIT∆REALL←''
[13]   MIDCOLS←((LASTYEAR-YEAR1),0)⍴0
[14]  ⍝ GET INPUT
[15]   ' ' ◊ 'ARE THERE ANY EMPLOYERS THAT HAVE PREVIOUSLY WITHDRAWN FROM'
[16]   ⍞←'THIS PLAN BEFORE THE YEAR ENDING ',(⍕LASTYEAR),' (Y/N)?  '
[17]   ⎕ARBOUT '' ◊ R←⍞
[18]  C1:→(0≠⍴R)/C2
[19]  N1:⍞←'PLEASE ENTER Y OR N: ' ◊ ⎕ARBOUT '' ◊ R←⍞
[20]   →C1
[21]  C2:→((1↑R)∊'nN')/0
[22]   →(~(1↑R)∊'yY')/N1
[23]   ⎕TCFF
[24]   ' ' ◊ 'PLEASE ENTER EMPLOYERS'' NAMES IN CHRONOLOGICAL ORDER OF WITHDRAWAL
      .'
[25]   'ENTER THE NAME OF THE FIRST OF EMPLOYER THAT WITHDREW:'
[26]   →C0
[27]  LOOP:⎕TCFF
[28]   ' ' ◊ 'ENTER THE NAME OF THE NEXT EMPLOYER THAT HAS PREVIOUSLY WITHDRAWN,'
[2     'OR ENTER Q IF THERE ARE NO MORE TO ENTER.'
[30]  C0:TEMP←⍞
[31]  N0:→(0≠⍴TEMP)/C3
[32]   ⍞←'PLEASE ENTER A NAME: ' ◊ ⎕ARBOUT '' ◊ TEMP←⍞ ◊ →N0
[33]  C3:→((∧/TEMP='Q')∨(∧/TEMP='q'))/0
[34]   →(20≥⍴TEMP)/N2
[35]   ⍞←'PLEASE ABBREVIATE TO 20 CHARACTERS OR LESS.  REENTER THE NAME: '
[36]   ⎕ARBOUT '' ◊ TEMP←⍞ ◊ →N0
[37]  N2:REALL∆ER←REALL∆ER,[1](TEMP,(20-⍴TEMP)⍴' ')
[38]  ⍝ GET THE WITHDRAWAL DATE
[39]  P0:' ' ◊ 'ENTER THE WITHDRAWAL DATE OF THIS EMPLOYER: '
[40]   ⍞←'      ENTER THE MONTH (USING 2 DIGITS): '
[41]   ⎕ARBOUT '' ◊ TEMP1←CHECK∆MONTH ⍞
[42]   ⍞←'      ENTER THE DAY   (USING 2 DIGITS): '
[43]   ⎕ARBOUT '' ◊ TEMP2←TEMP1,'-',CHECK∆DAY ⍞
[44]   ⍞←'      ENTER THE YEAR  (USING 4 DIGITS): '
[45]   ⎕ARBOUT '' ◊ Y←CHECK∆YEAR ⍞
[46]   TEMP←TEMP2,'-',2↓⍕Y
[47]  P1:' ' ◊ ⍞←'ENTER THE YEAR OF THE LAST PLAN YEAR ENDING BEFORE THIS WITHDRA
      WAL DATE: '
[48]   ⎕ARBOUT '' ◊ REALL∆YEAR←REALL∆YEAR,[1]CHECK∆YEAR ⍞
[49]   →((Y=REALL∆YEAR[⍴REALL∆YEAR])∨((Y-1)=REALL∆YEAR[⍴REALL∆YEAR]))/N3
[50]   'INVALID ENTRY -- THIS YEAR MUST EQUAL OR BE ONE LESS THAN THE LAST'
[51]   'YEAR ENTERED. ' ◊ REALL∆YEAR←¯1↓REALL∆YEAR ◊ →P1
[52]  N3:→(REALL∆YEAR[I+1]≤LASTYEAR)/NEXT
[53]   'INVALID ENTRY -- THIS EMPLOYER MUST HAVE WITHDRAWN BEFORE ',⍕LASTYEAR
[5     'PLEASE REENTER THE WITHDRAWAL DATE.' ◊ REALL∆YEAR←¯1↓REALL∆YEAR ◊ →P0
[55]  NEXT:REALL∆DATE←REALL∆DATE,[1]TEMP
[56]   ' ' ◊ 'ENTER THE AMOUNT OF UVB TO BE REALLOCATED FOR THIS EMPLOYER. '
[57]   ⍞←'(IF THERE IS NONE, ENTER 0):  '
[58]   ⎕ARBOUT '' ◊ INIT∆REALL←INIT∆REALL,⌊0.5+CHECK∆NUM ⍞
[59]   I←I+1
```

```
[60] ⍝ GET THE CONTRIBUTIONS
[61]  ⎕TCFF
[62]  MIDCOLS←MIDCOLS,GET∆CONTRIB REALL∆ER[I;]
[63]  →LOOP
    ∇
```

```
  ∇ GET∆HIST;YEAR
1]  ⍝ THIS FUNCTION GATHERS INFORMATION ABOUT THE PLAN'S ASSETS, AND
2]  ⍝ VESTED BENEFITS.
3]  ⍝
4]  ⍝ VARIABLES CREATED: VESTBEN, ASSETS
5]  ⍝ VARIABLES NEEDED:  INITYEAR, LASTYEAR
6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
7]   ⎕TCFF
8]  ⍝ INITIALIZATIONS
9]   YEAR←INITYEAR
10]  ASSETS←VESTBEN←''
11] ⍝ GET ASSETS AND VESTED BENEFITS
12] L1:⎕TCFF
13]  ' ' ⋄ 'ENTER THE FOLLOWING INFORMATION AS OF LAST DAY OF THE PLAN YEAR END
     ING IN ',(⍕YEAR),': '
14]  ⍞←'     TOTAL PLAN PRESENT VALUE OF VESTED BENEFITS: '
15]  ⎕ARBOUT '' ⋄ VESTBEN←VESTBEN,⌊0.5+CHECK∆NUM ⍞
16]  ⍞←'     TOTAL PLAN ASSETS: '
17]  ⎕ARBOUT '' ⋄ ASSETS←ASSETS,⌊0.5+CHECK∆NUM ⍞
18]  YEAR←YEAR+1
19]  →(LASTYEAR≠YEAR-1)/L1
   ∇
```

```
    ∇ GET∆TOTCONTRIB;YEAR
[1]  ⍝ THIS FUNCTION GATHERS THE TOTAL CONTRIBUTIONS BY ALL EMPLOYERS TOGETHER.
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED: YEAR1, LASTYEAR
[    ⍝ VARIABLE CREATED: TOTCONTRIB
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   ⎕TCFF
[7]   TOTCONTRIB←''
[8]   YEAR←YEAR1
[9]   ' ' ⋄ 'ENTER THE TOTAL AMOUNT OF CONTRIBUTIONS PAID BY ALL EMPLOYERS FOR'
[10]  'THE YEAR ENDING'
[11] L1:⍞←'     ',(⍕YEAR+1),': '
[12]  ⎕ARBOUT '' ⋄ TOTCONTRIB←TOTCONTRIB,⌊0.5+CHECK∆NUM ⍞
[13]  YEAR←YEAR+1
[14]  →(LASTYEAR≠YEAR)/L1
    ∇
```

```
    ∇ R←GET∆CONTRIB E;YEAR;STR;I
[1]  ⍝ THIS FUNCTION GATHERS THE AMOUNTS OF CONTRIBUTIONS DUE FOR A GIVEN
[2]  ⍝ EMPLOYER.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED: I, INITYEAR, YEAR1, RESP, ER, LASTYEAR, WITH∆YEAR
[5]  ⍝                   REALL∆ER, PREV∆ER, REALL∆YEAR, MONTH1, DAY1
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   YEAR←YEAR1 ⋄ R← 0 1 ⍴'' ⋄ I←0 ⋄ STR←''
[8]   →(0=1↑⍴REALL∆ER)/DUE
[9]  LO:I←I+1 ⋄ STR←STR,∧/E=REALL∆ER[I;]
[10]  →(I≠1↑⍴REALL∆ER)/LO
[11]  →(0=∨/STR)/DUE
[12]  ' ' ⋄ 'ENTER THE AMOUNTS OF THE ACTUAL CONTRIBUTIONS MADE BY ',(LEFT∆AL E) ⋄ →SKIP
[13] DUE:' ' ⋄ 'ENTER THE AMOUNTS OF THE CONTRIBUTIONS DUE FOR ',(LEFT∆AL E)
[14] SKIP:'FOR THE PLAN YEAR ENDING (IF NONE, ENTER 0): '
[15] L1:⍞←'     ',(⍕YEAR+1),': '
[16]  ⎕ARBOUT '' ⋄ R←R,[1](CHECK∆NUM ⍞)
[17]  YEAR←YEAR+1
[18] END:→(LASTYEAR≠YEAR)/L1
    ∇
```

```
    ∇ GET∆CL;M;D;Y;R;CITY;STATE;ZIP
[1]  ⍝ THIS FUNCTION GATHERS THE INPUT NECESSARY TO CREATE THE STANDARD
[2]  ⍝ COVER LETTER.
[3]  ⍝
[4     VARIABLES CREATED: CURR∆DATE, SPONSOR, STREET, CITY∆STATE, ZIP,
[5   ⍝                    PLAN∆NAME, CONTRACT, SECTION, ACTUARY, PHONE,
[6]  ⍝                    GROUP∆OFF, GROUP∆NAME, ADMIN, G, A
[7]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]   ⎕TCFF
[9]   CURR∆DATE←SPONSOR←STREET←CITY∆STATE←ZIP←PLAN∆NAME←SECTION←ACTUARY←PHONE←GR
      OUP∆OFF←GROUP∆NAME←ADMIN←G←A←''
[10]  →(0=1↑⍴PREV∆ER)/0
[11]  ' ' ⋄ 'WOULD YOU LIKE TO GENERATE THE COVER LETTER CONCERNING THE WITHDRAW
      AL'
[12]  'LIABILITY CALCULATIONS FOR ',(NOPAD PREV∆ER[1;]),' AS SHOWN IN THE MANUAL
      ?'
[13] P:⍞←'PLEASE ENTER Y OR N: ' ⋄ ⎕ARBOUT '' ⋄ CL←⍞
[14]  →((1↑CL)∊'Nn')/0
[15]  →(~(1↑CL)∊'Yy')/P
[16]  ⎕TCFF
[17] ⍝ GET TODAY'S DATE
[18]  ' ' ⋄ 'PLEASE ENTER TODAY''S DATE: '
[19]  ⍞←'    ENTER THE MONTH (USING 2 DIGITS): '
[20]  ⎕ARBOUT '' ⋄ M←CHECK∆MONTH ⍞
[21]  ⍞←'    ENTER THE DAY   (USING 2 DIGITS): '
[22]  ⎕ARBOUT '' ⋄ D←CHECK∆DAY ⍞
[23]  ⍞←'    ENTER THE YEAR  (USING 4 DIGITS): '
[24]  ⎕ARBOUT '' ⋄ Y←CHECK∆YEAR ⍞
[25]  M←SPELL∆MONTH M
[26]  CURR∆DATE←M,' ',D,', ',⍕Y
[2     GET PLAN SPONSOR
[28]  ⎕TCFF
[29]  ' ' ⋄ 'PLEASE ENTER THE NAME OF THE PLAN SPONSOR (INCLUDE MR/MRS/MS): '
[30]  SPONSOR←CHECK∆EMPTY ⍞
[31] ⍝ GET SPONSOR'S ADDRESS
[32]  ' ' ⋄ ' ' ⋄ 'PLEASE ENTER THE PLAN SPONSOR''S ADDRESS: '
[33]  ⍞←'   ENTER THE STREET ADDRESS:   ' ⋄ ⎕ARBOUT '' ⋄ STREET←CHECK∆EMPTY ⍞
[34]  ⍞←'   ENTER THE CITY:             ' ⋄ ⎕ARBOUT '' ⋄ CITY←CHECK∆EMPTY ⍞
[35]  ⍞←'   ENTER THE STATE:            ' ⋄ ⎕ARBOUT '' ⋄ STATE←CHECK∆EMPTY ⍞
[36]  ⍞←'   ENTER THE ZIP CODE:         ' ⋄ ⎕ARBOUT '' ⋄ ZIP←CHECK∆NUM ⍞
[37]  CITY∆STATE←CITY,', ',STATE,'  ',⍕ZIP
[38] ⍝ GET THE PLAN NAME
[39]  ⎕TCFF
[40]  ⍞←'PLEASE ENTER THE NAME OF THE PLAN: '
[41]  ⎕ARBOUT '' ⋄ PLAN∆NAME←CHECK∆EMPTY ⍞
[42] ⍝ GET THE SECTION NUMBER
[43]  ' ' ⋄ 'PLEASE ENTER THE SECTION NUMBER OF THE PLAN DOCUMENT FOR WHICH THE
      '
[44]  ⍞←'WITHDRAWAL LIABILITY CALCULATIONS FOLLOW: '
[45]  ⎕ARBOUT '' ⋄ SECTION←CHECK∆EMPTY ⍞
[46] ⍝ GET THE ACTURAY'S NAME AND PHONE NUMBER
[47]  ⎕TCFF
[48]  ' ' ⋄ ⍞←'ENTER THE NAME OF THE SENDER OF THIS LETTER: '
[49]  ⎕ARBOUT '' ⋄ ACTUARY←CHECK∆EMPTY ⍞
[50] P1:' ' ⋄ ⍞←'ENTER THE SENDER''S 7 DIGIT PHONE NUMBER (INCLUDE THE -):  (515
      )'
[5    ⎕ARBOUT '' ⋄ PHONE←⍞
[52]  →(8≠⍴PHONE)/P1
[53]  →(PHONE[4]≠'-')/P1
[54]  GROUP∆OFF←GROUP∆NAME←''
[55]  ADMIN←''
[56] ⍝ GET THE GROUP OFFICE
```

```
[57]  ⎕TCFF
[58]  'DO YOU WISH TO SEND A COPY OF THIS LETTER TO THE GROUP OFFICE?'
[59] P2:⍞←'PLEASE ENTER Y OR N: '
[60]  ⎕ARBOUT '' ◊ G←1↑⍞
[61]  →(G∊'Nn')/P3
[6[illegible]  →(~G∊'Yy')/P2
[63]  ' ' ◊ ⍞←'ENTER THE FULL NAME OF THE GROUP OFFICE OF THIS PLAN: '
[64]  ⎕ARBOUT '' ◊ GROUP∆OFF←CHECK∆EMPTY ⍞
[65]  ' ' ◊ 'ENTER THE NAME OF THE PERSON IN THE GROUP OFFICE IN CHARGE OF THIS
      PLAN: '
[66]  GROUP∆NAME←CHECK∆EMPTY ⍞
[67] ⍝ GET THE ADMINISTRATOR
[68] P3:⎕TCFF
[69]  'DO YOU WISH TO SEND A COPY OF THIS LETTER TO THE PLAN ADMINISTRATOR?'
[70] P4:⍞←'PLEASE ENTER Y OR N: '
[71]  ⎕ARBOUT '' ◊ A←⍞
[72]  →(A∊'Nn')/0
[73]  →(~A∊'Yy')/P4
[74]  ' ' ◊ ⍞←'ENTER THE NAME OF THE PLAN ADMINISTRATOR: '
[75]  ⎕ARBOUT '' ◊ ADMIN←CHECK∆EMPTY ⍞
    ∇
```

```
  ∇ R←CHECK∆MONTH M
 ⍝ THIS FUNCTION CHECKS TO SEE IF A VALUE INPUTTED FOR A MONTH IS VALID.
 ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
  R←M
 C1:→(2=⍴R)/C2
  ⍞←'PLEASE USE 2 DIGITS.  REENTER THE MONTH: '
  ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C1
 C2:→(1=∧/R∊'0123456789')/C3
  ⍞←'PLEASE USE ONLY NUMERIC VALUES. REENTER THE MONTH: '
  ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C1
 C3:→((12≥⍎R)∧(1≤⍎R))/0
  ⍞←'THE NUMBER FOR THE MONTH MUST BE BETWEEN 01 AND 12. REENTER THE MONTH:
  '
  ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C1
  ∇
```

```
  ∇ R←CHECK∆DAY M
[1]  ⍝ THIS FUNCTION CHECKS IF THE VALUE INPUTTED FOR A DAY IS VALID.
[2]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[3]   R←M
[4]  C1:→(2=⍴R)/C2
[5]   ⍞←'PLEASE USE 2 DIGITS.  REENTER THE DAY: '
[6]   ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C1
[7]  C2:→(1=∧/R∊'0123456789')/C3
[8]   ⍞←'PLEASE ENTER ONLY NUMERIC VALUES.  REENTER THE DAY: '
[9]   ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C1
[10] C3:→((31≥⍎R)∧(1≤⍎R))/0
[11]  ⍞←'THE NUMBER OF THE DAY MUST BE BETWEEN 01 AND 31.  REENTER THE DAY: '
[12]  ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C1
  ∇
```

```
    ∇ R←CHECK∆YEAR M
  ⍝ THIS FUCTION CHECKS IF THE VALUE INPUTTED FOR A YEAR IS VALID.
  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
   R←M
  C1:→(4=ρR)/C2
   ⍞←'PLEASE USE 4 DIGITS.  REENTER THE YEAR: '
   ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C1
  C2:→(1=∧/R∊'0123456789')/C3
   ⍞←'PLEASE USE ONLY NUMERIC VALUES.  REENTER THE YEAR: '
   ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C1
  C3:R←⍎R
    ∇
```

```
 ∇ R←CHECK∆NUM M
 ⍝ THIS FUNCTION CHECKS IF THE VALUE INPUTTED FOR A NUMBER IS VALID.
 ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
  R←M
 C0:→(0≠⍴R)/C1
  ⍞←'PLEASE ENTER A VALUE: ' ⋄ ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C0
 C1:→(1=∧/R∊'0123456789.')/C2
  ⍞←'PLEASE USE ONLY NUMERIC VALUES. REENTER THE VALUE: '
  ⎕ARBOUT '' ⋄ R←⍞ ⋄ →C0
 C2:R←⍎R
 ∇
```

```
    ∇ R←CHECK∆EMPTY X
[1]  ⍝ THIS FUNCTION CHECKS TO SEE IF A VALUE WAS ENTERED.
[2]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[3]   R←X
[4]  P1:→(0≠⍴R)/0
[5]   ' ' ⋄ ⍞←'PLEASE ENTER AN ITEM: '
[6]   ⎕ARBOUT '' ⋄ R←⍞ ⋄ →P1
    ∇
```

```
    ∇ CHANGE∆INPUT;R;SEC;T
[1]   ⍝ THIS FUNCTION RECALLS OTHER INPUT FUNCTIONS THAT NEED TO BE CORRECTED.
[2]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[3]   P0:→(NOPRINT=1)/P2
[4]    REPEAT←1
[5]    96 WRITE 'CHECK∆INPUT'
[6]    ⎕TCFF
[7]    'ARE THERE ANY CORRECTIONS THAT NEED TO BE MADE TO THESE VALUES? '
[8]   P1:⍞←'    PLEASE ENTER Y OR N: '
[9]    ⎕ARBOUT '' ⋄ R←⍞
[10]   →(∼1↑R∊'YyNn')/P1
[11]   →(1↑R∊'Nn')/0
[12]  P2:⎕TCFF ⋄ 'ENTER A SECTION NUMBER WHICH NEEDS CORRECTING, OR IF THERE '
[13]   'ARE NO MORE ENTER Q.  (NOTE: DO NOT ENTER A SECTION WHICH SAYS NONE!)'
[14]   →P4
[15]  P3:⍞←'    ENTER A NUMBER BETWEEN 1 AND 8: '
[16]  P4:⎕ARBOUT '' ⋄ SEC←⍞
[17]   NOPRINT←0
[18]   →(SEC∊'Qq')/P0
[19]   SEC←CHECK∆NUM SEC
[20]   →(∼SEC∊ 4 5 6)/SKIP
[21]  SKIP:→(((SEC)>8)∨((SEC)<1))/P3
[22]   →(1=SEC)/N1
[23]   →(2=SEC)/N2
[24]   →(3=SEC)/N3
[25]   →(4=SEC)/N4
[26]   →(5=SEC)/N5
[27]   →(6=SEC)/N6
[28]   →(7=SEC)/N7
[29]   →N8
[30]  N1:→(RESP∊'AaCc')/ONE
[31]   REDO←1 ⋄ GET∆INIT∆YEAR2 ⋄ REDO←0 ⋄ →P2
[32]  ONE:REDO←1 ⋄ GET∆INIT∆YEAR1 ⋄ REDO←0 ⋄ →P2
[33]  N2:GET∆INPUT ⋄ →P2
[34]  N3:GET∆HIST ⋄ →P2
[35]  N4:GET∆PRES ⋄ CONTRIB∆DUE←FIRSTCOL,MIDCOLS,LASTCOL ⋄ →P2
[36]  N5:T←WITH∆YEAR ⋄ GET∆PREV ⋄ CONTRIB∆DUE←FIRSTCOL,MIDCOLS,LASTCOL
[37]   WITH∆YEAR←T ⋄ →P2
[38]  N6:GET∆REALL ⋄ CONTRIB∆DUE←FIRSTCOL,MIDCOLS,LASTCOL ⋄ →P2
[39]  N7:GET∆TOTCONTRIB ⋄ →P2
[40]  N8:GET∆CL ⋄ →P2
    ∇
```

```
    ∇ CHECKΔINPUT;I;YEAR;YEARΔMAT;T1;COLONS
[1]   ⍝ THIS FUNCTION PRODUCES A PAGE OF WHAT ITEMS HAVE BEEN INPUT
[2]   ⍝ IN ORDER TO CHECK THEM FOR ACCURACY.
[3]   ⍝
[4[illegible] VARIABLES NEEDED: LASTYEAR, YEAR1, INITYEAR, MONTH1, DAY1, INITMONTH,
[5]   ⍝                    MONTH1, WS3ΔSTART, ER, PREVΔER, REALLΔER, CONTRIBΔDUE,
[6]   ⍝                    HYPΔYEAR, HYPΔDATE, WITHΔYEAR, WITHΔDATE, REALLΔYEAR
[7]   ⍝                    REALLΔDATE, FIRSTCOL, LASTCOL, MIDCOLS, ASSETS,
[8]   ⍝                    VESTBEN, TOTCONTRIB, INITΔREALL, CURRΔDATE, SPONSOR,
[9]   ⍝                    CITYΔSTATE, STREET, PLANΔNAME, CONTRACT, SECTION,
[10]  ⍝                    ACTUARY, PHONE, GROUPΔOFF, GROUPΔNAME, ADMIN, TOTΔER
[11]  ⍝                    TOTΔFIRSTCOL
[12] ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[13]  ⎕TCFF
[14]  YEARΔMAT←(((LASTYEAR-YEAR1),4)⍴' '),⍕((LASTYEAR-YEAR1),1)⍴YEAR1+⍳(LASTYEAR-YEAR1)
[15]  COLONS←((LASTYEAR-YEAR1),1)⍴':'
[16]  'PLEASE CHECK FOR ACCURACY THE FOLLOWING ITEMS THAT HAVE BEEN ENTERED:'
[17]  ' ' ⋄ 'SECTION 1'
[18]  '---------'
[19]  '   FIRST MONTH OF PLAN YEAR: ',MONTH1
[20]  '   FIRST DAY OF PLAN YEAR  : ',DAY1
[21]  '   LAST MONTH OF PLAN YEAR : ',INITMONTH
[22]  '   LAST DAY OF PLAN YEAR   : ',INITDAY
[23]  ' ' ⋄ 'SECTION 2 (NOTE:IF THERE IS AN ERROR HERE, ALL SECTIONS MUST BE RE-INPUT.)'
[24]  '---------'
[25]  '   LATER OF THE ENDING YEAR OF THE LAST PLAN YEAR ENDING BEFORE 9-26-80'
[26]  '     OR THE ENDING YEAR OF THE PLAN YEAR DURING WHICH THE EMPLOYER'
[27]  '     FIRST CONTRIBUTED:   ',⍕INITYEAR
[28]  '   ENDING YEAR OF THE LATER OF THE FIRST PLAN YEAR ENDING AFTER 9-26-80'
[29]  '     OR THE YEAR THE EMPLOYER FIRST CONTRIBUTED:  ',⍕WS3ΔSTART
[3[illegible]  '   ENDING YEAR OF THE LAST DAY OF PLAN YEAR ENDING PRIOR TO EMPLOYER''S'
[31]  '     WITHDRAWAL, OR IF CALCULATING POTENTIAL LIABILITY FOR OTHER '
[32]  '     EMPLOYERS, THE ENDING YEAR OF THE LAST DAY FOR WHICH'
[33]  '     YOU WANT TO CALCULATE LIABILITY:  ',⍕LASTYEAR
[34]  ' ' ⋄ 'SECTION 3'
[35]  '---------'
[36]  YEAR←INITYEAR-1 ⋄ I←0
[37]  '   TOTAL PLAN ASSETS AND VESTED BENEFITS AS OF THE LAST DAY OF PLAN YEAR ENDING: '
[38]  '              VESTED BENEFITS                          ASSETS      '
[39] L1:YEAR←YEAR+1 ⋄ I←I+1
[40]  '     ',(⍕YEAR),':',(,'CI18' ⎕FMT(VESTBEN[I])),,'CI35' ⎕FMT(ASSETS[I])
[41]  →(YEAR≠LASTYEAR)/L1
[42]  →(20>LASTYEAR-INITYEAR)/N1
[43]  ⎕TCFF
[44] N1:' ' ⋄ 'SECTION 4'
[45]  '---------'
[46]  '   PRESENT EMPLOYERS FOR WHOM YOU WISH TO CALCULATE LIABILITY FOR: '
[47]  →(0=1↑⍴TOTΔER)/NONE1
[48]  'X10,20A1' ⎕FMT(TOTΔER)
[49]  '   DATE FOR WHICH YOU WISH TO CALCULATE LIABILITY:  ',HYPΔDATE
[50]  '   CONTRIBUTIONS DUE FOR THESE EMPLOYERS (IN ABOVE ORDER) FOR THE PLAN YEAR ENDING:'
[51]  (⍕YEARΔMAT),COLONS,(((1↑⍴CONTRIBΔDUE),8)⍴' '),⍕TOTΔFIRSTCOL
[52]  →PREV
[53] NONE1:'         NONE'
[54] PREV:→(8>LASTYEAR-INITYEAR)/N2
[55]  ⎕TCFF
[5[illegible]2:' ' ⋄ 'SECTION 5'
[57]  '---------'
[58]  '   WITHDRAWING EMPLOYER AND WITHDRAWAL DATE: '
[59]  →(0=1↑⍴PREVΔER)/NONE2
[60]  'X10,20A1,X5,8A1' ⎕FMT(PREVΔER;WITHΔDATE)
[61]  '   CONTRIBUTIONS DUE FOR THIS EMPLOYER FOR THE PLAN YEAR ENDING: '
[62]  (⍕YEARΔMAT),COLONS,(((1↑⍴CONTRIBΔDUE),8)⍴' '),⍕LASTCOL
[63]  →REALL
```

```
[64] NONE2:'          NONE'
[65] REALL:→(8≤LASTYEAR-INITYEAR)/N3
[66]  ⎕TCFF
[67] N3:' ' ◊ 'SECTION 6'
[68]  '---------'
[6     '   PREVIOUS EMPLOYERS AND DATE OF WITHDRAWAL:'
[70]  →(0=1↑⍴REALLΔER)/NONE3
[71]  'X10,20A1,X5,8A1' ⎕FMT(REALLΔER;REALLΔDATE)
[72]  '   CORRESPONDING ENDING YEAR OF LAST PLAN YEAR ENDING BEFORE THESE DATES: '
[73]  '      ',⍕REALLΔYEAR
[74]  '   AMOUNT OF UVB TO BE REALLOCATED CORRESPONDING TO THESE EMPLOYERS:'
[75]  '          ',⍕INITΔREALL
[76]  '   ACTUAL CONTRIBUTIONS MADE BY THESE EMPLOYERS (IN ABOVE ORDER) FOR THE PLAN YEAR ENDING
     : '
[77]  (⍕YEARΔMAT),COLONS,(((1↑⍴CONTRIBΔDUE),8)⍴' '),⍕MIDCOLS
[78]  →NEXT
[79] NONE3:'          NONE'
[80] NEXT:→(20>LASTYEAR-INITYEAR)/N4
[81]  ⎕TCFF
[82] N4:' ' ◊ 'SECTION 7'
[83]  '---------'
[84]  YEAR←YEAR1 ◊ I←0
[85]  '   TOTAL CONTRIBUTIONS BY ALL EMPLOYERS FOR THE PLAN YEAR ENDING:'
[86] L2:YEAR←YEAR+1 ◊ I←I+1
[87]  '      ',(⍕YEAR),': ',⍕TOTCONTRIB[I]
[88]  →(YEAR≠LASTYEAR)/L2
[89]  →(CL∈'nN')/0
[90]  →(8>LASTYEAR-INITYEAR)/N5
[91]  ⎕TCFF
[92] N5:' ' ◊ 'SECTION 8'
[93]  '---------'
[9     '   TODAY''S DATE             :   ',CURRΔDATE
[95]  '   PLAN SPONSOR             :   ',SPONSOR
[96]  '   SPONSOR''S STREET ADDRESS:   ',STREET
[97]  '   SPONSOR''S CITY,STATE,ZIP:   ',CITYΔSTATE
[98]  '   PLAN NAME                :   ',PLANΔNAME
[99]  '   DOCUMENT SECTION NO.     :   ',SECTION
[100]  '   SENDER''S NAME            :   ',ACTUARY
[101]  '   SENDER''S PHONE NUMBER    :   ',PHONE
[102]  '   GROUP OFFICE             :   ',GROUPΔOFF
[103]  '   GROUP OFFICER IN CHARGE  :   ',GROUPΔNAME
[104]  '   PLAN ADMINISTRATOR       :   ',ADMIN
    ∇
```

```
  ∇ CALCULATE
 ⍝ THIS FUNCTION PERFORMS ALL CALCULATIONS.
 ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
  →(0=(1↑⍴ER)+(1↑⍴PREV∆ER))/0
  ⎕TCFF ◊ ' ' ◊ ' ' ◊ ' ' ◊ ' ' ◊ ' ' ◊ '                             PLEASE
  WAIT . . .'
  TABLE1∆CALCS
  TABLE2∆CALCS
  TABLE3∆CALCS
  WS∆CALCS
  ∇
```

```
    ∇ TABLE1∆CALCS;I;J;SUB;AM∆RATE
[1]   ⍝ THIS FUNCTION CALCULATES THE VALUES OF UVB, NETCHANGE, AND UNAM.
[2]   ⍝
[3]   ⍝ VARIABLES NEEDED: VESTBEN, ASSETS, LASTYEAR, INITYEAR
[4]   ⍝ VARIABLES CREATED: UVB, NETCHANGE, UNAM
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   UVB←VESTBEN-ASSETS
[7]   NETCHANGE←''
[8]   UNAM←((1+LASTYEAR-INITYEAR),(LASTYEAR-INITYEAR))ρ0
[9]   AM∆RATE←0.95
[10]  J←0 ⋄ I←1
[11]  →(LASTYEAR=INITYEAR)/0
[12] FIRSTROW:J←J+1
[13]  UNAM[I;J]←⌊0.5+UVB[I]×AM∆RATE
[14]  AM∆RATE←AM∆RATE-0.05
[15]  →((LASTYEAR-INITYEAR)≠J)/FIRSTROW
[16] MIDROWS:I←I+1 ⋄ J←I-1 ⋄ AM∆RATE←0.95
[17]  SUB←+/UNAM[;I-1]
[18]  NETCHANGE←NETCHANGE,(UVB[I]-SUB)
[19]  →(I=1+LASTYEAR-INITYEAR)/LASTROW
[20] IN∆LOOP:J←J+1
[21]  UNAM[I;J]←⌊0.5+NETCHANGE[I-1]×AM∆RATE
[22]  AM∆RATE←AM∆RATE-0.05
[23]  →(J≠LASTYEAR-INITYEAR)/IN∆LOOP
[24]  →MIDROWS
[25] LASTROW:UNAM[(1+LASTYEAR-INITYEAR);(LASTYEAR-INITYEAR)]←NETCHANGE[ρNETCHANGE]
    ∇
```

```
    ∇ TABLE2∆CALCS;I;YEAR;TEMP
[1]   ⍝ THIS FUNCTION CALCULATES TOTAL CONTRIBUTIONS LESS WITHDRAWALS FOR
[2]   ⍝ EACH YEAR FROM INITYEAR TO LASTYEAR, AND THE SUM OF THESE FIVE YEARS
[3]   ⍝ AT A TIME.
[[illegible] ⍝
[5]   ⍝ VARIABLES NEEDED:  TOTCONTRIB, LASTYEAR, INITYEAR, WITH∆YEAR, REALL∆YEAR
[6]   ⍝ VARIABLES CREATED: CONTRIB∆LESSWITH, FIVE∆CONTRIB
[7]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]   ⍝ GET CONTRIB∆LESSWITH
[9]    TEMP←TOTCONTRIB
[10]   CONTRIB∆LESSWITH←(5,(1+LASTYEAR-INITYEAR))⍴0
[11]   I←1
[12]   YEAR←INITYEAR
[13] ⍝ GET 1ST 5 YEARS
[14]  →((0=1↑⍴REALL∆ER)∧(0=1↑⍴PREV∆ER))/PRE∆HOP
[15]  →((∨/WITH∆YEAR≤YEAR-1)∨(∨/REALL∆YEAR≤YEAR-1))/PRE∆WITHD
[16] PRE∆HOP:CONTRIB∆LESSWITH[;I]←5↑TEMP
[17]  →END∆PRE
[18] PRE∆WITHD:→(0=1↑⍴REALL∆ER)/PRE∆SKIP
[19]  →(0=1↑⍴PREV∆ER)/PRE∆SKIP2
[20]  TEMP←TEMP-(-⍴TEMP)↑+/((REALL∆YEAR≤YEAR-1),(WITH∆YEAR=YEAR-1))/(0,(1↑⍴ER))↓
      ⌊0.5+CONTRIB∆DUE
[21]  →PRE∆NEXT
[22] PRE∆SKIP:TEMP←TEMP-(-⍴TEMP)↑+/((WITH∆YEAR≤YEAR-1))/(0,(1↑⍴ER))↓⌊0.5+CONTRIB
      ∆DUE
[23]  →PRE∆NEXT
[24] PRE∆SKIP2:TEMP←TEMP-(-⍴TEMP)↑+/((REALL∆YEAR≤YEAR-1))/(0,(1↑⍴ER))↓⌊0.5+CONTR
      IB∆DUE
[25] PRE∆NEXT:CONTRIB∆LESSWITH[;I]←5↑TEMP
[26] END∆PRE:YEAR←YEAR+1 ◊ I←I+1 ◊ TEMP←1↓TEMP
[2[illegible] →(LASTYEAR=YEAR-1)/0
[28] ⍝ GET THE REMAINING YEARS
[29] LOOP:→((0=1↑⍴REALL∆ER)∧(0=1↑⍴PREV∆ER))/HOP
[30]  →((∨/WITH∆YEAR=YEAR-1)∨(∨/REALL∆YEAR=YEAR-1))/WITHD
[31] HOP:CONTRIB∆LESSWITH[;I]←5↑TEMP
[32]  →ENDLOOP
[33] WITHD:
[34]  →(0=1↑⍴REALL∆ER)/SKIP
[35]  →(0=1↑⍴PREV∆ER)/SKIP2
[36]  TEMP←TEMP-(-⍴TEMP)↑+/((REALL∆YEAR=YEAR-1),(WITH∆YEAR=YEAR-1))/(0,(1↑⍴ER))↓
      ⌊0.5+CONTRIB∆DUE
[37]  →NEXT
[38] SKIP:TEMP←TEMP-(-⍴TEMP)↑+/((WITH∆YEAR=YEAR-1))/(0,(1↑⍴ER))↓⌊0.5+CONTRIB∆DUE

[39]  →NEXT
[40] SKIP2:TEMP←TEMP-(-⍴TEMP)↑+/((REALL∆YEAR=YEAR-1))/(0,(1↑⍴ER))↓⌊0.5+CONTRIB∆D
      UE
[41] NEXT:CONTRIB∆LESSWITH[;I]←5↑TEMP
[42] ENDLOOP:YEAR←YEAR+1
[43]  I←I+1
[44]  TEMP←1↓TEMP
[45]  →(LASTYEAR≠YEAR-1)/LOOP
[46] ⍝ GET FIVE∆CONTRIB
[47]  FIVE∆CONTRIB←+⌿CONTRIB∆LESSWITH
    ∇
```

```
    ∇ TABLE3∆CALCS;I;J;YEAR;REALL∆YEAR1;AM∆RATE
[1]  ⍝ THIS FUNCTION PERFORMS THE CALCULATIONS FOR TABLE3
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED:  REALL∆YEAR, INIT∆REALL, LASTYEAR
[4     VARIABLES CREATED: REALL∆UNAM
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   →(0=⍴REALL∆YEAR)/0
[7]   →(0=∧/INIT∆REALL=0)/SKIPITY
[8]   REALL∆YEAR1←⌊/REALL∆YEAR
[9]   →HIPITY
[10] SKIPITY:REALL∆YEAR1←⌊/(~INIT∆REALL=0)/REALL∆YEAR
[11] HIPITY:REALL∆UNAM←((1↑⍴REALL∆ER),(1+LASTYEAR-REALL∆YEAR1))⍴0
[12]  I←0
[13] ER∆LOOP:I←I+1
[14]  J←0 ◊ YEAR←REALL∆YEAR1
[15]  AM∆RATE←0.95
[16] YEAR∆LOOP:J←J+1
[17] ⍝ IF YEAR<REALL∆YEAR ENTER ZEROS
[18]  →(YEAR<REALL∆YEAR[I])/ZEROS
[19] ⍝ ELSE IF YEAR>REALL∆YEAR, AMORTIZED THE AMOUNT
[20]  →(YEAR>REALL∆YEAR[I])/AMORT
[21] ⍝ ELSE ENTER THE FULL VALUE
[22]  REALL∆UNAM[I;J]←INIT∆REALL[I]
[23]  →ENDLOOP
[24] ZEROS:REALL∆UNAM[I;J]←0
[25]  →ENDLOOP
[26] AMORT:REALL∆UNAM[I;J]←⌊0.5+INIT∆REALL[I]×AM∆RATE
[27]  AM∆RATE←AM∆RATE-0.05
[28] ENDLOOP:YEAR←YEAR+1
[29]  →(LASTYEAR≠YEAR-1)/YEAR∆LOOP
[3    →(I≠1↑⍴REALL∆ER)/ER∆LOOP
    ∇
```

```
    ∇ WS∆CALCS
[1]   ⍝ THIS FUCTION GENERATES ALL THE VARIABLES NEEDED TO PRODUCE THE
[2]   ⍝ WORKSHEET.
[3]   ⍝
[     ⍝ VARIABLES NEEDED:  LASTYEAR, INITYEAR, WITH∆YEAR, PREV∆ER, REALL∆ER,
[5]   ⍝                    WS3∆START, REALL∆UNAM, UVB, FIVE∆CONTRIB, INITMONTH,
[6]   ⍝                    INITDAY, CONTRIB∆DUE, UNAM, NETCHANGE, ER
[7]   ⍝ VARIABLES CREATED: CURR∆UVB, FIVE∆DUE, DUV, UNAD∆POR, UNAM∆WD∆YEAR,
[8]   ⍝                    IND∆REALL, TOT∆REALL∆UVB, UNAD∆WL, LAST∆UVB, MULT,
[9]   ⍝                    DEM∆FAC, DEM∆ADJ, AD∆WL
[10] ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[11]  POOL∆CALCS
[12]  REALL∆CALCS
[13]  ADJ∆CALCS
    ∇
```

```
    ∇ POOL∆CALCS
[1]  ⍝ THIS FUNCTION CALCULATES THE VARIABLES NECESSARY TO PRODUCE THE
[2]  ⍝ POOL SECTIONS OF THE WORKSHEET.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED:  FIVE∆CONTRIB, INITYEAR, INITMONTH, INITDAY, ER,
[5]  ⍝                    PREV∆ER, CONTRIB∆DUE, LASTYEAR, WITH∆YEAR, UVB
[6]  ⍝                    UNAM, NETCHANGE
[7]  ⍝ VARIABLES CREATED: CURR∆UVB, FIVE∆DUE, DIV, UNAD∆POR
[8]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[9]  ⍝ CALCULATE UNAMORTIZED VALUE OF UVB FOR EACH YEAR (CURR∆UVB)
[10]  CURR∆UVB∆CALC
[11] ⍝ CALCUATE CONTRIBUTIONS DUE 5 YEARS AT A TIME (FIVE∆DUE)
[12]  FIVE∆DUE∆CALC
[13] ⍝ FIVE∆CONTRIB IS CALCULATED IN TABLE2∆CALCS
[14] ⍝ CALCLUATE DIVISION FACTOR (DIV)
[15]  DIV∆CALC
[16] ⍝ CALCULATE THE INDIVIDUAL ER UNADJUSTED PORTION OF LIAB PER POOL (UNAD∆POR)
[17]  UNAD∆POR←⌊0.5+CURR∆UVB×DIV
    ∇
```

```
∇ CURR∆UVB∆CALC;ROW∆NUM;YEAR;I;J;PRE
 ⍝ THIS FUNCTION CALCUALTES THE UNAMORTIZED VALUE OF EACH YEAR]S UVB WHICH
 ⍝ CORRESPONS TO THE DATE OF THE LAST PLAN YEAR ENDING BEFORE THE DATE
 ⍝ OF WITHDRAWAL.  THIS MATRIX IS USED IN THE POOLING SECTIONS OF THE
 ⍝ WORKSHEET.
 ⍝
 ⍝ VARIABLES NEEDED:  INITYEAR, INITMONTH, INITDAY, ER, PREV∆ER, LASTYEAR
 ⍝                    WITH∆YEAR, UVB, UNAM, NETCHANGE
 ⍝ VARIABLES CREATED: CURR∆UVB
 ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
  CURR∆UVB←((1+LASTYEAR-INITYEAR),((1↑ρER)+(1↑ρPREV∆ER)))ρ0
  I←J←1
  ROW∆NUM←1
  YEAR←INITYEAR
  PRE←0
  →(INITYEAR<1980)/PRE∆80
  →((INITYEAR=1980)∧((⍎INITMONTH)<9))/PRE∆80
  →((INITYEAR=1980)∧((⍎INITMONTH)=9)∧((⍎INITDAY)≤26))/PRE∆80
  →POST∆80
 PRE∆80:PRE←1
  →L1
 THEN:ROW∆NUM←ROW∆NUM+1
  PRE←0
  YEAR←YEAR+1
 POST∆80:I←J←1
 L1:→(0=1↑ρER)/L2
  →(INITYEAR≠LASTYEAR)/SKIP
  CURR∆UVB[ROW∆NUM;I]←UVB[ROW∆NUM]
  →NEXT
 SKIP:CURR∆UVB[ROW∆NUM;I]←UNAM[ROW∆NUM;(LASTYEAR-INITYEAR)]
 NEXT:I←I+1
  →(I≠1+1↑ρER)/L1
 L2:→(0=1↑ρPREV∆ER)/END
  →(0=WITH∆YEAR[J]-INITYEAR)/Z1
  →((ROW∆NUM=1+WITH∆YEAR[J]-INITYEAR)∧(LASTYEAR>WITH∆YEAR[J]))/NETCH
  →(ROW∆NUM>1+WITH∆YEAR[J]-INITYEAR)/DASHES
  CURR∆UVB[ROW∆NUM;I]←UNAM[ROW∆NUM;WITH∆YEAR[J]-INITYEAR]
  →NEXT1
 Z1:CURR∆UVB[ROW∆NUM;I]←UVB[ROW∆NUM]
  →NEXT1
 NETCH:CURR∆UVB[ROW∆NUM;I]←NETCHANGE[WITH∆YEAR[J]-INITYEAR]
  →NEXT1
 DASHES:CURR∆UVB[ROW∆NUM;I]←0
 NEXT1:→(J=1↑ρPREV∆ER)/END
  J←J+1 ◇ I←I+1
  →L2
 END:→(PRE=1)/THEN
  YEAR←YEAR+1
  ROW∆NUM←ROW∆NUM+1
  →(ROW∆NUM≠2+LASTYEAR-INITYEAR)/POST∆80
∇
```

```
    ∇ FIVE∆DUE∆CALC;J;TEMP;TEMP2
[1]   ⍝ THIS FUNCTION CALCULATES THE TOTAL CONTRIBUTION AMOUNT REQUIRED TO BE
[2]   ⍝ PAID BY THE INDIVIDUAL EMPLOYER FOR FIVE YEARS AT A TIME
[3]   ⍝
[4]   ⍝ VARIABLES NEEDED: LASTYEAR, INITYEAR, CONTRIB∆DUE, ER, PREV∆ER, REALL∆ER
[5]   ⍝ VARIABLE CREATED: FIVE∆DUE
[6]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]    FIVE∆DUE←((1+LASTYEAR-INITYEAR),((1↑⍴ER)+(1↑⍴PREV∆ER)))⍴0
[8]    →(0=1↑⍴REALL∆ER)/SKIP
[9]   ⍝ TEMP IS MATRIX OF CONTRIBUTIONS BY ALL EXCEPT REALL∆ER
[10]   →(0=1↑⍴ER)/HOP
[11]   TEMP←((1↑⍴CONTRIB∆DUE),(1↑⍴ER))↑CONTRIB∆DUE
[12]  HOP:→(0=1↑⍴PREV∆ER)/NEXT
[13]   TEMP2←((1↑⍴CONTRIB∆DUE),-(1↑⍴PREV∆ER))↑CONTRIB∆DUE
[14]  JUMP:→(0=1↑⍴ER)/A1
[15]   TEMP←TEMP,TEMP2
[16]   →NEXT
[17]  A1:TEMP←TEMP2
[18]   →NEXT
[19]  SKIP:TEMP←CONTRIB∆DUE
[20]  NEXT:J←1
[21]  L1:FIVE∆DUE[;J]←⌊0.5++/(TEMP[;J][(⍳(1↑⍴TEMP)-4)∘.+ 0 1 2 3 4])
[22]   J←J+1
[23]   →((J-1)≠((1↑⍴ER)+(1↑⍴PREV∆ER)))/L1
    ∇
```

```
    ∇ DIV∆CALC;I
[1]  ⍝ THIS FUNCTION CALCULATES THE DIVISION FACTOR USED IN THE SECTIONS.
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED: PREV∆ER, ER, FIVE∆DUE, FIVE∆CONTRIB, LASTYEAR,
[4]  ⍝                   INITYEAR
[5]  ⍝ VARIABLE CREATED: DIV
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   I←0
[8]   DIV←(0,((1↑⍴PREV∆ER)+(1↑⍴ER)))⍴''
[9]  LOOP:I←I+1
[10]  DIV←DIV,[1](⌊0.5+1000000×FIVE∆DUE[I;]÷FIVE∆CONTRIB[I]⌈1)÷1000000
[11]  →(I≠1+LASTYEAR-INITYEAR)/LOOP
    ∇
```

```
    ∇ REALL∆CALCS
[1]  ⍝ THIS FUNCTION CALCULATES THE VARIABLES NECESSARY TO PRODUCE THE
[2]  ⍝ REALLOCATED UVB SECTION OF THE WORKSHEET.
[3]  ⍝
[    ⍝ VARIABLES NEEDED:  REALL∆YEAR, LASTYEAR, INITYEAR, ER, PREV∆ER,
[5]  ⍝                    REALL∆ER, WS3∆START, REALL∆UNAM
[6]  ⍝ VARIABLES CREATED: UNAM∆WD∆YEAR, IND∆REALL, TOT∆REALL∆UVB
[7]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]  ⍝ CALCULATE UNAM∆WD∆YEAR
[9]   UNAM∆WD∆YEAR∆CALC
[10] ⍝ FIVE∆DUE WAS CALCULATED IN POOL∆CALCS
[11] ⍝ FIVE∆CONTRIB WAS CALCULATED IN TABLE2∆CALCS
[12] ⍝ DIV WAS CALCULATED IN POOL∆CALCS
[13] ⍝ CALCULATE IND∆REALL
[14]  IND∆REALL←⌊0.5+UNAM∆WD∆YEAR×DIV
[15] ⍝ CALCULATE TOT∆REALL∆UVB
[16]  TOT∆REALL∆UVB←+/IND∆REALL
    ∇
```

```
    ∇ UNAM∆WD∆YEAR∆CALC;I;TEMP;YEAR
[1]   ⍝ THIS FUNCTION CALCUALTES THE UNAMORTIZED AMOUNT OF REALLOCATED
[2]   ⍝ VESTED BENEFITS FOR EACH YEAR.
[3]   ⍝
[4     ⍝ VARIABLES NEEDED: LASTYEAR, INITYEAR, ER, PREV∆ER, REALL∆ER, RESP
[5    ⍝                    WS3∆START, REALL∆YEAR, REALLL∆UNAM, INITMONTH, INITDAY
[6]   ⍝ VARIABLE CREATED:UNAM∆WD∆YEAR
[7]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]    UNAM∆WD∆YEAR←((1+LASTYEAR-INITYEAR),((1↑⍴ER)+(1↑⍴PREV∆ER)))⍴0
[9]    YEAR←WS3∆START-1
[10]   TEMP←''
[11]   →(0=1↑⍴REALL∆ER)/0
[12]   I←0
[13]   →(INITYEAR<1980)/PRE∆80
[14]   →((INITYEAR=1980)∧((⍎INITMONTH)<9))/PRE∆80
[15]   →((INITYEAR=1980)∧((⍎INITMONTH)=9)∧((⍎INITDAY)≤26))/PRE∆80
[16]   →LOOP
[17]  PRE∆80:I←I+1
[18]   UNAM∆WD∆YEAR[I;]←0
[19]  LOOP:I←I+1 ⋄ YEAR←YEAR+1
[20]   TEMP←+⌿(REALL∆YEAR=YEAR-1)⌿REALL∆UNAM[;1↓⍴REALL∆UNAM]
[21]   →(0=⍴TEMP)/ZERO
[22]   →(RESP∈'Bb')/S1
[23]   →(YEAR>WITH∆YEAR[1])/ZERO∆ONE
[24]  S1:UNAM∆WD∆YEAR[I;]←TEMP
[25]   →(YEAR≠LASTYEAR)/LOOP
[26]   →0
[27]  ZERO:UNAM∆WD∆YEAR[I;]←0
[28]   →(YEAR≠LASTYEAR)/LOOP
[29]   →0
[3     ERO∆ONE:
[31]   UNAM∆WD∆YEAR[I;]←TEMP
[32]   UNAM∆WD∆YEAR[I;((1↑⍴ER)+(1↑⍴PREV∆ER))]←0
[33]   →(YEAR≠LASTYEAR)/LOOP
    ∇
```

```
    ∇ ADJ∆CALCS
[1]  ⍝ THIS FUNCTION CALCULATES THE VALUES NECESSARY FOR THE ADJUSTED
[2]  ⍝ INDIVIDUAL EMPLOYER WITHDRAWAL LIABILITY OF THE WORKSHEET.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED : TOT∆REALL∆UVB, UNAD∆POR, UVB, LASTYEAR, INITYEAR,
[                         WITH∆YEAR, ER, PREV∆ER
[6]  ⍝ VARIABLES CREATED: UNAD∆WL, LAST∆UVB, MULT, DEM∆FAC, DEM∆ADJ, AD∆WL
[7]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]  ⍝ CALCULATE UNADJUSTED INDIVIDUAL ER WITHDRAWAL LIABILITY (UNAD∆WL)
[9]   UNAD∆WL←TOT∆REALL∆UVB++⌿UNAD∆POR
[10] ⍝ CALCULATE CURRENT YEAR UVB (LAST∆UVB)
[11]  LAST∆UVB∆CALC
[12] ⍝ CALCULATE THE MULTIPLYING FACTOR (MULT)
[13]  MULT←⌊0.5+7.5E¯3×LAST∆UVB
[14] ⍝ CALCULATE THE DEMINIMUS FACTOR (DEM∆FAC)
[15]  DEM∆FAC∆CALC
[16] ⍝ CALCULATE THE DEMINIMUS ADJUSTMENT (DEM∆ADJ)
[17]  DEM∆ADJ∆CALC
[18] ⍝ CALCULATE THE ADJUSTED INDIVIDUAL ER WITHDRAWAL LIABILITY (AD∆WL)
[19]  AD∆WL∆CALC
    ∇
```

```
  ∇ LAST∆UVB∆CALC;I;J
1]  ⍝ THIS FUNCTION CALCULATES THE VALUE OF THE CURRENT YEAR UVB.
2]  ⍝
3]  ⍝ VARIABLES NEEDED: LASTYEAR, WITH∆YEAR, UVB, INITYEAR, ER, PREV∆ER
    ⍝                   RESP
5]  ⍝ VARIABLE CREATED: LAST∆UVB
6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
7]   LAST∆UVB←''
8]   I←J←1
9]  L1:→(RESP∊'Bb')/S1
10]  →((I)1↑⍴ER)∨(LASTYEAR=WITH∆YEAR[J]))/WITHD
11] S1:LAST∆UVB←LAST∆UVB,UVB[1+LASTYEAR-INITYEAR]
12]  →NEXT
13] WITHD:LAST∆UVB←LAST∆UVB,UVB[1+WITH∆YEAR[J]-INITYEAR]
14] NEXT:→(I≤1↑⍴ER)/SKIP
15]  J←J+1
16] SKIP:I←I+1
17]  →(I≠1+(1↑⍴ER)+1↑⍴PREV∆ER)/L1
  ∇
```

```
   ∇ DEM⍙FAC∆CALC;I
[1] ⍝ THIS FUCTION CALCULATES THE DEMINIMUS FACTOR.
[2] ⍝
[3] ⍝ VARIABLES NEEDED: MULT
[4] ⍝ VARIABLE CREATED: DEM⍙FAC
[5] ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]  DEM⍙FAC←''
[7]  I←0
[8] LOOP:I←I+1
[9]  →(MULT[I]≥50000)/FIFTY
[10] DEM⍙FAC←DEM⍙FAC,MULT[I]
[11] →(I≠⍴MULT)/LOOP
[12] →0
[13]FIFTY:DEM⍙FAC←DEM⍙FAC,50000
[14] →(I≠⍴MULT)/LOOP
    ∇
```

```
    ∇ DEM∆ADJ∆CALC;I;TEMP
[1]  ⍝ THIS FUNCTION CALCULATES THE DEMINIMUS ADJUSTMENT.
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED: UNAD∆WL, DEM∆FAC, MULT
[[illegible] VARIABLE CREATED: DEM∆ADJ
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   DEM∆ADJ←''
[7]   I←0
[8]  LOOP:I←I+1
[9]   →(UNAD∆WL[I]≤0)/ZERO
[10]  →(UNAD∆WL[I]<100000)/FACTOR
[11]  TEMP←DEM∆FAC[I]+100000-UNAD∆WL[I]
[12]  →(TEMP<0)/ZERO
[13]  DEM∆ADJ←DEM∆ADJ,TEMP
[14]  →END
[15] ZERO:DEM∆ADJ←DEM∆ADJ,0
[16]  →END
[17] FACTOR:DEM∆ADJ←DEM∆ADJ,DEM∆FAC[I]
[18] END:→(I≠⍴MULT)/LOOP
    ∇
```

```
    ∇ AD∆WL∆CALC;I;TEMP
[1]  ⍝ THIS FUNCTION CALCULATES THE ADJUSTED INDIVIDUAL EMPLOYER WITHDRAWAL
[2]  ⍝ LIABILITY.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED: UNAD∆WL, DEM∆ADJ
[5]  ⍝ VARIABLE CREATED: AD∆WL
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   AD∆WL←''
[8]   I←0
[9]  LOOP:I←I+1
[10]  TEMP←UNAD∆WL[I]-DEM∆ADJ[I]
[11]  →(TEMP<0)/ZERO
[12]  AD∆WL←AD∆WL,TEMP
[13]  →END
[14] ZERO:AD∆WL←AD∆WL,0
[15] END:→(I≠⍴UNAD∆WL)/LOOP
    ∇
```

```
    ∇ OUTPUT;T
[1]  ⍝ THIS FUNCION OUTPUTS ALL THE TABLES AND WORKSHEETS.
[2]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[3]   →(0≠(1↑⍴ER)+(1↑⍴PREV∆ER))/OUT
[[illegible]   ⎕TCFF ◊ 'THERE ARE NO EMPLOYERS TO DO CALCULATIONS FOR SO NOTHING WILL BE
      OUTPUT.' ◊ T←1
[5]  PAUSE:T←T+1
[6]   →(T≤100)/PAUSE ◊ →0
[7]  OUT:WS∆OUT
[8]   TABLE1∆OUT
[9]   CON∆HIST∆OUT
[10]  TABLE2∆OUT
[11]  TABLE3∆OUT
[12]  CL∆OUT
[13]  ANOTHER∆WS
    ∇
```

```
    ∇ WS∆OUT
[1]  ⍝ THIS FUNCTION WRITES WORKSHEET TO THE PRINTER.
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED: THE SAME VARIABLE AS IN WORKSHEET.
[    ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[5]   →(((1↑⍴PREV∆ER)+1↑⍴ER)=1)/N1
[6]   →(((1↑⍴PREV∆ER)+1↑⍴ER)≤3)/N2
[7]   →(((1↑⍴PREV∆ER)+1↑⍴ER)≤5)/N3
[8]   →(((1↑⍴PREV∆ER)+1↑⍴ER)=6)/N4
[9]   →(((1↑⍴PREV∆ER)+1↑⍴ER)=7)/N5
[10]  →(((1↑⍴PREV∆ER)+1↑⍴ER)≥8)/N6
[11] N1:80 WRITE 'WORKSHEET' ⋄ →0
[12] N2:137 WRITE 'WORKSHEET' ⋄ →0
[13] N3:175 WRITE 'WORKSHEET' ⋄ →0
[14] N4:199 WRITE 'WORKSHEET' ⋄ →0
[15] N5:223 WRITE 'WORKSHEET' ⋄ →0
[16] N6:247 WRITE 'WORKSHEET' ⋄ →0
    ∇
```

```
  ∇ WORKSHEET;ROW∆NUM;UNAD;WS1;WS∆UNAD;WSR;WSA;P;OLDP;LINEA;LINEB;OLDLINEB;PAG
    E∆VEC;PAGE;PRE;NUM;CH∆FLAG
[1]  ⍝ THIS FUNCTION GENERATES THE OUTPUT FOR THE WITHDRAWAL LIABILITY
[2]  ⍝ WORKSHEET
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED: MAXPAGE, HYP∆DATE, ER, PREV∆ER, FIVE∆DUE, FIVE∆CONTRIB
[5]  ⍝                   DIV, UNAD∆POR, WITH∆YEAR, UNAM, NETCHANGE, LASTYEAR,
[6]  ⍝                   WS3∆START, INITDAY, INITMONTH, INITYEAR, IND∆REALL,
[7]  ⍝                   UNAM∆WD∆YEAR, TOT∆REALL∆UVB, UNAD∆WL, UVB, MULT,
[8]  ⍝                   DEM∆FAC, DEM∆ADJ, AD∆WL
[9]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[10]  CH∆FLAG←0
[11]  PAGE←1
[12]  LINEA←LINEB←OLDLINEB←0
[13]  P←OLDP←1
[14]  PAGE∆VEC←''
[15]  ROW∆NUM←1
[16]  WS∆SEC1
[17]  WS∆POOLS
[18]  WS∆REALL
[19]  WS∆ADJWL
[20]  WS1 ⋄ WS∆UNAD
[21]  →(0=1↑⍴REALL∆ER)/ALL
[22]  WSR
[23] ALL:WSA
  ∇
```

```
    ∇ WS∆SEC1;TITLE1;TITLE2;I;J;WS1A;WS1B;WS1C
[1]  ⍝ THIS FUNCTION GENERATES THE OUTPUT FOR SECTION ONE OF THE WITHDRAWAL
[2]  ⍝ LIABILITY WORKSHEET
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED:  MAXLINE1, ER, PREV∆ER, LINEB, OLDLINEB, P, OLDP
[5]  ⍝                    MAXPAGE, PAGE∆VEC, PAGE, WITH∆YEAR, INITMONTH,
[6]  ⍝                    INITDAY, LINEA, PAGE, HYP∆DATE, LASTYEAR
[7]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]   TITLE1←'WITHDRAWAL LIABILITY WORKSHEET'
[9]   TITLE2←'------------------------------'
[10]  '                            '
[11]  ((⌊0.5×(MAXLINE1-ρTITLE1))ρ' '),TITLE1
[12]  ((⌊0.5×(MAXLINE1-ρTITLE2))ρ' '),TITLE2
[13]  WS∆SEC1A
[14]  WS1←WS1A
[15]  I←J←1
[16] ⍝ LOOP FOR PRESENT EMPLOYERS
[17] LOOP1:→(0=1↑ρER)/LOOP2
[18]  WS∆SEC1B
[19]  WS1←WS1,WS1B
[20]  →(I=1↑ρER)/LOOP2
[21]  I←I+1
[22]  →LOOP1
[23] ⍝ LOOP FOR PREVIOUS EMPLOYERS
[24] LOOP2:→(0=1↑ρPREV∆ER)/END
[25]  WS∆SEC1C
[26]  WS1←WS1,WS1C
[27]  →(J=1↑ρPREV∆ER)/END
[28]  J←J+1
[29]  →LOOP2
[30] END:OLDLINEB←LINEB
[31]  OLDP←P
    ∇
```

```
    ∇ WS∆SEC1A
[1]  ⍝ THIS FUNCTION GENERATES SECTION 1 OF THE WITHDRAWAL LIALBIITY WORKSHEET
[2]  ⍝
[3]  ⍝ VARIABLE NEEDED:  LINEA, MAXPAGE, PAGE∆VEC
[    ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[5]   WS1A← 0 55 ⍴''
[6]   WS1A←WS1A,[1] 2 55 ⍴' ' ⋄ LINEA←LINEA+2
[7]   WS1A←WS1A,[1]'SECTION 1:  General Information                        '
[8]   WS1A←WS1A,[1]'---------                                              '
[9]   LINEA←LINEA+2 ⋄ WS1A←WS1A,[1]WS∆NEWPAGE∆A 55
[10]  WS1A←WS1A,[1]'1)  Enter Employer Name                                '
[11]  WS1A←WS1A,[1]'                                                       '
[12]  LINEA←LINEA+2 ⋄ WS1A←WS1A,[1]WS∆NEWPAGE∆A 55
[13]  WS1A←WS1A,[1]'2)  Enter date of Employer Withdrawal                  '
[14]  WS1A←WS1A,[1]'                                                       '
[15]  LINEA←LINEA+2 ⋄ WS1A←WS1A,[1]WS∆NEWPAGE∆A 55
[16]  WS1A←WS1A,[1]'3)  Enter date of last Plan Year ending                '
[17]  WS1A←WS1A,[1]'    before date of Employer Withdrawal                 '
[18]  LINEA←LINEA+2 ⋄ WS1A←WS1A,[1]WS∆NEWPAGE∆A 55
    ∇
```

```
    ∇ WS∆SEC1B
[1]  ⍝ THIS FUNCTION GENERATES ONE COLUMN OF OUTPUT IN SECTION ONE OF THE
[2]  ⍝ WITHDRAWAL LIABILITY WORKSHEET FOR EACH EMPLOYER THAT HAS NOT WITH-
[3]  ⍝ DRAWN, BUT WISHES TO KNOW HIS WITHDRAWAL LIABILITY IF HE WOULD WITHDRAW.
[4]  ⍝
[5]  ⍝ VARIABLES NEEDED:  HYP∆DATE, INITMONTH, INITDAY, LASTYEAR, I, J, LINEB
[6]  ⍝                    P, OLDP, OLDLINEB, PREV∆ER, ER, PAGE
[7]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]   WS1B← 0 24 ⍴''
[9]   P←OLDP
[10]  LINEB←OLDLINEB
[11]  WS1B←WS1B,[1]ER[I;],'       ' ⋄ LINEB←LINEB+1
[12]  WS1B←WS1B,[1](UNDER∆HEAD ER[I;]),'     ' ⋄ LINEB←LINEB+1
[13]  WS1B←WS1B,[1] 2 24 ⍴' ' ⋄ LINEB←LINEB+2 ⋄ WS1B←WS1B,[1]WS∆NEWPAGE
[14]  WS1B←WS1B,[1] 2 24 ⍴' ' ⋄ LINEB←LINEB+2 ⋄ WS1B←WS1B,[1]WS∆NEWPAGE
[15]  WS1B←WS1B,[1]('             ',HYP∆DATE),'     ' ⋄ LINEB←LINEB+1
[16]  WS1B←WS1B,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS1B←WS1B,[1]WS∆NEWPAGE
[17]  WS1B←WS1B,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1
[18]  WS1B←WS1B,[1]('             ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(2↓⍕HYP∆YEAR)),'     ' ⋄ LINEB
      ←LINEB+1
    ∇
```

```
    ∇ WS∆SEC1C
[1]  ⍝ THIS FUNCTION GENERATES ONE COLUMN OF OUTPUT FOR SECTION ONE OF THE
[2]  ⍝ WITHDRAWAL LIABILITY WORKSHEET FOR EACH EMPLOYER THAT HAS WITHDRAWN
[3]  ⍝
[[illegible]  ⍝ VARIABLES NEEDED: PREV∆ER, I, J, WITH∆YEAR, INITMONTH, INITDAY, LINEB,
[5]  ⍝                   OLDLINEB, PAGE∆VEC, P, PAGE
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   WS1C← 0 24 ρ''
[8]   LINEB←OLDLINEB
[9]   WS1C←WS1C,[1]PREV∆ER[J;],'    ' ◊ LINEB←LINEB+1
[10]  WS1C←WS1C,[1](UNDER∆HEAD PREV∆ER[J;]),'    ' ◊ LINEB←LINEB+1
[11]  WS1C←WS1C,[1] 2 24 ρ' ' ◊ LINEB←LINEB+2 ◊ WS1C←WS1C,[1]WS∆NEWPAGE
[12]  WS1C←WS1C,[1] 2 24 ρ' ' ◊ LINEB←LINEB+2 ◊ WS1C←WS1C,[1]WS∆NEWPAGE
[13]  WS1C←WS1C,[1]('            ',WITH∆DATE[J;]),'    ' ◊ LINEB←LINEB+1
[14]  WS1C←WS1C,[1] 1 24 ρ' ' ◊ LINEB←LINEB+1 ◊ WS1C←WS1C,[1]WS∆NEWPAGE
[15]  WS1C←WS1C,[1] 1 24 ρ' ' ◊ LINEB←LINEB+1
[16]  WS1C←WS1C,[1]('            ',(⍕INITMONTH),'-',(⍕INITDAY),'-',¯2↑(⍕WITH∆YEA
        R[J])),'    ' ◊ LINEB←LINEB+1
    ∇
```

```
    ∇ WS∆POOLS;YEAR;FLAG;WS2;WS3
[1]  ⍝ THIS FUNCTION GENERATES THE OUTPUT FOR THE PRE-80 PORTION OF
[2]  ⍝ WITHDRAWAL LIABLITY IF NEEDED, AND ALL OF THE POST-80 PORTIONS
[3]  ⍝ OF WITHDRAWAL LIABILITY.
[4
[5]  ⍝ VARIABLES NEEDED: INITYEAR, INITMONTH, INITDAY, ROW∆NUM, LASTYEAR
[6]  ⍝                   ER, PREV∆ER, OLDLINEB, LINEB, P, OLDP, LINEA,
[7]  ⍝                   MAXPAGE, PAGE∆VEC, PAGE, FIVE∆DUE, FIVE∆CONTRIB, DIV,
[8]  ⍝                   UNAD∆POR, WITH∆YEAR, UNAM, NETCHANGE
[9]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[10]  YEAR←INITYEAR
[11]  FLAG←PRE←0
[12]  →(INITYEAR<1980)/PRE∆80
[13]  →((INITYEAR=1980)∧((⍎INITMONTH)<9))/PRE∆80
[14]  →((INITYEAR=1980)∧((⍎INITMONTH)=9)∧((⍎INITDAY)≤26))/PRE∆80
[15]  →POST∆80
[16] ⍝ DO THE PRE-1980 PORTION
[17] PRE∆80:WS∆SEC2
[18]  WS∆UNAD←WS2
[19]  FLAG←PRE←1
[20]  ROW∆NUM←ROW∆NUM+1
[21]  YEAR←YEAR+1
[22] ⍝ DO THE POST-1980 PORTION
[23] POST∆80:WS∆SEC3
[24]  →(FLAG=0)/INIT
[25]  WS∆UNAD←WS∆UNAD,[1]WS3
[26]  →NEXT
[27] INIT:WS∆UNAD←WS3
[28] NEXT:FLAG←1
[29]  YEAR←YEAR+1
[3    ROW∆NUM←ROW∆NUM+1
[31]  →(ROW∆NUM≠2+LASTYEAR-INITYEAR)/POST∆80
    ∇
```

```
    ∇ WS∆SEC2;I;J;WS2A;WS2B;WS2C
[1]  ⍝ THIS FUNCTION GENERATES THE OUTPUT FOR THE UNADJUSTED PRE-1980 PORTION
[2]  ⍝ OF THE WITHDRAWAL LIABILITY WORKSHEET IF NEEDED.
[3]  ⍝
[[illegible] VARIABLES NEEDED:  ER, PREV∆ER, OLDLINEB, LINEB, P, OLDP, LINEA,
[5]  ⍝                    MAXPAGE, PAGE, PAGE∆VEC, INITDAY, INITMONTH,
[6]  ⍝                    INITYEAR, ROW∆NUM, LASTYEAR, FIVE∆DUE, FIVE∆CONTRIB,
[7]  ⍝                    DIV, UNAD∆POR, WITH∆YEAR, UNAM, NETCHANGE
[8]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[9]   WS∆SEC2A
[10]  WS2←WS2A
[11]  I←J←1
[12] ⍝ LOOP FOR PRESENT EMPLOYERS
[13] LOOP1:→(0=1↑ρER)/LOOP2
[14]  WS∆SEC2B
[15]  WS2←WS2,WS2B
[16]  I←I+1
[17]  →(I≠1+1↑ρER)/LOOP1
[18] ⍝ LOOP FOR PREVIOUS EMPLOYERS
[19] LOOP2:→(0=1↑ρPREV∆ER)/END
[20]  WS∆SEC2C
[21]  WS2←WS2,WS2C
[22]  →(J=1↑ρPREV∆ER)/END
[23]  J←J+1 ⋄ I←I+1
[24]  →LOOP2
[25] END:OLDLINEB←LINEB
[26]  OLDP←P
    ∇
```

```
    ∇ WS∆SEC2A
[1]  ⍝ THIS FUCTION GENERATES THE INSTRUCTIONS FOR SECTION 2 OF THE
[2]  ⍝ WITHDRAWAL LIABILITY WORKSHEET
[3]  ⍝
[[illegible] VARIABLES NEEDED: INITMONTH, INITDAY, LINEA, MAXPAGE, PAGE∆VEC
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   WS2A← 0 55 ⍴''
[7]   WS2A←WS2A,[1]'                                                       '
[8]   LINEA←LINEA+1 ◇ WS2A←WS2A,[1]WS∆NEWPAGE∆A 55
[9]   WS2A←WS2A,[1]'SECTION 2:  Unadjusted Pre-1980 Portion                '
[10]  WS2A←WS2A,[1]'---------                                              '
[11]  WS2A←WS2A,[1]'1)  Enter the unamortized value of the ',((⍕INITMONTH),'-',(⍕INITDAY),'-',2↓
      ⍕INITYEAR),'       '
[12]  WS2A←WS2A,[1]'    unfunded vested benefits which corresponds to      '
[13]  WS2A←WS2A,[1]'    the date of the last Plan Year ending before the   '
[14]  WS2A←WS2A,[1]'    date of Employer Withdrawal (See Table I.)         '
[15]  WS2A←WS2A,[1]'                                                       '
[16]  LINEA←LINEA+7 ◇ WS2A←WS2A,[1]WS∆NEWPAGE∆A 55
[17]  WS2A←WS2A,[1]'2)  Enter the total Contribution amount                '
[18]  WS2A←WS2A,[1]'    required to be paid by the Individual              '
[19]  WS2A←WS2A,[1]'    Employer for the Plan Years ending                 '
[20]  WS2A←WS2A,[1]'    ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(2↓⍕INITYEAR-4),' through ',(⍕INITMONT
      H),'-',(⍕INITDAY),'-',(2↓⍕INITYEAR),' (See Table II).          '
[21]  WS2A←WS2A,[1]'                                                       '
[22]  LINEA←LINEA+5 ◇ WS2A←WS2A,[1]WS∆NEWPAGE∆A 55
[23]  WS2A←WS2A,[1]'3)  Total Contributions for Plan Years ending          '
[24]  WS2A←WS2A,[1]'    ',((⍕INITMONTH),'-',(⍕INITDAY),'-',(2↓⍕INITYEAR-4),' through '),((⍕INITM
      ONTH),'-',(⍕INITDAY),'-',(2↓⍕INITYEAR),' for Employers par-        ')
[25]  WS2A←WS2A,[1]'    ticipating on or after 09-26-80 (See Table II).    '
[26]  WS2A←WS2A,[1]'                                                       '
[2[illegible] LINEA←LINEA+4 ◇ WS2A←WS2A,[1]WS∆NEWPAGE∆A 55
[28]  WS2A←WS2A,[1]'4)  Divide Item 2 by Item 3                            '
[29]  WS2A←WS2A,[1]'                                                       '
[30]  LINEA←LINEA+2 ◇ WS2A←WS2A,[1]WS∆NEWPAGE∆A 55
[31]  WS2A←WS2A,[1]'5)  Multiply Item 1 by Item 4 to determine the         '
[32]  WS2A←WS2A,[1]'    Individual Employer''s Unadjusted Pre-1980           '
[33]  WS2A←WS2A,[1]'    Portion.                                           '
[34]  LINEA←LINEA+3
    ∇
```

```
    ∇ WS∆SEC2B
[1]  ⍝ THIS FUNCTION GENERATES THE VALUES FOR THE UNADJUSTED PORTIONS OF
[2]  ⍝ THE WITHDRAWAL LIABILITY WORKSHEET FOR THE NON-WITHDRAWING EMPLOYERS.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED:  ROW∆NUM, LASTYEAR, INITYEAR, FIVE∆DUE, I, J,
[5]  ⍝                    FIVE∆CONTRIB, DIV, UNAD∆POR, OLDLINEB, LINEB,
[6]  ⍝                    P, OLDP, PAGE∆VEC, PAGE, PREV∆ER, ER, FIRST
[7]  ⍝                    CURR∆UVB
[8]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[9]   P←OLDP
[10]  LINEB←OLDLINEB
[11]  WS2B← 0 24 ρ''
[12]  WS2B←WS2B,[1] 1 24 ρ' ' ◊ LINEB←LINEB+1 ◊ WS2B←WS2B,[1]WS∆NEWPAGE
[13]  WS2B←WS2B,[1] 5 24 ρ' ' ◊ LINEB←LINEB+5
[14]  WS2B←WS2B,[1]'CM<$->P<$>I20,X4' ⎕FMT(CURR∆UVB[ROW∆NUM;I])
[15]  LINEB←LINEB+1
[16]  FIRST←0
[17]  WS2B←WS2B,[1] 1 24 ρ' ' ◊ LINEB←LINEB+1 ◊ WS2B←WS2B,[1]WS∆NEWPAGE
[18]  WS2B←WS2B,[1] 3 24 ρ' ' ◊ LINEB←LINEB+3
[19]  WS2B←WS2B,[1]'CM<$->P<$>I20,X4' ⎕FMT(FIVE∆DUE[ROW∆NUM;I])
[20]  LINEB←LINEB+1
[21]  WS2B←WS2B,[1] 1 24 ρ' '
[22]  LINEB←LINEB+1 ◊ WS2B←WS2B,[1]WS∆NEWPAGE
[23]  WS2B←WS2B,[1] 2 24 ρ' ' ◊ LINEB←LINEB+2
[24]  WS2B←WS2B,[1]'CM<$->P<$>I20,X4' ⎕FMT(FIVE∆CONTRIB[ROW∆NUM])
[25]  LINEB←LINEB+1
[26]  WS2B←WS2B,[1] 1 24 ρ' '
[27]  LINEB←LINEB+1 ◊ WS2B←WS2B,[1]WS∆NEWPAGE
[28]  →(DIV[ROW∆NUM;I]=0)/A1
[29]  WS2B←WS2B,[1]'M<->F20.6,X4' ⎕FMT(DIV[ROW∆NUM;I])
[30]  →A2
[31] A1:WS2B←WS2B,[1]'M<->I20,X4' ⎕FMT(DIV[ROW∆NUM;I])
[32] A2:LINEB←LINEB+1
[33]  WS2B←WS2B,[1] 1 24 ρ' ' ◊ LINEB←LINEB+1 ◊ WS2B←WS2B,[1]WS∆NEWPAGE
[34]  WS2B←WS2B,[1] 2 24 ρ' ' ◊ LINEB←LINEB+2
[35]  WS2B←WS2B,[1]'CM<$->P<$>I20,X4' ⎕FMT(UNAD∆POR[ROW∆NUM;I])
[36]  LINEB←LINEB+1
    ∇
```

```
    ∇ WS∆SEC2C
[1]   ⍝ THIS FUNCTION GENERATES THE VALUES FOR THE UNAMORTIZED SECTIONS OF
[2]   ⍝ THE WITHDRAWAL LIABILITY WORKSHEET FOR THE WITHDRAWN OR WITHDRAWING
[3]   ⍝ EMPLOYERS.
[4]   ⍝
[5]   ⍝ VARIABLES NEEDED:  ROW∆NUM, WITH∆YEAR, INITYEAR, CURR∆UVB,
[6]   ⍝                    FIVE∆DUE, I, J, FIVE∆CONTRIB, DIV, UNAD∆POR, LINEB,
[7]   ⍝                    OLDLINEB, PAGE∆VEC, PAGE, P, OLDP, PREV∆ER, ER
[8]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[9]    WS2C← 0 24 ⍴''
[10]   P←OLDP
[11]   LINEB←OLDLINEB
[12]   WS2C←WS2C,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS2C←WS2C,[1]WS∆NEWPAGE
[13]   WS2C←WS2C,[1] 5 24 ⍴' ' ⋄ LINEB←LINEB+5
[14] ⍝ OUTPUT DASHES IF..
[15]   →(ROW∆NUM>1+WITH∆YEAR[J]-INITYEAR)/DASHES
[16] ⍝ ELSE OUTPUT CURR∆UVB
[17]   WS2C←WS2C,[1]'CM<$->P<$>I20,X4' ⎕FMT(CURR∆UVB[ROW∆NUM;I]) ⋄ LINEB←LINEB+1
[18]   WS2C←WS2C,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS2C←WS2C,[1]WS∆NEWPAGE
[19]   WS2C←WS2C,[1] 3 24 ⍴' ' ⋄ LINEB←LINEB+3
[20]   WS2C←WS2C,[1]'CM<$->P<$>I20,X4' ⎕FMT(FIVE∆DUE[ROW∆NUM;I]) ⋄ LINEB←LINEB+1
[21]   WS2C←WS2C,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS2C←WS2C,[1]WS∆NEWPAGE
[22]   WS2C←WS2C,[1] 2 24 ⍴' ' ⋄ LINEB←LINEB+2
[23]   WS2C←WS2C,[1]'CM<->P<$>I20,X4' ⎕FMT(FIVE∆CONTRIB[ROW∆NUM]) ⋄ LINEB←LINEB+1

[24]   WS2C←WS2C,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS2C←WS2C,[1]WS∆NEWPAGE
[25]   →(DIV[ROW∆NUM;I]=0)/A1
[26]   WS2C←WS2C,[1]'M<->F20.6,X4' ⎕FMT(DIV[ROW∆NUM;I]) ⋄ LINEB←LINEB+1
[27]   →A2
[28] A1:WS2C←WS2C,[1]'M<->I20,X4' ⎕FMT(DIV[ROW∆NUM;I]) ⋄ LINEB←LINEB+1
[29] A2:WS2C←WS2C,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS2C←WS2C,[1]WS∆NEWPAGE
[30]   WS2C←WS2C,[1] 2 24 ⍴' ' ⋄ LINEB←LINEB+2
[31]   WS2C←WS2C,[1]'CM<$->P<$>I20,X4' ⎕FMT(UNAD∆POR[ROW∆NUM;I]) ⋄ LINEB←LINEB+1
[32]   →0
[33] DASHES:WS2C←WS2C,[1]'                   -    ' ⋄ LINEB←LINEB+1
[34]   WS2C←WS2C,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS2C←WS2C,[1]WS∆NEWPAGE
[35]   WS2C←WS2C,[1] 3 24 ⍴' ' ⋄ LINEB←LINEB+3
[36]   WS2C←WS2C,[1]'                   -    ' ⋄ LINEB←LINEB+1
[37]   WS2C←WS2C,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS2C←WS2C,[1]WS∆NEWPAGE
[38]   WS2C←WS2C,[1] 2 24 ⍴' ' ⋄ LINEB←LINEB+2
[39]   WS2C←WS2C,[1]'                   -    ' ⋄ LINEB←LINEB+1
[40]   WS2C←WS2C,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS2C←WS2C,[1]WS∆NEWPAGE
[41]   WS2C←WS2C,[1]'                   -    ' ⋄ LINEB←LINEB+1
[42]   WS2C←WS2C,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WS2C←WS2C,[1]WS∆NEWPAGE
[43]   WS2C←WS2C,[1] 2 24 ⍴' ' ⋄ LINEB←LINEB+2
[44]   WS2C←WS2C,[1]'                   -    ' ⋄ LINEB←LINEB+1
    ∇
```

```
    ∇ WS∆SEC3;I;J;WS3A;WS2C;WS2B
[1]  ⍝ THIS FUNCTION GENERATES THE OUTPUT FOR THE POST-80 PORTIONS OF
[2]  ⍝ WITHDRAWAL LIABILITY WORKSHEET.
[3]  ⍝
[[illegible] ⍝ VARIABLES NEEDED:  ER, PREV∆ER, LINEB, OLDLINEB, P, OLDP, PAGE,
[5]  ⍝                    MAXPAGE, PAGE∆VEC, ROW∆NUM, INITMONTH, INITDAY,
[6]  ⍝                    INITYEAR, YEAR, LINEA, LASTYEAR, FIVE∆DUE, DIV,
[7]  ⍝                    FIVE∆CONTRIB, UNAD∆POR, WITH∆YEAR, UNAM, NETCHANGE
[8]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[9]   WS∆SEC3A
[10]  WS3←WS3A
[11]  I←J←1
[12] ⍝ LOOP FOR PRESENT EMPLOYERS
[13] LOOP1:→(0=1↑⍴ER)/LOOP2
[14]  WS∆SEC2B
[15]  WS3←WS3,WS2B
[16]  I←I+1
[17]  →(I=1+1↑⍴ER)/LOOP2
[18]  →LOOP1
[19] ⍝ LOOP FOR PREVIOUS EMPLOYERS
[20] LOOP2:→(0=1↑⍴PREV∆ER)/END
[21]  WS∆SEC2C
[22]  WS3←WS3,WS2C
[23]  →(J=1↑⍴PREV∆ER)/END
[24]  J←J+1 ⋄ I←I+1
[25]  →LOOP2
[26] END:OLDLINEB←LINEB
[27]  OLDP←P
    ∇
```

```
    ∇ WS∆SEC3A
[1]  ⍝ THIS FUNCTION GENERATES THE INSTRUCTIONS FOR THE POST-80 PORTIONS
[2]  ⍝ OF THE WITHDRAWAL LIABILITY WORKSHEET.
[3]  ⍝
[4   ⍝ VARIABLES NEEDED:  ROW∆NUM, INITMONTH, INITDAY, YEAR, LINEA
[5   ⍝                    MAXPAGE, PAGE∆VEC
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   WS3A← 0 55 ⍴''
[8]   WS3A←WS3A,[1] 1 55 ⍴' ' ◇ LINEA←LINEA+1 ◇ WS3A←WS3A,[1]WS∆NEWPAGE∆A 55
[9]   WS3A←WS3A,[1]'SECTION ',(⍕ROW∆NUM+1),':  Unadjusted Post-1979 Portion (for
      ',(⍕YEAR-1),')',(5-⍴⍕ROW∆NUM+1)⍴' '
[10]  WS3A←WS3A,[1]'--------',((⍴⍕ROW∆NUM+1)⍴'-'),((55-8+⍴⍕ROW∆NUM+1)⍴' ')
[11]  WS3A←WS3A,[1]'1)  Enter the net change value of the unfunded          '
[12]  WS3A←WS3A,[1]'    vested benefits which corresponds to the            '
[13]  WS3A←WS3A,[1]'    date of the Plan Year ending ',(⍕INITMONTH),'-',(⍕INITDA
      Y),'-',(2↓⍕YEAR),'            '
[14]  WS3A←WS3A,[1]'    (See Table I.)                                      '
[15]  WS3A←WS3A,[1]'                                                        '
[16]  LINEA←LINEA+7 ◇ WS3A←WS3A,[1]WS∆NEWPAGE∆A 55
[17]  WS3A←WS3A,[1]'2)  Enter the total contribution amount required to     '
[18]  WS3A←WS3A,[1]'    be paid by the Individual Employer for the          '
[19]  WS3A←WS3A,[1]'    Plan Years ending ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(2↓⍕
      YEAR-4),' through  ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(2↓⍕YEAR),'       '
[20]  WS3A←WS3A,[1]'    (See Table II.)                                     '
[21]  WS3A←WS3A,[1]'                                                        '
[22]  LINEA←LINEA+5 ◇ WS3A←WS3A,[1]WS∆NEWPAGE∆A 55
[23]  WS3A←WS3A,[1]'3)  Enter the total accumulated contributions for       '
[24]  WS3A←WS3A,[1]'    the above Plan Years for Employers participating    '
[25]  WS3A←WS3A,[1]'    after ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(2↓⍕YEAR),' (See
       Table II.)                    '
[2    WS3A←WS3A,[1]'                                                        '
[27]  LINEA←LINEA+4 ◇ WS3A←WS3A,[1]WS∆NEWPAGE∆A 55
[28]  WS3A←WS3A,[1]'4)  Divide Item 2 by Item 3.                            '
[29]  WS3A←WS3A,[1]'                                                        '
[30]  LINEA←LINEA+2 ◇ WS3A←WS3A,[1]WS∆NEWPAGE∆A 55
[31]  WS3A←WS3A,[1]'5)  Multiply Item 1 by Item 4 to determine the          '
[32]  WS3A←WS3A,[1]'    ',(⍕YEAR),' Individual Employer''s Unadjusted Post-1979
       '
[33]  WS3A←WS3A,[1]'    Portion.                                            '
[34]  LINEA←LINEA+3
    ∇
```

```
    ∇ WSΔREALL;LAST;YEAR;FLAG;ROW;WSR1;I;J;WSRA;WSRB;WSRC;WSRD;LEN
[1]   ⍝  THIS FUNCTION GENERATES THE OUTUT FOR THE REALLOCATED UNFUNDED
[2]   ⍝  VESTED BENEFITS SECTION OF THE WITHDRAWAL LIABILITY WORKSHEET
[3]   ⍝
[     ⍝  VARIABLES NEEDED: WS3ΔSTART, PRE, ER, PREVΔER, LASTYEAR, P, OLDP,
[5]   ⍝                    LINEB, OLDLINEB, LINEA, MAXPAGE, PAGEΔVEC, PAGE,
[6]   ⍝                    ROWΔNUM, INITMONTH, INITDAY, UNAMΔWDΔYEAR, DIV,
[7]   ⍝                    FIVEΔDUE, FIVEΔCONTRIB, INDΔREALL, WITHΔYEAR,
[8]   ⍝                    TOTΔREALLΔUVB
[9]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[10]  ⍝ IF THERE IS NO UVBs TO BE REALLOCATED SKIP SECTION AND NUM←4
[11]   NUM←4
[12]   →(0=1↑ρREALLΔER)/0
[13]  ⍝ ELSE NUM←0
[14]   NUM←0
[15]   ROW←1 ⋄ FLAG←0
[16]   YEAR←WS3ΔSTART
[17]   →(PRE=1)/TRUE
[18]   →YEARΔLOOP
[19]  TRUE:ROW←2
[20]  YEARΔLOOP:I←1 ⋄ J←1
[21]   WSΔREALLΔA
[22]   WSR1←WSRA
[23]  ERΔLOOP:WSΔREALLΔB
[24]   WSR1←WSR1,WSRB
[25]   I←I+1
[26]   →(I>1+1↑ρER)/INC
[27]   →SKIP1
[28]  INC:J←J+1
[29]  SKIP1:→(I=1+(1↑ρER)+(1↑ρPREVΔER))/NEXTΔYEAR
[      →ERΔLOOP
[31]  NEXTΔYEAR:→(FLAG=0)/FIRSTΔTIME
[32]   WSR←WSR,[1]WSR1
[33]   →NEXTΔTIMES
[34]  FIRSTΔTIME:WSR←WSR1 ⋄ FLAG←1
[35]  NEXTΔTIMES:ROW←ROW+1 ⋄ YEAR←YEAR+1
[36]   OLDLINEB←LINEB ⋄ OLDP←P
[37]   →(YEAR=LASTYEAR+1)/LAST
[38]   →YEARΔLOOP
[39]  LAST:WSΔREALLΔC
[40]   WSΔREALLΔD
[41]   WSR←WSR,[1](WSRC,WSRD)
[42]   OLDLINEB←LINEB
[43]   OLDP←P
    ∇
```

```
    ∇ WS∆REALL∆A
  ⍝ THIS FUNCTION GENERATES THE INSTRUCTIONS FOR ONE SECTION OF THE
  ⍝ REALLOCATED UNFUNDED VESTED BENEFITS SECTION OF THE WITHDRAWAL
  ⍝ LIABLITY WORKSHEET
  ⍝
  ⍝ VARIABLES NEEDED: NUM, ROW∆NUM, INITMONTH, INITDAY, YEAR
  ⍝                   LINEA, MAXPAGE, PAGE∆VEC
  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
   WSRA← 0 55 ⍴''
   →(NUM=0)/TITLE
   WSRA←WSRA,[1] 1 55 ⍴' ' ⋄ LINEA←LINEA+1 ⋄ WSRA←WSRA,[1]WS∆NEWPAGE∆A 55
   →NEXT
 TITLE:WSRA←WSRA,[1] 1 55 ⍴' ' ⋄ LINEA←LINEA+1 ⋄ WSRA←WSRA,[1]WS∆NEWPAGE∆A 55
   WSRA←WSRA,[1]'SECTION ',(⍕ROW∆NUM+1),':  Reallocated Unfunded Vested Benefits',(55-47+⍴⍕ROW∆NUM+1)⍴' '
   WSRA←WSRA,[1]'--------',((⍴⍕ROW∆NUM+1)⍴'-'),(55-8+⍴⍕ROW∆NUM+1)⍴' '
   WSRA←WSRA,[1] 1 55 ⍴' ' ⋄ LINEA←LINEA+3
   ROW∆NUM←ROW∆NUM+1
 NEXT:NUM←NUM+1
   WSRA←WSRA,[1](⍕NUM),')',((4-⍴⍕NUM)⍴' '),'Enter the unamortized amount of reallocated',7⍴' '
   WSRA←WSRA,[1]'     vested benefits for Employers that withdrew      '
   WSRA←WSRA,[1]'     in the Plan Year ending ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(¯2↑⍕YEAR),'.         '
   WSRA←WSRA,[1]'     (See Table III.)                                  '
   WSRA←WSRA,[1]'                                                       '
   LINEA←LINEA+5 ⋄ WSRA←WSRA,[1]WS∆NEWPAGE∆A 55
   NUM←NUM+1
   WSRA←WSRA,[1](⍕NUM),')',((4-⍴⍕NUM)⍴' '),'Enter the total contribution amount required to',3⍴' '
   WSRA←WSRA,[1]'     be paid by the Individual Employer for Plan       '
   WSRA←WSRA,[1]'     Years ending ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(¯2↑⍕YEAR-4),' through ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(¯2↑⍕YEAR),'.           '
   WSRA←WSRA,[1]'                                                       '
   LINEA←LINEA+4 ⋄ WSRA←WSRA,[1]WS∆NEWPAGE∆A 55
   NUM←NUM+1
   WSRA←WSRA,[1](⍕NUM),')',((4-⍴⍕NUM)⍴' '),'Enter the total accumulated contributions for',5⍴' '
   WSRA←WSRA,[1]'     the above Plan Years for Employers partici-       '
   WSRA←WSRA,[1]'     pating after ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(¯2↑⍕YEAR),'.  (See Table II.)       '
   WSRA←WSRA,[1]'                                                       '
   LINEA←LINEA+4 ⋄ WSRA←WSRA,[1]WS∆NEWPAGE∆A 55
   NUM←NUM+1
   WSRA←WSRA,[1](⍕NUM),')',((4-⍴⍕NUM)⍴' '),'Divide Item ',(⍕NUM-2),' by Item ',(⍕NUM-1),'.',((28-(⍴⍕NUM-2)+(⍴⍕NUM-1))⍴' ')
   WSRA←WSRA,[1]'                                                       '
   LINEA←LINEA+2 ⋄ WSRA←WSRA,[1]WS∆NEWPAGE∆A 55
   NUM←NUM+1
   WSRA←WSRA,[1](⍕NUM),')',((4-⍴⍕NUM)⍴' '),'Multiply Item ',(⍕NUM-4),' by Item ',(⍕NUM-1),' to determine the',(10-(⍴⍕NUM-4)+(⍴⍕NUM-1))⍴' '
   WSRA←WSRA,[1]'     ',(⍕INITMONTH),'-',(⍕INITDAY),'-',(¯2↑⍕YEAR),' Individual Employer''s share of      '
   WSRA←WSRA,[1]'     Reallocated Unfunded Vested Benefit.              '
   LINEA←LINEA+3
    ∇
```

```
    ∇ WS∆REALL∆B
[1]   ⍝ THIS FUNCTION GENERATES THE NUMBERS FOR THE OUTPUT OF THE REALLOCATED
[2]   ⍝ UNFUNDED VESTED BENEFITS SECTION OF THE WITHDRAWAL LIABILITY WORKSHEET
[3]   ⍝
[     ⍝ VARIABLES NEEDED: NUM, UNAM∆WD∆YEAR, ROW, I, FIVE∆DUE, FIVE∆CONTRIB,
[5]   ⍝                   DIV, IND∆REALL, WITH∆YEAR, J, YEAR, P, OLDP
[6]   ⍝                   PAGE∆VEC, LINEB, OLDLINEB, PREV∆ER, ER, PAGE
[7]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]    WSRB← 0 24 ⍴' '
[9]    P←OLDP
[10]   LINEB←OLDLINEB
[11]  ⍝ IF THE FIRST TIME THRU THIS SECTION LEAVE SPACES FOR SECTION HEADER
[12]   →(NUM=5)/TITLE∆SPACE
[13]   WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WSRB←WSRB,[1]WS∆NEWPAGE
[14]   →NEXT
[15]  TITLE∆SPACE:WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WSRB←WSRB,[1]WS∆NEWPA
       GE
[16]   WSRB←WSRB,[1] 3 24 ⍴' ' ⋄ LINEB←LINEB+3
[17]  NEXT:WSRB←WSRB,[1] 3 24 ⍴' '
[18]   →(I≤1↑⍴ER)/NORM
[19]  ⍝ IF YEAR>WITH∆YEAR PRINT DASHES IN THE COLUMN
[20]   →(YEAR>WITH∆YEAR[J])/DASHES
[21]  ⍝ ELSE PRINT THE VALUES
[22]  NORM:WSRB←WSRB,[1]'CM<$->P<$>I20,X4' ⎕FMT(UNAM∆WD∆YEAR[ROW;I])
[23]   WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+5 ⋄ WSRB←WSRB,[1]WS∆NEWPAGE
[24]   WSRB←WSRB,[1] 2 24 ⍴' '
[25]   WSRB←WSRB,[1]'CM<$->P<$>I20,X4' ⎕FMT(FIVE∆DUE[ROW;I])
[26]   WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+4 ⋄ WSRB←WSRB,[1]WS∆NEWPAGE
[27]   WSRB←WSRB,[1] 2 24 ⍴' '
[28]   WSRB←WSRB,[1]'CM<$->P<$>I20,X4' ⎕FMT(FIVE∆CONTRIB[ROW])
[      WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+4 ⋄ WSRB←WSRB,[1]WS∆NEWPAGE
[30]   →(DIV[ROW;I]=0)/A1
[31]   WSRB←WSRB,[1]'M<->F20.6,X4' ⎕FMT(DIV[ROW;I])
[32]   →A2
[33]  A1:WSRB←WSRB,[1]'M<->I20,X4' ⎕FMT(DIV[ROW;I])
[34]  A2:WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+2 ⋄ WSRB←WSRB,[1]WS∆NEWPAGE
[35]   WSRB←WSRB,[1] 2 24 ⍴' '
[36]   WSRB←WSRB,[1]'CM<$->P<$>I20,X4' ⎕FMT(IND∆REALL[ROW;I])
[37]   LINEB←LINEB+3
[38]   →0
[39]  DASHES:WSRB←WSRB,[1]'                    -   '
[40]   WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+5 ⋄ WSRB←WSRB,[1]WS∆NEWPAGE
[41]   WSRB←WSRB,[1] 2 24 ⍴' '
[42]   WSRB←WSRB,[1]'                    -   '
[43]   WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+4 ⋄ WSRB←WSRB,[1]WS∆NEWPAGE
[44]   WSRB←WSRB,[1] 2 24 ⍴' '
[45]   WSRB←WSRB,[1]'                    -   '
[46]   WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+4 ⋄ WSRB←WSRB,[1]WS∆NEWPAGE
[47]   WSRB←WSRB,[1]'                    -   '
[48]   WSRB←WSRB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+2 ⋄ WSRB←WSRB,[1]WS∆NEWPAGE
[49]   WSRB←WSRB,[1] 2 24 ⍴' '
[50]   WSRB←WSRB,[1]'                    -   '
[51]   LINEB←LINEB+3
    ∇
```

```
    ∇ WS∆REALL∆C;NUMSTR;J;FLAG1;B
[1]   ⍝ THIS FUNCTION GENERATES THE INSTRUCTIONS FOR THE LAST LINE OF THE
[2]   ⍝ REALLOCATED UNFUDED VESTED BENEFITS SECTION OF THE WITHDRAWAL
[3]   ⍝ LIABILITY WORKSHEET.
[4]   ⍝
[5]   ⍝ VARIABLES NEEDED: NUM, LINEA, MAXPAGE, PAGE∆VEC
[6]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]    WSRC← 0 55 ⍴''
[8]    WSRC← 1 55 ⍴' '
[9]    LINEA←LINEA+1 ⋄ WSRC←WSRC,[1]WS∆NEWPAGE∆A 55
[10]   B←5×⍳NUM÷5
[11]   NUMSTR←''
[12]   J←0
[13]   →(1=NUM÷5)/ONLYONE
[14]   J←1
[15]   NUMSTR←(⍕B[J])
[16]   FLAG1←0
[17]  LOOP:→((J=¯1+NUM÷5)∧(FLAG1=0))/COMBINE1
[18]   →((J=10)∧(FLAG1=0))/COMBINE2
[19]   →((J=¯1+NUM÷5)∧(FLAG1=1))/COMBINE3
[20]   J←J+1
[21]   NUMSTR←NUMSTR,', ',⍕B[J]
[22]   →LOOP
[23]  ONLYONE:WSRC←WSRC,[1](⍕NUM+1),')',((4-⍴⍕NUM+1)⍴' '),'List Item 5 to determi
      ne the total',16⍴' '
[24]   WSRC←WSRC,[1]'     of the Individual Employer''s share                 '
[25]   WSRC←WSRC,[1]'     of Reallocated Vested Benefits.                     '
[26]   LINEA←LINEA+3 ⋄ LEN←3
[27]   →0
[28]  COMBINE1:WSRC←WSRC,[1](⍕NUM+1),')',((4-⍴⍕NUM+1)⍴' '),'Add Item ',NUMSTR,' a
      nd ',(⍕B[J+1]),(55-(19+(⍴NUMSTR)+⍴⍕B[J+1]))⍴' '
[29]   WSRC←WSRC,[1]'     to determine the total of the Individual            '
[30]   WSRC←WSRC,[1]'     Employer''s share of Reallocated Vested              '
[31]   WSRC←WSRC,[1]'     Benefits.                                           '
[32]   LINEA←LINEA+4 ⋄ LEN←4
[33]   →0
[34]  COMBINE2:
[35]   WSRC←WSRC,[1](⍕NUM+1),')',((4-⍴⍕NUM+1)⍴' '),'Add Item ',NUMSTR,',',(55-(15
       +⍴NUMSTR))⍴' ' ⋄ LINEA←LINEA+1 ⋄ LEN←1
[36]   NUMSTR←''
[37]   FLAG1←1
[38]   →LOOP
[39]  COMBINE3:WSRC←WSRC,[1]'     ',2↓NUMSTR,' and ',(⍕B[J+1]),(55-(10+(¯2+⍴NUMST
       R)+⍴⍕B[J+1]))⍴' ' ⋄ LINEA←LINEA+1 ⋄ LEN←LEN+1
[40]   WSRC←WSRC,[1]'     to determine the total of the Individual            '
[41]   WSRC←WSRC,[1]'     Employer''s share of Reallocated Vested Benefits.   '
[42]   LINEA←LINEA+2 ⋄ LEN←LEN+2
    ∇
```

```
  ∇ WS∆REALL∆D;WSRD1;I;FLAG;K;J
[1]  ⍝ THIS FUNCTION GENERATES THE VALUES FOR THE LAST LINE OF OUTPUT IN
[2]  ⍝ THE REALLOCATED UNFUDED VESTED BENEFITS SECTION OF THE WITHDRAWAL
[3]  ⍝ LIABILITY WORKSHEET.
[    ⍝
[5]  ⍝ VARIABLES NEEDED: TOT∆REALL∆UVB, LINEB, OLDLINEB, P, OLDP, ER,
[6]  ⍝                    PAGE∆VEC, PREV∆ER, PAGE
[7]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]   FLAG←I←J←0
[9]  LOOP:I←I+1
[10]  LINEB←OLDLINEB
[11]  P←OLDP
[12]  WSRD1← 0 24 ⍴''
[13]  →(I>1↑⍴ER)/PREV
[14]  →NEXT
[15] PREV:J←J+1
[16] NEXT:WSRD1←WSRD1,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WSRD1←WSRD1,[1]WS∆NEWPAGE
[17]  K←1
[18] LOOP2:WSRD1←WSRD1,[1] 1 24 ⍴' '
[19]  K←K+1
[20]  LINEB←LINEB+1
[21]  →(K≠LEN)/LOOP2
[22]  WSRD1←WSRD1,[1]'CM<$->P<$>I20,X4' ⎕FMT(TOT∆REALL∆UVB[I]) ⋄ LINEB←LINEB+1
[23]  →(FLAG=0)/FIRST
[24]  WSRD←WSRD,WSRD1
[25]  →CHECK
[26] FIRST:WSRD←WSRD1
[27]  FLAG←1
[28] CHECK:→(I≠(1↑⍴ER)+(1↑⍴PREV∆ER))/LOOP
  ∇
```

```
    ∇ WS∆ADJWL;I;J;WSA1;WSAA;WSAB;WSA2;WSAC;WSAD;BLANK
[1]   ⍝ THIS FUNCTION GENERATES THE OUTPUT FOR THE ADJUSTED INDIVIDUAL
[2]   ⍝ EMPLOYER WITHDRAWAL LIABILITY SECTION OF THE WORKSHEET.
[3]   ⍝
[4]   ⍝ VARIABLES NEEDED:  ER, PREV∆ER, LINEB, P, OLDLINEB, OLDP, LINEA,
[5]   ⍝                    MAXPAGE, PAGE∆VEC, PAGE, ROW∆NUM, NUM, UVB, MULT,
[6]   ⍝                    DEM∆FAC, DEM∆ADJ, AD∆WL, LASTYEAR, INITYEAR,
[7]   ⍝                    WITH∆YEAR
[8]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[9]    WS∆ADJWL∆A
[10]   WSA1←WSAA
[11]   J←I←1
[12]  ⍝ DO THE FIRST PART OF THIS SECTION OF THE WORKSHEET
[13]  L1:
[14]   WS∆ADJWL∆B
[15]   WSA1←WSA1,WSAB
[16]   I←I+1
[17]   →(I≠1+(1↑⍴ER)+1↑⍴PREV∆ER)/L1
[18]   OLDLINEB←LINEB
[19]   OLDP←P
[20]   WS∆ADJWL∆C
[21]   WSA2←WSAC
[22]   J←I←1
[23]  ⍝ DO THE LAST ITEM OF THE WORKSHEET
[24]  L2:
[25]   WS∆ADJWL∆D
[26]   WSA2←WSA2,WSAD
[27]   I←I+1
[28]   →(I≠1+(1↑⍴ER)+1↑⍴PREV∆ER)/L2
[29]   WSA←WSA1,[1]WSA2
[30]   OLDLINEB←LINEB ⋄ OLDP←P
    ∇
```

```
    ∇ WS∆ADJWL∆A;K
[1]   ⍝ THIS FUNCTION GENERATES THE INSTRUCTIONS FOR ITEM 1 OF THE ADJUSTED
[2]   ⍝ WITHDRAWAL LIABILITY SECTION OF THE WORKSHEET.
[3]   ⍝
[     ⍝ VARIABLES NEEDED: ROW∆NUM, NUM, BLANK, LINEA, MAXPAGE, PAGE∆VEC
[5]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]    WSAA← 0 55 ρ''
[7]    WSAA←WSAA,[1] 1 55 ρ' ' ⋄ LINEA←LINEA+1 ⋄ WSAA←WSAA,[1]WS∆NEWPAGE∆A 55
[8]    WSAA←WSAA,[1]'Section ',(⍕ROW∆NUM+1),':  Adjusted Individual Employer',(55
       -39+(ρ⍕ROW∆NUM+1))ρ' '
[9]    WSAA←WSAA,[1]'--------',((ρ⍕ROW∆NUM+1)ρ'-'),'   Withdrawal Liability',(55-
       31+(ρ⍕ROW∆NUM+1))ρ' '
[10]   WSAA←WSAA,[1]'                                                       '
[11]   BLANK←3 ⋄ LINEA←LINEA+3
[12]   K←2
[13]   →(ROW∆NUM=K+1)/ONLYONE
[14]   WSAA←WSAA,[1]'1)  Add Section ',(⍕K),', Item 5; Section ',(⍕K+1),', Item 5
       ;',(55-43+(ρ⍕K)+(ρ⍕K+1))ρ' '
[15]   BLANK←BLANK+1 ⋄ LINEA←LINEA+1
[16]  LOOP:K←K+2
[17]   →(K=ROW∆NUM)/LAST
[18]   →(ROW∆NUM=K+1)/ONEMORE
[19]   WSAA←WSAA,[1]'    Section ',(⍕K),', Item 5; Section ',(⍕K+1),', Item 5;',(
       55-39+(ρ⍕K)+(ρ⍕K+1))ρ' '
[20]   BLANK←BLANK+1 ⋄ LINEA←LINEA+1
[21]   →LOOP
[22]  ONEMORE:
[23]   WSAA←WSAA,[1]'    Section ',(⍕K),', Item 5; and Section ',(⍕ROW∆NUM),', It
       em ',(⍕NUM+1),(55-41+(ρ⍕K)+(ρ⍕ROW∆NUM)+(ρ⍕NUM+1))ρ' '
[24]   WSAA←WSAA,[1]'    to determine the Unadjusted Individual             '
[      WSAA←WSAA,[1]'    Employer Withdrawal Liability.                    '
[26]   BLANK←BLANK+3 ⋄ LINEA←LINEA+3
[27]   →0
[28]  LAST:
[29]   WSAA←WSAA,[1]'    and Section ',(⍕ROW∆NUM),', Item ',(⍕NUM+1),' to determi
       ne the',(55-40+(ρ⍕ROW∆NUM)+(ρ⍕NUM+1))ρ' '
[30]   WSAA←WSAA,[1]'    Unadjusted Individual Employer Withdrawal          '
[31]   WSAA←WSAA,[1]'    Liability.                                         '
[32]   BLANK←BLANK+3 ⋄ LINEA←LINEA+3
[33]   →0
[34]  ONLYONE:
[35]   WSAA←WSAA,[1]'1)  Add Section 2, Item 5; and  Section ',(⍕ROW∆NUM),', Item
        ',(⍕NUM+1),(55-47+(ρ⍕ROW∆NUM)+(ρ⍕NUM+1))ρ' '
[36]   WSAA←WSAA,[1]'    to determine the Unadjusted Individual             '
[37]   WSAA←WSAA,[1]'    Employer Withdrawal Liability.                    '
[38]   BLANK←BLANK+3 ⋄ LINEA←LINEA+3
    ∇
```

```
    ∇ WS∆ADJWL∆B;K
[1]  ⍝ THIS FUNCTION GENERATES THE VALUES FOR ITEM 1 OF THE ADJUSTED
[2]  ⍝ INDIVIDUAL EMPLOYER WITHDRAWAL LIABILITY SECTION OF THE WORKSHEET.
[3]  ⍝
[    ⍝ VARIABLES NEEDED:  BLANK, UNAD∆WL, I, J, LINEB, OLDLINEB, P, OLDP,
[    ⍝                    PAGE∆VEC, PREV∆ER, ER, PAGE
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   WSAB← 0 24 ⍴''
[8]   LINEB←OLDLINEB ⋄ P←OLDP
[9]   WSAB←WSAB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WSAB←WSAB,[1]WS∆NEWPAGE
[10]  K←0
[11] LOOP:K←K+1
[12]  WSAB←WSAB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1
[13]  →(K≠BLANK-1)/LOOP
[14]  WSAB←WSAB,[1]'CM<$->P<$>I20,X4' ⎕FMT(UNAD∆WL[I])
[15]  LINEB←LINEB+1
    ∇
```

```
    ∇ WS∆ADJWL∆C
[1]  ⍝ THIS FUNCTION GENERATES THE INSTRUCTIONS FOR ITEMS 2 THROUGH 6 OF THE
[2]  ⍝ ADJUSTED INDIVIDUAL EMPLOYER WITHDRAWAL LIABILITY SECTION.
[3]  ⍝
[    ⍝ VARIABLES NEEDED:  LINEA, MAXPAGE, PAGE∆VEC
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   WSAC← 0 55 ⍴''
[7]   WSAC←WSAC,[1] 1 55 ⍴' ' ⋄ LINEA←LINEA+1 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[8]   WSAC←WSAC,[1]'2)  See Table I for current year Unfunded              '
[9]   WSAC←WSAC,[1]'    Vested Benefit.                                    '
[10]  WSAC←WSAC,[1]'                                                       '
[11]  LINEA←LINEA+3 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[12]  WSAC←WSAC,[1]'3)  Multiply Item 2 times 0.0075                       '
[13]  WSAC←WSAC,[1]'                                                       '
[14]  LINEA←LINEA+2 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[15]  WSAC←WSAC,[1]'4)  DeMinimus Factor:                                  '
[16]  WSAC←WSAC,[1]'                                                       '
[17]  LINEA←LINEA+2 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[18]  WSAC←WSAC,[1]'    (A)  If Item 3 is equal to or greater              '
[19]  WSAC←WSAC,[1]'         than $50,000, enter $50,000 as the            '
[20]  WSAC←WSAC,[1]'         DeMinimus Factor.                             '
[21]  WSAC←WSAC,[1]'                                                       '
[22]  LINEA←LINEA+4 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[23]  WSAC←WSAC,[1]'    (B)  If Item 3 is less than $50,000, enter         '
[24]  WSAC←WSAC,[1]'         Item 3 as the DeMinimus Factor.               '
[25]  WSAC←WSAC,[1]'                                                       '
[26]  LINEA←LINEA+3 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[27]  WSAC←WSAC,[1]'5)  DeMinimus Adjustment:                              '
[28]  WSAC←WSAC,[1]'                                                       '
[29]  LINEA←LINEA+2 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[     WSAC←WSAC,[1]'    (A)  If Item 1 is more than $150,000, or less      '
[31]  WSAC←WSAC,[1]'          than 0, enter zero.                          '
[32]  WSAC←WSAC,[1]'                                                       '
[33]  LINEA←LINEA+3 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[34]  WSAC←WSAC,[1]'    (B)  If Item 1 is less than $100,000, enter        '
[35]  WSAC←WSAC,[1]'          Item 4                                       '
[36]  WSAC←WSAC,[1]'                                                       '
[37]  LINEA←LINEA+3 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[38]  WSAC←WSAC,[1]'    (C)  Otherwise, enter Item 4 plus $100,000         '
[39]  WSAC←WSAC,[1]'          minus Item 1.  If the result is              '
[40]  WSAC←WSAC,[1]'          negative, enter zero.                        '
[41]  WSAC←WSAC,[1]'                                                       '
[42]  LINEA←LINEA+4 ⋄ WSAC←WSAC,[1]WS∆NEWPAGE∆A 55
[43]  WSAC←WSAC,[1]'6)  Subtract Item 1 minus Item 5 to determine the      '
[44]  WSAC←WSAC,[1]'    Adjusted Individual Employer Withdrawal            '
[45]  WSAC←WSAC,[1]'    Liability.  If the result is a negative            '
[46]  WSAC←WSAC,[1]'    number, enter zero.  Otherwise, enter the          '
[47]  WSAC←WSAC,[1]'    result of the subtraction.                         '
[48]  LINEA←LINEA+5
    ∇
```

```
  ∇ WS∆ADJWL∆D
⍝ THIS FUNCTION GENERATES THE VALUES FOR THE ADJUSTED INDIVIDUAL EMPLOYER
⍝ WITHDRAWAL LIABILITY SECTION OF THE WORKSHEET.
⍝
⍝ VARIABLES NEEDED:  I, J, UVB, MULT, DEM∆FAC, DEM∆ADJ, AD∆WL, P, OLDP,
⍝                    LASTYEAR, WITH∆YEAR, INITYEAR, LINEB, OLDLINEB,
⍝                    PAGE∆VEC, PREV∆ER, ER, PAGE, RESP
⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
 WSAD← 0 24 ⍴''
 LINEB←OLDLINEB ⋄ P←OLDP
 WSAD←WSAD,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1
 WSAD←WSAD,[1]'CM<$->P<$>I20,X4' ⎕FMT(LAST∆UVB[I]) ⋄ LINEB←LINEB+1
 WSAD←WSAD,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1]'CM<$->P<$>I20,X4' ⎕FMT(MULT[I]) ⋄ LINEB←LINEB+1
 WSAD←WSAD,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1]'CM<$->P<$>I20,X4' ⎕FMT(DEM∆FAC[I]) ⋄ LINEB←LINEB+1
 WSAD←WSAD,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1] 4 24 ⍴' ' ⋄ LINEB←LINEB+4 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1] 3 24 ⍴' ' ⋄ LINEB←LINEB+3 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1]'CM<$->P<$>I20,X4' ⎕FMT(DEM∆ADJ[I]) ⋄ LINEB←LINEB+1
 WSAD←WSAD,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1] 3 24 ⍴' ' ⋄ LINEB←LINEB+3 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1] 3 24 ⍴' ' ⋄ LINEB←LINEB+3 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1] 4 24 ⍴' ' ⋄ LINEB←LINEB+4 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1] 4 24 ⍴' ' ⋄ LINEB←LINEB+4 ⋄ WSAD←WSAD,[1]WS∆NEWPAGE
 WSAD←WSAD,[1]'CM<$->P<$>I20,X4' ⎕FMT(AD∆WL[I])
 LINEB←LINEB+1
 →(I≤1↑⍴ER)/0
 J←J+1
```

```
    ∇ R←WS∆NEWPAGE∆A A
[1]  ⍝ THIS FUNCTION CREATES A VECTOR SHOWING WHERE PAGE BREAKS ARE TO
[2]  ⍝ OCCUR IN THE WORKSHEET.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED:  LINEA, MAXPAGE, PAGE∆VEC
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   R←(0,A)⍴''
[7]   →(LINEA<MAXPAGE)/0
[8]   R←R,[1]⎕TCFF
[9]   PAGE∆VEC←PAGE∆VEC,LINEA
[10]  R←R,[1](4,A)⍴' '
[11]  LINEA←4
    ∇
```

```
    ∇ R←WS∆NEWPAGE
[1]  ⍝ THIS FUNCTION CREATES A NEW PAGE IN THE WORKSHEET BY EXAMINING THE
[2]  ⍝ PAGE∆VEC PRODUCED IN WS∆NEWPAGE. IT PRODUCES HEADERS AND PAGE NUMS.
[3]  ⍝
[    ⍝ VARIABLES NEEDED:  PAGE∆VEC, P, LINEB, PREV∆ER, ER, PAGE, I, J
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   R← 0 24 ρ''
[7]   →(P)ρPAGE∆VEC)/0
[8]   →(LINEB≠PAGE∆VEC[P])/0
[9]   R←R,[1]⎕TCFF
[10]  →(CH∆FLAG=1)/FLAG
[11]  →SKIP
[12] FLAG:FIRST←1
[13] SKIP:→(I=(1↑ρER)+(1↑ρPREV∆ER))/PAGE∆HEAD
[14]  R←R,[1] 1 24 ρ' '
[15]  →NEXT
[16] PAGE∆HEAD:PAGE←PAGE+1
[17]  R←R,[1]((19-ρ⍕PAGE)ρ' '),'Page ',⍕PAGE
[18] NEXT:P←P+1
[19]  →(I)1↑ρER)/PREV
[20]  R←R,[1] 1 24 ρ' '
[21]  R←R,[1]ER[I;],'    '
[22]  R←R,[1](UNDER∆HEAD ER[I;]),'    '
[23]  LINEB←4
[24]  →0
[25] PREV:R←R,[1] 1 24 ρ' '
[26]  R←R,[1]PREV∆ER[J;],'    '
[27]  R←R,[1](UNDER∆HEAD PREV∆ER[J;]),'    '
[28]  LINEB←4
    ∇
```

```
    ∇ TABLE1∆OUT;∆1;∆2;∆3;MAXLINE1;MAXPAGE
[1]  ⍝ THIS FUNCTION OUTPUTS TABLE1 TO THE PRINTER.
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED: LASTYEAR, INITYEAR, INITDAY, INITMONTH, UNAM,
[4]  ⍝                   VESTBEN, ASSETS, UVB, NETCHANGE
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   →(2≥LASTYEAR-INITYEAR)/N1
[7]   →(3=LASTYEAR-INITYEAR)/N2
[8]   →(5≥LASTYEAR-INITYEAR)/N3
[9]   →(7≥LASTYEAR-INITYEAR)/N4
[10]  →(8=LASTYEAR-INITYEAR)/N5
[11]  →(9=LASTYEAR-INITYEAR)/N6
[12]  →(10=LASTYEAR-INITYEAR)/N7
[13]  →(11=LASTYEAR-INITYEAR)/N8
[14]  →(12≤LASTYEAR-INITYEAR)/N9
[15] N1:80 WRITE 'TABLE1' ⋄ →0
[16] N2:96 WRITE 'TABLE1' ⋄ →0
[17] N3:137 WRITE 'TABLE1' ⋄ →0
[18] N4:175 WRITE 'TABLE1' ⋄ →0
[19] N5:176 WRITE 'TABLE1' ⋄ →0
[20] N6:192 WRITE 'TABLE1' ⋄ →0
[21] N7:208 WRITE 'TABLE1' ⋄ →0
[22] N8:224 WRITE 'TABLE1' ⋄ →0
[23] N9:240 WRITE 'TABLE1' ⋄ →0
    ∇
```

```
    ∇ TABLE1;TITLE1;TITLE2;T1A;T1B;PAGE∆VEC
[1] ⍝ THIS FUNCTION DEVELOPS THE OUTPUT FOR TABLE I
[2] ⍝
[3] ⍝ VARIABLES NEEDED: MAXLINE1, INITDAY, INITMONTH, INITYEAR, LASTYEAR,
[   ⍝                   UNAM, VESTBEN, ASSETS, UVB, NETCHANGE, MAXPAGE
[5] ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]  PAGE∆VEC←''
[7]  TITLE1←'Table I'
[8]  TITLE2←'Calculation of Unfunded Vested Benefits (UVB)'
[9]  ((⌊0.5×(MAXLINE1-⍴TITLE1))⍴' '),TITLE1
[10] ((⌊0.5×(MAXLINE1-⍴TITLE2))⍴' '),TITLE2
[11] TABLE1A
[12] TABLE1B
[13] ⍝ IF THE TABLE IS TOO LONG TO FIT ON A PAGE, PUT IT IN 2 PARTS
[14] →(13≤LASTYEAR-INITYEAR)/JUMP
[15] T1A,T1B
[16] →0
[17] JUMP:T1A,T1B[;⍳192]
[18] ⎕TCFF
[19] T1A,T1B[;192↓⍳1↓⍴T1B]
    ∇
```

```
    ∇ TABLE1A;YEAR;DATE;INDEX;I;INITDATE;GET∆DATE;LINE;N1
[1]  ⍝ THIS FUNCTION GENERATES ROW HEADERS AND THE FIRST COLUMN OF
[2]  ⍝ OUTPUT IN TABLE I
[3]  ⍝
[4     VARIABLES NEEDED:  LASTYEAR, INITMONTH, INITDAY, INITYEAR, VESTBEN
[5]  ⍝                    ASSETS, UVB, UNAM, NETCHANGE, MAXPAGE, PAGE∆VEC
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]  ⍝ INITIALIZATIONS
[8]   T1A← 0 48 ρ''
[9]   PAGE∆VEC←''
[10]  YEAR←INITYEAR
[11]  DATE←INITDATE←(⍕INITMONTH),'-',(⍕INITDAY),'-',2↓⍕YEAR
[12]  T1A←T1A,[1] 7 48 ρ' '
[13]  INDEX←1
[14]  LINE←7
[15] ⍝ DO YEAR∆LOOP FOR EACH YEAR FROM INITYEAR TO LASTYEAR
[16] YEAR∆LOOP:T1A←T1A,[1]DATE,'     Present Value of                   ' ⋄ LINE←LINE+1
[17]  T1A←T1A,[1]'              Vested Benefits        ',,('M<->G<$ZZ,ZZZ,ZZ9 >' ⎕FMT(VESTBEN[IND
      EX])) ⋄ LINE←LINE+1
[18]  T1A←T1A,[1]'                                                 ' ⋄ LINE←LINE+1
[19]  CHECK∆NEWPAGE
[20]  T1A←T1A,[1]'             Assets                  ',,('M<->G<ZZZ,ZZZ,ZZ9 >' ⎕FMT(ASSETS[INDE
      X])) ⋄ LINE←LINE+1
[21]  T1A←T1A,[1]'                                     ----------- ' ⋄ LINE←LINE+1
[22]  T1A←T1A,[1]'             ',DATE,' UVB            ',,('M<->G<$ZZ,ZZZ,ZZ9 >' ⎕FMT(UVB[INDEX])
      ) ⋄ LINE←LINE+1
[23]  T1A←T1A,[1]'                                                 ' ⋄ LINE←LINE+1
[24]  CHECK∆NEWPAGE
[25] ⍝ THE FIRST YEAR HAS NOTHING TO SUBTRACT
[26]  →(YEAR=INITYEAR)/SKIP
[2    T1A←T1A,[1]'             Less Unamortized            ' ⋄ LINE←LINE+1
[28]  T1A←T1A,[1]'              ',INITDATE,' UVB          ',,'M<->G<ZZZ,ZZZ,ZZ9 >' ⎕FMT(UNAM[1;I
      NDEX-1]) ⋄ LINE←LINE+1
[29]  CHECK∆NEWPAGE
[30]  I←1
[31] ⍝ LOOP TO SUBTRACT ALL UNAMORTIZED VALUES
[32] UNAM∆LOOP:→(I=YEAR-INITYEAR)/NET∆CHANGE
[33]  T1A←T1A,[1]'                                                 ' ⋄ LINE←LINE+1
[34]  CHECK∆NEWPAGE
[35]  T1A←T1A,[1]'             Less Unamortized            ' ⋄ LINE←LINE+1
[36]  T1A←T1A,[1]'              ',((¯2↓DATE),2↓⍕INITYEAR+I),' UVB net                 ' ⋄ LINE←
      LINE+1
[37]  T1A←T1A,[1]'              change value          ',,'M<->G<ZZZ,ZZZ,ZZ9 >' ⎕FMT(UNAM[(I+1);I
      NDEX-1]) ⋄ LINE←LINE+1
[38]  I←I+1
[39]  →UNAM∆LOOP
[40] NET∆CHANGE:T1A←T1A,[1]'                                     ----------- ' ⋄ LINE←LINE+1
[41]  T1A←T1A,[1]'             ',(⍕YEAR),' UVB net                       ' ⋄ LINE←LINE+1
[42]  T1A←T1A,[1]'              change value          ',,'M<->G<$ZZ,ZZZ,ZZ9 >' ⎕FMT(NETCHANGE[IN
      DEX-1]) ⋄ LINE←LINE+1
[43]  →(YEAR≠LASTYEAR)/CHECK
[44]  →N1
[45] CHECK:CHECK∆NEWPAGE
[46] N1:T1A←T1A,[1]'                                                  ' ⋄ LINE←LINE+1
[47] SKIP:→(YEAR=LASTYEAR)/0
[48]  YEAR←YEAR+1
[4    DATE←(¯2↓DATE),2↓⍕YEAR
[50]  INDEX←INDEX+1
[51]  →YEAR∆LOOP
    ∇
```

```
    ∇ TABLE1B;COL∆NUM;YEAR;T1;BLANK;DATE;I;J;LINE;P
[1]  ⍝ THIS FUNCTION GENERATES THE COLUMN HEADERS AND THE OUTPUT THAT BELONGS
[2]  ⍝ UNDER EACH HEADER  OF TABLE I
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED:  INITDAY, INITMONTH, INITYEAR, LASTYEAR, UNAM, PAGE∆VEC
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]  ⍝ INITIALIZATIONS
[7]   COL∆NUM←0
[8]   YEAR←INITYEAR
[9]   →(LASTYEAR≠INITYEAR)/LOOPA
[10]  P←1
[11]  T1B← 10 16 ⍴' ' ⋄ LINE←10 ⋄ CHECK∆NEWPAGE2
[12]  T1B←T1B,[1] 4 16 ⍴' ' ⋄ LINE←LINE+4
[13]  →0
[14] ⍝ DO LOOPA FOR EACH YEAR FROM INITYEAR+1 TO LASTYEAR
[15] LOOPA:T1← 0 16 ⍴' '
[16]  P←1
[17]  COL∆NUM←COL∆NUM+1
[18]  YEAR←YEAR+1
[19]  BLANK←8
[20]  DATE←(⍕INITMONTH),'-',(⍕INITDAY),'-',2↓⍕YEAR
[21]  T1←T1,[1] 2 16 ⍴' '
[22]  T1←T1,[1]'       ',DATE,' '
[23]  T1←T1,[1]'     Unamortized'
[24]  T1←T1,[1]'        Value   '
[25]  T1←T1,[1]'     -----------'
[26]  T1←T1,[1] 6 16 ⍴' '
[27]  LINE←12
[28]  I←0 ⋄ J←0
[29]  →(COL∆NUM=LASTYEAR-INITYEAR)/LASTCOL
[30] ⍝ INSERT NUMBERS INTO THE TABLE
[31] NUMS:I←I+1
[32]  T1←T1,[1]'M⟨-⟩G⟨     $ZZ,ZZZ,ZZ9⟩' ⎕FMT(UNAM[I;COL∆NUM])
[33]  LINE←LINE+1
[34]  CHECK∆NEWPAGE2
[35]  →(I=1+LASTYEAR-INITYEAR)/NEXT1
[36]  BLANKLINES
[37] NEXT1:→(I≠COL∆NUM)/NUMS
[38] ⍝ INSERT Xs INTO THE TABLE
[39] XS:I←I+1
[40]  T1←T1,[1]'          XX    '
[41]  LINE←LINE+1
[42]  CHECK∆NEWPAGE2
[43]  →(I=1+LASTYEAR-INITYEAR)/NEXT2
[44]  BLANKLINES
[45]  →XS
[46] NEXT2:→(COL∆NUM≠1)/CONCAT1
[47]  T1B←T1,[1] 1 16 ⍴' '
[48]  →LOOPA
[49] CONCAT1:T1B←T1B,T1,[1] 1 16 ⍴' '
[50]  →LOOPA
[51] ⍝ GENERATE THE LAST COLUMN OF THE TABLE
[52] LASTCOL:J←J+1
[53]  T1←T1,[1]'M⟨-⟩G⟨     $ZZ,ZZZ,ZZ9⟩' ⎕FMT(UNAM[J;COL∆NUM])
[54]  LINE←LINE+1
[55]  CHECK∆NEWPAGE2
[56]  →(J=1+LASTYEAR-INITYEAR)/NEXT3
[57]  BLANKLINES
[58]  →LASTCOL
[59] NEXT3:→(COL∆NUM≠1)/CONCAT2
[60]  T1B←T1,[1] 1 16 ⍴' '
[61]  →0
[62] CONCAT2:T1B←T1B,T1,[1] 1 16 ⍴' '
    ∇
```

```
    ∇ CHECK∆NEWPAGE
[1]  ⍝ THIS FUNCTION CHECKS TABLE1A TO SEE IF A NEW PAGE IS NEEDED. A VECTOR
[2]  ⍝ CALLED PAGE∆VEC IS PRODUCED TO SHOW WHERE PAGE BREAKS OCCUR.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED: LINE, MAXPAGE, T1A, PAGE∆VEC
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   →(LINE<MAXPAGE)/0
[7]   T1A←T1A,[1]⎕TCFF
[8]   PAGE∆VEC←PAGE∆VEC,LINE
[9]   T1A←T1A,[1] 5 48 ⍴' '
[10]  LINE←5
    ∇
```

```
    ∇ CHECK∆NEWPAGE2
[1]  ⍝ THIS FUNCTION CHECKS TO SEE IF TABLE1B NEEDS A PAGE BREAK BY LOOKING AT
[2]  ⍝ PAGE∆VEC. IF A BREAK OCCURS, COLUMN HEADERS ARE PRINTED.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED: P, PAGE∆VEC, LINE, T1
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   →(P>⍴PAGE∆VEC)/0
[7]   →(LINE≠PAGE∆VEC[P])/0
[8]   T1←T1,[1]⎕TCFF
[9]   P←P+1
[10]  T1←T1,[1]'       ',DATE,' '
[11]  T1←T1,[1]'    Unamortized'
[12]  T1←T1,[1]'       Value   '
[13]  T1←T1,[1]'    -----------'
[14]  T1←T1,[1] 1 16 ⍴' '
[15]  LINE←5
    ∇
```

```
    ∇ R←BLANKLINES;I
[1] ⍝ THIS FUNCTION ADDS THE APPROPRIATE NUMBER OF BLANK LINES TO THE OUTPUT
[2] ⍝ OF TABLE I.
[3] ⍝
[4] ⍝ VARIABLE NEEDED:  BLANK, PAGE∆VEC, P, T1, LINE
[5] ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]  BLANK←BLANK+4
[7]  I←0
[8] LOOP:I←I+1
[9]  →(I>BLANK)/0
[10] T1←T1,[1] 1 16 ⍴' '
[11] LINE←LINE+1
[12] CHECK∆NEWPAGE2
[13] →LOOP
    ∇
```

```
    ∇ CON∆HIST∆OUT;∆1;∆2;∆3;T;MAXPAGE;MAXLINE1
[1]   ⍝ THIS FUNCTION OUTPUTS THE CONTRIBUTION HISTORY TO THE PRINTER
[2]   ⍝
[3]   ⍝ VARIABLES NEEDED: PREV∆ER, TOT∆ER, REALL∆ER, CONTRIB∆DUE, YEAR1, LASTYEAR
[4]   ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[5]   →(((1↑⍴PREV∆ER)+(1↑⍴REALL∆ER)+1↑⍴TOT∆ER)≤3)/N1
[6]   →(((1↑⍴PREV∆ER)+(1↑⍴REALL∆ER)+1↑⍴TOT∆ER)≤5)/N2
[7]   →(((1↑⍴PREV∆ER)+(1↑⍴REALL∆ER)+1↑⍴TOT∆ER)=6)/N3
[8]   →(((1↑⍴PREV∆ER)+(1↑⍴REALL∆ER)+1↑⍴TOT∆ER)=7)/N4
[9]   →(((1↑⍴PREV∆ER)+(1↑⍴REALL∆ER)+1↑⍴TOT∆ER)=8)/N5
[10]  →(((1↑⍴PREV∆ER)+(1↑⍴REALL∆ER)+1↑⍴TOT∆ER)=9)/N6
[11]  →N6
[12] N1:80 WRITE 'CON∆HIST' ⋄ →0
[13] N2:137 WRITE 'CON∆HIST' ⋄ →0
[14] N3:175 WRITE 'CON∆HIST' ⋄ →0
[15] N4:176 WRITE 'CON∆HIST' ⋄ →0
[16] N5:200 WRITE 'CON∆HIST' ⋄ →0
[17] N6:224 WRITE 'CON∆HIST' ⋄ →0
    ∇
```

```
    ∇ CON∆HIST;TITLE1;TITLE2;FIRST;I;J;K;CHA;CHB;CH;PAGE;P;OLDP;LINEA;LINEB;OLDL
      INEB;PAGE∆VEC;CH∆FLAG;ROW
[1]  ⍝ THIS FUNCTION GENERATES THE OUTPUT FOR THE INDIVIDUAL EMPLOYER
[2]  ⍝ CONTRIBUTION HISTORY TABLE.
[[illegible]  ⍝
[4]  ⍝ VARIABLES NEEDED: TOT∆ER, PREV∆ER, REALL∆ER, YEAR1, LASTYEAR, CONTRIB∆DUE

[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   TITLE1←'Individual Employer Contribution History'
[7]   TITLE2←'----------------------------------------'
[8]   ((⌊0.5×(MAXLINE1-⍴TITLE1))⍴' '),TITLE1
[9]   ((⌊0.5×(MAXLINE1-⍴TITLE2))⍴' '),TITLE2
[10] ⍝ INITIALIZATIONS
[11]  J←I←K←ROW←1
[12] P1:ROW←1
[13]  LINEA←LINEB←OLDLINEB←0
[14]  P←OLDP←PAGE←CH∆FLAG←1
[15]  PAGE∆VEC←''
[16] ⍝ GET THE ROW HEADERS
[17]  CON∆HISTA
[18]  CH←CHA
[19] ⍝ LOOP TO GENERATE 1 COLUMN OF OUTPUT AT A TIME
[20] L1:FIRST←1
[21]  CON∆HISTB
[22]  CH←CH,CHB
[23] ⍝INCREMENT J IF WORKING ON PREV∆ER
[24]  →(I>(1↑⍴TOT∆ER)+1↑⍴REALL∆ER)/INC2
[25] ⍝INCREMENT I IF  WORKING ON ER
[26]  →(I=(1↑⍴TOT∆ER)+1↑⍴REALL∆ER)/NEXT
[27] ⍝INCREMENT K IF WORKING ON REALL∆ER
[2[illegible]  →(I>1↑⍴TOT∆ER)/INC
[29]  →NEXT
[30] INC:K←K+1
[31]  →NEXT
[32] INC2:J←J+1
[33] NEXT:I←I+1 ◊ ROW←ROW+1
[34]  →(I=1+(1↑⍴REALL∆ER)+(1↑⍴TOT∆ER)+(1↑⍴PREV∆ER))/END
[35] ⍝IF MORE THAN 9 COLUMNS START A NEW PAGE
[36]  →(9<ROW)/JUMP
[37]  →L1
[38] JUMP:CH ◊ ⎕TCFF
[39]  →P1
[40] END:CH
    ∇
```

```
    ∇ CON∆HISTA;YEAR
[1]   ⍝ THIS FUNCTION GENERATES THE YEAR COLUMN OF THE INDIVIDUAL EMPLOYER
[2]   ⍝ CONTRIBUTION TABLE.
[3]   ⍝
[4]   ⍝ VARIABLES NEEDED: YEAR1, LASTYEAR, LINEA, PAGE∆VEC, MAXPAGE
[5]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   CHA← 0 8 ⍴''
[7]   CHA←CHA,[1] 2 8 ⍴' ' ⋄ LINEA←2
[8]  ⍝COLUMN HEADER
[9]   CHA←CHA,[1]'Year    '
[10]  CHA←CHA,[1]'----    '
[11]  LINEA←LINEA+2
[12]  →((∧/MONTH1='01')∧(∧/DAY1='01'))/SKIP
[13]  YEAR←YEAR1
[14] ⍝COLUMN OF YEARS
[15] L1:CHA←CHA,[1]'        ' ⋄ LINEA←LINEA+1 ⋄ CHA←CHA,[1]WS∆NEWPAGE∆A 8
[16]  CHA←CHA,[1](⍕YEAR),'    ' ⋄ LINEA←LINEA+1
[17]  YEAR←YEAR+1
[18]  →(YEAR≠LASTYEAR)/L1
[19]  →0
[20] SKIP:YEAR←YEAR1+1
[21] L2:CHA←CHA,[1]'        ' ⋄ LINEA←LINEA+1 ⋄ CHA←CHA,[1]WS∆NEWPAGE∆A 8
[22]  CHA←CHA,[1](⍕YEAR),'    ' ⋄ LINEA←LINEA+1
[23]  YEAR←YEAR+1
[24]  →(YEAR≠LASTYEAR+1)/L2
    ∇
```

```
    ∇ CON∆HISTB;CONTRIB∆DUE;ROW
[1]  ⍝ THIS FUNCTION GENERATES THE CONTRIBUTION COLUMNS OF THE INDIVIDUAL
[2]  ⍝ EMPLOYER CONTRIBUTION TABLE.
[3]  ⍝
[4]  ⍝ VARIABLES NEEDED:  I, CONTRIB∆DUE, PREV∆ER, LASTYEAR, YEAR1, J, K
[5]  ⍝                    PAGE∆VEC, P, LINEB, OLDP, OLDLINEB, PAGE, REALL∆ER
[6]  ⍝                    FIRST, TOT∆ER
[7]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[8]  ⍝INITIALIZATIONS
[9]   CONTRIB∆DUE←TOT∆FIRSTCOL,MIDCOLS,LASTCOL
[10]  CHB← 0 24 ⍴''
[11]  LINEB←OLDLINEB ⋄ P←OLDP
[12]  CHB←CHB,[1] 2 24 ⍴' ' ⋄ LINEB←2
[13]  ROW←1
[14] ⍝IF WORKING ON PREV∆ER GO TO PREV TO GET COLUMN HEADERS
[15]  →(I>(1↑⍴TOT∆ER)+1↑⍴REALL∆ER)/PREV
[16] ⍝IF WORKING ON REALL∆ER GO TO REALL TO GET COLUMN HEADERS
[17]  →(I>1↑⍴TOT∆ER)/WITHD
[18] ⍝ELSE
[19]  CHB←CHB,[1]TOT∆ER[I;],'    '
[20]  CHB←CHB,[1](UNDER∆HEAD TOT∆ER[I;]),'    ' ⋄ LINEB←LINEB+2
[21]  →NEXT
[22] WITHD:CHB←CHB,[1](RT∆ALIGN REALL∆ER[K;]),'    '
[23]  CHB←CHB,[1](UNDER∆HEAD(RT∆ALIGN REALL∆ER[K;])),'    ' ⋄ LINEB←LINEB+2
[24]  →NEXT
[25] PREV:CHB←CHB,[1]PREV∆ER[J;],'    '
[26]  CHB←CHB,[1](UNDER∆HEAD PREV∆ER[J;]),'    ' ⋄ LINEB←LINEB+2
[27] ⍝OUPUT CONTRIBUTIONS DUE
[28] NEXT:CHB←CHB,[1] 1 24 ⍴' ' ⋄ LINEB←LINEB+1 ⋄ CHB←CHB,[1]WS∆NEWPAGE
[29] ⍝IF FIRST ROW OF THE TABLE, OUTPUT WITH DOLLAR SIGNS
[30]  →(FIRST≠1)/F1
[31]  →(CONTRIB∆DUE[ROW;I]=0)/Z1
[32]  CHB←CHB,[1],'     $',(,'CM<->F14.2' ⎕FMT(CONTRIB∆DUE[ROW;I])),'    '
[33]  →Z2
[34] Z1:CHB←CHB,[1]'      $         0       '
[35] Z2:FIRST←0
[36]  →F2
[37] ⍝ELSE OUTPUT WITH NO DOLLAR SIGNS
[38] F1:→(CONTRIB∆DUE[ROW;I]=0)/Z3
[39]  CHB←CHB,[1](,'CM<->F20.2' ⎕FMT(CONTRIB∆DUE[ROW;I])),'    '
[40]  →F2
[41] Z3:CHB←CHB,[1]'                0       '
[42] F2:ROW←ROW+1 ⋄ LINEB←LINEB+1
[43]  →(ROW≠1+LASTYEAR-YEAR1)/NEXT
    ∇
```

```
    ∇ TABLE2∆OUT;T;∆1;∆2;∆3;MAXLINE1;MAXPAGE
      ⍝ THIS FUNCTION GENERATES TABLE2 TO THE PRINTER
      ⍝
      ⍝ VARIABLES NEEDED:  DAY1, MONTH1, YEAR1, LASTYEAR, PREV∆ER,
      ⍝                    INITDAY, INITMONTH, TOTCONTRIB, CONTRIB∆LESSWITH,
      ⍝                    FIVE∆CONTRIB, WITH∆YEAR
      ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
       175 WRITE 'TABLE2'
    ∇
```

```
    ∇ TABLE2;TITLE1;TITLE2;I;YEAR;GROUP;COL1;COL2;COL3;ROW;T2B;T2C;J
  ⍝ THIS FUNCTION CREATES THE OUTPUT FOR TABLE 2
  ⍝
  ⍝ VARIABLES NEEDED:  DAY1, MONTH1, INITYEAR, MAXLINE1, LASTYEAR, PREV∆ER,
  ⍝                    INITDAY, INITMONTH, TOTCONTRIB, CONTRIB∆LESSWITH,
  ⍝                    FIVE∆CONTRIB, WITH∆YEAR
  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
   TITLE1←'Table II'
   TITLE2←'Contribution History'
   ((⌊0.5×(MAXLINE1-⍴TITLE1))⍴' '),TITLE1
   ((⌊0.5×(MAXLINE1-⍴TITLE2))⍴' '),TITLE2
   ' ' ⋄ ' '
   I←1
   YEAR←INITYEAR
   →(LASTYEAR≠YEAR)/JUMP
   TABLE2ROWS ⋄ TABLE2B ⋄ TABLE2C
   '20A1,X57,19A1,X27,25A1' ⎕FMT(ROW;T2B;T2C)
   →0
  JUMP:TABLE2ROWS ⋄ TABLE2B
   TABLE2C ⋄ COL1←T2C
   YEAR←YEAR+1 ⋄ TABLE2C ⋄ COL2←T2C
   '20A1, X17, 19A1, X21, 25A1, X21, 25A1' ⎕FMT(ROW;T2B;COL1;COL2)
   →(LASTYEAR=YEAR)/0
   ' '
   →(15<LASTYEAR-YEAR1)/NEWPAGE1
   GROUP←2
   →LOOP
  NEWPAGE1:⎕TCFF
   GROUP←1
  LOOP:YEAR←YEAR+1
   →(LASTYEAR=YEAR+1)/TWO
   →((YEAR+2)≤LASTYEAR)/THREE
   TABLE2C
   '20A1,X11,25A1' ⎕FMT(ROW;T2C)
   →0
  THREE:TABLE2C ⋄ COL1←T2C
   YEAR←YEAR+1
   TABLE2C ⋄ COL2←T2C
   YEAR←YEAR+1
   TABLE2C ⋄ COL3←T2C
   '20A1,X11,25A1,X21,25A1,X21,25A1' ⎕FMT(ROW;COL1;COL2;COL3)
   →(YEAR=LASTYEAR)/0
   →((GROUP=2)∨(15<LASTYEAR-YEAR1))/NEWPAGE2
   ' '
   →NEXT
  NEWPAGE2:⎕TCFF
   GROUP←0
  NEXT:GROUP←GROUP+1
   →LOOP
  TWO:TABLE2C ⋄ COL1←T2C
   YEAR←YEAR+1
   TABLE2C ⋄ COL2←T2C
   '20A1,X11,25A1,X21,25A1' ⎕FMT(ROW;COL1;COL2)
    ∇
```

```
    ∇ TABLE2ROWS;BEGINDATE;ENDDATE;I
[1]  ⍝THIS FUNCTIONS GENERATES THE ROW HEADERS FOR TABLE2
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED:  MONTH1, DAY1, YEAR1, INITMONTH, INITDAY, LASTYEAR
[    ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[5]   ROW← 0 20 ⍴' '
[6]   ROW←ROW,[1] 2 20 ⍴' '
[7]   ROW←ROW,[1]'     Plan Year      '
[8]   ROW←ROW,[1]'     ---------      '
[9]   ROW←ROW,[1]'                    '
[10]  →((∧/MONTH1='01')∧(∧/DAY1='01'))/SKIP
[11]  BEGINDATE←(⍕MONTH1),'-',(⍕DAY1),'-',2↓⍕YEAR1
[12]  ENDDATE←(⍕INITMONTH),'-',(⍕INITDAY),'-',2↓⍕(YEAR1+1)
[13]  I←YEAR1
[14] LOOP:ROW←ROW,[1]BEGINDATE,' to ',ENDDATE
[15]  I←I+1
[16]  BEGINDATE←(¯2↓BEGINDATE),2↓⍕I
[17]  ENDDATE←(¯2↓ENDDATE),2↓⍕I+1
[18]  →(I≠LASTYEAR)/LOOP
[19]  →0
[20] SKIP:BEGINDATE←(⍕MONTH1),'-',(⍕DAY1),'-',2↓⍕YEAR1+1
[21]  ENDDATE←(⍕INITMONTH),'-',(⍕INITDAY),'-',2↓⍕YEAR1+1
[22]  I←YEAR1+1
[23] LOOP2:ROW←ROW,[1]BEGINDATE,' to ',ENDDATE
[24]  I←I+1
[25]  BEGINDATE←(¯2↓BEGINDATE),2↓⍕I
[26]  ENDDATE←(¯2↓ENDDATE),2↓⍕I
[27]  →(I≠LASTYEAR+1)/LOOP2
    ∇
```

```
    ∇ TABLE2B;I
[1]  ⍝ THIS FUNCTION OUTPUTS THE TOTAL CONTRIBUTIONS COLUMN OF TABLE 2
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED:  TOTCONTRIB, LASTYEAR, YEAR1
[    ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[5]   T2B← 0 19 ⍴''
[6]   T2B←T2B,[1] 2 19 ⍴' '
[7]   T2B←T2B,[1]'Total Contributions'
[8]   T2B←T2B,[1]'-------------------'
[9]   T2B←T2B,[1]'                   '
[10]  I←1
[11]  T2B←T2B,[1]'CN<$>P<$>I13,X6' ⎕FMT(⌊0.5+TOTCONTRIB[1])
[12] LOOP:→(I=LASTYEAR-YEAR1)/0
[13]  I←I+1
[14]  T2B←T2B,[1]'CI13,X6' ⎕FMT(⌊0.5+TOTCONTRIB[I])
[15]  →LOOP
    ∇
```

```
    ∇ TABLE2C;J
[1]  ⍝ THIS FUNCTION GENERATES ONE COLUMN FOR TOTAL CONTRIBUTIONS
[2]  ⍝ LESS WITHDRAWALS PRIOR TO A PARTICULAR PLAN YEAR
[3]  ⍝
[[illegible] ⍝ VARIABLES NEEDED:  YEAR, CONTRIB∆LESSWITH, FIVE∆CONTRIB, WITH∆YEAR
[[illegible] ⍝                    INITDAY,INITMONTH,I
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   T2C← 0 25 ⍴''
[8]   T2C←T2C,[1]'Total Contributions Less '
[9]   T2C←T2C,[1]'Withdrawals Prior to the '
[10]  T2C←T2C,[1]'Plan Year Ending ',(⍕INITMONTH),'-',(⍕INITDAY),'-',2↓⍕YEAR
[11]  T2C←T2C,[1]'-------------------------'
[12]  J←0
[13] LOOP:J←J+1
[14]  T2C←T2C,[1] 1 25 ⍴' '
[15]  →(J≠I)/LOOP
[16]  T2C←T2C,[1]'CN<$>P<$>I9,X16' ⎕FMT(CONTRIB∆LESSWITH[1;I])
[17]  T2C←T2C,[1]'CI9,X16' ⎕FMT(CONTRIB∆LESSWITH[2;I])
[18]  T2C←T2C,[1]'CI9,CN<$>P<$>I16' ⎕FMT(CONTRIB∆LESSWITH[3;I];FIVE∆CONTRIB[I])
[19]  T2C←T2C,[1]'CI9,X16' ⎕FMT(CONTRIB∆LESSWITH[4;I])
[20]  T2C←T2C,[1]'CI9,X16' ⎕FMT(CONTRIB∆LESSWITH[5;I])
[21]  I←I+1
    ∇
```

```
    ∇ TABLE3∆OUT;T;∆1;∆2;∆3;REALL∆YEAR1;MAXLINE1;MAXPAGE
[1]  ⍝ THIS FUNCTION GENERATES TABLE3 OUTPUT TO THE PRINTER.
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED: LASTYEAR, INITMONTH, REALL∆ER,
[4]  ⍝                   WITH∆YEAR, INIT∆REALL, REALL∆UNAM, WITH∆DATE
[    ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[6]   →(0=1↑ρREALL∆ER)/0
[7]   →(1=∧/INIT∆REALL=0)/0
[8]   REALL∆YEAR1←⌊/(~INIT∆REALL=0)/REALL∆YEAR
[9]   →((1+LASTYEAR-REALL∆YEAR1)=1)/N0
[10]  →((1+LASTYEAR-REALL∆YEAR1)=2)/N1
[11]  →((1+LASTYEAR-REALL∆YEAR1)≤5)/N2
[12]  →((1+LASTYEAR-REALL∆YEAR1)≤7)/N3
[13]  →((1+LASTYEAR-REALL∆YEAR1)=8)/N4
[14]  →((1+LASTYEAR-REALL∆YEAR1)=9)/N5
[15]  →((1+LASTYEAR-REALL∆YEAR1)=10)/N6
[16]  →((1+LASTYEAR-REALL∆YEAR1)=11)/N7
[17]  →((1+LASTYEAR-REALL∆YEAR1)≥12)/N8
[18] N0:80 WRITE 'TABLE3' ⋄ →0
[19] N1:96 WRITE 'TABLE3' ⋄ →0
[20] N2:137 WRITE 'TABLE3' ⋄ →0
[21] N3:175 WRITE 'TABLE3' ⋄ →0
[22] N4:183 WRITE 'TABLE3' ⋄ →0
[23] N5:199 WRITE 'TABLE3' ⋄ →0
[24] N6:215 WRITE 'TABLE3' ⋄ →0
[25] N7:231 WRITE 'TABLE3' ⋄ →0
[26] N8:247 WRITE 'TABLE3' ⋄ →0
    ∇
```

```
  ∇ TABLE3;YEAR;DATE;UNDERLINE∆DATES;TITLE1;TITLE2;TITLE3;I;J;REALL∆YEAR1;STR;TAKE;DATE∆HEADER
    ;FIRST
[1]  ⍝ THIS FUNCTION GENERATES TABLE III
[2]  ⍝
[3]  ⍝ VARIABLES NEEDED: INITMONTH, INITDAY, REALL∆ER, WITH∆DATE, MAXLINE1
[4]  ⍝                   WITH∆YEAR, INIT∆REALL, REALL∆UNAM, LASTYEAR,
[5]  ⍝                   REALL∆YEAR, REALL∆DATE
[6]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[7]   →(0=1↑ρREALL∆ER)/0
[8]   →(1=∧/INIT∆REALL=0)/0
[9]   TITLE1←'Table III'
[10]  TITLE2←'Reallocated Unfunded Vested Benefits'
[11]  TITLE3←'Reallocated due to De Minimus'
[12]  ((⌊0.5×(MAXLINE1-ρTITLE1))ρ' '),TITLE1
[13]  ((⌊0.5×(MAXLINE1-ρTITLE2))ρ' '),TITLE2
[14]  ((⌊0.5×(MAXLINE1-ρTITLE3))ρ' '),TITLE3
[15]  ' ' ⋄ ' '
[16]  YEAR←REALL∆YEAR1←⌊/(~INIT∆REALL=0)/REALL∆YEAR
[17]  STR←DATE∆HEADER←UNDERLINE∆DATES←''
[18] ⍝ GENERATE THE COLUMN HEADERS FOR THE DATES
[19] LOOP1:DATE←(⍕INITMONTH),'-',(⍕INITDAY),'-',2↓⍕YEAR
[20]  DATE∆HEADER←DATE∆HEADER,'        ',DATE
[21]  UNDERLINE∆DATES←UNDERLINE∆DATES,'        --------'
[22]  YEAR←YEAR+1
[23]  →(LASTYEAR≠YEAR-1)/LOOP1
[24]  →(160<ρDATE∆HEADER)/SKIP
[25]  TAKE←ρDATE∆HEADER
[26]  →A0
[27] SKIP:TAKE←160
[28] ⍝ WRITE THE COLUMN HEADERS
[29] A0:'   Employer Name      Withdrawal Date      Initial Amount',TAKE↑DATE∆HEADER
[30]  '   -------------     ---------------      --------------',TAKE↑UNDERLINE∆DATES
[31]  I←0 ⋄ FIRST←1
[32] ⍝ DO OUTLOOP FOR EACH REALLOCATED EMPLOYER
[33] OUTLOOP:I←I+1 ⋄ J←0 ⋄ YEAR←REALL∆YEAR1-1
[34]  STR←''
[35]  →((I=1↑ρREALL∆ER)∧(INIT∆REALL[I]=0))/0
[36]  →(INIT∆REALL[I]=0)/OUTLOOP
[37] ⍝ DO INLOOP FOR EACH YEAR TO GENERATE VALUES FOR THAT ROW
[38] INLOOP:J←J+1 ⋄ YEAR←YEAR+1
[39]  →(INIT∆REALL[I]=0)/BLANK
[40]  →(YEAR<REALL∆YEAR[I])/XS
[41]  →(FIRST=1)/A1
[42]  STR←STR,,'CI16' ⎕FMT(REALL∆UNAM[I;J])
[43]  →A2
[44] A1:STR←STR,,'G<      $ZZ,ZZZ,ZZ9>' ⎕FMT(REALL∆UNAM[I;J])
[45] A2:→NEXT
[46] BLANK:STR←STR,'                '
[47]  →NEXT
[48] XS:STR←STR,'              XX '
[49] NEXT:→(J≠1+LASTYEAR-REALL∆YEAR1)/INLOOP
[50]  →(160<ρSTR)/JUMP
[51]  →(FIRST=1)/A3
[52]  REALL∆ER[I;],'    ',REALL∆DATE[I;],'       ',(,'CI14' ⎕FMT(INIT∆REALL[I])),'   ',STR
[53]  →A4
[54] A3:REALL∆ER[I;],'    ',REALL∆DATE[I;],'       ',(,'G<    $ZZ,ZZZ,ZZ9>' ⎕FMT(INIT∆REALL[I])),'
        ',STR
[55]  FIRST←0
[56] A4:→(I≠1↑ρREALL∆ER)/OUTLOOP
[57]  →0
[58] ⍝ IMPROVISE IF WILL NOT FIT ALL ON ONE PAGE
[59] JUMP:→(FIRST=1)/A5
```

```
[60]  REALL∆ER[I;],'    ',REALL∆DATE[I;],'       ',(,'CI14' ⎕FMT(INIT∆REALL[I])),'   ',160↑STR
[61]  ' '
[62]  (55⍴' '),160↓DATE∆HEADER ⋄ (55⍴' '),160↓UNDERLINE∆DATES ⋄ (55⍴' '),160↓STR
[63]  →A6
[64] A5:REALL∆ER[I;],'    ',REALL∆DATE[I;],'       ',(,'G<   $ZZ,ZZZ,ZZ9)' ⎕FMT(INIT∆REALL[I])),'
       ',160↑STR
[6[illegible]  FIRST←0
[66]  ' '
[67]  (55⍴' '),160↓DATE∆HEADER ⋄ (55⍴' '),160↓UNDERLINE∆DATES ⋄ (55⍴' '),160↓STR
[68]  →(I≤5)/A6
[69]  ⎕TCFF
[70] A6:→(I≠1↑⍴REALL∆ER)/OUTLOOP
    ∇
```

```
 ∇ CL∆OUT;∆1;∆2;∆3;T;MAXLINE1;MAXPAGE
  ⍝ THIS FUNCTION GENERATES THE COVER LETTER.
  ⍝
  ⍝ VARIABLES NEEDED: CURR∆DATE, SPONSOR, STREET, CITY∆STATE, PLAN∆NAME, CL,
  ⍝                   CONTRACT, SECTION, PREV∆ER, MONTH1, DAY1, LASTYEAR, G,
  ⍝                   AD∆WL, ACTUARY, PHONE, GROUP∆NAME, GROUP;OFF, ADMIN, A
  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
   →(CL∊'Nn')/0
   ⎕TCFF
   'MAKE SURE THE PRINTER CONTAINS LETTER SIZE PAPER.  HIT ENTER WHEN READY.'
   T←⍞
   ∆1←2 ⎕POKE 126 ⋄ ∆1←3 ⎕POKE 125 ⋄ ∆1←1 ⎕POKE 116
   ⎕AV[28 92 49 60 51 121]
   ⎕PW←MAXLINE1←80
   ⎕AV[28 92 49 113 28 92 52 57 51 116]
   ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' '
   '     ',CURR∆DATE
   ' ' ⋄ ' ' ⋄ ' '
   '     ',SPONSOR
   '     ',STREET
   '     ',CITY∆STATE
   ' '
   '     RE  ',PLAN∆NAME
   '         ',CONTRACT
   ' '
   '     Dear ',SPONSOR,':'
   ' '
   '     Enclosed are the worksheets showing the calculations of the Employer'
   '     Withdrawal Liability of ',(NOPAD PREV∆ER[1;]),' as of ',(MONTH1,'-',DAY1,'-',2↓⍕LAST
  YEAR),'.'
   '     As you will notice, the withdrawal liability we''ve calculated'
   '     is: ',(,'P<$>CI10' ⎕FMT(AD∆WL[⍴AD∆WL])),'.'
   ' '
   '     Although we have performed the withdrawal liability calculations for'
   '     you, the Multi-Employer Pension Plan Amendments Act makes the determination'
   '     and assessment of withdrawal liability the responsibility of the plan '
   '     trustee.  The trustees should therefore understand what is involved in '
   '     determining employer withdrawal liability and be comfortable with the'
   '     results of our calculations.'
   ' '
   '     The calculations we''ve made follow the provisions of Section ',(SECTION),' in your'
   '     plan document.  We have used actuarial valuation assumptions in the'
   '     calculation of withdrawal liability.'
   ' '
   '     The plan administrator of a multiemployer plan must provide in the plan''s'
   '     annual report some additional information required by the Pension Benefit'
   '     Guaranty Corporation (PBGC).  The information required may include the '
   '     following: '
   ' '
   '     (1)  a statement by the plan''s enrolled actuary of the value of all vested'
   '          benefits and the value of plan assets as of the end of the plan year;'
   ' '
   '     (2)  a statement certified by the plan sponsor of the value of each out-'
   '          standing claim for withdrawal liability as of the close of the plan'
   '          year and as of the close of the preceding plan year; and'
   ' '
   '     (3)  the number of employers required to contribute to the plan and the '
   '          number of employers required to make withdrawal payments.'
   ⎕TCFF
   ' ' ⋄ ' '
   '     Page 2'
   ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' ' ⋄ ' '
```

```
 '    These requirements may be found in ERISA Section 4065.'
 ' '
 '    Section 4219(c)(1)(c)(i) and (ii) refers to the payment schedule formula'
 '    under which the withdrawing employer is required to pay its withdrawal'
 '    liability.'
 ' '
 '    The average annual number of contribution hours worked for the three'
 '    consecutive plan years during the ten year plan period ending before the'
 '    plan year of withdrawal, in which the number of hours was the highest,'
 '    multiplied by the highest contribution rate within the ten year plan'
 '    period is equal to the annual amount of withdrawal liability payment.'
 ' '
 '   I hope this information has been helpful.  If I can be of any further'
 '   assistance, please contact me.'
 ' '
 '   Sincerely'
 ' ' ◊ ' ' ◊ ' ' ◊ ' ' ◊ ' '
 '   ',ACTUARY
 '   Pension Actuarial Services'
 '   Phone (515) ',PHONE
 ' ' ◊ ' '
 '   Enclosures'
 ' '
 →((G∊'Nn')∧(A∊'Nn'))/END
 →((G∊'Yy')∧(A∊'Nn'))/GROUP∆ONLY
 →((G∊'Nn')∧(A∊'Yy'))/ADMIN∆ONLY
 '   cc ',GROUP∆NAME,' - ',GROUP∆OFF
 '      ',ADMIN,' - Pen. Adm.'
 →END
GROUP∆ONLY:'    cc ',GROUP∆NAME,' - ',GROUP∆OFF
 →END
ADMIN∆ONLY:'    cc ',ADMIN,' - Pen. Adm.'
END:⎕TCFF
 ∆1←0 ⎕POKE 116
∇
```

```
 ∇ X WRITE PROG;∆1;∆2;∆3;T
 ⍝ THIS FUNCTION OUTPUTS A FUNCTION TO THE PRINTER
 ⍝
 ⍝ VARIABLES NEEDED: X, PROG, AND VARIABLES NEEDED FOR PROG
⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
 ⎕TCFF
 →(X≤175)/SKIP
 'MAKE SURE THE PRINTER CONTAINS LEGAL SIZE PAPER.  HIT ENTER WHEN READY.'
 T←⍞
 →NEXT
SKIP:'MAKE SURE THE PRINTER CONTAINS LETTER SIZE PAPER.  HIT ENTER WHEN REA
 DY.'
 T←⍞
NEXT:∆1←2 ⎕POKE 126 ◊ ∆1←3 ⎕POKE 125 ◊ ∆1←1 ⎕POKE 116
⍝ OUTPUT THE FUNCTION
 ⎕PW←MAXLINE1←X
 →(X=80)/N1
 →(X=96)/N2
 →(X=137)/N3
 →(X=175)/N4
 →N5
N1:⎕AV[28 92 49 113 28 92 52 57 51 116] ◊ ⎕AV[28 92 49 60 52 121]
 MAXPAGE←50 ◊ →N6
N2:⎕AV[28 92 49 113 28 92 52 57 50 116] ◊ ⎕AV[28 92 49 60 52 121]
 MAXPAGE←55 ◊ →N6
N3:⎕AV[28 92 49 113 28 92 52 57 49 116] ◊ ⎕AV[28 92 49 60 52 121]
 MAXPAGE←55 ◊ →N6
N4:⎕AV[28 92 50 113 28 92 58 54 57 116] ◊ ⎕AV[28 92 49 60 52 121]
 MAXPAGE←40 ◊ →N6
N5:⎕AV[28 92 50 113 28 92 58 54 57 116] ◊ ⎕AV[28 92 49 60 51 121]
 MAXPAGE←40 ◊ →N6
N6:⍎PROG
 ⎕TCFF
 ∆1←0 ⎕POKE 116
 ∇
```

```
    ∇ R←UNDER∆HEAD STR;I;LEN;S
[1]  ⍝ THIS FUNCTION UNDERLINES THE WORDS IN A STRING AND DOES NOT UNDERLINE
[2]  ⍝ LEADING SPACES.
[3]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[4]   R←''
[5]   LEN←⍴STR
[6]   I←1
[7]  L1:S←STR[I]
[8]   →(S≠' ')/L2
[9]   R←R,' '
[10]  I←I+1
[11]  →L1
[12] L2:R←R,(1+LEN-I)⍴'-'
    ∇
```

```
    ∇ R←NOPAD STR;I;S
[1]  ⍝ THIS FUNCTION ELIMINATES LEADING SPACES FROM A STRING
[2]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[3]   I←1
[4]  L1:S←STR[I]
[5]   →(S≠' ')/L2
[6]   I←I+1
[7]   →L1
[8]  L2:R←(I-1)↓STR
    ∇
```

```
    ∇ R←LEFT∆AL STR;I;SP;S
[1]  ⍝ THIS FUNCTION TURNS A RIGHT ALIGNED STRING INTO A LEFT ALIGNED ONE.
[2]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[3]   SP←''
[4]   I←1
[5]  L1:S←STR[I]
[6]   →(S≠' ')/L2
[7]   SP←SP,' '
[8]   I←I+1
[9]   →L1
[10] L2:R←(I-1)↓STR,SP
    ∇
```

```
    ∇ R←RT∆ALIGN STR;I;NEW
[1]  ⍝ THIS FUNCTION RIGHT ALIGNS A STRING.
[2]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[3]   I←20
[4]   NEW←''
[5]  L1:→(STR[I]≠' ')/END
[6]   NEW←NEW,' '
[7]   I←I-1
[8]   →L1
[9]  END:R←NEW,(I↑STR)
    ∇
```

```
    ∇ R←SPELL∆MONTH M
[1]  ⍝ THIS FUNCTION CHANGES THE NUMBER OF A MONTH INTO ITS CORRESPONDING
[2]  ⍝ WORDS.  (ASSUMING M HAS ALREADY BEEN VALIDATED)
[3]  ⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝⍝
[     →(∧/M='01')/JAN
[5]   →(∧/M='02')/FEB
[6]   →(∧/M='03')/MAR
[7]   →(∧/M='04')/APR
[8]   →(∧/M='05')/MAY
[9]   →(∧/M='06')/JUN
[10]  →(∧/M='07')/JUL
[11]  →(∧/M='08')/AUG
[12]  →(∧/M='09')/SEP
[13]  →(∧/M='10')/OCT
[14]  →(∧/M='11')/NOV
[15]  →(∧/M='12')/DEC
[16] JAN:R←'January' ⋄ →0
[17] FEB:R←'February' ⋄ →0
[18] MAR:R←'March' ⋄ →0
[19] APR:R←'April' ⋄ →0
[20] MAY:R←'May' ⋄ →0
[21] JUN:R←'June' ⋄ →0
[22] JUL:R←'July' ⋄ →0
[23] AUG:R←'August' ⋄ →0
[24] SEP:R←'September' ⋄ →0
[25] OCT:R←'October' ⋄ →0
[26] NOV:R←'November' ⋄ →0
[27] DEC:R←'December' ⋄ →0
    ∇
```

August 07, 1990

Mr. Donald MacDonell
1501 West Lafayette
Detroit, MI 48216

RE Graphic Communications Int'l Union Local 20-B
08584

Dear Mr. Donald MacDonell:

Enclosed are the worksheets showing the calculations of the Employer Withdrawal Liability of Bland Printing as of 01-01-89.
As you will notice, the withdrawal liability we've calculated is: $56,778.

Although we have performed the withdrawal liability calculations for you, the Multi-Employer Pension Plan Amendments Act makes the determination and assessment of withdrawal liability the responsibility of the plan trustee. The trustees should therefore understand what is involved in determining employer withdrawal liability and be comfortable with the results of our calculations.

The calculations we've made follow the provisions of Section 11 in your plan document. We have used actuarial valuation assumptions in the calculation of withdrawal liability.

The plan administrator of a multiemployer plan must provide in the plan's annual report some additional information required by the Pension Benefit Guaranty Corporation (PBGC). The information required may include the following:

(1) a statement by the plan's enrolled actuary of the value of all vested benefits and the value of plan assets as of the end of the plan year;

(2) a statement certified by the plan sponsor of the value of each outstanding claim for withdrawal liability as of the close of the plan year and as of the close of the preceding plan year; and

(3) the number of employers required to contribute to the plan and the number of employers required to make withdrawal payments.

These requirements may be found in ERISA Secion 4065.

Section 4219(c)(1)(c)(i) and (ii) refers to the payment schedule formula under which the withdrawing employer is required to pay its withdrawal liability.

The average annual number of contribution hours worked for the three consecutive plan years during the ten year plan period ending before the plan year of withdrawal, in which the number of hours was the highest, multiplied by the highest contribution rate within the ten year plan period is equal to the annual amount of withdrawal liability payment.

I hope this information has been helpful. If I can be of any further assistance, please contact me.

Sincerely

Rebecca A. Stoll
Pension Actuarial Services
Phone (515) 247-6110

Enclosures

cc Theo Leanard - Detroit Group Office
Chuck Staples - Pen. Adm.

WITHDRAWAL LIABILITY WORKSHEET

Bland Printing

SECTION 1: General Information

1) Enter Employer Name	
2) Enter date of Employer Withdrawal	05-31-90
3) Enter date of last Plan Year ending before date of Employer Withdrawal	12-31-89

SECTION 2: Unadjusted Pre-1980 Portion

1) Enter the unamortized value of the 12-31-79 unfunded vested benefits which corresponds to the date of the last Plan Year ending before the date of Employer Withdrawal (See Table I.)	$1,626,222
2) Enter the total Contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-75 through 12-31-79 (See Table II).	$24,634
3) Total Contributions for Plan Years ending 12-31-75 through 12-31-79 for Employer participating on or after 09-26-80 (See Table II).	$1,762,942
4) Divide Item 2 by Item 3	0.013973
5) Multiply Item 1 by Item 4 to determine the Individual Employer's Unadjusted Pre-1980 Portion.	$22,723

SECTION 3: Unadjusted Post-1979 Portion (for 1979)

1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-80 (See Table I.)	$-238,892
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-76 through 12-31-80 (See Table II.)	$28,642
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-80 (See Table II.)	$1,837,401
4) Divide Item 2 by Item 3.	0.015588
5) Multiply Item 1 by Item 4 to determine the 1980 Individual Employer's Unadjusted Post-1979 Portion.	$-3,724

SECTION 4: Unadjusted Post-1979 Portion (for 1980)

	Bland Printing
1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-81 (See Table I.)	$265,271
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-77 through 12-31-81 (See Table II.)	$33,592
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-81 (See Table II.)	$1,838,977
4) Divide Item 2 by Item 3.	0.018267
5) Multiply Item 1 by Item 4 to determine the 1981 Individual Employer's Unadjusted Post-1979 Portion.	$4,846

SECTION 5: Unadjusted Post-1979 Portion (for 1981)

1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-82 (See Table I.)	$216,039
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-78 through 12-31-82 (See Table II.)	$40,023
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-82 (See Table II.)	$1,322,620
4) Divide Item 2 by Item 3.	0.030260
5) Multiply Item 1 by Item 4 to determine the 1982 Individual Employer's Unadjusted Post-1979 Portion.	$6,537

SECTION 6: Unadjusted Post-1979 Portion (for 1982)

1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-83 (See Table I.)	$-91,149

	Bland Printing
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-79 through 12-31-83 (See Table II.)	$48,016
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-83 (See Table II.)	$1,428,972
4) Divide Item 2 by Item 3.	0.033602
5) Multiply Item 1 by Item 4 to determine the 1983 Individual Employer's Unadjusted Post-1979 Portion.	$-3,063

SECTION 7: Unadjusted Post-1979 Portion (for 1983)

1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-84 (See Table I.)	$265,177
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-80 through 12-31-84 (See Table II.)	$53,982
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-84 (See Table II.)	$1,471,992
4) Divide Item 2 by Item 3.	0.036673
5) Multiply Item 1 by Item 4 to determine the 1984 Individual Employer's Unadjusted Post-1979 Portion.	$9,725

SECTION 8: Unadjusted Post-1979 Portion (for 1984)

1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-85 (See Table I.)	$184,397
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-81 through 12-31-85 (See Table II.)	$62,094
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-85 (See Table II.)	$1,551,755

	Bland Printing
4) Divide Item 2 by Item 3.	0.040015
5) Multiply Item 1 by Item 4 to determine the 1985 Individual Employer's Unadjusted Post-1979 Portion.	$7,379

SECTION 9: Unadjusted Post-1979 Portion (for 1985)

1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-86 (See Table I.)	$-140,900
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-82 through 12-31-86 (See Table II.)	$72,448
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-86 (See Table II.)	$1,644,399
4) Divide Item 2 by Item 3.	0.044057
5) Multiply Item 1 by Item 4 to determine the 1986 Individual Employer's Unadjusted Post-1979 Portion.	$-6,208

SECTION 10: Unadjusted Post-1979 Portion (for 1986)

1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-87 (See Table I.)	$130,928
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-83 through 12-31-87 (See Table II.)	$87,901
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-87 (See Table II.)	$1,809,948
4) Divide Item 2 by Item 3.	0.048565
5) Multiply Item 1 by Item 4 to determine the 1987 Individual Employer's Unadjusted Post-1979 Portion.	$6,359

SECTION 11: Unadjusted Post-1979 Portion (for 1987)

[illegible] Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-88 (See Table I.)	$610,876

	Bland Printing
2 Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-84 through 12-31-88 (See Table II.)	$100,402
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-88 (See Table II.)	$2,138,479
4) Divide item 2 by item 3.	0.046950
5) Multiply item 1 by item 4 to determine the 1988 Individual Employer's Unadjusted Post-1979 Portion.	$28,681

SECTION 12: Unadjusted Post-1979 Portion (for 1988)

1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 12-31-89 (See Table I.)	$13,272
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 12-31-85 through 12-31-89 (See Table II.)	$118,601
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-89 (See Table II.)	$2,480,165
4) Divide item 2 by item 3.	0.047820
5) Multiply item 1 by item 4 to determine the 1989 Individual Employer's Unadjusted Post-1979 Portion.	$635

SECTION 13: Reallocated Unfunded Vested Benefits

1) Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-80. (See Table III.)	$0
2) Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-76 through 12-31-80.	$28,642
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-80. (See Table II.)	$1,837,401

		Bland Printing
4)	Divide Item 2 by Item 3.	0.015588
5)	Multiply Item 1 by Item 4 to determine the 12-31-80 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0
6)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-81. (See Table III.)	$18,975
7)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-77 through 12-31-81.	$33,592
8)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-81. (See Table II.)	$1,838,977
9)	Divide Item 7 by Item 8.	0.018267
10)	Multiply Item 6 by Item 9 to determine the 12-31-81 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$347
11)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-82. (See Table III.)	$0
12)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-78 through 12-31-82.	$40,023
13)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-82. (See Table II.)	$1,322,620
14)	Divide Item 12 by Item 13.	0.030260
15)	Multiply Item 11 by Item 14 to determine the 12-31-82 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0
16)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-83. (See Table III.)	$0
17)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-79 through 12-31-83.	$48,016

		Bland Printing
1[illegible]	Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-83. (See Table II.)	$1,428,972
19)	Divide Item 17 by Item 18.	0.033602
20)	Multiply Item 16 by Item 19 to determine the 12-31-83 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0
21)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-84. (See Table III.)	$0
22)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-80 through 12-31-84.	$53,982
23)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-84. (See Table II.)	$1,471,992
24)	Divide Item 22 by Item 23.	0.036673
25)	Multiply Item 21 by Item 24 to determine the 12-31-84 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0
26)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-85. (See Table III.)	$15,797
27)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-81 through 12-31-85.	$62,094
28)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-85. (See Table II.)	$1,551,755
29)	Divide Item 27 by Item 28.	0.040015
30)	Multiply Item 26 by Item 29 to determine the 12-31-85 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$632
31)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-86. (See Table III.)	$35,546

		Bland Printing
3[illegible]	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-82 through 12-31-86.	$72,448
33)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-86. (See Table II.)	$1,644,399
34)	Divide Item 32 by Item 33.	0.044057
35)	Multiply Item 31 by Item 34 to determine the 12-31-86 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$1,566
36)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-87. (See Table III.)	$34,020
37)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-83 through 12-31-87.	$87,901
38)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-87. (See Table II.)	$1,809,948
39)	Divide Item 37 by Item 38.	0.048565
40)	Multiply Item 36 by Item 39 to determine the 12-31-87 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$1,652
41)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-88. (See Table III.)	$0
42)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-84 through 12-31-88.	$100,402
43)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-88. (See Table II.)	$2,138,479
44)	Divide Item 42 by Item 43.	0.046950
45)	Multiply Item 41 by Item 44 to determine the 12-31-88 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0

		Bland Printing
4[illegible]	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 12-31-89. (See Table III.)	$0
47)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 12-31-85 through 12-31-89.	$118,601
48)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 12-31-89. (See Table II.)	$2,480,165
49)	Divide Item 47 by Item 48.	0.047820
50)	Multiply Item 46 by Item 49 to determine the 12-31-89 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0
51)	Add Item 5, 10, 15, 20, 25, 30, 35, 40, 45 and 50 to determine the total of the Individual Employer's share of Reallocated Vested Benefits.	$4,197

Section 14: Adjusted Individual Employer Withdrawal Liability

1)	Add Section 2, Item 5; Section 3, Item 5; Section 4, Item 5; Section 5, Item 5; Section 6, Item 5; Section 7, Item 5; Section 8, Item 5; Section 9, Item 5; Section 10, Item 5; Section 11, Item 5; Section 12, Item 5; and Section 13, Item 51 to determine the Unadjusted Individual Employer Withdrawal Liability.	$78,087
2)	See Table I for current year Unfunded Vested Benefit.	$2,841,241
3)	Multiply Item 2 times 0.0075	$21,309
4)	DeMinimus Factor:	$21,309
	(A) If Item 3 is equal to or greater than $50,000, enter $50,000 as the DeMinimus Factor.	
	(B) If Item 3 is less than $50,000, enter Item 3 as the DeMinimus Factor.	
5)	DeMinimus Adjustment:	$21,309

(A) If item 1 is more than $150,000, or less than 0, enter zero.

(B) If item 1 is less than $100,000, enter item 4

(C) Otherwise, enter item 4 plus $100,000 minus item 1. If the result is negative, enter zero.

6) Subtract item 1 minus item 5 to determine the Adjusted Individual Employer Withdrawal Liability. If the result is a negative number, enter zero. Otherwise, enter the result of the subtraction. $56,778

Table I

Calculation of Unfunded Vested Benefits (UVB)

			12-31-80 Unamortized Value	12-31-81 Unamortized Value	12-31-82 Unamortized Value	12-31-83 Unamortized Value	12-31-84 Unamortized Value	12-31-85 Unamortized Value	12-31-86 Unamortized Value	12-31-87 Unamortized Value	12-31-88 Unamortized Value	12-31-89 Unamortized Value
12-31-79	Present Value of Vested Benefits	$ 7,181,088										
	Assets	3,928,644										
	12-31-79 UVB	$ 3,252,444	$ 3,089,822	$ 2,927,200	$ 2,764,577	$ 2,601,955	$ 2,439,333	$ 2,276,711	$ 2,114,089	$ 1,951,466	$ 1,788,844	$ 1,626,222
12-31-80	Present Value of Vested Benefits	$ 7,005,371										
	Assets	4,349,898										
	12-31-80 UVB	$ 2,655,473										
	Less Unamortized 12-31-79 UVB	3,089,822										
	1980 UVB net change value	$ -434,349	XX	$ -412,632	$ -390,914	$ -369,197	$ -347,479	$ -325,762	$ -304,044	$ -282,327	$ -260,609	$ -238,892
12-31-81	Present Value of Vested Benefits	$ 7,745,758										
	Assets	4,789,072										
	12-31-81 UVB	$ 2,956,686										
	Less Unamortized 12-31-79 UVB	2,927,200										
	Less Unamortized 12-31-80 UVB net change value	-412,632										
	1981 UVB net change value	$ 442,118	XX	XX	$ 420,012	$ 397,906	$ 375,800	$ 353,694	$ 331,589	$ 309,483	$ 287,377	$ 265,271

			12-31-80 Unamortized Value	12-31-81 Unamortized Value	12-31-82 Unamortized Value	12-31-83 Unamortized Value	12-31-84 Unamortized Value	12-31-85 Unamortized Value	12-31-86 Unamortized Value	12-31-87 Unamortized Value	12-31-88 Unamortized Value	12-31-89 Unamortized Value
12-31-82	Present Value of Vested Benefits	$ 8,374,799										
	Assets	5,246,756										
	12-31-82 UVB	$ 3,128,043										
	Less Unamortized 12-31-79 UVB	2,764,677										
	Less Unamortized 12-31-80 UVB net change value	-390,814										
	Less Unamortized 12-31-81 UVB net change value	420,012										
	1982 UVB net change value	$ 332,368	XX	XX	XX	$ 315,750	$ 299,131	$ 282,513	$ 265,894	$ 249,276	$ 232,658	$ 216,039
12-31-83	Present Value of Vested Benefits	$ 8,667,743										
	Assets	5,851,542										
	12-31-83 UVB	$ 2,816,201										
	Less Unamortized 12-31-79 UVB	2,601,966										
	Less Unamortized 12-31-80 UVB net change value	-369,197										

			12-31-80 Unamortized Value	12-31-81 Unamortized Value	12-31-82 Unamortized Value	12-31-83 Unamortized Value	12-31-84 Unamortized Value	12-31-85 Unamortized Value	12-31-86 Unamortized Value	12-31-87 Unamortized Value	12-31-88 Unamortized Value	12-31-89 Unamortized Value
	Less Unamortized 12-31-81 UVB net change value	307,908										
	Less Unamortized 12-31-82 UVB net change value	316,750										

	1983 UVB net change value	$ -130,213	XX	XX	XX	XX	$ -123,702	$ -117,192	$ -110,681	$ -104,170	$ -97,660	$ -91,149
12-31-84	Present Value of Vested Benefits	$ 9,349,401										
	Assets	6,352,749										

	12-31-84 UVB	$ 2,996,652										
	Less Unamortized 12-31-79 UVB	2,439,333										
	Less Unamortized 12-31-80 UVB net change value	-347,479										
	Less Unamortized 12-31-81 UVB net change value	375,800										
	Less Unamortized 12-31-82 UVB net change value	299,131										
	Less Unamortized 12-31-83 UVB net change value	-123,702										

	1984 UVB net change value	$ 353,569	XX	XX	XX	XX	XX	$ 335,891	$ 318,212	$ 300,534	$ 282,855	$ 265,177

			12-31-80 Unamortized Value	12-31-81 Unamortized Value	12-31-82 Unamortized Value	12-31-83 Unamortized Value	12-31-84 Unamortized Value	12-31-85 Unamortized Value	12-31-86 Unamortized Value	12-31-87 Unamortized Value	12-31-88 Unamortized Value	12-31-89 Unamortized Value
12-31-85	Present Value of Vested Benefits	$10,004,378										
	Assets	6,968,027										
	12-31-85 UVB	$ 3,036,351										
	Less Unamortized 12-31-79 UVB	2,276,711										
	Less Unamortized 12-31-80 UVB net change value	-325,762										
	Less Unamortized 12-31-81 UVB net change value	353,884										
	Less Unamortized 12-31-82 UVB net change value	282,813										
	Less Unamortized 12-31-83 UVB net change value	-117,192										
	Less Unamortized 12-31-84 UVB net change value	336,891										
	1985 UVB net change value	$ 238,496	XX	XX	XX	XX	XX	XX	$ 218,071	$ 207,440	$ 196,022	$ 184,397
12-31-86	Present Value of Vested Benefits	$10,287,450										

			12-31-80 Unamortized Value	12-31-81 Unamortized Value	12-31-82 Unamortized Value	12-31-83 Unamortized Value	12-31-84 Unamortized Value	12-31-85 Unamortized Value	12-31-86 Unamortized Value	12-31-87 Unamortized Value	12-31-88 Unamortized Value	12-31-89 Unamortized Value
	Assets	7,519,191										
	12-31-86 UVB	$ 2,688,268										
	Less Unamortized 12-31-79 UVB	2,114,089										
	Less Unamortized 12-31-80 UVB net change value	-304,044										
	Less Unamortized 12-31-81 UVB net change value	331,589										
	Less Unamortized 12-31-82 UVB net change value	285,894										
	Less Unamortized 12-31-83 UVB net change value	-110,661										
	Less Unamortized 12-31-84 UVB net change value	318,212										
	Less Unamortized 12-31-85 UVB net change value	218,971										
	1986 UVB net change value	$ -165,768	XX	XX	XX	XX	XX	XX	XX	$ -167,477	$ -149,188	$ -140,800
12-31-87	Present Value of Vested Benefits	$11,145,218										

		12-31-80 Unamortized Value	12-31-81 Unamortized Value	12-31-82 Unamortized Value	12-31-83 Unamortized Value	12-31-84 Unamortized Value	12-31-85 Unamortized Value	12-31-86 Unamortized Value	12-31-87 Unamortized Value	12-31-88 Unamortized Value	12-31-89 Unamortized Value
Assets	8,826,503										
12-31-87 UVB	$ 2,019,707										
Less Unamortized 12-31-79 UVB	1,851,488										
Less Unamortized 12-31-80 UVB net change value	-262,327										
Less Unamortized 12-31-81 UVB net change value	309,483										
Less Unamortized 12-31-82 UVB net change value	249,276										
Less Unamortized 12-31-83 UVB net change value	-104,170										
Less Unamortized 12-31-84 UVB net change value	308,534										
Less Unamortized 12-31-85 UVB net change value	287,446										
Less Unamortized 12-31-86 UVB net change value	-157,477										
1987 UVB net change value	$ 145,476	XX	XX	XX	XX	XX	XX	XX	XX	$ 138,282	$ 130,928

			12-31-80 Unamortized Value	12-31-81 Unamortized Value	12-31-82 Unamortized Value	12-31-83 Unamortized Value	12-31-84 Unamortized Value	12-31-85 Unamortized Value	12-31-86 Unamortized Value	12-31-87 Unamortized Value	12-31-88 Unamortized Value	12-31-89 Unamortized Value
12-31-86	Present Value of Vested Benefits	$12,280,110										
	Assets	9,198,682										
	12-31-86 UVB	$ 3,081,428										
	Less Unamortized 12-31-79 UVB	1,768,044										
	Less Unamortized 12-31-80 UVB net change value	-260,809										
	Less Unamortized 12-31-81 UVB net change value	207,377										
	Less Unamortized 12-31-82 UVB net change value	232,858										
	Less Unamortized 12-31-83 UVB net change value	-97,660										
	Less Unamortized 12-31-84 UVB net change value	282,855										
	Less Unamortized 12-31-85 UVB net change value	195,922										

			12-31-80 Unamortized Value	12-31-81 Unamortized Value	12-31-82 Unamortized Value	12-31-83 Unamortized Value	12-31-84 Unamortized Value	12-31-85 Unamortized Value	12-31-86 Unamortized Value	12-31-87 Unamortized Value	12-31-88 Unamortized Value	12-31-89 Unamortized Value
	Less Unamortized 12-31-86 UVB net change value	-149,186										
	Less Unamortized 12-31-87 UVB net change value	138,202										
	1988 UVB net change value	$ 643,027	XX	XX	XX	XX	XX	XX	XX	XX	XX	$ 610,676
12-31-89	Present Value of Vested Benefits	$12,889,819										
	Assets	10,048,578										
	12-31-89 UVB	$ 2,841,241										
	Less Unamortized 12-31-79 UVB	1,826,222										
	Less Unamortized 12-31-80 UVB net change value	-238,892										
	Less Unamortized 12-31-81 UVB net change value	265,271										
	Less Unamortized 12-31-82 UVB net change value	216,039										
	Less Unamortized 12-31-83 UVB net change value	-91,149										

		12-31-80 Unamortized Value	12-31-81 Unamortized Value	12-31-82 Unamortized Value	12-31-83 Unamortized Value	12-31-84 Unamortized Value	12-31-85 Unamortized Value	12-31-86 Unamortized Value	12-31-87 Unamortized Value	12-31-88 Unamortized Value	12-31-89 Unamortized Value
Less Unamortized 12-31-84 UVB net change value	265,177										
Less Unamortized 12-31-85 UVB net change value	184,397										
Less Unamortized 12-31-86 UVB net change value	-140,000										
Less Unamortized 12-31-87 UVB net change value	130,928										
Less Unamortized 12-31-88 UVB net change value	618,676										
1989 UVB net change value	$ 13,272	XX	XX	XX	XX	XX	XX	XX	XX	XX	$ 13,272

Individual Employer Contribution History

Year	Shelby Litho	Mulford	Averill Press	Nat'l Art Crafts	Lawson and Jones	Michigan Bookbinding	Bloomfield Graphics	Safran Printing	West Printing
1975	$ 78.50	$ 4,082.01	$ 5,000.00	$ 6,014.25	$ 15,303.00	$ 10,017.00	$ 203.25	$ 61,800.92	$ 2,986.00
1976	0	2,287.66	11,991.50	6,266.25	16,103.75	8,408.75	406.25	63,348.61	1,559.50
1977	0	0	373.80	4,780.50	17,017.50	11,940.75	470.50	72,331.00	1,384.50
1978	0	0	0	5,738.75	17,116.50	14,006.50	491.00	78,834.27	2,236.75
1979	0	0	0	5,825.20	18,802.00	15,360.00	512.00	88,653.50	2,317.10
1980	0	0	0	4,600.20	14,380.25	16,740.48	984.00	101,108.00	1,873.70
1981	0	2,923.30	0	303.80	3,103.25	16,732.10	998.00	80,363.40	1,837.08
1982	0	0	0	0	30,068.02	45,710.88	0	37,362.18	885.20
1983	0	0	0	0	30,908.04	58,870.00	0	124,890.00	0
1984	0	0	0	0	0	0	0	124,770.00	0
1985	0	0	0	0	64,924.00	0	0	124,769.00	0
1986	0	0	0	0	31,100.64	0	0	124,769.00	0
1987	0	0	0	0	15,641.00	0	0	93,678.75	0
1988	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0

Year	Standard Bookbinding	Kramer Printing	King Smith	Lincoln Printing	Consolidated Litho	Bland Printing
1975	$ 20,844.75	$ 0	$ 0	$ 0	$ 0	$ 3,337.50
1976	30,310.25	0	0	0	0	3,838.50
1977	30,907.50	0	0	0	0	4,722.00
1978	31,818.50	0	0	0	0	5,635.00
1979	37,173.55	0	0	0	0	7,101.20
1980	31,039.25	3,429.85	0	0	0	7,346.15
1981	28,715.95	4,237.40	11,011.90	4,284.50	4,784.95	8,788.30
1982	17,318.10	2,467.85	8,033.45	4,804.25	3,772.80	11,153.70
1983	0	997.90	5,900.70	4,281.45	3,614.85	13,827.50
1984	0	718.80	5,068.05	4,074.40	3,778.57	13,067.80
1985	0	531.45	2,558.20	2,083.75	4,589.71	15,456.50
1986	0	0	5,718.40	3,383.65	8,063.82	19,142.50
1987	301,597.59	0	30,228.20	186.00	3,380.20	28,606.40
1988	0	0	0	0	19,787.20	28,128.87
1989	0	0	0	0	0	31,266.27

Table II

Contribution History

Plan Year	Total Contributions	Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-79		Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-80	
01-01-75 to 12-31-75	$264,653	$254,852			
01-01-76 to 12-31-76	367,797	353,517		$329,127	
01-01-77 to 12-31-77	340,008	339,634	$1,762,942	317,829	
01-01-78 to 12-31-78	370,464	370,464		347,612	$1,837,401
01-01-79 to 12-31-79	444,475	444,475		428,067	
01-01-80 to 12-31-80	433,726			414,766	
01-01-81 to 12-31-81	424,109				
01-01-82 to 12-31-82	424,441				
01-01-83 to 12-31-83	541,523				
01-01-84 to 12-31-84	440,841				
01-01-85 to 12-31-85	541,424				
01-01-86 to 12-31-86	545,483				
01-01-87 to 12-31-87	923,516				
01-01-88 to 12-31-88	660,382				
01-01-89 to 12-31-89	644,126				

Plan Year	Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-81		Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-82		Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-83	
01-01-75 to 12-31-75						
01-01-76 to 12-31-76						
01-01-77 to 12-31-77	$304,017					
01-01-78 to 12-31-78	330,878		$220,427			
01-01-79 to 12-31-79	409,879	$1,838,977	273,051		$273,051	
01-01-80 to 12-31-80	395,162		263,013	$1,322,620	263,013	
01-01-81 to 12-31-81	399,041		273,942		273,942	$1,428,972
01-01-82 to 12-31-82			292,187		292,187	
01-01-83 to 12-31-83					326,779	
01-01-84 to 12-31-84						
01-01-85 to 12-31-85						
01-01-86 to 12-31-86						
01-01-87 to 12-31-87						
01-01-88 to 12-31-88						
01-01-89 to 12-31-89						

Plan Year	Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-84		Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-85		Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-86	
01-01-75 to 12-31-75						
01-01-76 to 12-31-76						
01-01-77 to 12-31-77						
01-01-78 to 12-31-78						
01-01-79 to 12-31-79						
01-01-80 to 12-31-80	$263,013					
01-01-81 to 12-31-81	273,942		$269,705			
01-01-82 to 12-31-82	292,187	$1,471,992	289,719		$281,686	
01-01-83 to 12-31-83	326,779		325,781	$1,551,755	319,880	
01-01-84 to 12-31-84	316,071		315,351		310,293	$1,644,399
01-01-85 to 12-31-85			351,199		348,643	
01-01-86 to 12-31-86					383,897	
01-01-87 to 12-31-87						
01-01-88 to 12-31-88						
01-01-89 to 12-31-89						

Plan Year	Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-87		Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-88		Total Contributions Less Withdrawals Prior to the Plan Year Ending 12-31-89	
01-01-75 to 12-31-75						
01-01-76 to 12-31-76						
01-01-77 to 12-31-77						
01-01-78 to 12-31-78						
01-01-79 to 12-31-79						
01-01-80 to 12-31-80						
01-01-81 to 12-31-81						
01-01-82 to 12-31-82						
01-01-83 to 12-31-83	$312,084					
01-01-84 to 12-31-84	302,440		$302,440			
01-01-85 to 12-31-85	341,969	$1,809,948	341,969		$341,969	
01-01-86 to 12-31-86	374,449		374,449	$2,138,479	374,449	
01-01-87 to 12-31-87	479,006		479,006		479,006	$2,480,165
01-01-88 to 12-31-88			640,615		640,615	
01-01-89 to 12-31-89					644,126	

Table III

Reallocated Unfunded Vested Benefits

Reallocated due to Deminimus

Employer Name	Withdrawal Date	Initial Amount	12-31-80	12-31-81	12-31-82	12-31-83	12-31-84	12-31-85	12-31-86	12-31-87	12-31-88	12-31-89
Michigan Bookbinding	12-31-81	$ 18,376	$ 18,376	$ 17,467	$ 16,538	$ 15,620	$ 14,701	$ 13,782	$ 12,863	$ 11,944	$ 11,026	$ 10,107
Bloomfield Graphics	12-31-81	3,363	3,363	3,185	3,018	2,850	2,682	2,516	2,347	2,179	2,012	1,844
West Printing	12-31-81	12,770	12,770	12,132	11,493	10,855	10,216	9,578	8,939	8,301	7,662	7,024
Kramer Printing	12-31-85	21,082	XX	XX	XX	XX	21,082	20,009	18,956	17,903	16,850	15,797
King Smith	09-30-86	44,432	XX	XX	XX	XX	XX	44,432	42,210	39,988	37,767	35,546
Lincoln Printing	03-31-87	20,012	XX	XX	XX	XX	XX	XX	20,012	19,011	18,011	17,010
Consolidated Litho	03-31-87	20,012	XX	XX	XX	XX	XX	XX	20,012	19,011	18,011	17,010

WITHDRAWAL LIABILITY WORKSHEET

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
SECTION 1: General Information			
1) Enter Employer Name			
2) Enter date of Employer Withdrawal	02-01-90	02-01-90	02-01-90
3) Enter date of last Plan Year ending before date of Employer Withdrawal	03-31-89	03-31-89	03-31-89
SECTION 2: Unadjusted Pre-1980 Portion			
1) Enter the unamortized value of the 03-31-80 unfunded vested benefits which corresponds to the date of the last Plan Year ending before the date of Employer Withdrawal (See Table I.)	$-68,326	$-68,326	$-68,326
2) Enter the total Contribution amount required to be paid by the Individual Employer for the Plan Years ending 03-31-76 through 03-31-80 (See Table II).	$228,489	$3,318	$0
3) Total Contributions for Plan Years ending 03-31-76 through 03-31-80 for Employer participating on or after 09-26-80 (See Table II).	$1,207,155	$1,207,155	$1,207,155
4) Divide Item 2 by Item 3	0.189279	0.002749	0
5) Multiply Item 1 by Item 4 to determine the Individual Employer's Unadjusted Pre-1980 Portion.	$-12,933	$-188	$0
SECTION 3: Unadjusted Post-1979 Portion (for 1980)			
1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 03-31-81 (See Table I.)	$171,280	$171,280	$171,280
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 03-31-77 through 03-31-81 (See Table II.)	$269,930	$4,473	$0
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-81 (See Table II.)	$1,365,438	$1,365,438	$1,365,438
4) Divide Item 2 by Item 3.	0.197687	0.003276	0
5) Multiply Item 1 by Item 4 to determine the [illegible]81 Individual Employer's Unadjusted Post-1979 Portion.	$33,860	$561	$0

S[illegible]ON 4: Unadjusted Post-1979 Portion (for 1981)

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 03-31-82 (See Table I.)	$-101,224	$-101,224	$-101,224
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 03-31-78 through 03-31-82 (See Table II.)	$306,514	$4,473	$0
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-82 (See Table II.)	$1,559,035	$1,559,035	$1,559,035
4) Divide Item 2 by Item 3.	0.196605	0.002869	0
5) Multiply Item 1 by Item 4 to determine the 1982 Individual Employer's Unadjusted Post-1979 Portion.	$-19,901	$-290	$0

SECTION 5: Unadjusted Post-1979 Portion (for 1982)

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
1) Enter the net change value of the unfunded vested benefits which corresponds to the [illegible]te of the Plan Year ending 03-31-83 (See Table I.)	$206,229	$206,229	$206,229
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 03-31-79 through 03-31-83 (See Table II.)	$319,579	$6,466	$0
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-83 (See Table II.)	$1,508,932	$1,508,932	$1,508,932
4) Divide Item 2 by Item 3.	0.211792	0.004285	0
5) Multiply Item 1 by Item 4 to determine the 1983 Individual Employer's Unadjusted Post-1979 Portion.	$43,678	$884	$0

SECTION 6: Unadjusted Post-1979 Portion (for 1983)

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 03-31-84 (See Table I.)	$-132,697	$-132,697	$-132,697

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
2) Enter the total contribution amount required to be paid by the individual Employer for the Plan Years ending 03-31-80 through 03-31-84 (See Table II.)	$310,503	$3,998	$0
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-84 (See Table II.)	$1,482,469	$1,482,469	$1,482,469
4) Divide item 2 by item 3.	0.209450	0.002697	0
5) Multiply item 1 by item 4 to determine the 1984 Individual Employer's Unadjusted Post-1979 Portion.	$-27,793	$-358	$0
SECTION 7: Unadjusted Post-1979 Portion (for 1984)			
1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 03-31-85 (See Table I.)	$90,217	$90,217	$90,217
2) Enter the total contribution amount required to be paid by the individual Employer for the Plan Years ending 03-31-81 through 03-31-85 (See Table II.)	$284,813	$6,127	$0
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-85 (See Table II.)	$1,406,745	$1,406,745	$1,406,745
4) Divide item 2 by item 3.	0.202462	0.004355	0
5) Multiply item 1 by item 4 to determine the 1985 Individual Employer's Unadjusted Post-1979 Portion.	$18,266	$393	$0
SECTION 8: Unadjusted Post-1979 Portion (for 1985)			
1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 03-31-86 (See Table I.)	$227,482	$227,482	$227,482
2) Enter the total contribution amount required to be paid by the individual Employer for the Plan Years ending 03-31-82 through 03-31-86 (See Table II.)	$240,665	$10,056	$0
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-86 (See Table II.)	$1,310,500	$1,310,500	$1,310,500

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
[illegible] Divide Item 2 by Item 3.	0.183644	0.007673	0
5) Multiply Item 1 by Item 4 to determine the 1986 Individual Employer's Unadjusted Post-1979 Portion.	$41,776	$1,745	$0

SECTION 9: Unadjusted Post-1979 Portion (for 1986)

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 03-31-87 (See Table I.)	$77,180	$77,180	$77,180
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 03-31-83 through 03-31-87 (See Table II.)	$202,709	$13,146	$0
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-87 (See Table II.)	$1,339,675	$1,339,675	$1,339,675
4) Divide Item 2 by Item 3.	0.151312	0.009813	0
5) Multiply Item 1 by Item 4 to determine the 1987 Individual Employer's Unadjusted Post-1979 [illegible]rtion.	$11,678	$757	$0

SECTION 10: Unadjusted Post-1979 Portion (for 1987)

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
1) Enter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 03-31-88 (See Table I.)	$414,502	$414,502	$414,502
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 03-31-84 through 03-31-88 (See Table II.)	$170,992	$15,339	$81,335
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-88 (See Table II.)	$770,434	$770,434	$770,434
4) Divide Item 2 by Item 3.	0.221942	0.019910	0.105570
5) Multiply Item 1 by Item 4 to determine the 1988 Individual Employer's Unadjusted Post-1979 Portion.	$91,995	$8,253	$43,759

SECTION 11: Unadjusted Post-1979 Portion (for 1988)

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
1) [illegible]ter the net change value of the unfunded vested benefits which corresponds to the date of the Plan Year ending 03-31-89 (See Table I.)	$280,073	$280,073	$280,073

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
2) Enter the total contribution amount required to be paid by the Individual Employer for the Plan Years ending 03-31-85 through 03-31-89 (See Table II.)	$139,985	$15,339	$81,335
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-89 (See Table II.)	$842,334	$842,334	$842,334
4) Divide Item 2 by Item 3.	0.166187	0.018210	0.096559
5) Multiply Item 1 by Item 4 to determine the 1989 Individual Employer's Unadjusted Post-1979 Portion.	$46,544	$5,100	$27,044
SECTION 12: Reallocated Unfunded Vested Benefits			
1) Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 03-31-81. (See Table III.)	$0	$0	$0
2) Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 03-31-77 through 03-31-81.	$269,930	$4,473	$0
3) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-81. (See Table II.)	$1,365,438	$1,365,438	$1,365,438
4) Divide Item 2 by Item 3.	0.197687	0.003276	0
5) Multiply Item 1 by Item 4 to determine the 03-31-81 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0	$0	$0
6) Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 03-31-82. (See Table III.)	$0	$0	$0
7) Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 03-31-78 through 03-31-82.	$306,514	$4,473	$0
8) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-82. (See Table II.)	$1,559,035	$1,559,035	$1,559,035
9) Divide Item 7 by Item 8.	0.196605	0.002869	0

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
[illegible] Multiply Item 6 by Item 9 to determine the 03-31-82 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0	$0	$0
11) Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 03-31-83. (See Table III.)	$0	$0	$0
12) Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 03-31-79 through 03-31-83.	$319,579	$6,466	$0
13) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-83. (See Table II.)	$1,508,932	$1,508,932	$1,508,932
14) Divide Item 12 by Item 13.	0.211792	0.004285	0
15) Multiply Item 11 by Item 14 to determine the 03-31-83 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0	$0	$0
16) Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 03-31-84. (See Table III.)	$0	$0	$0
17) Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 03-31-80 through 03-31-84.	$310,503	$3,998	$0
18) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-84. (See Table II.)	$1,482,469	$1,482,469	$1,482,469
19) Divide Item 17 by Item 18.	0.209450	0.002697	0
20) Multiply Item 16 by Item 19 to determine the 03-31-84 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0	$0	$0
21) Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 03-31-85. (See Table III.)	$5,142	$5,142	$5,142
22) Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 03-31-81 through 03-31-85.	$284,813	$6,127	$0

		American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
[illegible]	Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-85. (See Table II.)	$1,406,745	$1,406,745	$1,406,745
24)	Divide Item 22 by Item 23.	0.202462	0.004355	0
25)	Multiply Item 21 by Item 24 to determine the 03-31-85 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$1,041	$22	$0
26)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 03-31-86. (See Table III.)	$0	$0	$0
27)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 03-31-82 through 03-31-86.	$240,665	$10,056	$0
28)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-86. (See Table II.)	$1,310,500	$1,310,500	$1,310,500
29)	Divide Item 27 by Item 28.	0.183644	0.007673	0
30)	Multiply Item 26 by Item 29 to determine the 03-31-86 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0	$0	$0
31)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 03-31-87. (See Table III.)	$0	$0	$0
32)	Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 03-31-83 through 03-31-87.	$202,709	$13,146	$0
33)	Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-87. (See Table II.)	$1,339,675	$1,339,675	$1,339,675
34)	Divide Item 32 by Item 33.	0.151312	0.009813	0
35)	Multiply Item 31 by Item 34 to determine the 03-31-87 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0	$0	$0
36)	Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 03-31-88. (See Table III.)	$179,687	$179,687	$179,687

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
37) Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 03-31-84 through 03-31-88.	$170,992	$15,339	$81,335
38) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-88. (See Table II.)	$770,434	$770,434	$770,434
39) Divide Item 37 by Item 38.	0.221942	0.019910	0.105570
40) Multiply Item 36 by Item 39 to determine the 03-31-88 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$39,880	$3,578	$18,970
41) Enter the unamortized amount of reallocated vested benefits for Employers that withdrew in the Plan Year ending 03-31-89. (See Table III.)	$0	$0	$0
42) Enter the total contribution amount required to be paid by the Individual Employer for Plan Years ending 03-31-85 through 03-31-89.	$139,985	$15,339	$81,335
43) Enter the total accumulated contributions for the above Plan Years for Employers participating after 03-31-89. (See Table II.)	$842,334	$842,334	$842,334
44) Divide Item 42 by Item 43.	0.166187	0.018210	0.096559
45) Multiply Item 41 by Item 44 to determine the 03-31-89 Individual Employer's share of Reallocated Unfunded Vested Benefit.	$0	$0	$0
46) Add Item 5, 10, 15, 20, 25, 30, 35, 40 and 45 to determine the total of the Individual Employer's share of Reallocated Vested Benefits.	$40,921	$3,600	$18,970

Section 13: Adjusted Individual Employer Withdrawal Liability

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
1) Add Section 2, Item 5; Section 3, Item 5; Section 4, Item 5; Section 5, Item 5; Section 6, Item 5; Section 7, Item 5; Section 8, Item 5; Section 9, Item 5; Section 10, Item 5; Section 11, Item 5; and Section 12, Item 46 to determine the Unadjusted Individual Employer Withdrawal Liability.	$268,091	$20,457	$89,773
2) See Table I for current year Unfunded Vested Benefit.	$1,164,716	$1,164,716	$1,164,716

	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.
3) Multiply Item 2 times 0.0075	$8,735	$8,735	$8,735
4) DeMinimus Factor:	$8,735	$8,735	$8,735
(A) If Item 3 is equal to or greater than $50,000, enter $50,000 as the DeMinimus Factor.			
(B) If Item 3 is less than $50,000, enter Item 3 as the DeMinimus Factor.			
5) DeMinimus Adjustment:	$0	$8,735	$8,735
(A) If Item 1 is more than $150,000, or less than 0, enter zero.			
(B) If Item 1 is less than $100,000, enter Item 4			
(C) Otherwise, enter Item 4 plus $100,000 minus Item 1. If the result is negative, enter zero.			
6) Subtract Item 1 minus Item 5 to determine the Adjusted Individual Employer Withdrawal Liability. If the result is a negative number, enter zero. Otherwise, enter the result of the subtraction.	$268,091	$11,722	$81,038

Individual Employer Contribution History

Year	American Grain	Hyman-Michaels Azcon	Seaway Port Auth.	Great Lakes Ass.	Great Lakes Storage	N. Central Term Ops
1975	$ 34,018.53	$ 0	$ 0	$ 0	$ 11,979.39	$ 0
1976	26,316.95	0	0	0	17,178.15	0
1977	33,628.72	0	0	0	36,440.85	147,751.42
1978	65,317.06	2,468.40	0	0	20,853.22	80,851.66
1979	69,207.84	849.24	0	0	17,055.00	89,323.92
1980	75,459.22	1,155.67	0	0	0	76,292.66
1981	62,901.07	0	0	8,726.99	11,968.57	105,369.54
1982	46,693.37	1,992.87	0	18,138.05	13,068.03	113,976.06
1983	56,241.90	0	0	17,853.66	3,360.06	135,801.27
1984	43,517.76	2,978.56	0	11,753.04	6,644.56	137,224.36
1985	31,310.52	5,084.31	0	0	0	85,890.65
1986	24,944.97	3,090.36	0	0	0	144,162.94
1987	14,977.17	4,186.08	81,334.80	0	0	21,094.11
1988	25,234.29	0	0	0	0	0

Table II

Contribution History

Plan Year	Total Contributions	Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-80		Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-81	
04-01-75 to 03-31-76	$133,778	$133,778			
04-01-76 to 03-31-77	123,900	123,900		$123,900	
04-01-77 to 03-31-78	315,562	315,562	$1,207,155	315,562	
04-01-78 to 03-31-79	328,015	328,015		328,015	$1,365,438
04-01-79 to 03-31-80	305,900	305,900		305,900	
04-01-80 to 03-31-81	292,061			292,061	
04-01-81 to 03-31-82	317,497				
04-01-82 to 03-31-83	265,459				
04-01-83 to 03-31-84	301,552				
04-01-84 to 03-31-85	321,690				
04-01-85 to 03-31-86	195,816				
04-01-86 to 03-31-87	325,976				
04-01-87 to 03-31-88	189,185				
04-01-88 to 03-31-89	216,437				

Plan Year	Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-82		Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-83		Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-84	
04-01-75 to 03-31-76						
04-01-76 to 03-31-77						
04-01-77 to 03-31-78	$315,562					
04-01-78 to 03-31-79	328,015		$328,015			
04-01-79 to 03-31-80	305,900	$1,559,035	305,900		$305,900	
04-01-80 to 03-31-81	292,061		292,061	$1,508,932	292,061	
04-01-81 to 03-31-82	317,497		317,497		317,497	$1,482,469
04-01-82 to 03-31-83			265,459		265,459	
04-01-83 to 03-31-84					301,552	
04-01-84 to 03-31-85						
04-01-85 to 03-31-86						
04-01-86 to 03-31-87						
04-01-87 to 03-31-88						
04-01-88 to 03-31-89						

Plan Year	Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-85		Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-86		Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-87	
04-01-75 to 03-31-76						
04-01-76 to 03-31-77						
04-01-77 to 03-31-78						
04-01-78 to 03-31-79						
04-01-79 to 03-31-80						
04-01-80 to 03-31-81	$292,061					
04-01-81 to 03-31-82	296,801		$296,801			
04-01-82 to 03-31-83	234,253	$1,406,745	234,253		$234,253	
04-01-83 to 03-31-84	280,338		280,338	$1,310,500	280,338	
04-01-84 to 03-31-85	303,292		303,292		303,292	$1,339,675
04-01-85 to 03-31-86			195,816		195,816	
04-01-86 to 03-31-87					325,976	
04-01-87 to 03-31-88						
04-01-88 to 03-31-89						

Plan Year	Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-88		Total Contributions Less Withdrawals Prior to the Plan Year Ending 03-31-89	
04-01-75 to 03-31-76				
04-01-76 to 03-31-77				
04-01-77 to 03-31-78				
04-01-78 to 03-31-79				
04-01-79 to 03-31-80				
04-01-80 to 03-31-81				
04-01-81 to 03-31-82				
04-01-82 to 03-31-83				
04-01-83 to 03-31-84	$144,537			
04-01-84 to 03-31-85	166,068		$166,068	
04-01-85 to 03-31-86	109,925	$770,434	109,925	
04-01-86 to 03-31-87	181,813		181,813	$842,334
04-01-87 to 03-31-88	168,091		168,091	
04-01-88 to 03-31-89			216,437	

Table III

Reallocated Unfunded Vested Benefits

Reallocated due to Deminimus

Employer Name	Withdrawal Date	Initial Amount	03-31-84	03-31-85	03-31-86	03-31-87	03-31-88	03-31-89
Great Lakes Storage	09-30-84	$ 6,858	$ 6,856	$ 6,513	$ 6,170	$ 5,828	$ 5,485	$ 5,142
N. Central Term Ops	06-01-87	199,652	XX	XX	XX	199,652	189,669	179,687

Table I

Calculation of Unfunded Vested Benefits (UVB)

			03-31-81 Unamortized Value	03-31-82 Unamortized Value	03-31-83 Unamortized Value	03-31-84 Unamortized Value	03-31-85 Unamortized Value	03-31-86 Unamortized Value	03-31-87 Unamortized Value	03-31-88 Unamortized Value	03-31-89 Unamortize
03-31-80	Present Value of Vested Benefits	$ 2,569,421									
	Assets	2,693,650									
	03-31-80 UVB	$ -124,229	$ -118,018	$ -111,806	$ -105,595	$ -99,383	$ -93,172	$ -86,960	$ -80,749	$ -74,537	$ -68,32
03-31-81	Present Value of Vested Benefits	$ 3,389,939									
	Assets	3,222,491									
	03-31-81 UVB	$ 167,448									
	Less Unamortized 03-31-80 UVB	-118,018									
	1981 UVB net change value	$ 285,466	XX	$ 271,193	$ 256,919	$ 242,646	$ 228,373	$ 214,100	$ 199,826	$ 185,553	$ 171,28
03-31-82	Present Value of Vested Benefits	$ 3,777,285									
	Assets	3,773,627									
	03-31-82 UVB	$ 3,658									
	Less Unamortized 03-31-80 UVB	-111,806									
	Less Unamortized 03-31-81 UVB net change value	271,193									
	1982 UVB net change value	$ -155,729	XX	XX	$ -147,943	$ -140,156	$ -132,370	$ -124,583	$ -116,797	$ -109,010	$ -101,224

			03-31-81 Unamortized Value	03-31-82 Unamortized Value	03-31-83 Unamortized Value	03-31-84 Unamortized Value	03-31-85 Unamortized Value	03-31-86 Unamortized Value	03-31-87 Unamortized Value	03-31-88 Unamortized Value	03-31-89 Unamortized Value
03-31-83	Present Value of Vested Benefits	$ 4,651,947									
	Assets	4,353,953									

	03-31-83 UVB	$ 297,994									
	Less Unamortized 03-31-80 UVB	-105,595									
	Less Unamortized 03-31-81 UVB net change value	256,919									
	Less Unamortized 03-31-82 UVB net change value	-147,943									

	1983 UVB net change value	$ 294,613	XX	XX	XX	$ 279,882	$ 265,152	$ 250,421	$ 235,690	$ 220,960	$ 206,229
03-31-84	Present Value of Vested Benefits	$ 5,073,625									
	Assets	4,967,565									

	03-31-84 UVB	$ 106,060									
	Less Unamortized 03-31-80 UVB	-99,383									
	Less Unamortized 03-31-81 UVB net change value	242,646									

			03-31-81 Unamortized Value	03-31-82 Unamortized Value	03-31-83 Unamortized Value	03-31-84 Unamortized Value	03-31-85 Unamortized Value	03-31-86 Unamortized Value	03-31-87 Unamortized Value	03-31-88 Unamortized Value	03-31-89 Unamortize Value
	Less Unamortized 03-31-82 UVB net change value	-140,156									
	Less Unamortized 03-31-83 UVB net change value	279,882									

	1984 UVB net change value	$ -176,929	XX	XX	XX	XX	$ -168,083	$ -159,236	$ -150,390	$ -141,543	$ -132,89
03-31-85	Present Value of Vested Benefits	$ 5,869,748									
	Assets	5,657,077									

	03-31-85 UVB	$ 212,671									
	Less Unamortized 03-31-80 UVB	-93,172									
	Less Unamortized 03-31-81 UVB net change value	228,373									
	Less Unamortized 03-31-82 UVB net change value	-132,370									
	Less Unamortized 03-31-83 UVB net change value	265,152									
	Less Unamortized 03-31-84 UVB net change value	-168,083									

	1985 UVB net change value	$ 112,771	XX	XX	XX	XX	XX	$ 107,132	$ 101,494	$ 95,855	$ 90,217

			03-31-81 Unamortized Value	03-31-82 Unamortized Value	03-31-83 Unamortized Value	03-31-84 Unamortized Value	03-31-85 Unamortized Value	03-31-86 Unamortized Value	03-31-87 Unamortized Value	03-31-88 Unamortized Value	03-31-89 Unamortized Value
03-31-86	Present Value of Vested Benefits	$ 5,747,996									
	Assets	5,279,496									
	03-31-86 UVB	$ 468,500									
	Less Unamortized 03-31-80 UVB	-86,960									
	Less Unamortized 03-31-81 UVB net change value	214,100									
	Less Unamortized 03-31-82 UVB net change value	-124,583									
	Less Unamortized 03-31-83 UVB net change value	250,421									
	Less Unamortized 03-31-84 UVB net change value	-159,236									
	Less Unamortized 03-31-85 UVB net change value	107,132									
	1986 UVB net change value	$ 267,626	XX	XX	XX	XX	XX	XX	$ 254,245	$ 240,863	$ 227,482
03-31-87	Present Value of Vested Benefits	$ 7,480,824									

			03-31-81 Unamortized Value	03-31-82 Unamortized Value	03-31-83 Unamortized Value	03-31-84 Unamortized Value	03-31-85 Unamortized Value	03-31-86 Unamortized Value	03-31-87 Unamortized Value	03-31-88 Unamortized Value	03-31-89 Unamortize Value
	Assets	6,951,750									
	03-31-87 UVB	$ 529,074									
	Less Unamortized 03-31-80 UVB	-80,749									
	Less Unamortized 03-31-81 UVB net change value	199,826									
	Less Unamortized 03-31-82 UVB net change value	-116,797									
	Less Unamortized 03-31-83 UVB net change value	235,690									
	Less Unamortized 03-31-84 UVB net change value	-150,390									
	Less Unamortized 03-31-85 UVB net change value	101,494									
	Less Unamortized 03-31-86 UVB net change value	254,245									
	1987 UVB net change value	$ 85,755	XX	XX	XX	XX	XX	XX	XX	$ 81,467	$ 77,180
03-31-88	Present Value of Vested Benefits	$ 8,394,671									

		03-31-81 Unamortized Value	03-31-82 Unamortized Value	03-31-83 Unamortized Value	03-31-84 Unamortized Value	03-31-85 Unamortized Value	03-31-86 Unamortized Value	03-31-87 Unamortized Value	03-31-88 Unamortized Value	03-31-89 Unamortized Value
Assets	7,458,745									
03-31-88 UVB	$ 935,926									
Less Unamortized 03-31-80 UVB	-74,537									
Less Unamortized 03-31-81 UVB net change value	185,553									
Less Unamortized 03-31-82 UVB net change value	-109,010									
Less Unamortized 03-31-83 UVB net change value	220,960									
Less Unamortized 03-31-84 UVB net change value	-141,543									
Less Unamortized 03-31-85 UVB net change value	95,855									
Less Unamortized 03-31-86 UVB net change value	240,863									
Less Unamortized 03-31-87 UVB net change value	81,467									
1988 UVB net change value	$ 436,318	XX	XX	XX	XX	XX	XX	XX	XX	$ 414,502

			03-31-81 Unamortized Value	03-31-82 Unamortized Value	03-31-83 Unamortized Value	03-31-84 Unamortized Value	03-31-85 Unamortized Value	03-31-86 Unamortized Value	03-31-87 Unamortized Value	03-31-88 Unamortized Value	03-31-89 Unamortized Value
03-31-89	Present Value of Vested Benefits	$ 9,088,630									
	Assets	7,923,914									
	03-31-89 UVB	$ 1,164,716									
	Less Unamortized 03-31-80 UVB	-68,326									
	Less Unamortized 03-31-81 UVB net change value	171,280									
	Less Unamortized 03-31-82 UVB net change value	-101,224									
	Less Unamortized 03-31-83 UVB net change value	206,229									
	Less Unamortized 03-31-84 UVB net change value	-132,697									
	Less Unamortized 03-31-85 UVB net change value	90,217									
	Less Unamortized 03-31-86 UVB net change value	227,482									

		03-31-81 Unamortized Value	03-31-82 Unamortized Value	03-31-83 Unamortized Value	03-31-84 Unamortized Value	03-31-85 Unamortized Value	03-31-86 Unamortized Value	03-31-87 Unamortized Value	03-31-88 Unamortized Value	03-31-89 Unamortized Value
Less Unamortized 03-31-87 UVB net change value	77,180									
Less Unamortized 03-31-88 UVB net change value	414,502									
1989 UVB net change value	$ 280,073	XX	XX	XX	XX	XX	XX	XX	XX	$ 280,073