

July 2003

State of Alaska
National Guard and Naval Militia
Retirement System

Actuarial Valuation Report as of June 30, 2002

MERCER

Human Resource Consulting

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Report Highlights

This report has been prepared by Mercer Human Resource Consulting for the State of Alaska National Guard and Naval Militia Retirement System to:

1. present the results of a valuation of the State of Alaska National Guard and Naval Militia Retirement System as of June 30, 2002;
2. determine the contribution rate for the Retirement System for Fiscal Year 2005 and Fiscal Year 2006;
3. provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

The report is divided into three sections. Section 1 contains the results of the valuation. It includes a development of assets during the 2001 and 2002 fiscal years, the current annual costs and reporting and disclosure information.

Section 2 contains disclosure information required by GASB No. 25. It contains schedules of employer contributions and funding progress.

Section 3 describes the basis of the valuation. It summarizes the System provisions, provides information relating to the System's participants, and describes the funding methods and actuarial assumptions used in determining liabilities and costs.

The principle results are as follows:

Funding Status as of June 30	2000	2002
1. Valuation Assets	\$ 13,734,397	\$ 12,114,025
2. Accrued Liability	17,967,471	20,545,214
3. Funding Ratio, (1.) ÷ (2.)	76.4%	59.0%

Recommended Contribution Amounts	FY03/04	FY05/06
1. Normal Cost	\$ 635,554	\$ 657,035
2. Past Service Cost	686,948	1,368,222
3. Total Annual Cost, (1.) + (2.)	\$ 1,322,502	\$ 2,025,257

Report Highlights (continued)


We have prepared an actuarial valuation of the State of Alaska National Guard and Naval Militia Retirement System as of June 30, 2002. The results of the valuation are set forth in this report, which reflects the provisions of the Plan as amended and effective through June 30, 2002.

The valuation is based on employee and financial data, which were provided by the System and which are summarized in this report.

All costs, liabilities and other factors under the Plan were determined in accordance with generally accepted actuarial principles and procedures, in accordance with the provisions of current federal statutes and regulations issued thereunder, using an actuarial cost method which we believe is appropriate. In our opinion, the actuarial assumptions are reasonable and represent our best estimate of the anticipated experience under the Plan. This report fully and fairly discloses the actuarial position of the Plan on an ongoing basis.

There have been no changes in plan provisions, valuation procedures, actuarial cost method or actuarial assumptions since the last valuation of the plan as of June 30, 2000.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. Collectively, the undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion in this report.

<hr/> Robert M. Reynolds, ASA, MAAA	<hr/> Date
	
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Analysis of the Valuation

The actuarial methods used to value plan liabilities this year are the same as those used in the June 30, 2000, actuarial report. The Report Highlights section on page one of this Report shows that the funding ratio has decreased from 76.4% at June 30, 2000, to 59.0% at June 30, 2002.

The average annual rate of return on assets during the period was -2.6%, compared to our assumption of 8.25%, resulting in an actuarial loss from investment return. Section 1.1 of the Report shows that the value of assets declined during the period from \$13,734,397 to \$12,114,025.

Section 1

This section sets forth the results of the actuarial valuation.

- Section 1.1 Shows the transactions of the System's fund during FY01 and FY02.
- Section 1.2 Shows the actuarial present values of benefits and the normal cost as of June 30, 2002.
- Section 1.3 Develops the total contribution.

1.1(a) Statement of Net Assets

Net Assets as of June 30	2001	2002
Assets:		
1. Cash and cash equivalents	\$ 16,145	\$ 15,895
2. Investments, at fair value	13,094,992	12,211,803
3. Total Assets (1.) + (2.)	13,111,137	12,227,698
Receivables:		
4. Accrued expenses	114,785	84,391
5. Due to State of Alaska General Fund	34,435	29,282
6. Total Liabilities (4.) + (5.)	149,220	113,673
Total Net Assets (3.) – (6.)	\$ 12,961,917	\$ 12,114,025

1.1(b) Statement of Changes in Net Assets

Change in Net Assets as of June 30	2001	2002
Income:		
1. Employer Contributions	\$ 879,800	\$ 879,800
2. Investment Income	(136,494)	(331,200)
3. Total Income (1.) + (2.)	743,306	548,600
Disbursements:		
4. Retirement Benefits	1,443,078	1,283,804
5. Administrative Expenses	72,708	112,688
6. Total Disbursements (4.) + (5.)	1,515,786	1,396,492
7. Net Income (3.) - (6.)	(772,480)	(847,892)
8. Net Assets Available for Benefits at beginning of year	13,734,397	12,961,917
9. Net Assets Available for Benefits at end of year (7.) + (8.)	\$ 12,961,917	\$ 12,114,025
Estimated Investment Return, Net of Expenses	(1.6)%	(3.5)%

1.2 Actuarial Present Values

As of June 30, 2002	Normal Cost	Accrued Liability
Active Members		
1. Retirement Benefits	\$ 497,641	\$ 8,518,379
2. Termination Benefits ¹	124,933	1,439,390
3. Death Benefits	23,415	195,010
4. Involuntary Retirement Benefits	11,046	121,158
5. Total Active Actuarial Present Value (1.) + (2.) + (3.) + (4.)	657,035	10,273,937
Inactive Members		
6. Vested Terminated	0	6,880,749
7. Retirees (including QDROs)	0	3,390,528
8. Total Inactive Actuarial Present Value (6.) + (7.)	0	10,271,277
Total Actuarial Present Value (5.) + (8.)	\$ 657,035	\$ 20,545,214

¹ Members who terminate before assumed retirement age, but after completing 20 years of service.

1.3 Calculation of Total Contribution Amount – FY05 and FY06

1. Accrued Liability	\$ 20,545,214
2. Assets	12,114,025
3. Total Unfunded Accrued Liability, (1) – (2)	8,431,189
4. Amortization Factor (8.0 years) (assuming payments at beginning of the year)	6.162150
5. Past Service Payment, (3) ÷ (4)	1,368,222
6. Normal Cost	657,035
7. Total Contribution , (5.) + (6.)	\$ 2,025,257

Section 2

This section contains supplementary information on retirement benefits that is required to be disclosed in financial statements to comply with Statement No. 25 of the Governmental Accounting Standards Board (GASB No. 25)

Section 2.1 Presents the Schedule of Employer Contributions.

Section 2.2 Presents the Schedule of Funding Progress.

2.1 Schedule of Employer Contributions

Year ended June 30	Annual Required Contribution	Annual Actual Contribution	Percentage Contributed	Supplemental Contributions ²
1994	\$ 964,001	\$ 964,001	100.0%	\$ —
1995	1,104,352	1,104,352	100.0%	—
1996	1,359,862	1,104,400	81.2%	8,000,000
1997	1,626,000	1,434,900	88.2%	—
1998	1,626,000	1,434,900	88.2%	—
1999	1,104,519	1,104,519	100.0%	—
2000	1,104,519	1,104,500	100.0%	—
2001	879,784	879,800	100.0%	—
2002	879,784	879,800	100.0%	—

² During the year ended June 30, 1996, the Plan received an \$8,000,000 supplemental appropriation from the State of Alaska General Fund to increase Plan funding. This appropriation was in addition to the amount designated for the 1996 actuarial required contribution. The original contribution requirements for the years ended June 30, 1998 and 1997 were calculated to be \$2,584,919. These contribution requirements were revised to \$1,626,000 as a result of the supplemental contribution in fiscal year 1996.

2.2 Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liabilities (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) ÷ c)
June 30, 1994	\$ 2,414,426	\$ 14,031,289	\$ 11,616,863	17.2%	N/A	N/A
June 30, 1996	9,948,108	12,511,803	2,563,695	79.5%	N/A	N/A
June 30, 1998	12,671,276	14,252,184	1,580,908	88.9%	N/A	N/A
June 30, 2000	13,734,397	17,967,471	4,233,074	76.4%	N/A	N/A
June 30, 2002	12,114,025	20,545,214	8,431,189	59.0%	N/A	N/A

Section 3

In this section, the basis of the valuation is presented and described. This information -- the provisions of the System and the census of participants -- is the foundation of the valuation, since these are the present facts upon which benefit payments will depend.

Employee data was provided by the System. This information would customarily not be verified by a plan's actuary. We have reviewed the data for internal consistencies and made best estimates of the missing or inconsistent data.

A summary of the System's provisions is provided in Section 3.1 and participant census information is shown in Sections 3.2 and 3.3.

The valuation is based upon the premise that the System will continue in existence, so that future events must also be considered. These future events are assumed to occur in accordance with the actuarial assumptions and concern such events as the earnings of the fund, the number of participants who will retire, die, terminate their services, their ages at such termination and their expected benefits.

The actuarial assumptions and the actuarial cost method, or funding method, which have been adopted to guide the sponsor in funding the System in a reasonable and acceptable manner, are described in Section 3.4.

3.1 Summary of System Provisions

1. Effective Date

January 1, 1973.

2. Members Included

Members of the Alaska National Guard who were active on or after January 1, 1973, and members of the Alaska Naval Militia who were active on or after July 1, 1980.

3. Retirement

(a) Eligibility:

Members are eligible for voluntary retirement after completing 20 years of satisfactory service in the Alaska National Guard, Alaska Naval Militia or U.S. Armed Forces, and the reserve of them or any combination of that service if they have at least five years of Alaska National Guard or Naval Militia service. Credit is also allowed for Territorial Guard service rendered to the former territory of Alaska.

Members are eligible for involuntary retirement at any time assuming there has been no misconduct.

(b) Benefit:

Eligible members may elect to receive:

- (i) monthly benefits of \$100 which are payable for a period equal to the number of months that they were active members;
- (ii) a lump sum benefit equal to the actuarial equivalent of (i); or
- (iii) monthly payments until age 72 equal to the actuarial equivalent of (i).

4. Vesting

Members are 100% vested after 20 years of total service in the Alaska National Guard, Alaska Naval Militia, U.S. Armed Forces or Reserves, or any combination of that service if members have at least five years of Alaska National Guard or Naval Militia service.

3.1 Summary of System Provisions (continued)

5. Death Benefits

(a) Active Members: If the member has at least five years of active service in the Alaska National Guard or Naval Militia, the designated beneficiary will receive a lump sum benefit equal to the benefit in 3(b) above.

(b) Retired or Terminated Vested Members:

The designated beneficiary will receive a lump benefit equal to the remaining benefits payable in 3(b) above.

3.2 Participant Census Information

Census Information as of June 30	2000	2002
Active Air Guard Members		
Number	1,836	1,894
Average Age	36.60	36.69
Average Alaska Guard Service	7.76	7.97
Average Total Military Service	14.32	14.70
Active Army Guard Members		
Number	1,896	1,568
Average Age	34.15	34.65
Average Alaska Guard Service	6.29	6.28
Average Total Military Service	9.75	9.71
Active Naval Militia Members		
Number	100	76
Average Age	37.52	37.82
Average Alaska Militia Service	9.72	5.26
Average Total Military Service	13.06	11.25
Vested Terminated Members		
Number	471	680
Average Age	49.69	50.24
Average Alaska Guard Service	18.58	18.89
Average Total Military Service	26.90	27.24
Retirees (including QDROs)		
Number	497	463
Average Age	61.54	61.26
Average Years Remaining	10.03	10.10

3.3 (a) Distributions of Active Participants – All Actives

State of Alaska National Guard – All Actives						Valuation Date 6/30/02				
Age Group	Total Military Service									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	133									133
20-24	353	68								421
25-29	168	233	66							467
30-34	67	158	298	88						611
35-39	39	72	216	305	84					716
40-44	10	33	94	194	220	33				584
45-49	2	10	46	76	113	78	14			339
50-54	2	1	15	41	42	37	44	1		183
55-59	1		5	13	20	16	16	9	1	81
60-64			1		1			1		3
65-69										
70-74										
75+										
Total	775	575	741	717	480	164	74	11	1	3,538

3.3 (b) Distributions of Active Participants – Air Actives

State of Alaska National Guard – Air Actives						Valuation Date 6/30/02				
Age Group	Total Military Service									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	41									41
20-24	117	40								157
25-29	45	143	59							247
30-34	20	44	199	77						340
35-39	10	15	105	232	75					437
40-44	3	5	36	104	178	30				356
45-49		3	17	26	64	60	14			184
50-54	1		3	11	20	23	36	1		95
55-59				1	13	6	8	6	1	35
60-64			1					1		2
65-69										
70-74										
75+										
Total	237	250	420	451	350	119	58	8	1	1,894

3.3 (c) Distributions of Active Participants – Army Actives

State of Alaska National Guard – Army Actives										Valuation Date 6/30/02
Total Military Service										
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	92									92
20-24	232	24								256
25-29	121	85	7							213
30-34	44	108	90	10						252
35-39	25	56	108	68	9					266
40-44	6	27	57	88	41	3				222
45-49	1	6	29	44	42	17				139
50-54		1	12	27	21	14	8			83
55-59	1		4	12	6	10	8	3		44
60-64					1					1
65-69										
70-74										
75+										
Total	522	307	307	249	120	44	16	3	0	1,568

3.3 (d) Distributions of Active Participants – Navy Actives

State of Alaska National Guard – Navy Actives						Valuation Date 6/30/02				
Age Group	Total Military Service									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19										
0-24	4	4								8
25-29	2	5								7
30-34	3	6	9	1						19
35-39	4	1	3	5						13
40-44	1	1	1	2	1					6
45-49	1	1		6	7	1				16
50-54	1			3	1					5
55-59			1		1					2
60-64										
65-69										
70-74										
75+										
Total	16	18	14	17	10	1	0	0	0	76

3.4 Actuarial Methods and Assumptions

1. **Actuarial Method - Projected Unit Credit.** Liabilities and contributions shown in the report are computed using the Projected Unit Credit method of funding.

The objective under this method is to fund each participant's benefits under the plan as they accrue. Thus, each participant's total pension is broken down into units, each associated with a year of past or future service. The principle underlying the method is that each unit is funded in the year for which it is credited. Typically, when the method is introduced there will be an initial liability for benefits credited for service prior to that date, and to the extent that this liability is not covered by assets there is an Unfunded Liability to be funded over a chosen period in accordance with an amortization schedule.

An Accrued Liability is calculated at the valuation date as the present value of benefits credited with respect to service to that date.

The Unfunded Liability at the valuation date is the excess of the Accrued Liability over the Assets of the System. The Unfunded Liability is amortized over 20 years less the average total military service of active members, and is referred to as the Past Service Cost.

The Normal Cost is the present value of those benefits which are expected to be credited with respect to service during the year beginning on the valuation date.

Under this method, differences between the actual experience and that assumed in the determination of costs and liabilities will emerge as adjustments in the Unfunded Liability, subject to amortization.

2. Actuarial Assumptions –

- (a) Interest 8.25% per year, compounded annually, net of investment expenses.
- (b) Mortality 1994 Group Annuity Mortality Basic Table for males and females, 1994 base year.
- (c) Turnover Turnover is assumed at 25% in the first year, and at 8% in the second; both rates are independent of age. Turnover after the second year is assumed to follow the T-3 Table published in the Pension Actuary's Handbook. Sample rates are:

Age	Rate
30	.04930
40	.04041
50	.02172

3.4 Actuarial Methods and Assumptions *(continued)*

- | | |
|--------------------|---|
| (d) Disability | Disability rates under Group Long Term Disability policies, as given in the 1978 Society of Actuaries Study. |
| (e) Retirement Age | Active members are assumed to retire after 20 years of total military service, except: <ul style="list-style-type: none">(i) if they complete 20 years of total military service before age 55, it is assumed that they will work one-half of the remaining years to age 55;(ii) if they will complete their 20th year of total military service after age 60, it is assumed they will retire at age 60. Vested Terminated members are assumed to retire at current age or age 50, whichever is later. |
| (f) Assets | Market value. |

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