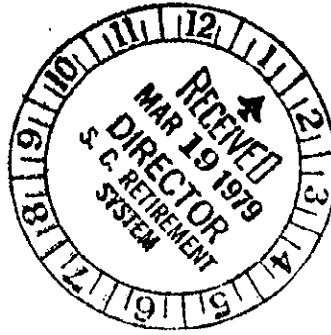


REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS
RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1978

George B. Buck Consulting Actuaries, Inc.
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Telephone 404 | 955 2488

March 13, 1979



BUCK
CONSULTANTS


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 our "Report on an Actuarial Valuation of the South Carolina Police Officers Retirement System Prepared as of June 30, 1978".

Very truly yours,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.


Thomas J. Cavanaugh, F.S.A.
Associate Consulting Actuary

TJC:AE
Enc.

George B. Buck Consulting Actuaries, Inc.
Two Pennsylvania Plaza, New York, New York 10001
Telephone 212 | 279 4400

February 1, 1979

BUCK
CONSULTANTS

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

Gentlemen:

We transmit herewith our report on the actuarial valuation of the South Carolina Police Officers Retirement System prepared as of June 30, 1978.

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.

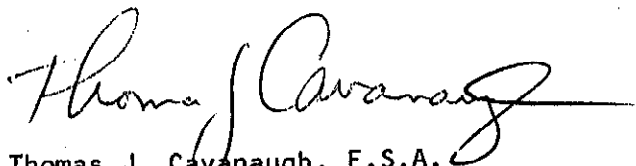
We trust that the report is in satisfactory form for use by the Board.

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.



Hugh Gillespie
Consulting Actuary



Thomas J. Cavanaugh, F.S.A.
Associate Consulting Actuary

REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1978

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, 1978. 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, 1978. Next, the valuation balance sheet showing the assets and liabilities of the System as of June 30, 1978 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 amendment, effective July 1, 1978, providing for a death benefit after 30 years of service, regardless of age, was taken into account in this 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 | <p>Upon service retirement a member receives a service retirement allowance which is equal to:</p> <ol style="list-style-type: none"> (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, or who, regardless of age, has completed 30 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 for at least one year 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, 1978, 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, 1978.

TABLE I
NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
AS OF JUNE 30, 1978

GROUP	NUMBER	ANNUAL COMPENSATION
Men	7,144	\$ 74,321,927
Women	507	4,267,267
Total	7,651*	\$ 78,589,194

*There are in addition 1,473 members not on the payroll as of June 30, 1978 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, 1978.

TABLE II
THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES
ON THE ROLL AS OF JUNE 30, 1978

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Service and Early Retirements:		
Men	850	\$ 2,526,258
Women	17	35,955
Total	867	\$ 2,562,213
Disability Retirements:		
Men	128	\$ 345,837
Women	-	-
Total	128	\$ 345,837
Beneficiaries of Deceased Members:		
Men	39	\$ 95,987
Women	112	220,414
Total	151	\$ 316,401
Grand Total	1,146	\$ 3,224,451

VALUATION BALANCE SHEET

The following valuation balance sheet indicates the present and contingent assets and liabilities of the Retirement System as of June 30, 1978. The amounts of the present assets shown on the balance sheet at adjusted amortized cost 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, 1978

ASSETS	
Present assets of System creditable to:	
Members' account	\$ 21,352,433
Accumulation account	<u>72,972,100</u>
Total Present Assets	\$ 94,324,533
Present value of prospective contributions to the accumulation account:	
Normal contributions	\$ 58,633,149
Accrued liability contributions	<u>23,425,224</u>
Total Prospective Contributions	<u>82,058,373</u>
Total Assets	<u>\$ 176,382,906</u>
LIABILITIES	
Present value of benefits on account of which contributions have been accumulated to date in the members' account	
	\$ 21,352,433
Present value of benefits payable on account of beneficiaries now drawing allowances from the accumulation account	
	29,467,037
Present value of benefits to active members to be paid by contributions of the employers into the accumulation account	
	120,487,424
Reserve for future increases in retirement allowances	
	<u>5,076,012</u>
Total Liabilities	<u>\$ 176,382,906</u>

RESULTS OF VALUATION

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

Members' Account

The members' account is the account 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 account to the accumulation account. The assets credited to the members' account on June 30, 1978, which represent the accumulated contributions of members to that date, amounted to \$21,352,433. Future contributions into this account and benefits payable from such contributions are considered to be of equivalent value and hence are not shown in the balance sheet.

Accumulation Account

The accumulation account is the account 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 accumulation account on June 30, 1978 amounted to \$72,972,100. The liabilities on account of active members amounted to \$120,487,424. In addition, the balance sheet indicates liabilities of \$29,467,037 on account of all benefits payable to retired members or their beneficiaries from the accumulation account. The balance sheet also shows a reserve of \$5,076,012 for future increases in retirement allowances to provide four cost-of-living increases of 4 per cent per annum commencing July 1, 1978. The total liabilities therefore amounted to \$155,030,473. The difference between these liabilities and the present assets credited to this account is \$82,058,373, 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 3.87 per cent of compensation. Therefore, if employers contribute 7.5 per cent of payroll for Class One members in their employ and 3.87 per cent is attributable to normal contributions, then the resulting 3.63 per cent is attributable to accrued liability contributions. For Class Two service the normal rate for the average new entrant was determined to be 6.59 per cent of

compensation. Subtracting 6.59 per cent from 10 per cent (the amount employers contribute for Class Two members in their employ) results in an accrued liability contribution of 3.41 per cent of compensation for Class Two members. Future normal contributions at the above rates have a present value of \$58,633,149. If this amount is subtracted from \$82,058,373, the present value of future contributions to be made by employers, \$23,425,224 remains as the present value of the unfunded accrued liability. On this basis, it is anticipated that the accrued liability of \$23,425,224 will be liquidated within a period of 12 years from the valuation date.

If provision were made for five additional lifetime cost-of-living increases of 4 per cent per annum commencing July 1, 1978, the reserve required would be \$7,261,467. This exceeds the reserve shown in the balance sheet by \$2,185,455. It is anticipated that the resultant accrued liability of \$25,610,679 would be liquidated within a period of 13.5 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 12 years.

In addition, participating employers pay the cost of the Accidental and Pre-retirement Death Benefit Programs. It is recommended that Employers contribute .40 per cent of compensation for pre-retirement lump sum death benefits, and .20 per cent of compensation for accidental death benefits. The rates recommended in last year's valuation were .55 per cent and .35 per cent, respectively. The reduction in rates is due to fewer claims than expected, and an asset build-up of \$1,237,686 as of June 30, 1978 for the lump sum death benefits, and \$656,371 as of June 30, 1978 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*	.40	.40
Accidental Death Benefits*	.20	.20
Total	8.10%	10.60%

*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:

Age	<u>Annual Rate of</u>				Salary Increases**
	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Service Retirement*</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, 1978 are given in the following tables.

TABLE 1

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30, 1978

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
18	2 \$	8,928		
19	5	22,520	1 \$	7,415
20	16	124,479	6	48,545
21	67	490,821	10	79,007
22	130	974,936	19	138,640
23	195	1,664,336	31	269,203
24	263	2,234,537	30	229,530
25	305	2,676,500	35	272,225
26	259	2,407,233	33	248,228
27	311	2,935,559	20	159,229
28	283	2,753,239	23	210,375
29	294	2,871,242	35	299,524
30	327	3,194,076	24	196,192
31	311	3,241,736	14	122,975
32	269	2,772,169	17	148,537
33	229	2,417,859	17	143,441
34	188	1,945,578	11	106,848
35	198	2,069,303	7	68,759
36	183	2,097,577	17	154,504
37	144	1,656,081	14	123,558
38	152	1,701,832	11	84,203
39	160	1,817,635	9	72,282
40	127	1,444,928	11	95,100
41	137	1,584,556	14	127,751
42	142	1,621,798	10	74,583
43	138	1,596,410	14	127,102
44	148	1,618,423	9	73,571
45	167	1,797,282	2	12,558
46	131	1,424,238	5	47,804
47	138	1,580,319	3	39,001
48	166	1,893,672	2	16,602
49	119	1,320,321	3	26,012
50	133	1,551,327	2	17,996
51	140	1,676,384	4	33,634
52	100	1,133,411	3	31,867
53	100	1,163,737	6	57,098
54	131	1,484,812	5	48,209
55	78	879,185	5	44,103

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30, 1978

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	98	\$ 1,118,532	3	\$ 33,939
57	80	906,335	6	46,376
58	105	1,183,376	2	16,209
59	89	965,845	1	8,400
60	82	939,849	7	48,503
61	54	603,153	1	8,338
62	66	786,510	1	9,675
63	44	534,041		
64	44	496,234	1	9,024
65	28	349,715		
66	19	213,800		
67	8	65,300	1	15,600
68	6	51,580		
69	9	57,657		
70	12	108,308	2	14,992
71	5	40,128		
72	2	23,023		
73	1	2,784		
74	1	4,800		
75	2	13,084		
77	2	5,132		
80	1	3,722		
TOTAL	7,144	\$ 74,321,927	507	\$ 4,267,267

SEE FOOTNOTE TABLE 1

TABLE 2

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30, 1978

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	608	\$ 4,115,444	75	\$ 475,475
1	1,133	9,982,146	166	1,410,822
2	732	6,658,975	73	625,627
3	679	6,558,810	62	540,144
4	612	5,983,830	46	381,160
5	554	5,672,702	25	244,093
6	370	3,907,538	27	258,289
7	315	3,481,907	5	45,875
8	242	2,758,537	2	20,909
9	249	2,824,418	3	36,307
10	201	2,476,297	2	29,879
11	104	2,407,070	2	28,004
12	138	1,731,700	2	19,101
13	118	1,462,256	2	19,635
14	82	1,114,718		
15	104	1,401,398		
16	93	1,194,071	3	31,937
17	77	997,411		
18	73	1,048,187		
19	30	393,121	1	7,442
20	58	821,275	3	24,099
21	70	1,031,339	1	6,972
22	49	683,865	2	13,219
23	30	391,493		
24	53	775,724		
25	36	479,728		
26	52	855,238	1	9,167
27	22	323,813	1	1,717
28	29	422,692		
29	10	152,006	1	15,600
30	37	631,403		
31	40	732,361		
32	18	265,657		
33	9	106,453	1	16,263
34	3	45,553		
35	1	12,002	1	7,631

TABLE 2

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30, 1978

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	2	\$ 26,160		
37	9	185,367		
38	8	143,022		
39	1	23,950		
41	1	4,452		
43	1	13,552		
44	1	24,167		
TOTAL	7,144	\$ 74,321,927	507	\$ 4,267,267

SEE FOOTNOTE TABLE 1

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1978

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
41	1	\$ 16,252		
48	1	759		
50	2	4,008		
51	1	6,643		
52	3	18,928		
53	1	4,626		
54	4	17,888		
56	11	48,315		
57	15	73,655		
58	17	63,868		
59	19	66,638		
60	31	118,596	1	\$ 1,045
61	31	75,676	1	1,335
62	33	105,555		
63	34	131,224		
64	53	167,120	2	4,552
65	49	137,568	1	2,052
66	57	155,385	2	3,835
67	56	140,621	1	1,998
68	54	161,746	1	2,888
69	60	193,744		
70	54	150,765	2	3,110
71	40	109,764	1	4,505
72	32	91,194	1	2,962
73	41	109,361		
74	22	49,969		
75	34	87,474	1	4,059
76	16	37,217		
77	12	25,119	1	2,193
78	22	54,758		
79	10	22,248	1	857
80	11	24,180		

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1978

SERVICE AND EARLY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
81	10 \$	22,659	1 \$	564
82	4	10,359		
83	2	5,921		
84	3	8,207		
85	1	648		
86	1	2,150		
88	1	540		
91	1	4,860		
TOTAL	850 \$	2,526,258	17 \$	35,955

SUMMARY

LIFE				
ANNUITY	676 \$	1,963,287	14 \$	30,897
100% J+S	73	182,901	3	5,058
50% J+S	101	380,070		

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1978

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
28	1	\$ 4,036		
31	1	3,751		
33	1	4,086		
34	1	3,550		
36	2	4,316		
37	1	2,886		
38	2	5,877		
39	1	6,156		
40	2	8,517		
41	1	3,045		
42	6	17,182		
43	1	10,703		
44	3	12,856		
45	2	2,066		
46	1	1,836		
47	4	7,279		
48	2	5,756		
49	2	1,728		
50	3	11,042		
51	3	8,646		
52	5	14,457		
53	11	26,867		
54	7	21,601		
55	4	11,433		
56	6	15,271		
57	7	11,573		
58	7	17,742		
59	12	24,169		
60	6	18,091		

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1978

DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
61	6 \$	17,350		
62	2	3,248		
63	7	19,031		
64	1	1,261		
65	3	3,454		
66	2	5,666		
68	1	6,597		
74	1	2,592		
TOTAL	128 \$	345,837		

SUMMARY

LIFE ANNUITY	87 \$	233,451
100% J+S	22	48,763
50% J+S	19	63,623

TABLE 5

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1978

BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36			1 \$	3,320
43			1	3,495
44			1	3,465
45			1	1,169
47			1	2,218
50			2	3,184
51			2	3,964
52			3	10,749
53			1	1,987
54			1	426
55			1	1,536
56			3	11,002
57			8	18,986
58	1 \$	1,145	2	2,556
59	3	9,728	4	9,436
60	3	10,123	3	5,750
61	3	3,168	2	3,852
62	1	5,972	6	7,144
63	2	7,622	6	16,531
64	2	5,877	4	6,921
65	1	4,500	5	10,335
66	3	11,144	5	7,946
67	1	3,562	6	14,414
68	1	1,627	4	10,416
69	8	16,260	5	5,906
70	2	2,910	4	5,111
71			6	8,408
72	3	6,763	4	6,460
73	2	1,154	4	6,526
74			2	1,206
75			4	9,829
76	1	406	2	2,010
77	1	2,427		
78	1	1,559		
79			2	2,746
80			1	1,406
81			1	2,728
82			1	3,418
83			1	1,762
84			1	918
89			1	1,178
TOTAL	39 \$	95,987	112 \$	220,414