ACTUARIAL VALUATION
JUNE 30, 1977

## HUCGINS <br> \&COMPANYINC

## CONSULTING ACTUARIES•EMPLOYEE BENEFIT PLAN CONSUMA

PHILADELPHIA

December 15, 1977

The Retirement Board
School Employees Retirement System of Ohio 88 East Broad Street Columbus, Ohio 43215

Gentlemen:

We are pleased to present herein the report on our actuarial valuation of the School Employees Retirement System of Ohio as of June 30, 1977.

We wish to take this opportunity of expressing our appreciation for the very fine cooperation which we received from Mr. Brennan, Mr. Wilson and the other members of the staff.

Respectfully submitted,
HUGGINS \& COMPANY, INC.

By


ROBERT H. SMITH, F.S.A.
Member American Academy of Actuaries

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## PART I - ACIUARIAL BALANCE SHEET

Using the various monetary tables developed in connection with the 1975 Investigation and the data prepared by the staff and submitted to us, a complete valuation of the system was made as of June 30 , 1977 in which the present and prospective assets and liabilities were calculated, based on legislation enacted by that date. The results are shown in the actuarial balance sheet on the following page.

It will be noted that the assets in the balance sheet consist of not only the present assets but also future assets represented by prospective contributions and future State appropriations to fund House Bill 284. The various fund balances included in the total present assets of $\$ 707,434,278$ obtained from the financial reports of the Board are shown in the balance sheet and the physical distribution of the present assets according to cash, investments, accrual items and furniture and equipment is shown in the footnote. The present value of future contributions of the present members and the present value of future employer contributions is shown in a combined total of $\$ 1,120,202,212$. In Part II we discuss the proper allocation of this total between the normal and deficiency contributions.

On the liability side of the balance sheet the major components of the total liability of $\$ 1,836,616,085$ are the liability for the benefits currently payable on account of present retirants and beneficiaries amounting to $\$ 535,289,890$ and the liability for present active and inactive members amounting to $\$ 1,301,198,486$. In addition, there is a minor reserve of $\$ 127,709$. An analysis of the various liability items and a comparison of liabilities with the corresponding fund balances follow the balance sheet, beginning on page 3 .

| nt value of benefits payable on unt of present retirants and benearies from the - |  |
| :---: | :---: |
| ity and Pension Reserve Fund: <br> perannuation retirants ...... \$ 360,787,463 |  |
| neficiaries under option | 13,959,257 |
| sability retirants | 37,663,461 |
| ath Benefit | 5,592,748 |
| Total Annuity \& Pension |  |
| Reserve Fund | 418,002,929 |
| alth Care Fund | 66,527,882 |
| rvivors' Benefit Fund | 50,759,079 |
| Total retirants and beneficiaries .... |  |


$\$ 707,434,278^{*}$
$\begin{array}{r}127,709 \\ \hline\end{array}$
148,232,679

15,917, 826
46,191,118 277,292,903
$\$ 219,672,043$
actuartal balance sheet showing present and prospective assets and liabilities
ASSETS
Present Assets:
Employees' Savings Fund
Annuity and Pension
Reserve Fund ......
Survivors' Benefit Fund
Health Care Fund
Employers' Trust Fund
General Fixed Assets
Total present assets
Future assets:
Present value of future
state appropriations
to finance House Bill
$565^{\prime} 6 L 6^{\prime} 8$
1,120,202,212
$\$ 1,129,181,807$
$\$ 1,836,616,085$

204,628
$680,825,608 * *$
os
** Market Value - $\$ 642,622,203$.

A breakdown of the $\$ 535,289,890$ of liability related to present retirants and beneficiaries according to the type of benefit payment is shown in the following table. The costs of providing the Death Benefit and the Health Care Benefit are shown separately.

|  | $\frac{\text { Liabili }}{\text { Total }}$ | for Retira Death Benefit | and BenefHealth <br> Care${ }^{\text {a }}$ ( | $\frac{\text { iaries }}{\text { Total }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Superannuation retirants | \$360,787,463. | \$5,193,150 | \$50,406,755 | \$416,387,368 |
| Beneficiaries receiving optional allowances .. | 13,959,257 | - | 2,238,287 | 16,197,544 |
| Disability retirants | 37,663,461 | 399,598 | 6,069,166 | 44,132,225 |
| Sub-total | \$412, 410, 181 | \$5,592,748 | \$58,714,208 | \$476,717,137 |
| Survivors' Benefit Fund beneficiaries ........ | 50,759,079 | - | 7,813,674 | 58,572,753 |
| Total Liability | \$463,169,260 | \$5,592,748 | \$66,527,882 | \$535,289,890 |
| Included in the $\$ 412,410,181$ of liability for present retirants and beneficiaries |  |  |  |  |
| is $\$ 14,333,670$ related to past cost-of-living increases. Included in the |  |  |  |  |
| \$50,759,079 of liability for present survivors is \$1, 723,675 related to past cost- |  |  |  |  |
| of-living increases. The Health Care liability includes the cost of Medicare B |  |  |  |  |
| reimbursement. It is informative to compare the above liabilities with the cor- |  |  |  |  |
| responding fund balances shown in the actuarial balance sheet. The liabilities |  |  |  |  |
| charged against the Annuity and Pension Reserve Fund result from the allowances |  |  |  |  |
| payable to superannuation and disability retirants, the optional allowances |  |  |  |  |
| payable to surviving beneficiaries of deceased retirants and retirant death |  |  |  |  |
| benefits. The total of these liabilities is $\$ 418,002,929$ related to benefits |  |  |  |  |
| to be paid from the Annuity and Pension Reserve Fund, which compares with |  |  |  |  |
| \$286,272,498 (the total of the A \& PRF balance of \$277,292,903 and the antici- |  |  |  |  |
| pated House Bill 284 state appropriations), leading to a deficiency of |  |  |  |  |
| \$131,730,431. The correspo | ing deficiency | a year earl | was \$146,4 | ,057 |

so there was a decrease in this deficiency during the year of $\$ 14,697,626$. It will also be noted that the Survivors' Benefit Fund had a fund balance of $\$ 46,191,118$ as compared with the liability of $\$ 50,759,079$ indicating a deficiency of $\$ 4,567,961$ in that Fund compared with a deficiency of $\$ 7,206,766$ a year earlier, a decrease of $\$ 2,638,805$.

The total deficiency in these two Funds is $\$ 136,298,392$.
A similar analysis of the Health Care Fund is not possible, since that fund covers liabilities of the active members as well as the retirants and survivors.

The status of that Fund is discussed in Part II of this report.
The number of retirants and beneficiaries and their annual allowances as of June 30, 1977, corresponding to the liabilities shown on the previous page, are shown in the following table:

| CATEGORY | ANNUAL ALLOWANCES AS OF JUNE 30, 1977 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | NUMBER | BASIC | $\mathrm{C}-\mathrm{O}-\mathrm{I}$ <br> INCREASES | TOTAL |
| Superannuation retirants .............. | 18,653 | \$32,065,957 | \$1,527,060 | \$33,593,017 |
| Beneficiaries receiving optional allowances ... | 1,150 | 1,684,734 | 111,239 | 1,795,973 |
| Disability retirants | 1,530 | 3,254,262 | 109,986 | 3,364,248 |
| Sub-Total | 21,333 | \$37,004,953 | \$1,748,285 | \$38,753,238 |
| Survivors' Benefit Fund beneficiaries | 2,414 | 4,397,969 | 201,317 | 4,599,286 |
| Total Allowances on June 30, 1977 | 23,747 | \$ $41,402,922$ | \$1,949,602 | \$43,352,524 |

categories are shown in schedules at the end of this report, as follows:

## SCHEDULE

    Superannuation retirants - men ............... A
    Superannuation retirants - women ........... B
    Beneficiaries receiving optional allowances C
    Disability retirants - men and women ....... D
    Survivor beneficiaries:
        Receiving allowances .................... E
        Entitled to deferred allowances ....... F
    Liability related to present active and inactive members
$\$ 1,301,198,486$

The $\$ 1,301,198,486$ of liability related to the active and inactive members of the system compares with $\$ 1,201,678,257$ one year earlier and is based on the data summarized briefly in the table below:
Men Women Total

Active members:
Number
27,815
68,325
96,140
Salaries ......... ........... $\$ 191,428,973$ \$245,545,915 \$436,974,888
Present value of $1 \%$ of future salaries ............. $17,932,202$ 27,772,412 45,704,614

Number of inactive members:
(a) Eligible for pensions
2,345
2,987
5,332
(b) Eligible for refunds only. $23,557 \quad 39,605 \quad 63,162$

Age distributions of the members are shown at the end of this report in
Schedule $G$ for active members and in Schedule $H$ for inactive members.
Reserve for contingencies; miscellaneous . . . . . . . . . . . $\$$ 127.709
This is the Investment in General Fixed Assets.
Total liabilities
$\$ 1,836,616,085$
The total liability represents the present value of all obligations of the System for all future benefits, both those related to service prior to June 30, 1977 and those that will be related to subsequent service, based on legislation enacted by that date, summarized in Schedule $I$.

The actuarial assumptions used in this valuation are summarized in Schedule $J$ at the end of this report.

## PART II - RATES OF CONTRIBUTIONS

In connection with the 1977 valuation, a New Entrant study was made (based on members with less than two years of service) in order to determine the normal contribution rate. The results of that study, adjusted for changes in benefits and assumed future interest, indicate a total normal rate of $15.96 \%$ of salary, with the breakdown shown in the table below:

$$
\begin{aligned}
& \text { Superannuation retirement benefit .......... 9.28\% } \\
& \text { Disability retirement benefit .............. . . } 66 \\
& \text { Survivor benefit ................................ } 1.15 \\
& \text { Refund of contributions ....................... } 3.12 \\
& \text { Health care .................................... } 1.62 \\
& \text { Retirant death benefit ...................... . . . } 13 \\
& \text { Total normal contribution rate ............ } 15.96 \%
\end{aligned}
$$

This total normal cost of $15.96 \%$ of payroll is slightly higher than the corresponding rate of $15.87 \%$ determined in the valuation as of June $30,1976$. The age distribution of the new entrants used in our study appears in Schedule $G(2)$. This schedule shows the number and total salaries of the new entrants separately for men and women. In the following summary we show the totals from that schedule along with the total present value of $1 \%$ of their future salaries.

|  | Men | Women | Total |
| :---: | ---: | ---: | ---: | ---: |
|  |  |  |  |
| Number ....... | 7,817 | 18,003 | 25,820 |
| Salaries ....... $\$ 21,196,845$ | $\$ 24,723,363$ | $\$ 45,920,208$ |  |
| Present Value of |  |  |  |
| 1\% of Future |  |  |  |
| Salaries ..... | $2,289,080$ | $3,418,603$ | $5,707,683$ |
| Average Salary ... | 2,712 | 1,373 | 1,778 |
| Average Age ..... | 34.7 | 37.2 | 36.5 |

In our 1976 valuation, the average salary of the new entrants was $\$ 2,603$ for men and $\$ 1,327$ for women, so the average increased slightly for both men and women this year. Last year the average age at entry for men was 34.5 years and for women, 37.0 years so these average ages both increased slightly this year.

In order to determine what portion of the future asset item of $\$ 1,120,202,212$ will be funded by the total normal contribution rate of $15.96 \%$ of salary, we have determined that the present value of $1 \%$ of the present members' future salaries is $\$ 45,704,614$. The present value of future normal contributions is, therefore, 15.96 times $\$ 45,704,614$, or $\$ 729,445,639$. This leaves a deficiency of $\$ 390,756,573$ to be funded by the remainder of the future contributions. The corresponding figure a year earlier was $\$ 353,122,096$, which means that the total system deficiency increased by $\$ 37,634,477$. In order to analyze the deficiency funding, let us start with the present total contribution rate of $20.50 \%$ of payroll, of which the member pays $8.00 \%$ and the State $12.50 \%$. If we deduct the normal contribution rate of $15.96 \%$, we are left with a balance of $4.54 \%$ available for funding the deficiency. The question to be answered is over how long a period will this rate of $4.54 \%$ be required in order to fund the deficiency of $\$ 390,756,573$. Before making this calculation, we should be aware of the consistently large increases in total payroll of the members in recent years, which have been as shown below.

| Year Ending June 30 | Total Payroll of Members | Percentage Increase |
| :---: | :---: | :---: |
| 1968 | \$199,733,000 | 13.2 |
| 1969 | 220,278,000 | 10.3 |
| 1970 | 247,774,000 | 12.5 |
| 1971 | 276,782,000 | 11.7 |
| 1972 | 305,167,000 | 10.3 |
| 1973 | 323,600,000 | 6.0 |
| 1974 | 342,400,000 | 5.8 |
| 1975 | 382,000,000 | 11.6 |
| 1976 | 416,600,000 | 9.1 |
| 1977 | 444,500,000 | 6.7 |

These increases, which have averaged almost $10 \%$ annually during the past ten years, have generally reflected both the effect of inflation on individual compensation and an increase in the membership. This year, however, there was only a $0.6 \%$ increase in the number of active members.

We have made our calculations on three different bases at substantially lower rates than those listed above, as follows:

1. Assuming that payrolls will continue at the 1976 1977 level of approximately $\$ 444,500,000$.
2. Assuming that payrolls will increase in the future at the rate of $3 \%$ per annum, compounded annually.
3. Assuming that payrolls will increase in the future at the rate of $5 \%$ per annum, compounded annually.

Our calculations indicate that, for the present total contribution rate of $20.50 \%$ of payroll, of which $15.96 \%$ is on account of the normal cost and $4.54 \%$ is on account of the deficiency, the funding periods on the three different assumptions as to future payrolls are as follows:

| No | 3\% Annual | 5\% Annual |
| :---: | :---: | :---: |
| Increase | Increase | Increase |
| Over 50 years | 25.5 yea | 20.3 |

These calculations indicate that the total employer rate of $12.50 \%$ of payroll, along with a member contribution rate of $8.0 \%$, will fund the normal cost each year and complete the funding of the deficiency in periods varying from 20.3 years to over 50 years, depending on the assumption as to future payroll increases.

In connection with this valuation, we made an actuarial valuation of the Health Care Benefits. Based on the present benefit provisions including Medicare " B " reimbursement, we have determined that the normal contribution rate for Health Care Benefits should be $1.62 \%$ of payroll, and this figure is included in our total normal contribution rate of $15.96 \%$.

We have also determined that the liabilities for these benefits are as follows:

## Liability 6/30/77

Retirants and other beneficiaries .......
Active and inactive members ..............
$\$ 66,527,882$

## Total liabilities

141,198,628
\$207,726,510
Health Care Fund balance
$15,917,826$
Unfunded liability for Health Care ......
Present value of $1.62 \%$ future Normal Contributions 74,041,475

Deficiency for Health Care benefits ..... \$117,767,209

When this deficiency of $\$ 117,767,209$ for future Health Care benefits is funded in the same manner as the total deficiency (over a period of 25.5 years assuming $3 \%$ annual increases in total payroll) we arrive at a deficiency contribution rate for Health Care of $1.37 \%$ of payroll. To summarize, we find that the total employer cost for Health Care benefits included in the overall employer rate of $12.50 \%$, is as follows:

Normal contribution rate for Health Care ......... 1.62\%
Deficiency contribution rate ...................... 1.37
Total employer rate for Health Care ....... 2.99\%
Last year the total employer rate for Health Care was $3.14 \%$.
When the Health Care Fund was established as of January 1, 1974, the Board was crediting $0.75 \%$ of payroll to it each month, charging it with premiums paid to Aetna and crediting the premiums paid by the beneficiaries. Subsequently, this Fund was established on an actuarial basis and credited with the total rate determined from time to time. This rate is $2.99 \%$ as shown above and is subject to change upon subsequent valuation. The Fund should also be credited with interest at $5 \%$ annually in the same manner as the other funds.

In our valuation of future Health Care benefits, we have taken into account a number of factors, as follows:

1. We have assumed that active members becoming covered in the future will, on the average, be eligible for Medicare benefits to the extent of $90 \%$ of the males and $85 \%$ of the females.
2. We have arrived at a composite monthly premium rate of $\$ 26.25$ taking into account a number of variables such as sex, age at retirement, percentage of members electing joint pensions and percentage not eligible for Medicare benefits.
3. By expressing $\$ 26.25$ as a percent of the average monthly superannuation pension for new retirees (we used the figure \$179.78 applicable for retirees from July 1976 through June 1977) we calculated liabilities as $14.60 \%$ of the liabilities for superannuation, disability and survivor benefit. Since our liability for superannuation allows for future increases in the average pension due to salary increases prior to retirement and cost-of-living increases after retirement, our method provides a built-in adjustment for future premium increases.

This valuation reveals a continuing expansion of the retirement system due to the continued increases in payroll.

Using the results for the deficiency funding period based on assumed $3 \%$ annual increases in total payroll of covered members in the future, we find that the funding period for the deficiency remained at the 25.5 years determined in the previous valuation.

The total increase in the deficiency during this period was $\$ 37,634,477$, broken down as follows:

Increase

| Annuity and Pension Reserve Fund | \$(-)14,697,626 |
| :---: | :---: |
| Survivor Benefit Fund | $(-) 2,638,805$ |
| Employers' Trust Fund | 54,970,908 |
| Total | \$ 37,634,477 |

A major portion of the decrease in the deficiency in the Annuity and Pension Reserve Fund and the Survivor Benefit Fund and the increase in the Employers' Trust Fund resulted from the transfer of funds from the Employers' Trust Fund to the other two Funds to compensate for insufficient transfers made in prior years.

As a result the balance in the Employers' Trust Fund has decreased in the past year from $\$ 177,447,247$, to $\$ 148,232,679$ and is approximately $67 \%$ of the balance of $\$ 219,672,043$ in the Employees' Savings Fund. This means that, on the average, the System has a reserve of $\$ 1,461$ in addition to the employees' personal account, for each of the 101,472 out of the 164,634 active and inactive members entitled to pensions in the future. This average was $\$ 1,757$ as of June 30, 1976. It is important, therefore, to build up this reserve. Consequently, we recommend that, unless changes are made by 1977-1978 legislation, the contribution rates be continued at present levels, namely:

Rate of member contribution ........ 8.00\%
Rate of employer contribution ..... 12.50
Total rate of contribution ....... 20.50\%

| Age | Straight Life |  | Options |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Annual Allowance | Number | $\begin{aligned} & \text { Annual } \\ & \text { Allowance } \end{aligned}$ | Number | Annual Allowance |
| 45 | 1 | \$ 6,355 | - | \$ - | 1 | \$ 6,355 |
| 51 | - | - | 3 | 21,309 | 3 | 21,309 |
| 52 | - | - | 2 | 8,153 | 2 | 8,153 |
| 53 | - | - | 3 | 31,214 | 3 | 31,214 |
| 54 | - | - | 4 | 29,816 | 4 | 29,816 |
| 55 | 2 | 10,952 | 6 | 40,414 | 8 | 51,366 |
| 56 | 5 | 11,797 | 8 | 40,366 | 13 | 52,163 |
| 57 | 6 | 21,892 | 8 | 38,099 | 14 | 59,991 |
| 58 | 8 | 26,360 | 12 | 68,083 | 20 | 94,443 |
| 59 | 7 | 35,129 | 18 | 97,146 | 25 | 132,275 |
| 60 | 13 | 61,606 | 34 | 137,067 | 47 | 198,673 |
| 61 | 47 | 86,702 | 50 | 156,376 | 97 | 243,078 |
| 62 | 63 | 129,668 | 90 | 197,329 | 153 | 326,997 |
| 63 | 119 | 246,035 | 133 | 269,384 | 252 | 515,419 |
| 64 | 122 | 245,708 | 160 | 383,304 | 282 | 629,012 |
| 65 | 180 | 363,614 | 210 | 441,938 | 390 | 805,552 |
| 66 | 209 | 412,349 | 229 | 521,127 | 438 | 933,476 |
| 67 | 266 | 520,018 | 237 | 530,537 | 503 | 1,050,555 |
| 68 | 244 | 500,920 | 255 | 566,798 | 499 | 1,067,718 |
| 69 | 256 | 486,687 | 239 | 577,195 | 495 | 1,063,882 |
| 70 | 222 | 426,482 | 224 | 519,678 | 446 | 946,160 |
| 71 | 285 | 583,244 | 210 | 493,453 | 495 | 1,076,697 |
| 72 | 229 | 425,491 | 199 | 423,645 | 428 | 849,136 |
| 73 | 234 | 439,776 | 155 | 299,024 | 389 | 738,800 |
| 74 | 261 | 463,590 | 142 | 345,333 | 403 | 808,923 |
| 75 | 186 | 364,984 | 122 | 242,995 | 308 | 607,979 |
| 76 | 168 | 287,953 | 89 | 172,623 | 257 | 460,576 |
| 77 | 147 | 284,599 | 81 | 215,627 | 228 | 500,226 |
| 78 | 161 | 318,275 | 76 | 161,801 | 237 | 480,076 |
| 79 | 154 | 306,606 | 57 | 121,201 | 211 | 427,807 |
| 80 | 132 | 316,035 | 54 | 115,526 | 186 | 431,561 |
| 81 | 122 | 231,546 | 37 | 88,097 | 159 | 319,643 |
| 82 | 106 | 239,588 | 44 | 96,860 | 150 | 336,448 |
| 83 | 111 | 240,445 | 26 | 59,799 | 137. | 300, 244 |
| 84 | 100 | 211,987 | 16 | 34,734 | 116 | 246,721 |
| 85 | 96 | 211,694 | 21 | 40,067 | 117 | 251,761 |
| 86 | 61 | 144,567 | 18 | 34,256 | 79 | 178,823 |
| 87 | 65 | 146,556 | 15 | 37,594 | 80 | 184,150 |
| 88 | 41 | 93,979 | 9 | 22,177 | 50 | 116,156 |
| 89 | 36 | 83,197 | 11 | 18,495 | 47 | 101,692 |
| 90 | 33 | 63,515 | 10 | 22,916 | 43 | 86,431 |
| 91 | 25 | 60,863 | 11 | 22,707 | 36 | 83,570 |
| 92 | 18 | 33,651 | - | - | 18 | 33,651 |
| 93 | 10 | 19,313 | 3 | 4,991 | 13 | 24,304 |
| 94 | 6 | 14,411 | 1 | 4,022 | 7 | 18,433 |
| 95 | 2 | 4,913 | - | - | 2 | 4,913 |
| 96 | 2 | 4,926 | - | - | 2 | 4,926 |
| 97 | 2 | 6,995 | - | - | 2 | 6,995 |
| 98 | 1 | 2,041 | - | - | 1 | 2,041 |
| 99 | - | - | - | - | - | - |
| 100 | 2 | 6,448 | - | - | 2 | 6,448 |
| 102 | - | 6, 4 | 2 | 2,415 | 2 | 2,415 |
| Total | 4,566 | \$9,203,462 | 3,334 | \$7,755,691 | 7,900 | \$16,959,153 |

## SUPERANNUATION RETIRANTS - JUNE 30, 1977 - WOMEN

| Age | Straight Life |  | Options |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Annual Allowance | Number | $\begin{aligned} & \text { Annual } \\ & \text { Allowance } \end{aligned}$ | Number | Annual Allowance |
| 46 | - | \$ | 1 | \$ 5,017 | 1 | \$ 5,017 |
| 49 | 1 | 3,521 | - | - | 1 | 3,521 |
| 50 | 2 | 19,048 | - | - | 2 | 19,048 |
| 51 | - | - | 1 | 7,235 | 1 | 7,235 |
| 52 | 1 | 8,732 | 1 | 7,338 | 2 | 16,070 |
| 53 | 4 | 14,415 | - | - | 4 | 14,415 |
| 54 | 2 | 11,951 | 1 | 5,932 | 3 | 17,883 |
| 55 | 1 | 2,631 | 2 | 12,504 | 3 | 15,135 |
| 56 | 2 | 10,471 | - | - | 2 | 10,471 |
| 57 | 10 | 46,166 | 4 | 16,100 | 14 | 62,266 |
| 58 | 11 | 51,671 | 4 | 14,354 | 15 | 66,025 |
| 59 | 16 | 64,866 | 8 | 23,665 | 24 | 88,531 |
| 60 | 67 | 129,075 | 35 | 49,915 | 102 | 178,990 |
| 61 | 276 | 374,017 | 87 | 131,819 | 363 | 505,836 |
| 62 | 351 | 499,750 | 100 | 122,917 | 451 | 622,667 |
| 63 | 456 | 580,382 | 134 | 199,571 | 590 | 779,953 |
| 64 | 494 | 635,720 | 133 | 149,340 | 627 | 785,060 |
| 65 | 466 | 599,759 | 150 | 167,671 | 616 | 767,430 |
| 66 | 497 | 689,969 | 147 | 180,915 | 644 | 870,884 |
| 67 | 585 | 885,458 | 150 | 195,719 | 735 | 1,081,177 |
| 68 | 539 | 771,556 | 109 | 141,232 | 648 | 912,788 |
| 69 | 535 | 756,189 | 90 | 122,116 | 625 | 878,305 |
| 70 | 480 | 748,845 | 77 | 105,257 | 557 | 854,102 |
| 71 | 507 | 794,373 | 56 | 111,111 | 563 | 905,484 |
| 72 | 448 | 751,677 | 42 | 62,217 | 490 | 813,894 |
| 73 | 409 | 652,617 | 31 | 72,822 | 440 | 725,439 |
| 74 | 389 | 596,217 | 19 | 28,208 | 408 | 624,425 |
| 75 | 346 | 553,251 | 31 | 59,267 | 377 | 612,518 |
| 76 | 269 | 429,510 | 20 | 33,495 | 289 | 463,005 |
| 77 | 273 | 462,999 | 16 | 31,039 | 289 | 494,038 |
| 78 | 223 | 383,059 | 12 | 18,967 | 235 | 402,026 |
| 79 | 228 | 398,452 | 4 | 3,955 | 232 | 402,407 |
| 80 | 209 | 368,365 | 5 | 8,654 | 214 | 377,019 |
| 81 | 187 | 363,189 | 5 | 8,806 | 192 | 371,995 |
| 82 | 180 | 297,926 | 6 | 10,227 | 186 | 308,153 |
| 83 | 172 | 283,591 | 3 | 5,078 | 175 | 288,669 |
| 84 | 135 | 245,913 | 1 | 1,247 | 136 | 247,160 |
| 85 | 118 | 234,585 | 5 | 6,587 | 123 | 241,172 |
| 86 | 92 | 195,725 | 5 | 9,673 | 97 | 205,398 |
| 87 | 57 | 117,793 | 2 | 2,867 | 59 | 120,660 |
| 88 | 54 | 104,218 | 1 | 1,166 | 55 | 105,384 |
| 89 | 52 | 99,094 | 1 | 3,776 | 53 | 102,870 |
| 90 | 32 | 72,493 |  | 3,276 | 32 | 72,493 |
| 91 | 29 | 66,238 | 1 | 3,378 | 30 | 69,616 |
| 92 | 18 | 44,941 | - | - | 18 | 44,941 |
| 93 | 7 | 24,179 | 1 | 1,326 | 8 | 25,505 |
| 94 | 8 | 17,797 | - | - | 8 | 17,797 |
| 95 | 6 | 15,769 | - | - | 6 | 15,769 |
| 96 | 4 | 7,588 | - | - | 4 | 7,588 |
| 97 | 2 | 3,175 | - | - | 2 | 3,175 |
| 98 | 2 | 2,455 | - | - | 2 | 2,455 |
| Total | 9,252 | \$14,491,381 | 1,501 | \$2,142,483 | 10.753 | \$16,633,864 |


| Age | Men |  | Women |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | $\begin{gathered} \text { Annual } \\ \text { Allowance } \end{gathered}$ | Number | $\begin{aligned} & \text { Annual } \\ & \text { Allowance } \end{aligned}$ |
| 39 | - | \$ | 1 | \$ 303 |
| 40 | - | - | - | - |
| 41 | - | - | - | - |
| 42 | - | - | - | - |
| 43 | - | - | - | - |
| 44 | - | - | - | - |
| 45 | - | - | - |  |
| 46 | - | - | 1 | 974 |
| 47 | - | - | 1 | 1,201 |
| 48 | - | - | - | - |
| 49 | - | - | - | - |
| 50 | - | - | - | - |
| 51 | - | - | - | - |
| 52 | - | - | - | - |
| 53 | - | - | 1 | 678 |
| 54 | - | - | 2 | 2,323 |
| 55 | - | - | 3 | 7,801 |
| 56 | - | - | - | - |
| 57 | 1 | 1,280 | - | - |
| 58 | - | - | 3 | 3,196 |
| 59 | - | - | 2 | 2,817 |
| 60 | - | - | 3 | 3,190 |
| 61 | 2 | 2,502 | 10 | 10,946 |
| 62 | 3 | 3,471 | 4 | 10,949 |
| 63 | 7 | 13,471 | 3 | 3,323 |
| 64 | 7 | 8,852 | 12 | 16,458 |
| 65 | 11 | 15,331 | 11 | 9,552 |
| 66 | 12 | 17,405 | 15 | 25,359 |
| 67 | 25 | 20,128 | 14 | 15,903 |
| 68 | 16 | 23,346 | 19 | 20,038 |
| 69 | 23 | 35,633 | 18 | 30,335 |
| 70 | 25 | 28,174 | 14 | 18,874 |
| 71 | 29 | 32,691 | 26 | 39,101 |
| 72 | 26 | 47,922 | 26 | 37,815 |
| 73 | 20 | 29,351 | 24 | 34,522 |
| 74 | 22 | 28,490 | 38 | 49,682 |
| 75 | 21 | 31,100 | 32 | 43,528 |
| 76 | 10 | 14,514 | 34 | 60,595 |
| 77 | 23 | 29,789 |  | 8,391 |
| 78 | 19 | 31,399 | 25 | 42,501 |
| 79 | 12 | 19,730 | 35 | 33,075 |
| 80 | 12 | 24,309 | 33 | 57,970 |
| 81 | 9 | 12,690 | 27 | 52,264 |
| 82 | 14 | 18,363 | 35 | 61,324 |
| 83 | 6 | 8,279 | 21 | 39,569 |
| 84 | 8 | 10,591 | 25 | 43,669 |
| 85 | 2 | 1,686 | 22 | 37,494 |
| 86 | 4 | 5,065 | 17 | 31,002 |
| 87 | 3 | 4,103 | 15 | 29,011 |
| 88 | 6 | 6,593 | 8 | 12,653 |
| 89 | 6 | 11,759 | 11 | 19,635 |
| 90 | 3 | 3,363 | 12 | 25,260 |
| 91 | 4 | 7,408 | 6 | 17,148 |
| 92 | 1 | 922 | 7 | 15,310 |
| 93 | 4 | 8,576 | 3 | 4,369 |
| 94 | 1 | 1,306 | 1 | 1,351 |
| 95 | 1 | 1,491 | 1 | 3,049 |
| 96 | - | - | 2 | 4,635 |
| 97 | 1 | 4,143 | $\underline{1}$ | 1,001 |
| Total | 399 | \$563.725 | 530 | 31, 013,344 |

Optional Term Certain Pensions
Year of

Expiry | Annual |
| :---: |
| Aumber |

$76 \quad 1 \quad \$ 1,243$

| 17 | 6 | 9,938 |
| :---: | :---: | :---: |
| 78 | 13 | 27,072 |
| 79 | 13 | 30,742 |

80
81 . 11 30,326
82
8
,

| 85 | 7 | 11,760 |
| :---: | :---: | :---: |
| 87 | 3 | 3,833 |
| 89 | 1 | 758 |
| 90 | 2 | 1,654 |
| 91 | 3 | 9,382 |
|  | 121 | \$216,903 |


| Age | M EN |  | W OMEN |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Annual <br> Allowance | Number | Annual <br> Allowance |
| 32 | - | \$ - | 1 | \$ 2,132 |
| 33 | 1 | 5,912 | - |  |
| 34 | 1 | 910 | 1 | 3,957 |
| 35 | 3 | 10,910 | - | - |
| 36 | 1 | 2,387 | 1 | 4,321 |
| 37 | - | - | 1 | 3,325 |
| 38 | 4 | 13,349 | 2 | 5,944 |
| 39 | 2 | 10,066 | 3 | 10,230 |
| 40 | 5 | 19,604 | 1 | 2,602 |
| 41 | 2 | 5,510 | 9 | 21,499 |
| 42 | 3 | 10,659 | 4 | 8,072 |
| 43 | 5 | 30,091 | 5 | 10,834 |
| 44 | 5 | 31,258 | 7 | 18,051 |
| 45 | 7 | 32,712 | 12 | 29,041 |
| 46 | 7 | 31,025 | 11 | 26,270 |
| 47 | 8 | 19,446 | 9 | 16,015 |
| 48 | 17 | 60,568 | 10 | 20,495 |
| 49 | 11 | 35,582 | 21 | 37,968 |
| 50 | 20 | 52,141 | 10 | 19,261 |
| 51 | 20 | 59,804 | 28 | 52,936 |
| 52 | 21 | 73,192 | 21 | 38,247 |
| 53 | 26 | 81,035 | 23 | 43,183 |
| 54 | 37 | 146,952 | 31 | 63,269 |
| 55 | 34 | 108,555 | 33 | 62,052 |
| 56 | 40 | 89,612 | 26 | 43,591 |
| 57 | 49 | 117,639 | 53 | 98,274 |
| 58 | 46 | 137,426 | 35 | 56,205 |
| 59 | 37 | 112,190 | 58 | 90,005 |
| 60 | 49 | 128,144 | 66 | 105,246 |
| 61 | 50 | 106,455 | 51 | 86,615 |
| 62 | 41 | 87,516 | 48 | 67,261 |
| 63 | 41 | 81,512 | 33 | 54,486 |
| 64 | 20 | 34,731 | 29 | 48,984 |
| 65 | 31 | 50,918 | 23 | 39,497 |
| 66 | 21 | 35,466 | 16 | 24,513 |
| 67 | 15 | 26,246 | 15 | 23,981 |
| 68 | 12 | 26,611 | 14 | 24,225 |
| 69 | 14 | 26,468 | 19 | 28,335 |
| 70 | 9 | 15,026 | 9 | 13,059 |
| 71 | 9 | 16,564 | 12 | 20,959 |
| 72 | 4 | 10,349 | 7 | 12,824 |
| 73 | 6 | 10,921 | 7 | 11,522 |
| 74 | 6 | 10,384 | 6 | 10,544 |
| 75 | 2 | 3,565 | 2 | 2,710 |
| 76 | 2 | 2,916 | - | - |
| 77 | 1 | 1,662 | 3 | 4,166 |
| 78 | 1 | 2,080 | 2 | 3,311 |
| 79 |  | - | 1 | 1,298 |
| 80 | , | - | - | - |
| 81 | 1 | 2,417 | 2 | 8,618 |
| 82 | - | - | 2 | 5,829 |
| Total | 747 | \$1,978,486 | 783 | \$1,385,762 |


| OPTION 1 OR DEPENOENT PARENT OR SPOUSE WITH NO ELIGIBLE CHILD |  |  | SPOUSE WITH |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number | Annual Allowance | Number | Annual dllowance |
| 18 | 1 | \$ 1,799 | - | \$ |
| 32 | 1 | 2,889 | - | - |
| 38 | - | - | 1. | 2,832 |
| 39 | - | - | 2 | 5,664 |
| 41 | 1 | 2,277 | - | - |
| 43 | - | - | 1 | 2,832 |
| 44 | - | - | 4 | 10,960 |
| 45 | - | - | 2 | 5,664 |
| 46 | - | - | - 3 | 7,296 |
| 47 | 1 | 2,277 | 5 | 12,837 |
| 48 | 1 | 1,490 | 6 | 18,048 |
| 49 | - | - | 1 | 2,232 |
| 50 | 2 | 1,749 | 7 | 17,328 |
| 51 | 1 | 1,272 | 3 | 6,307 |
| 52 | 2 | 2,778 | 3 | 7,941 |
| 53 | 4 | 5,144 | 3 | 6,256 |
| 54 | 2 | 2,569 | 5 | 11,102 |
| 55 | 1 | 982 | 7 | 14,029 |
| 56 | 2 | 2,894 | 5 | 11,892 |
| 57 | 1 | 1,638 | 4 | 9,017 |
| 58 | 1 | 1,272 | 2 | 4,275 |
| 59 | 3 | 5,137 | 6 | 12,724 |
| 60 | 5 | 7,594 | 5 | 11,158 |
| 61 | 8 | 14,660 | 3 | 7,398 |
| 62 | 5 | 6,946 | 1 | 2,232 |
| 63 | 6 | 7,873 | - | - |
| 64 | 8 | 9,205 | 1 | 2,277 |
| 65 | 10 | 13,859 | 1 | 2,889 |
| 66 | 9 | 11,452 | 1 | 2,277 |
| 67 | 13 | 16,150 | - | - |
| 68 | 8 | 9,585 | 1 | 2,232 |
| 69 | 4 | 7,528 | - | , |
| 70 | 13 | 19,710 | 1 | 2,832 |
| 71 | 13 | 17,663 | - | - |
| 72 | 11 | 12,968 | - | - |
| 73 | 3 | 5,890 | - | - |
| 74 | 7 | 10,014 | - | - |
| 75 |  | 12,263 | - | - |
| 76 | 7 | 10,052 | - | - |
| 77 | 4 | 4,486 | - | - |
| 78 | 5 | 6,940 | - | - |
| 79 | 5 | 10,314 | - | - |
| 80 | 4 | 6,646 | - | - |
| 81 | - | - | - | - |
| 82 | 2 | 3,378 | - | - |
| 83 | 7 | 12,796 | - | - |
| 84 | - | - | - | - |
| 85 | - | - | - | - |
| 86 | 1 | 1,412 | - | - |
| 87 | 4 | 5,326 | - | - |
| 88 | 1 | 1,297 | - | - |
| 39 | - | - | - | - |
| 90 | - | 1,021 | - | - |
| 112 | 1 | 1,525 | - | - |
| 114 | 1 | 1,758 | - | - |
| Total | 198 | \$ 286.478 | 34 | \$.202,531 |

SCHEDLLE E(1)

## SURVIVORS' BENEFIT FUND JUNE 30,1977

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES - WOMEN

OPTION 1 OR DEPENDENT PARENT OR SPOUSE WITH NO ELIGIBLE CHILD

| Age | OR SPOUSE WITH NO ELIGIBLE CHIL |  | ELIGIBLE CHILDREN |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Annual Allowance | Number | Annual Allowance |
| 22 | 1 | \$ 302 | - | \$ |
| 23 | 1 | 2,314 | - | - |
| 24 | - | - | - | - |
| 25 | - | - | - | - |
| 26 | - | - | 1 | 2,853 |
| 27 | - | - | - | - |
| 28 | - | - | 1 | 2,434 |
| 29 | - | - | - | - |
| 30 | 1 | 7,000 | 2 | 6,631 |
| 31 | - | - | 1 | 3,517 |
| 32 | - | - | 1 | 2,889 |
| 33 | - | - | - | - |
| 34 | 1 | 8,714 | 1 | 4,073 |
| 35 | - | - | 1 | 3,703 |
| 36 | 1 | 3,257 | 1 | 3,715 |
| 37 | - | - | 2 | 6,285 |
| 38 | 1 | 2,277 | 1 | 4,265 |
| 39 | - | - | 4 | 18,413 |
| 40 | - | - | 4 | 12,649 |
| 41 | - | - | 6 | 22,977 |
| 42 | - | - | 4 | 15,050 |
| 43 | - | - | 4 | 14,157 |
| 44 | 1 | 2,232 | 7 | 22,499 |
| 45 | - | - | 6 | 21,125 |
| 46 | - | - | 4 | 13,376 |
| 47 | 2 | 3,809 | 10 | 44,408 |
| 48 | 3 | 9,441 | 10 | 36,853 |
| 49 | 3 | 2,062 | 8 | 30,724 |
| 50 | 5 | 11,001 | 12 | 40,097 |
| 51 | 3 | 6,922 | 13 | 45,192 |
| 52 | 7 | 18,372 | 4 | 12,076 |
| 53 | 15 | 32,687 | 10 | 31,637 |
| 54 | 15 | 25,717 | 7 | 22,377 |
| 55 | 21 | 38,711 | 13 | 41,439 |
| 56 | 16 | 31,550 | 19 | 61,884 |
| 57 | 19 | 42,403 | 7 | 17,312 |
| 58 | 21 | 43,305 | 9 | 27,741 |
| 59 | 31 | 55,212 | 11 | 32,654 |
| 60 | 36 | 71,260 |  | 10,291 |
| 61 | 33 | 69,703 | 3 | 8,685 |
| 62 | 52 | 97,273 | 2 | 5,419 |
| 63 | 89 | 160,000 | 2 | 6,188 |
| 64 | 74 | 123,931 | 2 | 6,285 |


| Age | OPTION 1 OR DEPENDENT PARENT <br> OR SPOUSE WITH NO ELIGIBLE CHILD |  |  | SPOUSE WITH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  | Annual 1lowance | Number |  | nual owance |
| 65 | 69 | \$ | 105,935 | - | \$ | - |
| 66 | 61 |  | 103,598 | - |  | - |
| 67 | 68 |  | 111,453 | - |  | - |
| 68 | 69 |  | 121,911 | - |  | - |
| 69 | 72 |  | 122,508 | 1 |  | 2,931 |
| 70 | 78 |  | 133,616 | - |  | - |
| 71 | 64 |  | 118,046 | - |  | - |
| 72 | 59 |  | 97,291 | - |  | - |
| 73 | 48 |  | 98,548 | - |  | - |
| 74 | 59 |  | 115,560 | - |  | - |
| 75 | 46 |  | 93,434 | - |  | - |
| 76 | 38 |  | 68,516 | - |  | - |
| 77 | 32 |  | 57,448 | - |  | - |
| 78 | 29 |  | 68,178 | - |  | - |
| 79 | 30 |  | 60,772 | - |  | - |
| 80 | 30 |  | 63,691 | - |  | - |
| 81 | 26 |  | 55,816 | - |  | - |
| 82 | 22 |  | 55,843 | - |  | - |
| 83 | 20 |  | 46,829 | - |  | - |
| 84 | 8 |  | 22,362 | - |  | - |
| 85 | 13 |  | 30,038 | - |  | - |
| 86 | 11 |  | 25,163 | - |  | - |
| 87 | 8 |  | 16,519 | - - |  | - |
| 88 | 6 |  | 11,956 | - |  | - |
| 89 | 5 |  | 8,325 | - |  | - |
| 90 | 4 |  | 6,681 | - |  | - |
| 91 | 2 |  | 3,546 | - |  | - |
| 92 | - |  | - | - |  | - |
| 93 | 1 |  | 1,881 | - |  | - |
| 94 | 1 |  | 1,551 | - |  | - |
| Total | 1,431 |  | ,696,470 | 197 |  | 64,804 |

SCHEDULE E (2)
(concluded) AGE OF
YOUNGEST
CHTLD CHILD

BENEFICIARIES CURRENTLY RECEIVING ALLOWANCES - INCOMPETENTS


BENEFICIARIES NOW ENTITLED TO DEFERRED ALLOWANCE ONLY

| DEFERRED$\text { TO AGE } 65$ |  |  | DEFERRED <br> TO AGE 62 |  | DEFERRED <br> TO AGE 50 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number | Annual Allowance | Number | Annual Allowance | Number | Annual Allowance |
| 41 | - | \$ - | 1 | \$ 2,447 | - | \$ - |
| 42 | - | - | - | - | - | - |
| 43 | - | - | 1 | 1,948 | 1 | 1,999 |
| 44 | - | - | 4 | 6,417 | - | , |
| 45 | - | - | 1 | 1,152 | - | - |
| 46 | 1 | 1,849 | 2 | 2,599 | - | - |
| 47 | - | - | 1 | 1,210 | 2 | 5,596 |
| 48 | - | - | 6 | 8,482 | 2 | 4,700 |
| 49 | - | - | 7 | 11,702 | 1 | 1,524 |
| 50 | 1 | 1,187 | 3 | 3,866 | 4 | 6,498 |
| 51 | 3 | 4,210 | 5 | 7,014 | - | - |
| 52 | 3 | 3,583 | 9 | 13,275 | - | - |
| 53 | 3 | 3,700 | 11 | 16,483 | - | - |
| 54 | 1 | 1,152 | 13 | 18,915 | - | _ |
| 55 | 1 | 1,577 | 8 | 12,422 | - | - |
| 56 | 3 | 3,447 | 15 | 22,138 | - | - |
| 57 | 2 | 2,638 | 24 | 36,506 | - | - |
| 58 | 2 | 2,124 | 23 | 33,366 | - | - |
| 59 | 4 | 4,752 | 28 | 42,455 | - | - |
| 60 | 3 | 3,405 | 22 | 30,177 | - | - |
| 61 | 4. | 4,754 | 27 | 38,320 | - | - |
| 62 | 2 | 3,029 | 12 | 16,183 | - | - |
| 63 | 6 | 7,287 | - |  | - | - |
| 64 | 6 | 7,460 | - | - | - | - |
| 65 | 7 | 9,038 | - | - | - | - |
| Total | $\underline{52}$ | \$65,192 | 223 | \$327,077 | 10 | \$20,317 |

MEN
$\frac{\text { MEN }}{\text { NUMBER SALARIES }}$

51
216
440
491
527
554
673
615
622
610
543
589
597
505
385
411
431
474
441
470
470
484

524
497
551
520
537

503
520
611
604
584
695
627
678
731
735
695
771
769
702
751

7,920
39,368
430,729
1,484,501
2,024,504
2,498,606
2,404,334
3,210,175
3,114,753
3,071,686
3,110,240
2,854,027
3,224,499
2,900,041
2,589,964
2,113,929
2,281, 813
2,480,744
2,680,181
2,645,748
2,617,864
2,978,619
3,158,486
3,196,268
3,447,165
3,631,081
3,608,719
3,757,087
3,676,362
4,121,650
4,496,880
4,617,439
4,440,893
5,580,292
4,940,667
5,574,191
6,000,671
6,548,395
6,177,100
6,427,767
6,754,323
5,964,706
6,415,283

WOMEN

| WOMEN |  |  |
| :---: | :---: | :---: |
| NUMBER |  | SALARIES |
| 11 | \$ | 3,140 |
| 70 |  | 43,257 |
| 293 |  | 592,636 |
| 425 |  | 1,032,798 |
| 482 |  | 1,337,953 |
| 557 |  | 1,656,244 |
| 641 |  | 2,107,885 |
| 737 |  | 2,423,604 |
| 710 |  | 2,380,842 |
| 692 |  | 2,204,140 |
| 672 |  | 2,128,675 |
| 786 |  | 2,703,039 |
| 902 |  | 2,573,909 |
| 1,148 |  | 2,997,194 |
| 1,162 |  | 3,052,783 |
| 1,117 |  | 2,846,136 |
| 1,359 |  | 3,371,764 |
| 1,595 |  | 4,238,484 |
| 1,875 |  | 5,087,752 |
| 1,836 |  | 5,036,034 |
| 1,936 |  | 5,683,451 |
| 1,987 |  | 5,907,986 |
| 2,191 |  | 6,717,702 |
| 2,221 |  | 7,250,177 |
| 2,178 |  | 6,937,282 |
| 2,219 |  | 7,427,026 |
| 2,126 |  | 7,444,039 |
| 2,042 |  | 7,209,880 |
| 2,086 |  | 7,654,520 |
| 2,031 |  | 7,550,946 |
| 2,091 |  | 7,941,722 |
| 2,077 |  | 7,959,420 |
| 2,119 |  | 8,341,139 |
| 2,092 |  | 8,396,279 |
| 2,005 |  | 8,039,646 |
| 1,876 |  | 7,564,217 |
| 1,993 |  | 8,524,577 |
| 1,853 |  | 7,852,215 |
| 1,900 |  | 8,284,784 |
| 1,964 |  | 8,733,203 |
| 1,674 |  | 7,454,536 |
| 1,435 |  | 6,358,152 |
| 1,479 |  | 6,879,641 |


| AGE | MEN |  |  | WOMEN |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NUMBER |  | SALARIES | NUMBER |  | SALARIES |
| 60 | 664 | \$ | 5,623,517 | 1,260 | \$ | 5,815,827 |
| 61 | 686 |  | 5,926,529 | 988 |  | 4,444,845 |
| 62 | 651 |  | 5,890,333 | 920 |  | 4,306,727 |
| 63 | 562 |  | 4,890,552 | 651 |  | 3,049,305 |
| 64 | 501 |  | 4,433,881 | 541 |  | 2,494,396 |
| 65 | 442 |  | 3,731,757 | 434 |  | 1,919,719 |
| 66 | 292 |  | 2,430,324 | 290 |  | 1,245,370 |
| 67 | 224 |  | 1,700,340 | 183 |  | 790,158 |
| 68 | 168 |  | 1,191,037 | 131 |  | 505,516 |
| 69 | 121 |  | 839,120 | 100 |  | 404,663 |
| 70 | 109 |  | 679,620 | 72 |  | 285,902 |
| 71 | 51 |  | 251,604 | 37 |  | 126,923 |
| 72 | 32 |  | 176,188 | 22 |  | 56,721 |
| 73 | 26 |  | 105,312 | 13 |  | 37,243 |
| 74 | 25 |  | 83,631 | 6 |  | 9,873 |
| 75 | 20 |  | 64,801 | 7 |  | 13,153 |
| 76 | 10 |  | 34,438 | 3 |  | 3,689 |
| 77 | 12 |  | 76,319 | 22 |  | 105,076 |
| Total | 27,815 |  | 91,428,973 | 68,325 |  | 45,545,915 |

$\frac{\text { SCHEDULE G(1) }}{\text { (concluded) }}$

| AGE | MEN |  | WOMEN |  |
| :---: | :---: | :---: | :---: | :---: |
|  | NUMBER | SALARIES | MMMER | SALARIES |
| 17 | 14 | \$ 4,942 | 11 | \$ 3,140 |
| 18 | 51 | 39,388 | 70 | 43,257 |
| 19 | 215 | 426,023 | 289 | 581,955 |
| 20 | 370 | 1,060,424 | 345 | 613,315 |
| 21 | 351 | 1,013,204 | 344 | 669,478 |
| 22 | 322 | 970,197 | 353 | 614,345 |
| 23 | 347 | 918,597 | 394 | 753,951 |
| 24 | 423 | 1,155,540 | 439 | 767,460 |
| 25 | 331 | 903,854 | 410 | 752,225 |
| 26 | 325 | 835,100 | 389 | 578,524 |
| 27 | 316 | 725,864 | 355 | 468,576 |
| 28 | 269 | 640, 520 | 401 | 612,125 |
| 29 | 280 | 762,711 | 535 | 749,586 |
| 30 | 299 | 655,682 | 662 | 843,341 |
| 31 | 212 | 399,959 | 631 | 848,276 |
| 32 | 159 | 380,116 | 598 | 734,486 |
| 33 | 159 | 400, 571 | 670 | 844,378 |
| 34 | 151 | 335,780 | 705 | 864,860 |
| 35 | 161 | 341,915 | 779 | 1,014,684 |
| 36 | 140 | 371,123 | 694 | 882,886 |
| 37 | 150 | 313,435 | 655 | 323,760 |
| 38 | 128 | 329,795 | 621 | 771,832 |
| 39 | 126 | 300,703 | 695 | 927,259 |
| 40 | 157 | 421, 676 | 597 | 825,722 |
| 41 | 135 | 327,234 | 574 | 788,350 |
| 42 | 140 | 353,375 | 504 | 677,045 |
| 43 | 120 | 388,305 | 525 | 808,218 |
| 44 | 126 | 378,397 | 443 | 538,347 |
| 45 | 114 | 354,770 | 394 | 505,320 |
| 46 | 75 | 256,896 | 389 | 520,662 |
| 47 | 102 | 333,217 | 375 | 482,410 |
| 48 | 112 | 318,926 | 336 | 459,205 |
| 49 | 99 | 341,654 | 292 | 422,644 |
| 50 | 114 | 392,585 | 327 | 386,708 |
| 51 | 98 | 308,270 | 298 | 336,920 |
| 52 | 92 | 307,497 | 274 | 407,573 |
| 53 | 103 | 394,492 | 254 | 300,103 |
| 54 | 80 | 324,737 | 212 | 264,257 |
| 55 | 85 | 344,354 | 221 | 286,518 |
| 56 | 118 | 409,527 | 209 | 256,518 |
| 57 | 85 | 353,302 | 165 | 184,055 |
| 58 | 85 | 273,566 | 121 | 115,987 |
| 59 | 92 | 326,470 | 99 | 110,926 |
| 60 | 36 | 217,077 | 78 | 100,212 |
| 61 | 69 | 215,821 | 68 | -43,276 |
| 62 | 43 | 141,802 | 53 | 32,345 |
| 63 | 43 | 123,626 | 27 | 29,207 |
| 64 | 32 | 71,306 | 33 | 28,237 |
| 65 | 38 | 76,225 | 23 | 3,659 |
| 66 | 24 | 44,313 | 22 | 16,299 |
| 67 | 21 | 35,651 | 21 | 7,610 |
| 68 | 18 | 25,119 |  | 3,021 |
| 69 | 12 | 19,039 | 5 | 2,745 |
| 70 | 7 | 12,324 | 4 | 3,362 |
| 7 | 11 | 2,894 | 3 | 4,357 |
| 72 | 3 | 4,801 | 2 | 35 |
| 73 | 1 | 620 | - | - |
| 74 | 2 | 918 | - | - |
| 75 | 3 | 2,824 | - | - |
| 76 | 1 | 2,300 | 1 | 27 |
| 77 | 2 | 5,312 | 1 | 84 |
| Total | 7.817 | 321,196.343 | 1,3,003 | 524.723.363 |
| Average |  |  |  |  |
| Age |  |  |  |  |

ELIGIBLE FOR FUTURE ALLOWANCE

| AGE | MEN | WOMEN | AGE | MEN | WOMEN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | 1 | 3 | 60 | 105 | 169 |
| 26 | 1 | 4 | 61 | 72 | 82 |
| 27 | 1 | 6 | 62 | 56 | 40 |
| 28 | 3 | 5 | 63 | 48 | 34 |
| 29 | 7 | 10 | 64 | 41 | 34 |
| 30 | 4 | 6 | 65 | 33 | 29 |
| 31 | 6 | 7 | 66 | 16 | 13 |
| 32 | 7 | 11 | 67 | 16 | 11 |
| 33 | 13 | 13 | 68 | 10 | 9 |
| 34 | 20 | 9 | 69 | 9 | 6 |
| 35 | 16 | 16 | 70 | 5 | 6 |
| 36 | 25 | 23 | 71 | 1 | 2 |
| 37 | 17 | 26 | 72 | 3 | 3 |
| 38 | 28 | 22 | 73 | 4 | 4 |
| 39 | 41 | 29 | 74 | 2 | 1 |
| 40 | 32 | 41 | 75 | 3 | - |
| 41 | 39 | 45 | 76 | 2 | 1 |
| 42 | 53 | 53 | 77 | 7 | 3 |
| 43 | 63 | 58 |  |  |  |
| 44 | 58 | 66 | Totals | $\underline{\underline{2,345}}$ | 2,987 |
| 45 | 62 | 68 |  |  |  |
| 46 | 54 | 69 |  |  |  |
| 47 | 82 | 76 |  |  |  |
| 48 | 72 | 93 |  |  |  |
| 49 | 112 | 111 |  |  |  |
| 50 | 86 | 115 |  |  |  |
| 51. | 105 | 108 |  |  |  |
| 52 | 131 | 141 |  |  |  |
| 53 | 121 | 154 |  |  |  |
| $\because 54$ | 102 | 170 |  |  |  |
| 55 | 97 | 163 |  |  |  |
| 56 | 118 | 188 |  |  |  |
| 57 | 106 | 208 |  |  |  |
| 58 | 123 | 196 |  |  |  |
| 59 | 106 | 227 |  |  |  |


| AGE | MEN | WOMEN | AGE | MEN | WOMEN |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 55 | 365 | 759 |
|  |  |  | 56 | 529 | 958 |
| 17 | 5 | 9 | 57 | 328 | 740 |
| 18 | 8 | 1 | 58 | 273 | 667 |
| 19 | 27 | 19 | 59 | 324 | 640 |
| 20 | 77 | 109 | 60 | 278 | 540 |
| 21 | 146 | 206 | 61 | 251 | 498 |
| 22 | 255 | 270 | 62 | 241 | 452 |
| 23 | 324 | 398 | 63 | 211 | 421 |
| 24 | 383 | 609 | 64 | 193 | 325 |
| 25 | 585 | 875 | 65 | 203 | 294 |
| 26 | 728 | 1,085 | 66 | 162 | 197 |
| 27 | 783 | 1,171 | 67 | 148 | 218 |
| 28 | 883 | 1,245 | 68 | 109 | 177 |
| 29 | 912 | 1,291 | 69 | 95 | 147 |
| 30 | 889 | 1,476 | 70 | 84 | 100 |
| 31 | 782 | 1,126 | 71 | 76 | 92 |
| 32 | 611 | 850 | 72 | 77 | 95 |
| 33 | 606 | 868 | 73 | 55 | 68 |
| 34 | 685 | 903 | 74 | 50 | 52 |
| 35 | 639 | 1,010 | 75 | 58 | 41 |
| 36 | 598 | 980 | 76 | 42 | 34 |
| 37 | 558 | 1,013 | 77 \& |  |  |
| 38 | 576 | 1,007 | over | 587 | 343 |
| 39 | 512 | 1,048 |  |  |  |
|  |  |  | TOTAL | 23,557 | 39,605 |
| 40 | 509 | 1,029 |  |  |  |
| 41 | 522 | 1,000 |  |  |  |
| 42 | 496 | 1,045 |  |  |  |
| 43 | 485 | 1,029 |  |  |  |
| 44 | 493 | 917 |  |  |  |
| 45 | 503 | 993 |  |  |  |
| 46 | 500 | 933 |  |  |  |
| 47 | 508 | 1,014 |  |  |  |
| 48 | 528 | 898 |  |  |  |
| 49 | 463 | 888 |  |  |  |
| 50 | 486 | 919 |  |  |  |
| 51 | 474 | 846 |  |  |  |
| 52 | 444 | 876 |  |  |  |
| 53 | 410 | 936 |  |  |  |
| 54 | 425 | 855 |  |  |  |

The School Employees Retirement System of Ohio makes provision for retirement, disability, death, survivor and health care benefits to all noncertificated employees of the public school system. The major provisions of the system may be summarized as follows:

## I. Service Retirement

A. Eligibility
(1) Attainment of age 60 and completion of 5 or more years of service; or
(2) Attainment of age 55 and completion of 25 or more years of service; or
(3) Completion of 30 or more years of service.
B. Annual Allowance
(1) Greater of $2 \%$ of the average annual compensation during the 3 years (whether or not consecutive) of highest compensation or $\$ 86$ times total service. Annuity is reduced unless member has 30 years of service or has attained age 65 . Maximum allowance is $90 \%$ of the final average compensation, or
(2) An annuity with a reserve equal to twice the member's accumulated contributions plus $\$ 180$ if member had at least ten years of service on October 1, 1956, if larger than (1).
C. Optional forms of annuity

Option 1 - A joint-life annuity payable during the lifetime of the member, with the designated beneficiary to continue to receive $100 \%$ thereof if living at the death of the member. If the beneficiary is the spouse and dies before the member or if marriage is terminated by divorce the member will get the same benefit he would have if he had not elected any option.

Option 2 - A joint-life annuity payable during the lifetime of the member, with the designated beneficiary to receive a lesser annuity if living at the death of the member. If the beneficiary is the spouse and dies before the member or if marriage is terminated by divorce the member will get the same benefit he would have if he had not elected any option.

SCHEDULE I

Option 3 - A life annuity payable during the lifetime of the member, with a guarantee that at least an elected number of monthly payments will be paid in any event.

Option 4 - Any other benefit arrangement approved by the Board and certified by the actuary to be an actuarially equivalent benefit.
II. Disability Retirement
A. Eligibility
(1) Completion of 5 or more years of service and less than 60 years of age, and
(2) Determination by a physician that member is mentally or physically incapable of performing his duty.
B. Annual Allowance
(1) An annuity with a reserve equal to the member's accumulated contributions plus
(2) The difference between (1) and the greater of $2 \%$ of the average compensation during the 3 years of highest compensation or $\$ 86$ times total service plus years and months from date of disability to age 60. Maximum allowance is $75 \%$ of final average salary. Minimum allowance is $30 \%$ of final average salary.
III. Death Benefit

Upon the death of a retirant receiving a service or disability allowance a lump sum payment of $\$ 500$ is paid.

## IV. Survivor Benefit

A. If member was eligible for service retirement, surviving spouse or other sole dependent beneficiary may elect to receive the allowance that would have been payable had the member retired on date of death and elected Option 1.
B. If member had completed at least $1 \frac{1}{2}$ years of service with at least $\frac{1 / 4}{4}$ year of contributing service within the $2 \frac{1}{2}$ years prior to death or was on disability retirement at date of death, survivors may elect to receive an allowance depending on number of eligible survivors as follows:
(continued)

|  | Benefit as Percent <br> Number | Minimum <br> of Final Average Salary |
| :---: | :---: | :---: |
|  |  | Benefit |
| 2 | $25 \%$ | $\$ 1,152 *$ |
| 3 | $40 \%$ | 2,232 |
| 4 | $50 \%$ | 2,832 |
| 5 or more | $55 \%$ | 2,832 |
|  | $60 \%$ | 2,832 |

*If recipient is spouse and member had 10 or more years of service minimum is $\$ 1,272$.

Eligible survivors are:
(1) Spouse (as long as not remarried) age 62 or age 50 if member had 10 or more years of service or any age if caring for dependent (or adjudged mentally or physically incompetent) child.
(2) Unmarried child under age 18 (under age 22 if attending school).
(3) Parent age 65 or over who received at least one-half of his support from the member in the year prior to death.
C. Beneficiary may elect to receive the member's accumulated contributions instead of $A$ or $B$.
V. Cost-of-Living Adjustment

Effective 24 months after receiving or becoming eligible to receive an allowance, such allowance will be increased by $2 \%$ of the basic allowance in any year in which the Consumer Price Index has increased at least $2 \%$.
VI. Minimum Payments

If the total benefits paid are less than the member's accumulated contributions, the difference will be paid to the member's beneficiary.

## VII. Member's Contribution

Member contributes $8 \%$ of his compensation.

## VIII. Health Care

Each benefit recipient is provided health insurance which supplements medicare benefits if the recipient is covered by medicare and provides comprehensive coverage if not. Premiums for Part $B$ of medicare are reimbursed.

## ACTUARIAL ASSUMPTIONS - JUNE 30, 1977

## SUPERANNUATION RETIRANTS, BENEFICIARIES,

 AND SURVIVOR BENEFICIARIESINTEREST: $\quad 5 \%$ per annum, compounded annually.
MORTALITY: 1955 American Annuity Table, with ages set up one year for men and set back three years for women.

## DISABILITY RETIRANTS

INTEREST: $\quad 5 \%$ per annum, compounded annually.

MORTALITY: Rates developed in 1975 Investigation, based on 1970-1975 experience.

ACTIVE AND INACTIVE MEMBERS
INTEREST: $5 \%$ per annum, compounded annually.
RATES OF WITHDRAWAL, MORTALITY, DISABILITY, SUPERANNUATION AND COMPENSATION INCREASE: Rates developed in 1975 Investigation, based on 1970-1975 experience. Values at specimen ages are shown in the table below.

|  | AGE | R A T ES | S E | A R A T | D U E T O: | RATES OF COMPENSATION |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Withdrawal | Death | Disabil | Superannuation | INCREASE |
| MEN | 20 | .1691 | . 0008 | - | - | . 0689 |
|  | 30 | . 0826 | . 0011 | . 0002 | - | . 0567 |
|  | 40 | . 0581 | . 0020 | . 0005 | - | . 0473 |
|  | 50 | . 0394 | . 0049 | . 0038 | . 0002 | . 0387 |
|  | 55 | . 0331 | . 0083 | . 0059 | . 0072 | . 0347 |
|  | 60 | . 0288 | . 0123 | - | . 0544 | . 0307 |
|  | 65 | . 0288 | . 0163 | - | . 1711 | . 0267 |
|  | 70 |  | . 0203 | - | .1436 | . 0227 |
|  | 75 | - | - | - | 1.0000 | - |
| WOMEN | 20 | . 1507 | . 0002 | - | - | . 0879 |
|  | 30 | . 0858 | . 0003 | - | - | . 0823 |
|  | 40 | . 0620 | . 0006 | . 0002 | - | . 0691 |
|  | 50 | . 0396 | . 0023 | . 0015 | .0003 | . 0498 |
|  | 55 | . 0315 | . 0041 | . 0030 | . 0016 | . 0399 |
|  | 60 | . 0267 | . 0060 | - | .1171 | . 0311 |
|  | 65 | . 0246 | . 0072 | - | . 1406 | . 0248 |
|  | 70 | - | . 0096 | - | . 1739 | . 0189 |
|  | 75 | - | - | - | 1.0000 | - |

SCHEDULE J

