

REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS
RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1973 AND
JUNE 30, 1974

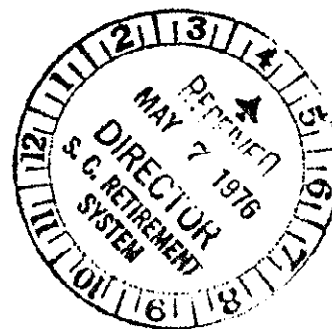
GEORGE B. BUCK CONSULTING ACTUARIES, INC.

EMPLOYEE BENEFIT PLAN CONSULTANTS

TWO PENNSYLVANIA PLAZA, NEW YORK, NEW YORK 10001

212-695-2800

May 3, 1976



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

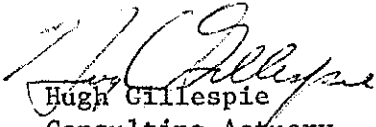
Dear Mr. Collins:

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, 1973 and June 30, 1974."

Very truly yours,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

By


Hugh Gillespie
Consulting Actuary

HG:JC

Enc.

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

EMPLOYEE BENEFIT PLAN CONSULTANTS

TWO PENNSYLVANIA PLAZA, NEW YORK, NEW YORK 10001
212-695-2800

February 27, 1976

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

Gentlemen:

I transmit herewith our report on the combined actuarial valuations of the South Carolina Police Officers Retirement System prepared as of June 30, 1973 and June 30, 1974.

As of June 30, 1973 in conjunction with a proposed study to incorporate benefits in the retirement system related to average final compensation, the valuation interest rate was increased from $4\frac{1}{2}$ per cent to $5\frac{1}{4}$ per cent. Special calculations were prepared on the basis of strengthened active service and mortality tables, a salary scale deemed appropriate for use and a $5\frac{1}{4}$ per cent interest assumption in order to determine the level of benefit which could be provided after taking into account excess reserves generated by the change in interest rate to $5\frac{1}{4}$ per cent and the revised actuarial assumptions. Inasmuch as benefits under the structure in effect June 30, 1973 were not related to salaries, periodic increases for all active and retired members had been made in the past on the basis of gains arising from year to year under the employer contribution rate of 8.5 per cent of payroll. However, in order to accomplish the general objective of incorporating benefits in the System related to average final compensation, various estimates were made in order to determine a benefit structure which could be supported on the basis of the revised actuarial assumptions and a $5\frac{1}{4}$ per cent valuation interest rate.

On the basis of the special study prepared as of June 30, 1973, two separate plans were established within the System, one providing for a basic flat monthly allowance for each year of covered service and one providing for a salary related monthly allowance computed as a percentage of average final compensation for each year of covered service which would in general automatically apply to members covered under the Supplemental Allowance Plan with special provision for such coverage extended to other members. Employee and employer contributions would be based on plan coverage. It was further recommended that the past practice of periodically increasing benefits for members covered under the flat basis plan be continued. It was also suggested that provision be made for cost-of-living increases in retirement allowances provided such increases did not require an increase in the employer rates of contribution. In line with these recommendations, the

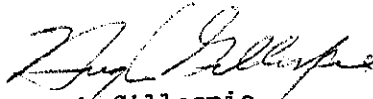
1974 Session of the General Assembly adopted several major changes in the System effective July 1, 1974. This report presents the results of the June 30, 1974 valuation prepared on the basis of the amendments to the System effective July 1, 1974. Inasmuch as the June 30, 1974 data indicated membership as basic or supplemental in accordance with the provisions in effect as of the valuation date, it was deemed conservative to value as Class Two service the future service credit for all members since approximately 65 per cent of the June 30, 1974 membership is covered under the Supplemental Program and such members will automatically become Class Two members as of July 1, 1974.

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 THE ACTUARIAL VALUATIONS OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1973 AND
JUNE 30, 1974

The South Carolina Police Officers Retirement System was established as of July 1, 1962. Membership in the System is open to any police officer 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 whose period of active duty during a year is at least 1,600 hours and his compensation for such service is at least \$2,000 per year is eligible to join. Membership is compulsory with employees who become police officers of the State or other employers after the employer's date of admission to the System. Police officers 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, 1974. The report gives first a summary of the benefit and contribution provisions of the System as in effect since July 1, 1974 and a statement of the membership as of June 30, 1973 and June 30, 1974. Next, the valuation balance sheet showing the assets and liabilities of the System as of June 30, 1974 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.

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

A summary of the main benefit and contribution provisions of the System as amended effective July 1, 1974 and interpreted for the valuation is presented in the following digest. Credited service of a member includes all service as a police officer 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 is participating in the Supplemental Allowance Program as of June 30, 1974 or which elects to provide Class Two membership for police officers in its employ and elects 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 is 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 member 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.

Amount of Allowance

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

(1) A monthly retirement allowance equal to eight 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 deferred allowance 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 $\frac{5}{12}$ 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 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 an option, 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, 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 beneficiary.

Cost-of-Living Adjustments in Allowance

As of July 1 1975, on the basis of a program whereby allowances are to be increased by 4% 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 December 31, 1973 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

Commencing as of July 1, 1974, 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

ACTIVE MEMBERSHIP

Table I shows the number of active members included in the membership as of June 30, 1973 and June 30, 1974.

TABLE I

NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS

GROUP	AS OF JUNE 30, 1973		AS OF JUNE 30, 1974	
	Number	Annual Compensation	Number	Annual Compensation
Men	4,929	\$ 36,302,171	5,462	\$ 42,962,453
Women	92	583,594	154	884,689
Total	5,021*	\$ 36,885,765	5,616*	\$ 43,847,142

*There are in addition 1,001 members not on the payroll as of June 30, 1973 and 1,073 as of June 30, 1974 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, 1973 and June 30, 1974.

TABLE II

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES
ON THE ROLL AS OF JUNE 30, 1973 AND JUNE 30, 1974

GROUP	AS OF JUNE 30, 1973		AS OF JUNE 30, 1974	
	Number	Annual Retirement Allowances	Number	Annual Retirement Allowances
Service and Early Retirements:				
Men	512	\$ 758,767	535	\$ 887,256
Women	10	14,304	12	17,856
Total	522	\$ 773,071	547	\$ 905,112
Disability Retirements:				
Men	50	\$ 57,148	53	\$ 68,700
Women	1	999		
Total	51	\$ 58,147	53	\$ 68,700
Beneficiaries of Deceased Members:				
Men	80	\$ 89,872	88	\$ 105,660
Women				
Total	80	\$ 89,872	88	\$ 105,660
Grand Total	653	\$ 921,090	688	\$ 1,079,472

VALUATION BALANCE SHEET

The following valuation balance sheet indicates the present and contingent assets and liabilities of the retirement system as of June 30, 1974. 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 accounts 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, 1974

ASSETS

Present assets of System creditable to:

Employee Annuity Savings Fund	\$	11,642,328
Employer Annuity Accumulation Fund excluding \$576,402 creditable to Death Benefit Program Account		35,498,026

Total Present Assets	\$	47,140,354
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Present value of prospective contributions
to the Employer Annuity Accumulation Fund:

Normal contributions	\$	36,352,710
Accrued liability contributions		14,432,467

Total Prospective Contributions		50,785,177
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Total Assets	\$	97,925,531
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LIABILITIES

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

\$ 11,642,328

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

10,352,219

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

72,808,084

Reserve for future increases in retirement
allowances

3,122,900

Total Liabilities	\$	97,925,531
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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, 1974, which represents the accumulated contributions of members to that date, including supplemental contributions made by members under the Supplemental Allowance Program, amounted to \$11,642,328. The liabilities of this fund are also shown as \$11,642,328. 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, 1974, excluding reserve assets of \$576,402 creditable to separate accounts for the Accidental and Group Life Pre-retirement Death Benefit Programs, amounted to \$35,498,026. The liabilities on account of active members amounted to \$72,808,084. In addition, the balance sheet indicates liabilities of \$10,352,219 on account of all benefits payable to retired members or their beneficiaries from the Employer Annuity Accumulation Fund, including increases in retirement allowances effective July 1, 1974. The balance sheet also shows a reserve of \$3,122,900 for future increases in retirement allowances to provide approximately five cost-of-living increases of 4 per cent per annum commencing July 1, 1975. The total liabilities therefore amounted to \$86,283,203. The difference between these liabilities and the present assets credited to this fund is \$50,785,177, 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. Since the valuation was prepared on the assumption that all members would have Class Two service credits for service after June 30, 1974, the normal rate was determined on the basis of Class Two service for the average new entrant to be 7.5 per cent of compensation. Therefore, if employers contribute 10 per cent of payroll, 7.5 per cent is attributable to normal contributions and 2.5 per cent to accrued liability contributions. On this basis, it is anticipated the accrued liability of \$14,432,467 will be liquidated within a period of 23 years from the valuation date.

CONCLUSIONS AND RECOMMENDATIONS

The results of the valuation, assuming Class Two coverage for all members after June 30, 1974 and an employer contribution rate of 10 per cent (exclusive of the cost of the pre-retirement and accidental death benefits) indicates the unfunded accrued liability will be liquidated within 23 years. It should be noted that on a 30 year funding period as of June 30, 1974, a margin of conservatism still exists in the employer contribution rate. Therefore, it appears the System is in a sound actuarial condition.

In connection with the valuation to be prepared as of June 30, 1975, the unfunded accrued liability will be determined on the basis of the actual Class One and Class Two membership as of that date. It is therefore 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.

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

The rate necessary to provide the pre-retirement lump sum death benefit may be reduced from the present employer rate of one per cent of compensation in view of the development of reserve assets of \$478,112 for this benefit. Employees may continue to contribute .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*	.75	.75
Accidental Death Benefits*	.35	.35
Total	8.60%	11.10%

*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>Salary Increase**</u>
	<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 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 valuations as of June 30, 1973 and June 30, 1974 are given in the following tables.

TABLE 1A

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30 1973

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
19	5 \$	18,342		
20	4	25,651		
21	12	57,306	6 \$	32,725
22	111	631,788	3	21,032
23	133	775,856	10	56,521
24	163	1,032,860	6	33,663
25	187	1,203,993	3	21,882
26	220	1,509,163		
27	214	1,422,533	1	5,718
28	154	1,052,762		
29	148	1,016,312	3	23,272
30	138	982,483	4	21,889
31	145	1,051,117	3	21,828
32	120	881,103	2	10,719
33	137	993,622	2	12,848
34	117	894,654	1	6,621
35	93	731,571	3	19,510
36	108	819,951	5	32,798
37	103	818,735		
38	96	760,279	4	31,064
39	107	831,832		
40	116	903,872		
41	92	692,906	4	21,106
42	120	967,638	1	9,220
43	132	1,009,483		
44	86	666,060	1	6,008
45	110	917,645	1	5,460
46	110	883,589	1	5,731
47	88	689,625	2	13,244
48	96	770,271	6	39,611
49	131	1,026,767	2	13,276
50	70	558,994		
51	83	686,653	1	6,248
52	93	724,578	1	6,939
53	107	843,824	1	5,426
54	93	734,788	1	5,160
55	107	842,551	6	36,106

TABLE 1A

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30 1973

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	81 \$	612,635	1 \$	7,796
57	89	711,653		
58	72	584,790	1	6,327
59	87	672,414		
60	78	600,179		
61	73	506,696	2	11,864
62	63	463,960	4	31,982
63	41	346,282		
64	58	468,039		
65	48	346,127		
66	24	163,242		
67	10	68,268		
68	11	67,379		
69	6	31,202		
70	10	69,972		
71	7	47,047		
72	7	17,351		
73	8	54,377		
74	2	7,340		
75	3	14,210		
76	1	9,100		
86	1	8,751		
TOTAL	4,929 \$	36,302,171	92 \$	583,594

See Footnote Table I

TABLE 1 B

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THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30 1974

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
18	1 \$	3,150		
19	7	25,556	3 \$	12,198
20	6	32,753	4	15,403
21	17	83,408	3	15,372
22	93	574,347	10	57,097
23	169	1,104,486	7	31,560
24	177	1,197,556	15	82,199
25	211	1,450,760	8	45,792
26	226	1,581,528	5	26,627
27	238	1,795,909	5	28,912
28	226	1,706,090	6	31,950
29	173	1,331,882	3	17,636
30	152	1,165,206	4	26,889
31	160	1,225,028	3	18,300
32	156	1,264,636	7	48,923
33	128	1,048,366	3	14,249
34	141	1,147,263	3	12,551
35	129	1,076,749	2	14,177
36	104	830,866	2	15,467
37	117	1,001,249	7	45,826
38	116	992,902	4	17,689
39	102	901,501	4	29,863
40	119	988,492	2	11,060
41	128	1,070,503		
42	107	885,431	4	21,217
43	139	1,147,984	2	14,117
44	148	1,220,992		
45	93	746,792	1	7,360
46	118	1,021,230	3	15,181
47	118	1,044,586	3	17,185
48	95	803,623	3	19,862
49	100	865,293	6	33,444
50	142	1,157,503	2	13,880
51	75	649,455	3	13,448
52	94	801,915	1	7,654
53	94	778,476	2	11,207
54	115	954,513	2	11,891
55	97	782,579	1	6,176

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30 1974

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	108	\$ 895,367	6	\$ 37,161
57	80	635,340	1	7,040
58	86	713,673		
59	72	611,466	1	6,186
60	87	682,673		
61	75	585,173		
62	69	513,706	2	10,000
63	51	403,041	1	11,940
64	37	304,607		
65	53	441,888		
66	39	273,663		
67	17	115,443		
68	9	56,665		
69	8	59,771		
70	6	29,408		
71	8	54,986		
72	4	30,732		
73	7	20,478		
74	8	32,823		
75	2	10,596		
76	3	14,782		
77	1	9,984		
87	1	5,630		
TOTAL	5,462	\$ 42,962,453	154	\$ 884,689

See Footnote Table I

TABLE 2 A

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30 1973

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT.
0	529	\$ 2,715,613	9	\$ 41,405
1	723	4,571,836	42	257,528
2	514	3,543,635	11	64,441
3	376	2,681,599	3	22,087
4	378	2,742,452	4	30,555
5	266	1,998,906	5	42,153
6	241	1,829,477	2	15,959
7	198	1,540,582	3	20,138
8	171	1,330,568	2	14,087
9	112	945,235	1	7,796
10	145	1,162,024		
11	177	1,379,916	4	25,088
12	111	909,056		
13	97	830,338		
14	44	352,064		
15	70	606,782	1	5,160
16	88	774,007	1	6,664
17	58	474,730	2	12,438
18	45	422,657		
19	67	616,258		
20	51	417,432		
21	67	608,292	1	6,399
22	40	334,212		
23	50	442,063		
24	27	249,923	1	11,696
25	49	480,919		
26	63	661,252		
27	34	315,846		
28	24	214,428		
29	9	87,216		
30	9	77,033		
31	10	98,333		
32	21	241,850		
33	17	170,368		
34	9	109,937		
35	8	73,629		
36	16	159,648		
37	2	18,383		
38	7	61,017		
39	2	23,670		
41	1	12,072		
42	2	7,813		
54	1	9,100		
TOTAL	4,929	\$ 36,302,171	92	\$ 583,594

See Footnote Table I

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30 1974

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	228	\$ 1,008,312	29	\$ 107,756
1	1,178	7,657,466	49	283,042
2	612	4,306,800	38	228,973
3	453	3,412,833	9	52,565
4	340	2,670,486	4	28,695
5	347	2,727,139	3	25,930
6	258	2,127,324	4	35,065
7	231	1,939,163	2	15,858
8	183	1,555,634	4	23,619
9	162	1,352,667	2	14,016
10	109	1,000,730	1	7,040
11	140	1,241,107		
12	166	1,347,246	3	20,339
13	107	974,505		
14	90	861,048		
15	41	359,225		
16	64	634,085	1	6,176
17	89	853,131	1	6,000
18	57	561,065	2	11,024
19	42	404,291		
20	66	694,252		
21	49	447,764		
22	63	683,185	1	6,651
23	39	345,727		
24	50	485,520		
25	26	244,802	1	11,940
26	46	527,376		
27	62	724,531		
28	33	345,955		
29	23	219,377		
30	8	87,504		
31	8	71,421		
32	11	117,164		
33	20	266,910		
34	17	208,667		
35	8	119,442		

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30 1974

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	7	\$ 73,881		
37	15	171,317		
38	1	3,939		
39	7	63,728		
40	2	29,729		
42	1	14,840		
43	2	11,181		
55	1	9,984		
TOTAL	5,462	\$ 42,962,453	154	\$ 884,689

See Footnote Table I

TABLE 3 A

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30 1973

SERVICE AND EARLY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
55	5 \$	8,465		
56	8	13,338		
57	11	18,189		
58	11	16,589		
59	15	19,834	1 \$	1,627
60	13	21,203	1	1,588
61	15	20,088		
62	28	44,944		
63	31	49,093	1	1,952
64	35	50,182		
65	35	51,087	2	2,107
66	39	59,731		
67	38	54,653	1	1,960
68	44	66,314		
69	23	30,443		
70	36	54,267	1	2,398
71	19	24,821		
72	13	19,585	1	1,653
73	26	39,793		
74	13	18,371	1	635
75	16	21,039		
76	13	19,545	1	384
77	7	9,725		
78	4	5,295		
79	4	7,026		
80	2	1,560		
81	2	2,691		
82	2	4,920		
83	1	360		
84	1	2,166		
85	1	780		
86	1	2,670		
TOTAL	512 \$	758,767	10 \$	14,304

SUMMARY

NO OPTION	444 \$	673,143	8 \$	12,118
OPTION 1	39	45,781	2	2,186
OPTION 2	29	39,843		

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1974

SERVICE AND EARLY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
46	1 \$	1,464		
53	1	2,616		
56	9	15,660		
57	12	18,672		
58	15	21,180		
59	12	21,012		
60	17	24,096	1 \$	1,788
61	15	27,192	1	1,740
62	20	30,600		
63	33	54,156	2	2,172
64	35	61,960	1	2,136
65	37	58,668		
66	43	66,216	2	2,316
67	39	69,156		
68	35	58,560	1	2,148
69	41	66,276		
70	21	32,220		
71	36	60,012	1	2,628
72	16	22,404		
73	13	21,948	1	1,812
74	26	43,728		
75	10	14,772	1	696
76	13	19,116		
77	13	21,480	1	420
78	6	9,192		
79	4	5,832		
80	4	7,740		
81	2	1,716		
82	2	2,940		
83	1	2,472		
84	1	396		
86	1	864		
87	1	2,940		
TOTAL	535 \$	887,256	12 \$	17,856

SUMMARY

NO OPTION	469 \$	800,760	10 \$	15,456
OPTION 1	39	46,360	2	2,400
OPTION 2	27	38,136		

TABLE 4 A

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30 1973

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
37	1	\$ 612		
40	3	2,760		
41	1	1,368		
42	1	1,267		
43	1	1,423		
44	2	1,334		
45	2	2,265		
47	2	3,281		
48	4	5,667		
49	1	608		
50	2	2,400		
51	2	2,904		
52	3	2,715	1	\$ 999
53	4	3,627		
54	8	10,903		
55	1	1,620		
56	5	4,977		
58	3	2,869		
61	1	1,166		
63	1	1,223		
69	1	1,788		
74	1	371		
TOTAL	50	\$ 57,148	1	\$ 999

SUMMARY

NO OPTION	36	\$ 42,342	1	\$ 999
OPTION 1	10	9,126		
OPTION 2	4	5,680		

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1974

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
38	2	\$ 2,244		
41	3	3,012		
42	1	1,500		
43	1	1,380		
44	1	1,560		
45	2	1,452		
46	2	2,484		
48	2	3,576		
49	5	7,716		
50	3	4,248		
51	2	2,640		
52	2	3,192		
53	3	2,976		
54	5	5,052		
55	8	12,456		
56	1	1,788		
57	4	3,672		
59	3	3,156		
62	1	1,284		
64	1	1,344		
70	1	1,968		
TOTAL	53	\$ 68,700		

SUMMARY

NO OPTION	38	\$ 50,532
OPTION 1	11	11,580
OPTION 2	4	6,588

TABLE 5 A

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30 1973

BENEFICIARIES OF DECEASED RETIRED MEMBERS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
			1	\$ 969
40			1	902
44			1	1,308
45			1	371
47			1	307
49			1	872
50			6	8,770
52			3	3,667
53			2	2,064
54			3	3,979
55			1	1,156
56			3	3,551
57			3	2,649
58			4	4,243
59			3	3,453
60			4	5,010
61			7	9,158
62			2	2,671
63			4	2,985
64			2	2,637
65			5	6,002
66			2	1,910
67			3	3,188
68			1	643
69			3	3,463
70			3	3,266
71			2	2,033
73			2	1,676
74			1	1,602
75			1	1,593
76			1	1,211
78			1	673
79			1	1,010
80			1	880
84				
TOTAL			80	\$ 89,872

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1974

BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
			1	\$ 1,068
41			1	996
45			1	1,440
46			1	408
48			1	336
50			1	960
51			6	9,552
53			3	4,008
54			2	2,268
55			3	4,356
56			1	1,272
57			3	3,828
58			4	4,044
59			4	4,812
60			3	3,792
61			4	5,460
62			7	10,020
63			3	3,444
64			4	3,276
65			5	4,860
66			5	6,504
67			3	3,504
68			4	4,800
69			1	708
70			3	3,732
71			3	3,552
72			2	2,232
74			2	1,848
75			2	2,676
76			1	1,752
77			1	1,332
79			1	744
80			1	1,116
81			1	960
85				
TOTAL			88	\$ 105,660