

REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS
RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1977

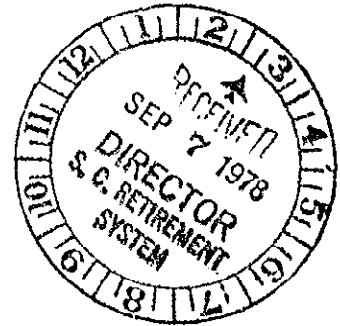
GEORGE B. BUCK CONSULTING ACTUARIES, INC.

EMPLOYEE BENEFIT PLAN CONSULTANTS

TWO PENNSYLVANIA PLAZA, NEW YORK, NEW YORK 10001

212-279-4400

September 5, 1978



Mr. Purvis Collins, Director
South Carolina Police Officers Retirement System
P. O. Box 11960 - Capitol Station
Columbia, South Carolina 29211


Dear Mr. Collins:

I am sending you herewith the signed bound copy of the
"Report on an Actuarial Valuation of the South Carolina Police
Officers Retirement System Prepared as of June 30, 1977".

Very truly yours,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

By


Hugh Gillespie
Consulting Actuary

HG:MH
Enc.

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

EMPLOYEE BENEFIT PLAN CONSULTANTS

TWO PENNSYLVANIA PLAZA, NEW YORK, NEW YORK 10001

212-279-4400

July 10, 1978

State Budget and Control Board
South Carolina Police Officers Retirement System
Columbia, South Carolina 29211

Gentlemen:

I transmit herewith our report on the actuarial valuation of the South Carolina Police Officers Retirement System prepared as of June 30, 1977.

The valuation indicates that the System remains actuarially sound and the sufficiency of retirement funds to provide the benefits called for by the System may be safely anticipated.

I trust that the report is in satisfactory form for use by the Board.

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.



By
Hugh Gillespie
Consulting Actuary

REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1977

The South Carolina Police Officers Retirement System was established as of July 1, 1962. Firemen were eligible to participate in the System on July 1, 1976. Membership in the System is open to any police officer or fireman of the State or other employer (county, municipality or other political subdivision of the State and any agency or department thereof) that has been admitted to the System. A police officer or fireman whose period of active duty during a year is at least 1,600 hours and whose compensation for such service is at least \$2,000 per year is eligible to join. Membership is compulsory with employees who become police officers or firemen of the State or other employers after the employer's date of admission to the System. Police officers and firemen in service on the employer's date of admission become members as of such date unless they file elections not to become members of the System and execute a waiver of all present and prospective benefits which would otherwise inure to them on account of their participation in the System. Contributions to provide the benefits under the System are made jointly by the members and the employers.

This report presents the results of the actuarial valuation of the System prepared as of June 30, 1977. The report gives first a summary of the benefit and contribution provisions of the System and a statement of the membership as of June 30, 1977. Next, the valuation balance sheet showing the assets and liabilities of the System as of June 30, 1977 is presented, followed by recommendations regarding the contributions payable by the employers. Appended to the report is an outline of the actuarial assumptions and method employed as well as summaries of the membership data on which calculations were based.

The amendments, effective July 1, 1977, increasing the flat dollar portion of the retirement allowance from \$8.00 to \$9.00 per month and providing for an unreduced retirement allowance after thirty years of credited service, regardless of age, were first taken into account in the June 30, 1976 valuation.

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

A summary of the main benefit and contribution provisions of the System as interpreted for the valuation is presented in the following digest. Credited service of a member includes all service as a police officer or fireman since he last became a member of the System and also includes, in the case of a member who became such on or before June 30, 1963, remains a member until death or retirement under the System and who immediately prior to his becoming a member was a participant in another fund, service which was credited to him under such other fund. "Supplemental Allowance Program" is the Supplemental Allowance Program established under the System as of July 1, 1966 and as in effect on June 30, 1974. There are two classes of members under the System. Class Two includes each member who was a participant in the Supplemental Allowance program as of June 30, 1974 and any other police officer who became a member prior to July 1, 1974 and is employed by the State or by an employer which was participating in the Supplemental Allowance Program as of June 30, 1974 or which elected to provide Class Two membership for police officers in its employ and elected by written notice filed with the board within 60 days after July 1, 1974 to become a Class Two member as of said date, provided that any such member who was not in service as of July 1, 1974 may make such election within 60 days after his return to service. Any police officer becoming a member on or after July 1, 1974 who is employed by the

State or by an employer which has elected to provide Class Two membership for police officers in its employ and any police officer or fireman who is a member and is employed by an employer whose date of admission is on or after July 1, 1974 is a Class Two member. Any member who is not a Class Two member is a Class One member. "Class Two service" is credited service subsequent to June 30, 1974 as a Class Two member, and credited service prior to July 1, 1974, or date of membership, if later, with respect to which required contributions have been made. "Class One service" is credited service which is not "Class Two service". "Average final compensation" is the average annual compensation of a member during the three consecutive fiscal years of credited service producing the highest such average.

BENEFITS

Service Retirement Allowance

Condition for Allowance

A member may retire on a service retirement allowance upon the attainment of age 55 and the completion of 5 years of credited service, or at any age upon the completion of 30 years of credited service.

Amount of Allowance

Upon service retirement a member receives a service retirement allowance which is equal to:

(1) A monthly retirement allowance equal to nine dollars multiplied by the number of years of his Class One service.

(2) A monthly retirement allowance equal to one-twelfth of one and three-fourths per cent of his average final compensation multiplied by the number of years of his Class Two service.

(3) An additional monthly retirement allowance which is the actuarial equivalent of the member's accumulated additional contributions at retirement.

The sum of the retirement allowances under (1) and (2) above is not to be less than the allowance which would have been provided under (1) if all of the member's credited service were Class One service. In the case of a police officer who became a member prior to July 1, 1974 and who was a participant in the Supplemental Allowance Program, the portion of his service retirement allowance not provided by his accumulated contributions is not to be less than it would have been if the provisions of the System in effect on June 30, 1974 had continued in effect until his date of retirement.

Early Retirement Allowance

Condition for Allowance

A member who has completed 20 years of credited service may retire on an early retirement allowance.

Amount of Allowance

Upon early retirement a member is entitled to a deferred allowance commencing at age 55 which is equal to a service retirement allowance computed on the basis of his average final compensation and credited service at his early retirement date.

If the member has attained age 50 and completed 25 years of credited service at early retirement date, in lieu of such deferred allowance, he may elect to receive a reduced allowance commencing immediately which is equal to the deferred allowance computed on the basis of Class One and Class Two service reduced by 5/12 of 1% for each month by which his age at retirement is less than age 55, plus the actuarial equivalent of the member's accumulated additional contributions.

Disability Retirement Allowance

Condition for Allowance

A member who has completed 5 or more years of credited service and is permanently incapacitated for duty, mentally or physically, may retire or be retired on a disability retirement allowance.

Amount of Allowance

Upon disability retirement a member receives a disability retirement allowance computed as a service retirement allowance based on his average final compensation, his years of credited service and his accumulated additional contributions at disability retirement; however, for a member who at disability retirement has not completed 20 years of credited service, his disability retirement allowance is determined on the basis of either 20 years of credited service or the number of years of credited service the member would have completed had he remained in service until age 55, whichever is less, and, in either case, on the basis of the average final compensation he would have had if he had continued in service without further change in compensation until the completion of said number of years of credited service. For the purpose of calculating the disability retirement allowance, the additional credited service so determined is either Class One service or Class Two service depending upon the classification of the member at time of retirement.

Return of Contributions

Should a member cease to be a police officer or fireman except by death or retirement his accumulated contributions are returned to him. Should a member die before retirement the amount of his accumulated contributions is paid to his designated beneficiary or estate.

Death Benefit

Upon the death of a member in service a lump sum amount is paid to his designated beneficiary or estate equal to:

(1) The amount of his accumulated contributions, excluding any additional contributions, or \$1,000, whichever is greater; plus

(2) The amount of his accumulated additional contributions.

Upon the death of a retired member who has not elected Option 1 or Option 2, the excess of his total accumulated contributions at the time his allowance commenced over the sum of the retirement allowance payments made to him is paid to his designated beneficiary or estate.

In the event of the death before retirement of a member who has attained age 55 and completed 20 or more years of credited service, his designated beneficiary may elect to receive in lieu of the lump sum settlement otherwise payable based on (1) above an allowance for life in the same amount as if the member had retired at the time of death and had chosen Option 1.

Such beneficiary may elect to receive in lieu of the member's accumulated additional contributions, an allowance for life which is the actuarial equivalent of the amount of contributions left on deposit in the System.

Pre-retirement Death Benefit Program

Upon the death of a contributing member in service who had completed at least one full year of membership or who had died as a result of an injury arising out of and in the course of the performance of his duties regardless of length of service, a death benefit is payable to his designated beneficiary or estate, equal to the annual compensation of the member at the time his death occurs. Such death benefit is payable apart and separate from the payment of the member's accumulated contributions. Benefits under this program are to be provided in the form of group life insurance.

Accidental Death Benefit Program

Upon the death in active service as a result of the actual performance of duty of a member whose employer participates under the Program, a pension equal to 50% of the member's compensation at the time of death is paid to his widow during her widowhood. If there is no eligible widow before the youngest child attains age 18 the pension is paid to surviving children under age 18 or, if at the time of the member's death there is no widow or child under age 18, the pension is paid to his surviving father or mother. Such death benefit is payable apart and separate from any other benefits payable upon death.

Optional Allowances

Until the first payment on account of a retirement allowance becomes normally due, any member may elect to receive his retirement allowance in accordance with one of the following forms, which are computed to be actuarially equivalent:

Option 1. A reduced retirement allowance payable during the retired member's life, with the provision that after his death the reduced allowance will be continued to his designated beneficiary.

Option 2. A reduced retirement allowance payable during the retired member's life, with the provision that after his death one-half of the reduced allowance will be continued to his designated beneficiary.

Option 3. A retirement allowance in such amount that, together with his Social Security benefit, he will receive approximately the same income per annum before and after the earliest age at which he is eligible for a Social Security benefit.

Cost-of-Living Adjustments in Allowance

If the increase in the Consumer Price Index for the previous year ending December 31 equals or exceeds 3%, the retirement allowance, exclusive of any part thereof derived from accumulated additional contributions, of each beneficiary in receipt of an allowance as of said December 31, is to be increased by 4%. Any such increase in allowances after the first five such increases becomes effective only if the additional liabilities on account of such increase in allowances do not require an increase in the employer rate of contribution. Any increase in allowance granted hereunder is to be permanent, irrespective of any subsequent decrease in the Consumer Price Index, and is to be included in determining any subsequent increase.

The allowance of a surviving annuitant of a beneficiary whose allowance is increased under this section is to be increased by the same per cent, when and if payable.

CONTRIBUTIONS

By Members

Each Class One member contributes \$16 per month. Each Class Two member contributes 5% of compensation.

By Employers

Each employer contributes 7.5% of the compensation of Class One members and 10% of the compensation of Class Two members in its employ. Such rates are subject to adjustment on the basis of actuarial valuations.

MEMBERSHIP OF THE SYSTEM

In order to obtain the aggregate liabilities and assets on account of members of the System as of June 30, 1977, data were needed with respect to each active member and beneficiary of the System and also with respect to terminations during the valuation year. These data were furnished to the actuary by the Retirement System office on a magnetic tape.

ACTIVE MEMBERSHIP

Table I shows the number of active members included in the membership as of June 30, 1977.

TABLE I
NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
AS OF JUNE 30, 1977

GROUP	NUMBER	ANNUAL COMPENSATION
Men	7,038	\$ 67,920,124
Women	510	4,188,430
Total	7,548	\$ 72,108,554

*There are in addition 1,414 members not on the payroll as of June 30, 1977 but included in the individual accounts maintained by the System. The results of the valuation were adjusted to take these members into account.

RETIRED MEMBERS

Table II shows the number and annual retirement allowances of beneficiaries on the roll as of June 30, 1977.

TABLE II
THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES
ON THE ROLL AS OF JUNE 30, 1977

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Service and Early Retirements:		
Men	773	\$ 2,112,044
Women	15	31,002
Total	788	\$ 2,143,046
Disability Retirements:		
Men	111	\$ 266,084
Women	1	1,132
Total	112	\$ 267,216
Beneficiaries of Deceased Members:		
Men	40	\$ 95,169
Women	93	171,568
Total	133	\$ 266,737
Grand Total	1,033	\$ 2,676,999

VALUATION BALANCE SHEET

The following valuation balance sheet indicates the present and contingent assets and liabilities of the retirement system as of June 30, 1977. The amounts of the present assets shown on the balance sheet were taken from a statement furnished by the Director of the System and exclude reserve assets creditable to separate funds for the Accidental and Group Life Insurance Pre-retirement Death Benefit Programs.

TABLE III
VALUATION BALANCE SHEET
SHOWING THE ASSETS AND LIABILITIES OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
AS OF JUNE 30, 1977

ASSETS

Present assets of System creditable to:

Employee Annuity Savings Fund	\$ 18,286,655
Employer Annuity Accumulation Fund	<u>62,537,125</u>

Total Present Assets	\$ 80,823,780
----------------------	---------------

Present value of prospective contributions
to the Employer Annuity Accumulation Fund:

Normal contributions	\$ 58,108,044
Accrued liability contributions	<u>19,211,049</u>

Total Prospective Contributions	<u>77,319,093</u>
---------------------------------	-------------------

Total Assets	\$ 158,142,873
--------------	----------------

LIABILITIES

Present value of benefits on account of
which contributions have been accumulated
to date in the Employee Annuity Savings
Fund

\$ 18,286,655

Present value of benefits payable on account
of beneficiaries now drawing allowances
from the Employer Annuity Accumula-
tion Fund

24,162,621

Present value of benefits to active members
to be paid by contributions of the employers
into the Employer Annuity Accumulation Fund

107,181,497

Reserve for future increases in retirement
allowances

8,512,100

Total Liabilities	\$ 158,142,873
-------------------	----------------

RESULTS OF VALUATION

The valuation balance sheet indicates the following in regard to the funds of the System.

Employee Annuity Savings Fund

The Employee Annuity Savings Fund is the fund to which are credited the contributions made by members together with interest thereon. When a member retires, the amount of his accumulated contributions is transferred from this fund to the Employer Annuity Accumulation Fund. The assets credited to the Employee Annuity Savings Fund on June 30, 1977, which represent the accumulated contributions of members to that date, amounted to \$18,286,655. Future contributions into this fund and benefits payable from such contributions are considered to be of equivalent value and hence are not shown in the balance sheet.

Employer Annuity Accumulation Fund

The Employer Annuity Accumulation Fund is the fund to which the contributions made by employers are credited and from which are paid all benefits on account of retired members and their beneficiaries.

The present assets creditable to the Employer Annuity Accumulation Fund on June 30, 1977 amounted to \$62,537,125. The liabilities on account of active members amounted to \$107,181,497. In addition, the balance sheet indicates liabilities of \$24,162,621 on account of all benefits payable to retired members or their beneficiaries from the Employer Annuity Accumulation Fund. The balance sheet also shows a reserve of \$8,512,100 for future increases in retirement allowances to provide approximately five cost-of-living increases of 4 per cent per annum commencing July 1, 1977. The total liabilities therefore amounted to \$139,856,218. The difference between these liabilities and the present assets credited to this fund is \$77,319,093, which represents the present value of future contributions to be made by employers.

The retirement act provides that each employer shall contribute 7.5 per cent of compensation of Class One members in its employ and 10 per cent of compensation of Class Two members in its employ. The normal rate on the basis of Class One service for the average new entrant was determined to be 3.18 per cent of compensation. Therefore, if employers contribute 7.5 per cent of payroll for Class One members in their employ and 3.18 per cent is attributable to normal contributions, then the resulting 4.32 per cent is attributable to accrued liability contributions. For Class Two service the normal rate for the average new entrant was

determined to be 7.21 per cent of compensation. Subtracting 7.21 per cent from 10 per cent (the amount employers contribute for Class Two members in their employ) results in an accrued liability contribution of 2.79 per cent of compensation for Class Two members. Future normal contributions at the above rates have a present value of \$58,108,044. If this amount is subtracted from \$77,319,093, the present value of future contributions to be made by employers, \$19,211,049 remains as the present value of the unfunded accrued liability. On this basis, it is anticipated that the accrued liability of \$19,211,049 will be liquidated within a period of 13 years from the valuation date.

CONCLUSIONS AND RECOMMENDATIONS

The data did not differentiate Class One from Class Two service for members with both types of service prior to the valuation date. For these members all prior service was conservatively valued as Class Two service.

It is recommended that in accordance with the provisions of the retirement act each employer contribute 7.5 per cent of compensation of Class One members and 10 per cent of compensation of Class Two members (exclusive of the cost of Pre-retirement and Accidental Death Benefits). Based on these employer contribution rates the unfunded accrued liability will be liquidated within 13 years.

In addition, participating employers pay the cost of the Accidental and Pre-retirement Death Benefit Programs.

Employers may continue to contribute .55 per cent of compensation for pre-retirement lump sum death benefits, and .35 per cent of compensation for accidental death benefits.

The following table gives the rates of contribution payable by employers.

TABLE IV
RATES OF CONTRIBUTION RECOMMENDED FOR
PAYMENT BY EMPLOYERS

RATES OF CONTRIBUTION	CLASS ONE	CLASS TWO
Regular Benefits	7.50%	10.00%
Pre-retirement Death Benefits*	.55	.55
Accidental Death Benefits*	.35	.35
Total	8.40%	10.90%

*Payable by participating employers.

BASIS FOR VALUATION

The valuation of the Retirement System was made on the basis of the rates of separation, salary scale and mortality tables which were adopted by the Board on November 7, 1974. An interest rate of 5-1/4 per cent per annum was used. An outline of the actuarial assumptions and method employed is included on the following page.

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHOD

INTEREST RATE: 5-1/4% per annum, compounded annually.

SEPARATIONS FROM SERVICE AND SALARY INCREASES: Representative values of the adopted annual rates of separation and annual rates of salary increases are as follows:

<u>Age</u>	<u>Annual Rate of</u>				
	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Service Retirement*</u>	<u>Salary Increases**</u>
20	13.79%	.10%	.14%		7.29%
25	12.83	.13	.16		6.39
30	9.12	.16	.20		5.01
35	5.61	.20	.26		3.29
40	3.43	.27	.34		2.50
45	2.33	.40	.50		2.21
50	1.74	.57	.84		1.80
55		.88		6.50%	1.60
60		1.42		9.90	1.40
64		2.03		15.98	1.30

DEATHS AFTER RETIREMENT: Combined Annuity Mortality Tables, Modified and Makehamized, for service retirement and dependent beneficiaries with a one year set back in ages. A special mortality table is used for disability retirements.

LOADING OR CONTINGENCY RESERVES:

*A loading was included to cover additional liabilities on the basis of an expected increase in the rates of service retirement in conjunction with the improved benefits under the average final compensation formula.

**Reserves were included to provide for an annual inflation factor of 2 per cent in the salary scale and the flat benefit formula.

VALUATION METHOD: Projected benefit method with level percentage entry age normal cost and open-end unfunded accrued liability. Gains and losses are reflected in the period remaining to liquidate the unfunded accrued liability. Lump sum death benefits are provided on a one-year term cost basis.

A detailed record of each member of the System on the valuation date was required as a basis for determining the contingent assets and liabilities of the System. Summaries of the tabulations of the data submitted for the valuation as of June 30, 1977 are given in the following tables.

TABLE 1

- 17 -

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30, 1977

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
16	1 \$	2,493		
18	2	19,000		
19	6	46,831	6 \$	57,000
20	22	176,475	7	56,946
21	36	292,708	16	131,833
22	105	898,824	35	271,701
23	206	1,753,283	34	272,540
24	291	2,403,687	36	321,265
25	280	2,402,766	25	186,307
26	317	2,776,446	21	158,537
27	279	2,504,917	32	253,184
28	301	2,707,291	38	319,951
29	335	3,051,606	32	272,880
30	326	3,116,138	22	202,276
31	278	2,680,221	14	118,605
32	226	2,179,902	14	110,041
33	198	1,867,033	12	92,135
34	215	2,056,373	11	93,248
35	193	1,939,251	14	115,586
36	150	1,526,900	14	106,509
37	157	1,609,674	8	57,040
38	157	1,619,776	5	38,385
39	131	1,376,163	7	62,671
40	142	1,437,053	13	114,982
41	145	1,470,957	10	80,890
42	132	1,387,578	12	94,948
43	160	1,578,200	9	67,711
44	164	1,655,564	2	9,136
45	132	1,330,069	4	37,501
46	140	1,481,760	4	44,035
47	171	1,762,086	3	14,511
48	119	1,203,000	2	16,979
49	133	1,385,080	2	17,777
50	138	1,479,584	5	40,718
51	100	1,046,043	4	39,570
52	104	1,111,951	4	37,065
53	134	1,390,017	5	48,827
54	85	879,170	5	42,729
55	103	1,083,440	4	35,396

TABLE 1

- 18 -

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30, 1977

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	89	\$ 933,242	4	\$ 27,488
57	105	1,085,423	2	14,488
58	87	848,058	1	7,589
59	79	866,680	7	46,876
60	63	615,877		
61	68	689,057	1	8,424
62	55	571,590		
63	53	515,508	1	9,500
64	36	349,653		
65	26	265,838		
66	11	97,964	1	15,600
67	10	91,072		
68	9	57,822		
69	15	119,704	2	17,050
70	6	42,038		
71	3	26,500		
72	1	9,500		
73	1	3,211		
74	3	20,647		
76	2	4,962		
79	1	3,545		
80	1	12,923		
TOTAL	7,038	\$ 67,920,124	510	\$ 4,188,430

See Footnote Table I

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30, 1977

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	690	\$ 5,775,451	136	\$ 1,071,364
1	1,060	8,724,845	148	1,197,657
2	864	7,462,390	86	703,351
3	742	6,632,006	53	432,979
4	660	6,194,146	27	233,883
5	417	4,021,050	28	251,130
6	345	3,473,460	5	44,200
7	264	2,686,109	2	19,808
8	265	2,715,010	3	33,421
9	213	2,279,070	2	27,699
10	202	2,159,668	2	24,531
11	146	1,634,591	2	17,728
12	128	1,390,108	2	17,395
13	89	1,045,922		
14	110	1,299,138		
15	98	1,105,450	3	24,726
16	83	950,119		
17	73	910,373		
18	31	349,271	1	6,758
19	60	729,814	2	15,139
20	69	865,368	1	6,336
21	49	584,798	2	10,431
22	29	332,108		
23	55	695,251		
24	36	419,938		
25	53	684,774	1	7,956
26	23	295,604	1	1,426
27	28	356,310		
28	12	153,242	1	15,600
29	37	516,183		
30	41	627,960		
31	19	249,542		
32	13	149,156	1	15,412
33	2	23,997		
34	1	11,357	1	9,500
35	4	45,896		

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30, 1977

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	9	\$ 131,885		
37	10	138,523		
38	2	28,330		
39	1	14,496		
40	2	13,952		
42	1	10,812		
43	1	19,728		
58	1	12,923		
TOTAL	7,038	\$ 67,920,124	510	\$ 4,188,430

See Footnote Table I

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1977

SERVICE AND EARLY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
49	1 \$	2,077		
51	1	3,063		
52	1	4,626		
53	3	8,583		
54	1	5,745		
55	2	8,200		
56	9	35,705		
57	11	40,398		
58	15	48,758		
59	25	86,271	1 \$	1,045
60	25	63,731	1	1,284
61	27	72,843		
62	22	75,133		
63	42	112,826	2	4,377
64	45	124,360	1	2,035
65	48	126,750		
66	56	141,510	1	1,923
67	52	155,357	1	2,780
68	61	192,408		
69	53	130,325	2	2,992
70	43	116,422	1	4,333
71	34	95,336	1	2,850
72	43	110,379		
73	23	53,097		
74	34	84,986	1	3,906
75	16	35,900		
76	12	24,238	1	2,110
77	23	54,083		
78	11	22,904	1	824
79	11	23,397		
80	9	19,842	1	543

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1977

SERVICE AND EARLY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
81	4 \$	9,962		
82	2	5,697		
83	3	7,891		
84	1	623		
85	2	3,426		
87	1	519		
90	1	4,673		
TOTAL	773 \$	2,112,044	15 \$	31,002

SUMMARY

LIFE				
ANNUITY	623 \$	1,683,280	13 \$	27,941
100% J+S	65	137,407	2	3,061
50% J+S	85	291,357		

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1977

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
33	1 \$	3,550		
35	2	7,244		
37	1	583		
40	1	3,045		
41	5	14,756		
43	2	8,893		
44	3	3,559		
45	1	1,765		
46	5	8,576		
47	2	5,683		
48	2	1,792		
49	2	2,947		
50	3	8,584		
51	4	11,360		
52	10	25,164		
53	6	18,662		
54	3	6,529	1 \$	1,132
55	7	22,279		
56	7	11,593		
57	7	17,480		
58	12	24,392		
59	6	18,008		
60	4	6,107		
61	2	3,248		
62	5	8,853		
63	1	1,213		
64	2	2,957		
65	3	8,427		
67	1	6,343		
73	1	2,492		
TOTAL	111 \$	266,084	1 \$	1,132

SUMMARY

LIFE				
ANNUITY	74 \$	171,362	1 \$	1,132
100% J+S	20	36,666		
50% J+S	17	58,056		

TABLE 5

- 24 -

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1977

BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
43			1 \$	3,465
49			2	3,104
51			2	7,058
52			1	1,911
53			1	410
55			1	11,425
56			7	14,734
57	2 \$	2,242	2	2,459
58	3	9,645	2	3,037
59	3	9,734	3	5,535
60	3	3,090	2	3,704
61	1	5,742	4	6,013
62	2	7,707	5	7,211
63	2	6,633	4	6,822
64	1	4,327	4	7,428
65	3	10,715	4	7,151
66	1	3,425	6	14,164
67	1	1,565	4	10,250
68	8	15,642	4	4,381
69	2	2,798	4	4,972
70			6	9,089
71	3	6,504	3	4,957
72	2	1,111	4	6,277
73			2	1,160
74			3	5,077
75	1	417	2	1,933
76	1	2,334		
77	1	1,538		
78			2	2,643
79			2	4,010
80			1	2,623
81			1	3,351
82			1	1,696
83			1	883
84			1	1,501
88			1	1,134
TOTAL	40 \$	95,169	93 \$	171,568