



**STATE OF MINNESOTA  
DEPARTMENT OF MILITARY AFFAIRS  
ARMY NATIONAL GUARD AIR NATIONAL GUARD  
BIENNIAL REPORT  
JULY 1, 1979—June 30, 1981**



STATE OF MINNESOTA  
DEPARTMENT OF MILITARY AFFAIRS  
OFFICE OF THE ADJUTANT GENERAL  
VETERANS SERVICE BUILDING  
STATE CAPITOL  
SAINT PAUL, 55101

30 June 1981

Honorable Albert H. Quie  
Governor of Minnesota  
130 State Capitol Building  
Saint Paul, Minnesota 55155

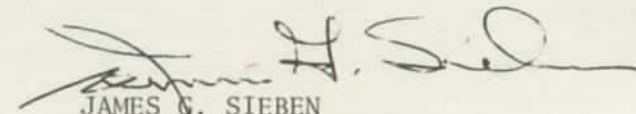
Dear Governor Quie:

The following Biennial Report covering the period 1 July 1979 through 30 June 1981, is submitted for information to you and the Minnesota Legislature.

This report contains information on the activities and accomplishments of this department, and reflects the high degree of readiness maintained by the Minnesota Army and Air National Guard.

Meaningful training is an absolute essential to preparedness for State and National emergencies. This training is tied directly to the maintenance of adequate strength which we in the Guard believe is definitely on the upswing. For the past years, we have been very concerned with the maintenance of strength and I believe that our efforts are now producing positive results. The continued support of you as Commander-in-Chief of the Guard and of the Minnesota Legislature is greatly appreciated.

Sincerely,

  
JAMES G. SIEBEN  
Major General, Minn ARNG  
The Adjutant General



*Governor Albert H. Quie  
Commander in Chief*



*On January 3, 1979, Governor Albert H. Quie took his oath of office, becoming the 35th Commander in Chief of the Minnesota National Guard. Major General James G. Sieben, Minnesota Adjutant General, is the Chief of Staff to the Governor on military matters and is responsible for the Minnesota National Guard fulfilling its State and Federal missions. He is the 13th Adjutant General and began his duties on May 10, 1975.*



*Major General James G. Sieben  
Minnesota Adjutant General*

*Cover explanation: New recruits into the Minnesota National Guard performing calisthenics during Basic Training Orientation Course (BTOC) at Camp Ripley.*



## INTRODUCTION

The Minnesota National Guard began in 1856, two years before statehood, with the founding of the Saint Paul Pioneer Guard. It is rooted in the concept that our able-bodied citizens have a privilege and responsibility to be ready to bear arms for the common defense. This tradition was begun over three centuries ago, with the militia units in the various colonies.

Today, the Minnesota Army and Air National Guard are the organized militia of the State of Minnesota, under the command of the Governor. At the same time, our National Guard men and women are members of a reserve component of the active Army and Air Force, and in that capacity may be called into active federal service by the President of the United States.

The State mission of the Minnesota National Guard is to provide units that are organized, equipped and trained to function efficiently at existing strength, in the protection of life and property and the preservation of peace, order and public safety, under orders of the Governor.

The Federal mission of the Minnesota National Guard is to provide units of trained, qualified and equipped personnel for mobilization in time of war or national emergency to augment the active Army and Air Force.

If the Minnesota National Guard were mobilized for Federal service, it would be temporarily replaced by a then-organized local militia, called the State Guard. The State Guard, under the command and control of the Governor, would assume the State emergency duties formerly held by the National Guard.

# # #

“The militia, sire, is our ultimate safety. We can have no security without it.”

- Patrick Henry, 14 June 1788



*Brigadier General  
Edward W. Waldon  
Assistant Adjutant General (Army)*

## THE DEPARTMENT OF MILITARY AFFAIRS AND THE OFFICE OF THE ADJUTANT GENERAL

The Minnesota Department of Military Affairs consists of the military forces of the State of Minnesota, the Office of the Adjutant General, civilians employed for department administration and maintenance, and the State-owned military installations.

The Adjutant General, as military Chief of Staff to the Governor, heads the Department of Military Affairs and is responsible for the Guard fulfilling its State and Federal missions. The Adjutant General accepts federal monies on behalf of the State of Minnesota for military forces and executes related agreements and contracts. He is the Minnesota National Guard's contracting officer for Guard construction, improvement and maintenance programs.

The Office of the Adjutant General is located in the State Capitol complex, as required by State law, in the Veterans Service Building, with major administrative and support sections in both St. Paul and at Camp Ripley, seven miles north of Little Falls, MN.



*Brigadier General  
Leo C. Goodrich  
Assistant Adjutant General (Air)*

### LEGAL AUTHORITY FOR THE GUARD

State Constitution	Federal Constitution	State Statutes	Federal Statutes
Article I, Section 14	Article X, Section 8	Chapter 190— Military Forces	Title 10— Army and Air
Article V, Section 4	Article II, Section 2	Chapter 191— Unorganized Militia	Title 32— National Guard
Article XII, Section I	Amendment II & V	Chapter 192— National Guard	Title 37— Pay & Allowances



## ADJUTANT GENERAL'S OFFICE SECTIONS

The Minnesota Adjutant General's Office is a joint headquarters, responsible for the command and administration of both the Minnesota Army and Air National Guard. This integration of both Guard components is reflected by the composition of the Adjutant General's office staff, which contains both Army and Air Guard officers.

The office consists of major administrative, logistic and support sections, and comprises the headquarters for the Minnesota National Guard. The Assistant Adjutants General for Air and Army forces are the coordinating links within the office for their respective components.

Office sections supervise and support the construction, maintenance, administration, budgeting, recruiting, training and operational readiness of the Minnesota Guard. Sections are located in St. Paul and at Camp Ripley. St. Paul sections are primarily administrative and operational; Camp Ripley sections are primarily logistical and fiscal.

## COMPTROLLER SECTION

The Comptroller Section budgets, distributes and audits all State of Minnesota funds appropriated for the Minnesota Army and Air National Guard. The section also prepares and manages federal reimbursements for certain state funds expended for wages and salaries.

For the biennium ending 30 June 1981, the Minnesota Legislature appropriated \$10,696,600.00 to the Department of Military Affairs. Salaries and wages for employees accounted for \$6,795,000.00, with the balance spent for supplies and expenses to operate 67 state controlled and owned Armories and three air bases.

The section annually audits the state appropriated and non appropriated fund accounts at each organizational and unit location. In addition, semi annual inspections are conducted to insure that all fund records and expenditures are in accord with regulations.



CW4 Thomas J. Ryan  
Comptroller

## ADJUTANT GENERAL'S STAFF CONTROL AND COORDINATION

The Chief of Staff is the Adjutant General's primary assistant and advisor on implementing policies and programs and assumes authority for these policies and programs in the absence of the Adjutant General. This is the top federal technician position within the Minnesota National Guard.



COL. Harry L. Moore  
Chief of Staff

On a day-to-day basis he exercises overall direction of the section staffs and offices; reviewing staff actions to insure they adequately meet requirements and are consistent with current policy and doctrine. The Chief of Staff is the key coordination link in the management process. Col. Harry L. Moore assumed this position in June, 1981 upon LTC David S. Michaud's retirement after nearly 42 years of military service.

When a Minnesota Guard unit is activated by the Governor for emergency state service, the Comptroller Section prepares requisitions for incidental expenses, such as food and fuel, and prepares pay vouchers for the activated Guard members.

The Comptroller Section handles personnel actions and pay for 237 National Guard State employees. Of these employees, 197 are custodians at armories, air bases and Camp Ripley. (Included in this total are 122 positions at three air bases and Camp Ripley whose salaries are reimbursed by the federal government at 75% and in some instances, at 100%). The remaining State employees are administrative and office personnel.

## STATE AND FEDERAL FUNDING

As the missions of the Minnesota National Guard are to prepare and train for Federal mobilization and provide service to the State, the expense is split between the two levels of government--but not evenly.

**FEDERAL DOLLARS DISBURSED IN MINNESOTA  
FOR NATIONAL GUARD SALARIES,  
WAGES AND PROCURED SERVICES,  
SUPPLIES AND EQUIPMENT**

**1 July 1979 - 30 June 1981**

Medical Service in Civilian Facilities	\$ 249,275.
Air Guard Medical Equipment and Supply Purchases	89,184.
Contracted Support for Camp Ripley Training Periods	3,278,006.
Army and Air Guard Construction	2,463,700.
Service Contracts to Support Logistics Facilities	2,714,809.
Special Airbase Maintenance and Supply Equipment	1,075,482.
Airbase Operations Costs	4,374,275.
Procurement of Fuel, Lubricants, Repair Parts, Clothing and Miscellaneous Equipment	12,313,714.
Rental and Maintenance for Computer Equipment	221,114.
Civilian and Military Payroll	88,365,202.
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TOTAL.....	\$115,144,761.

The Federal Government bears the cost of training the Guard, which includes wages and salaries of Guard members during weekend drills, annual training and while on active duty for training. More than 80% of the Guard's full-time work force is paid by the Federal Government--during the biennium, the total full and part-time payroll was \$88.3 million. All military equipment issued to the Army and Air Guard such as weapons, tanks, helicopters, airplanes, field gear and even food, clothing and fuel is provided by the Federal Government. In addition, another \$27.1 million in federal dollars was disbursed in Minnesota during the biennium for procured services, supplies, equipment and construction.

The State pays a large share of the facilities maintenance costs, to include:

- 100% of the maintenance expenses for all of the armories
- 20% of the maintenance expenses for the Twin Cities Air National Guard Base
- 25% of the maintenance expenses for the Duluth Air National Guard Base

The State and Guard unit communities share equally the 25% of armory construction costs not paid by the Federal Government, although the State assumes title to all Guard facilities. The State pays the salaries of individual Guard members only when they are called out by the Governor for emergency duty. Approximately \$226 million in Federal supplied equipment is available for use by the State during emergencies. The only costs assumed on the use of Federal equipment is for fuel and ancillary maintenance costs during the actual emergency.

**FUNDS BY COMMUNITY**

The following Federal funds were paid to Minnesota Army and Air National Guard members and civilian employees during the period 1 July 1979 through 30 June 1981.

<b>COMMUNITY:</b>	<b>TOTALS:</b>
Aitkin	\$ 210,915.16
Albert Lea	384,524.59
Alexandria	423,007.36
Anoka	920,188.57
Appleton	340,459.45
Austin	711,828.32
Bemidji	370,315.01
Benson	159,494.92
Brainerd	711,201.98
Chisholm	165,436.87
Cloquet	431,110.89
Crookston	300,649.67
Dawson	254,079.51
Detroit Lakes	689,591.28
Duluth	18,916,257.02
Eveleth	213,328.08
Fairmont	336,918.13
Faribault	231,605.14
Fergus Falls	255,148.10
Grand Rapids	215,077.99
Hastings	277,767.93
Hibbing	393,339.72
Hutchinson	333,708.96
Jackson	275,845.91
Litchfield	497,658.92
Little Falls (Camp Ripley)	11,610,451.35
Long Prairie	189,737.82
Luverne	284,322.89
Madison	251,628.34
Mankato	817,762.00
Marshall	220,914.81
Milaca	135,198.46
Montevideo	856,439.79
Moorhead	893,468.80
Morris	239,042.98
New Brighton	1,284,719.00
New Ulm	789,924.88
Northfield	264,719.08
Olivia	293,855.56
Ortonville	286,725.76
Owatonna	198,555.39
Park Rapids	229,534.22
Pine City	201,857.79
Pipestone	457,255.58
Princeton	434,601.74
Red Wing	426,340.32
Redwood Falls	165,842.85
Rochester	1,059,850.68
St. Cloud	1,141,134.82
St. James	350,374.28
St. Peter	261,973.08
Sauk Centre	553,822.25
Stillwater	1,015,847.78
Thief River Falls	275,064.61
Tracy	474,998.96
Twin Cities	31,545,727.71
Virginia	286,362.29
Wadena	431,764.28
White Bear Lake	563,824.80
Willmar	541,632.04
Windom	312,138.10
Winona	444,803.40
Worthington	290,386.58
Zumbrota	263,137.54
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TOTAL.....	\$88,365,202.09



This may seem to be a poor deal for the Federal Government, but it's really not. During the 1980 fiscal year, the entire U.S. National Guard annual appropriation amounted to less than 2% of the total U.S. defense budget. Between five and six National Guard members can be sustained for what it costs to sustain one active duty soldier or airman. In terms of Minnesota's general fund appropriations, about one-tenth of one percent went to the Department of Military Affairs during the biennium.

## ARMORY BUILDING COMMISSION

By law, the Minnesota State Armory Building Commission (MSABC) is a public corporation established to acquire, equip and maintain state armories. The Commission has authority to issue bonds up to a total bonded indebtedness level of \$4.5 million for the purposes of constructing and equipping new armory facilities. Titles to the armory properties acquired through the issuance of bonds are passed to the State when the associated bonds have been fully amortized.

The Adjutant General, as the exofficio Chairman of the MSABC, appoints Commission members for an indefinite term. The Commission meets when called upon by the Adjutant General, or at least on an annual basis.

During the biennium, the armory in Marshall was paid off and transferred to State control. Construction of the armories at Duluth and Jackson were completed and plans finalized to start construction on a facility at St. Peter. Thomas Nesbitt assumed the duties as the Executive Director on 1 February 1981.

## DOLLARS DISPENSED IN MINNESOTA FOR THE NATIONAL GUARD FY 1980-81

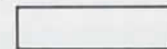
State

Federal

Ratio  
1:14.8

\$10.7 Million

\$115.1 Million



## CONSTRUCTION AND MAINTENANCE FISCAL RESPONSIBILITIES

State

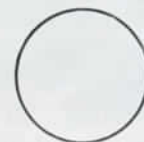
Federal



Armory Construction



Construction, Camp Ripley Training Site, State Maintenance facilities & shops, USPFO offices & warehouses, three Air Bases.



Armory Maintenance



Airbase Maintenance

## UNITED STATES PROPERTY AND FISCAL OFFICE FOR MINNESOTA

The United States Property and Fiscal Office for Minnesota (USPFO), located at Camp Ripley is the funnel through which all Federal money and equipment issued to the Minnesota Army National Guard must pass. This office, in conjunction with the Assistant USPFO For Air at the Duluth and Minneapolis Air National Guard Bases, maintains all necessary records concerning receipt, disbursement, and accounting of all Federal resources loaned to or used by the Minnesota National Guard.



*COL. William S. Mahling  
U.S. Property and  
Fiscal Officer*

During the past biennium, the amount of Federal equipment possessed by the Minnesota Army and Air Guard increased by a dollar amount of \$31 million, to a total of more than \$226 million reflecting more on the higher price tag of replacement equipment than increases in amounts or quantities of material. Although this equipment--vehicles, aircraft, communications equipment, etc.--is Federally owned, it is available to the State of Minnesota for use during Guard supported State emergencies.

The USPFO is responsible for all local purchasing agreements and contracts that involve Federal money for the Minnesota Army and Air Guard. This also includes purchase of authorized supplies, rations, equipment, and services not available through normal supply channels which must be purchased from the commercial sector and



the contracting for all Air National Guard construction. Federal funds disbursed locally during the period 1 July 1979—30 June 1981 amounted to more than \$26 million.

The USPFO Comptroller Division develops and administers the operating budget for all Federal money for the Minnesota Army Guard. This division is also responsible for the fiscal accounting of all Federal funds allocated the Minnesota National Guard. Payment of Minnesota Army National Guard personnel is also administered through this office and payrolls for approximately 8,000 members are prepared on a monthly basis.

The USPFO Logistics Division requisitions, receives, accounts, stores, distributes, and disposes of all Federal supplies and equipment issued to the Minnesota Army National Guard. Logistical support is provided to 125 units/split units/detachments, and activities. This division received Federal supplies and equipment valued in excess of \$12 million during the biennium which were issued to Minnesota Army Guard units.

## PERSONNEL AND ADMINISTRATIVE SECTION

The Minnesota Army National Guard Personnel and Administrative Section maintains Army Guard personnel records and a reference library of Army, Air Force and National Guard regulations, directives and circulars. The section is responsible for Army Guard promotions, separations and Skill Qualification testing of Army Guard personnel. In addition, the section microfilms and stores all Army Guard permanent and historical records; and sends and receives all Minnesota National Guard teletype messages. This section processed an estimated 3.4 million transactions during this biennium.



LTC. Gerald W. Forlund  
Administration Officer

During this period, much planning has gone into the implementation of the Standard Installation/Division Personnel System - Army National Guard (SIDPERS-ARNG). At the biennium's close, five additional individuals were employed to prepare for the system's installation in Minnesota. SIDPERS-ARNG is the most comprehensive, automated, personnel system ever devised for utilization within the military services. When the system is fully operational within the Army National Guard, it will provide the users of the system at all echelons with an array of management information and tools that will enhance their mission accomplishment capabilities. SIDPERS-ARNG will effectively reduce the administrative burden of the technician work force at all

The USPFO Examination Office schedules and performs annual property examinations and inventories of 125 property accounts, which confirm the condition and availability of Federal equipment assigned to units. The office completed 225 inventories or examinations this biennium, reporting problem areas whenever encountered. Forty internal reviews of the various USPFO staff operations and other activities were also conducted to insure compliance with appropriate regulations and seek methods to improve their overall operation. The examination office is also responsible to accomplish quarterly reviews of the two Minnesota Air National Guard Bases. These reviews include, but are not limited to, the fiscal, property, and real property areas.

The USPFO Data Processing Activity has updated their system by installation of the Burroughs' Mini-Computer, Model B1955. The new system will replace the IBM 1401 systems presently in use and total conversion is forecast to be completed in fiscal year 1982.



Computer operator sorts data for entry into the computer

levels and provide the users with accurate and timely statistical information far and above that which can be obtained from the present personnel reporting system.

National Guard officer promotions and appointments, which are monitored by this section, are governed by the same criteria as the active services: time-in-grade, written efficiency reports, military and civilian education, and individual health. Promotions are competitive, not automatic and are based upon the availability of position vacancies and officer qualifications. During this biennium, 68 individuals were promoted to first lieutenant; 61 first lieutenants were promoted to captain; 8 lieutenant colonels were promoted to colonel; and one colonel was promoted to brigadier general. Additionally, nine W-1 warrant officers were promoted to W-2; 23 W-2 warrant officers were promoted to W-3; and six W-3 warrant officers were promoted to W-4. Over the two year period, there were 250 officer appointments made, while 189 officers were separated for various reasons.

After completion of 20 years' service, officers are subject to action by a selective retention board, insuring that only the most capable are retained. Under this function, 446 officers were considered and 438 were retained.



## OPERATIONS AND TRAINING SECTION (ARMY)



*Infantryman aiming an M-60 machinegun (with blank ammo) during a simulated ambush.*

The Operations and Training Section budgets and manages all phases of individual training for the Minnesota Army Guard. The section supervises unit training at armories and training sites, arranges individual training through active Army schools and correspondence courses and supervises training at Camp Ripley. In addition, the section also administers other programs such as the Marksmanship Competition, ammunition management skill, qualification testing and unit exchange activities.



*COL. John H. Cox  
Operations and  
Training Officer*

Training, whether individual or unit level, is a continuing process which receives strong emphasis from the Adjutant General's Office because of its direct impact on readiness and mission accomplishment. Every unit of the Minnesota Army Guard trains two days monthly and attends a two-week training period annually, usually at Camp Ripley. Given the limited time available, training is carefully planned to yield maximum productivity as Guard members are measured against the same performance standards as active full-time Army soldiers.

Illustrative of the enormity of Minnesota Guard individual training is the fact that all Guard officers must continually improve their professional knowledge to be considered for retention and promotion, with the same requirements as their active duty counterparts. By the time an officer is a lieutenant colonel, he must have graduated from the basic course of his branch, completed his advanced officer course in the same field; and graduated from Command and General Staff College. These schools require many months of full-time attendance or years of correspondence courses. Likewise, a continuing education program is now a requirement for warrant officers as well.



*Rope bridge training at Camp Ripley*

Non-commissioned officers continued to improve their professional knowledge this biennium. In October, 1979 the Minnesota Military Academy (discussed more in another section) added four NCO courses to their curriculum. To date, about 1,200 Guard members have taken one or more of the courses. All of the courses have National Guard Bureau accreditation. Many Non Commissioned Officers have been trained or retrained at active Army schools as well.



*Advanced NCO course, new professional training this biennium*



Six hundred and two Minnesota Army Guard members attended active Army service schools during the biennium, with the Federal Government absorbing the costs—amounting to \$1.8 million. There were 1,721 Guard members enrolled in correspondence courses—all materials provided by the Army. In addition to these, Guard members attended specialized courses, such as intelligence, chemical, medical and administration, arranged and conducted locally utilizing Guard, Reserve and active Army instructors.



*New recruits at Basic Training Orientation Course (BTOC) receive instruction on the M-17 protective mask*

Since May 1977, 2,591 Minnesota Army Guard recruits have attended a special two-day course at Camp Ripley, prior to their departure to active Army basic training. The intent of the weekend course is to ease the adjustment problems often experienced by new recruits in Army basic training. The program called Basic Training Orientation Course (BTOC) has been extremely successful in reducing the number of Minnesota Guard recruits who drop out of basic. Over 97% of those who attend the weekend session go on to complete basic. Four years ago, the dropout figures hovered around 20%. BTOC-trained recruits learn what to expect in basic because the course has been refined into a brief, highly realistic simulation of a recruit's first eight weeks. Not only has the course resulted in higher retention rates, but it has made the money spent on recruiting, processing and training new Guard members more cost-effective. During the biennium, 15 courses were conducted for 1,527 recruits.

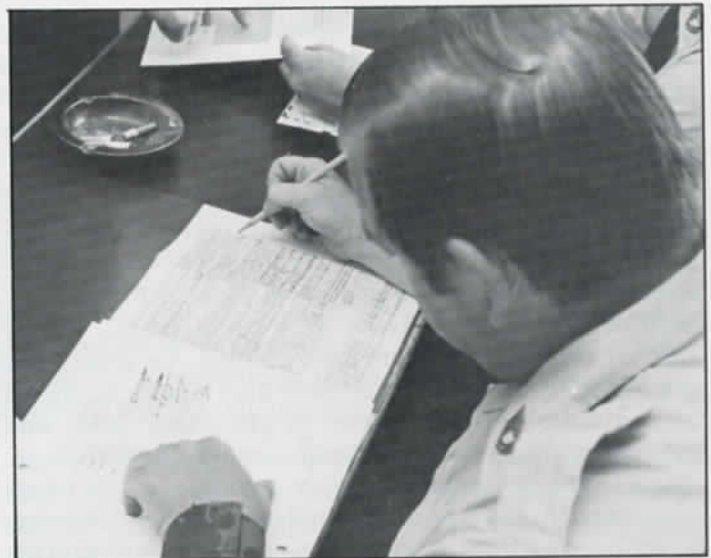
Generally, most Minnesota Army Guard units conduct their two-weeks annual training at Camp Ripley. However, some units require specialized facilities to fully train in their job specialties. Units also participate in Unit Exchange Programs with like units of other states. Such training challenges Guard members to adjust to unfamiliar terrain and different conditions. Units are tested on their ability to deploy as an operational unit and perform their operational missions in a new environment.

The following units deployed to out-of-state locations for their annual training:

- 7-21 July 1979—Co F, 747th Maint BN—Rhine Ammo Depot, Germany
- 15-29 Mar 1980—Btry E, 1/151st Field Artillery—Fort Sill, OK
- 9-23 Aug 1980—Btry A, 1/125th Field Artillery—Frederickton, Canada
- 26 Jul-9 Aug 1980—109th LEM—Sacramento Army Depot, CA
- 7-21 Mar 1981—a Detachment of the 204th Medical BN—Fitzsimmons Army Hospital, CO
- 4-18 Apr 1981—109th LEM—Sacramento Army Depot, CA
- 23 May-6 Jun 1981—a Detachment from the 47th Aviation BN—Corpus Christi, TX
- 13-27 Jun 1981—Co B, 135th Infantry—Fort Carson, CO.

Various sections of units and individuals trained at other locations throughout the United States and Europe. Guardsmen also trained in Camp Torpo, Norway, as part of an exchange program with the Norwegian Home Guard. This is discussed in more detail in the Winter Training Section.

An Army-wide method of measuring a soldier's individual skill proficiency, called Skill Qualification Testing (SQT) has been used in the Minnesota Army Guard since 1978. Under the supervision of the Operations and Training Section, SQT's were administered to approximately 55% of all Minnesota enlisted personnel during the biennium. Unlike the mere written test of the past, SQT's measure individual skills by combining written tests, hands-on performance tests with equipment and certification of ability with tools or vehicles used in the soldier's job. Minnesota Guard scores on these tests compared favorably with those of active Army soldiers given the same tests.



*An NCO studies the written part of his Skills Qualification Test (SQT)*



Another major responsibility of the Operations and Training Section is the reorganization of Minnesota Army Guard units, a process that consolidates or shifts units according to the needs of the Guard. During this biennium, one significant reorganization took place: the 1114th Ordnance Company (Luverne) was eliminated from the force structure and redesignated Company A (-) 2nd Battalion 135th Infantry. Additionally, two new units were created. The 789th Transportation Detachment based in St. Paul was created to provide highway traffic control points for military surface movement within the state. Also, Company G, 747th Maintenance Battalion was formed in Long Prairie to provide maintenance for all missile weapon systems of the 47th Infantry Division.

## WINTER TRAINING

The Minnesota Army National Guard and Camp Ripley Training Site have administered perhaps the most active and comprehensive winter training programs in the entire U.S. Army structure. Today's programs, recognized for their excellence by military units across the nation, are the direct outgrowth of a solid program established in the mid-1960's.

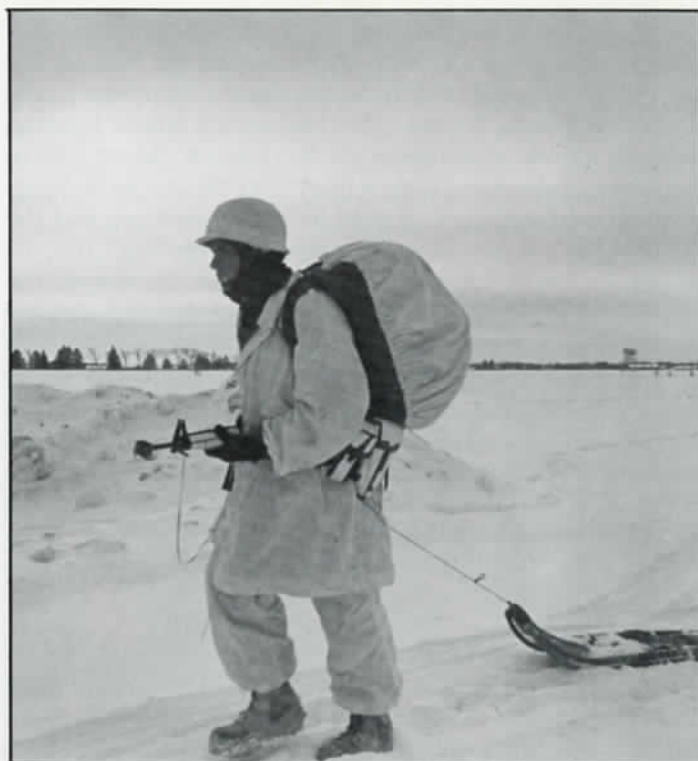
Formally, the program began in 1964, when the Guard's 47th "Viking" Infantry Division first sent troops to the two-week U.S. Army Northern Warfare Training Center at Ft. Greeley, Alaska, for winter environment training. These personnel became cadre for Minnesota Army Guard unit training at Camp Ripley when annual winter training began the same year.

Winter training was not intended to replace summer training; rather, it was designed to compliment and contrast summer training, teaching Guard members to perform their missions in a snow and cold environment and thereby increase their capabilities. Also, because of Camp Ripley's geographical location, it made better year-round use of its excellent training facilities.

As the winter training program expanded, it became apparent that units were not obtaining the maximum benefit out of their annual training. For lack



*Artillery firing during winter annual training*



*Guardsman heading for shelter at the close of a full training day*

of unit personnel qualified in specialized winter training subjects, units were not attaining the required levels of proficiency.

After a staff study, a special one week instructor's course was designed. Students for this Winter Operations Instructor Course, first conducted in 1968 at Camp Ripley, were selected from all units scheduled to send troops to winter training. Course instructors, highly-qualified volunteers from the 47th Infantry Division, taught these students downhill and cross-country skiing, use of winter equipment, survival techniques, winter first aid and methods of operating equipment in cold weather. The students went back to their units and later accompanied them to winter annual training at Camp Ripley, providing each unit with a nucleus of qualified, dedicated winter instructors. Unit winter training improved markedly, and since 1968 the Winter Operations Instructor School, now expanded to nine days, has become recognized as the finest course of its type in the continental U.S. For the past several years, students have included members of nearly all military branches and components in the country, from across the nation.

By the mid-1970's, the 47th Infantry Division had developed an integrated training plan, with major division elements scheduled for winter annual training once every three years. Every year, in addition to sending personnel to the Winter Operations Instructor School at Camp Ripley, approximately 100 division personnel were attending the U.S. Army Northern Warfare Training School in Alaska. Rapidly, the division, and the Minnesota Army Guard, were gaining a reputation for winter operations expertise.



In 1974, the first exchange of personnel with the Norwegian Home Guard was conducted, with a 50-person contingent of Minnesota Guard members going to Camp Torpo, Norway, for two week's winter training while a similar contingent of Norwegian Home Guard members trained at Camp Ripley. The Norwegians, long-recognized for their expertise in winter warfare, and the Minnesota Army Guard, also recognized for its expertise, were natural choices for this exchange. On each side of the Atlantic, knowledge about each country's equipment, weapons, tactics and methods of operation in a winter environment were exchanged, with the result that both nations' military forces benefited. In addition to its military aspects, this program has enhanced relations on a personal and governmental level between these NATO allies. Now an annual program, the exchange currently involves 85 personnel from each country and, since 1978, includes female Guard members as well.

Active U.S. Army battalions have conducted winter training at Camp Ripley since 1977. With each successive year, more active component forces have attended winter training at Camp Ripley.

Camp Ripley can accommodate 2500 personnel during a winter training period. Housing is accomplished in 13 company-sized, winterized billets; each with self contained administrative offices, supply rooms and dining facilities.

Winter training at Camp Ripley also includes use of the largest Biathlon course in the nation. Biathlon, a winter Olympic sport of Scandinavian origins, combines the skills of cross country skiing and marksmanship. In 1980, Camp Ripley was the scene of the 1980 National Guard Bureau Biathlon Championships. Minnesota biathletes competed and did well.

Camp Ripley's winter training programs and facilities are used extensively by military units from throughout the U.S., a fact attested by nearly 17,000 troops training there this biennium. Already considered as a top winter training site in the Continental U.S., completion of the federally funded Tactical Air Strip is enabling C-130 aircraft to land at Camp Ripley. In fact, C-130 aircraft were able to utilize the air strip this last winter, prior to completion, in support of troops in winter training. The airstrip is expected to be a key factor in the increased demand for Camp Ripley as a winter training facility in the future.

*Unit level winter training is designed to compliment the skills learned during the summer*



*An instructor discusses the finer points in building a survival lean-to*



*Norwegian Home Guard troops visiting the State Capitol during the Annual Exchange Program*



*Biathletes begin the grueling ski and shooting competition*





## SCHOOLS SECTION

The Minnesota Army Guard Schools Section is responsible for the operation of the Minnesota Military Academy, a federally-accredited Officer Candidate School created in 1956, as well as the Non-Commissioned Officer Education System. The Academy celebrated its 25th anniversary in June, 1981. In these 25 classes of its quarter-century existence, 1,043 officers have graduated.

Candidates for the officer school are selected from units throughout the state on the basis of rigid physical and mental examinations conducted by screening boards established by the National Guard. The program of instruction is prepared by the U.S. Army Infantry School, Ft. Benning, Ga., and expanded by the National Guard Bureau, Washington, D.C. The program is now under a two annual training period curriculum and consists of 300 hours instruction with emphasis on training management, weapons, map reading, drill and ceremonies, tactics, physical training and leadership.



COL. Arthur A. Ludwig  
Commandant, Schools  
Section

Training is conducted in four phases. Phase I consists of four weekend training assemblies at the Lake McCarrons facility in Roseville; Phase II, held at Camp Ripley is 16 days of continuous training; Phase III is conducted through 12 monthly weekend assemblies at the Lake McCarrons facility; and Phase IV is a 15-day training period at Camp Ripley in June that culminates with graduation.

One of the most significant happenings for MMA occurred during this biennium. After 25 years of existence, the Academy has finally acquired a home of its own—the McCarrons Lake Training Center, formally the McCarrons Lake School in Roseville. The facility was leased to the Guard in October, 1980. At that time, MMA



Class number XXV graduates

and three other units moved in to it. At the close of the biennium, the state purchased the school from the Roseville School District for \$700,000, making Minnesota the first state to acquire a school for use as a National Guard facility. The purchase of an existing facility, with more than adequate classrooms and storage space, saved the state thousands of dollars in potential construction costs.



The sign goes up on the new training center

Three classes were in progress or completed training during this biennium. Class XXIV (1979-1980) graduated 49 National Guard cadets and 4 Army Reserve cadets on 13 April 1980. Twelve of these were females.

Class XXV (1980-1981) graduated 42 National Guard cadets and 4 Army Reserve cadets on 26 June 1981. Six of these were females.

Class XXVI (1980-1981) commenced training on 11 April 1981 and will complete Phase I and II prior to the end of the biennium. As of 30 June 1981, the class had 26 National Guard and 3 Army Reserve cadets and is scheduled to graduate in June, 1982. Three of these cadets are women.

In October, 1979, all four noncommissioned officer courses were added to the curriculum of the Academy. Approximately 350 students are enrolled in these courses each year.

The Primary Noncommissioned Officer Course (PNCOC) is a 121 hour leadership course designed especially for soldiers serving in combat arms. The thrust of the instruction is to develop leadership ability by having students lead and train their peers in basic soldiering skills.

The Basic Noncommissioned Officer Course (BNCOC) is a 75 hour leadership course which is designed for combat service support soldiers aspiring to first line supervisor positions. This course emphasizes leadership and trainer skills.





The seven remaining Guard member-graduates of MMA Class I, celebrate the Academy's 25 years with Lieutenant Governor Wangberg and the Adjutant General

The Advanced Noncommissioned Officer Course (ANCOC) is 60 hours and designed for grades E-6 and E-7 in all branches of the Guard and Reserve. The course teaches advanced leadership and is a career progression program designed to prepare people for positions of increased responsibilities.

The Senior Noncommissioned Officer Course (SNCO) is 50 hours in length. It is designed for grades E-8 and E-9. The course is tailored to train the Guard's most senior NCO's to assume top positions within battalion and higher level organization, or high level staffing in specialized units.

### STATE GRADUATE HONORS

Awards are presented to the top graduates of each Officer's Candidate and Non-Commissioned Officer's class. The graduate who attains the highest combined score for leadership and academics is designated Distinguished Honor Graduate. The graduate who maintains the highest over-all academic average is presented the academic award. The leadership award is presented to the graduate whose leadership abilities are rated highest by peers and cadre.

#### OFFICER'S CANDIDATE CLASS XXIV (1979-1980)

#### NON-COMMISSIONED OFFICER'S CLASSES (1980-1981)

##### BASIC NCO COURSE

###### JUNE 1980

Academic Award - SP4 Jesse Crook  
Leadership Award - SP5 Eric Linner  
Honor Graduate - SP4 Jesse Crook  
Commandants List - SSG Anne Henkemeyer  
SGT Lyle Lehinger  
SP5 Eric Linner  
SP4 Dean Patton  
SP5 Gloria Tollefson

###### JUNE 1981 (13-19)

Academic Award - SGT John J. Carrlson  
Leadership Award - SSG Dianne L. Carter  
Commandants List - SSG James C. Anderson  
SSG Wilfred P. Zack  
SP5 Peter F. Keetley  
SGT Gerald R. Westloh

##### PRIMARY NCO COURSE

###### JUNE 1981 (21-27)

Academic Award - SP5 Judith V. Ojard  
Leadership Award - SGT Richard S. Lang  
Commandants List - SGT Steven V. Ranum  
SSG Patrick J. Kenny  
SGT Jesse L. Woodley  
SGT Alfred M. Simon

###### JUNE 1981 (13-27)

Academic Award - SP4 Thomas A. Loch  
Leadership Award - SGT David B. Knopf  
Commandants List - CPL Steven G. Hanson  
SP4 Randy J. Kvidt  
SP4 Edward E. Ness  
SGT Jeffrey J. Flood  
SP4 Brian F. Bias  
SGT Michael D. Ledoux

##### ADVANCED NCO COURSE

###### OCTOBER 1980 (4-12)

NCOES Academic Award - SSG Michael Tipton  
NCOES Leadership Award - SSG Shirley LaMay-Anderson  
NCOES Honor Graduate - SSG James White  
NCOES Commandants List - SSG Michael Nustad  
SSG Kenneth Ringesen  
SFC Ronald Kani  
SFC Ronald Jacobson  
SSG James Fink  
SSG Jeffrey Anderson  
SSG Ronald Kness  
SSG Lester Miller, Jr.  
SSG Kathryn Miller



Scott W. Whaley  
Arden Hills  
Distinguished Graduate



Stephen H. Boulay  
Bloomington  
Academic Award



Scott W. Whaley  
Arden Hills  
Leadership Award

#### OFFICER'S CANDIDATE CLASS XXV (1980-1981)



Kenneth J. Senkyr  
Stillwater  
Distinguished Graduate



Thomas K. Evers  
Marshall  
Academic Award



Douglas D. Trenda  
Brainerd  
Leadership Award





The U-8F makes the first takeoff from Camp Ripley's new runway. The plane was acquired in April, 1980

## ARMY GUARD AVIATION SUPPORT FACILITY

Located at the St. Paul Downtown Airport, the Minnesota Army National Guard Aviation Support Facility houses and maintains the Minnesota Army Guard helicopters and fixed wing aircraft fleet. Facility personnel manage the Guard's state aviation program, to include aircraft maintenance, flight operations, aviation standardization, tactical training, aviation safety and administrative support. Most of these services are provided to support the 47th Aviation Battalion, the Minnesota Army Guard's primary aviation element.



LTC. Jerome C. Litschke  
State Aviation Officer

During this biennium, the AASF was involved in providing new types of training and new training areas for flight crew members. One of the most rewarding programs, which started in January, 1981, and will be conducted annually, was winter survival training. The survival course consists of four days of intensive training conducted at the Charles L. Sommers Wilderness Canoe Area, at Ely, MN. Three classes were conducted and 18 crew members completed the training. This course provides insights into survival in a cold environment—with the limited amount of survival equipment carried on an aircraft. Three of the four days are spent living out-of-doors. During the 1981 training, there were days when the temperature dipped to -40 degrees Fahrenheit, giving crew members a realistic training environment. There will continue to be three classes of 18 crew members each year.

Two new Nap-of-the-Earth (NOE) training areas were established and approved for use by our aviation



Aviators conduct winter survival training at Ely

units. NOE training is designed to acquaint aviators with techniques for low-level flying, which is essential for both wartime operations and searches for lost persons. One of the two new areas is in the Foot Hills State Forest, approximately 24 miles north of Camp Ripley. The other area is located approximately 48 miles from St. Paul in a forested area just south of Grantsburg, WI. These training areas give our aviators ample opportunities to improve and maintain their tactical flight proficiency.

There are 80 aviators assigned to the Minnesota Army National Guard; there could be as many as 92 if temporary positions (one year maximum assignment) were filled. The turnover of aviators annually is about 20 percent. This turnover creates a considerable training workload since most of the new aviators require some type of additional training such as transition training into a new type of aircraft, instrument training and nap-of-the-earth techniques. During this biennium, 38 aviators completed transition training, 24 aviators completed instrument training and 12 completed NOE.



During the last 17 years, there has been one aircraft accident (an OH-58) which occurred during winter training at Camp Ripley in March, 1979. No one was injured. Since then, our aviators have flown 10,158 hours without an accident—during the 17-year period we flew 73,875 hours.

During the biennium, Army Guard aircraft accumulated more than 8,800 hours while flying more than 6,000 aerial missions. There were 48 tours conducted for school classes at our facility during the biennium. In addition to the school classes, tours were conducted for explorer scouts and other interested groups.

As of 30 June, 1981, the Minnesota Army National Guard listed the following aircraft at the St. Paul Downtown Airport:

	On Hand	Authorized
T-42 (fixed wing, twin engine)	1	1
U-8F (fixed wing, twin engine)	1	1
OH-58A (Observation Helicopter)	25	25
UH-1 (Transportation Helicopter)	12	12

Since the last report, the U-8F (Beech Queen Air) fixed wing was added to our fleet; this aircraft was transferred to us on 1 April, 1980. It came equipped to operate in our cold climate (electrically heated windshields and propellers were installed and the aircraft has an excellent interior heating system). We installed a new weather radar which displays weather phenomena in color. Overall, this aircraft has good flight capabilities for most types of weather conditions.

Why is the Guard seeing this resurgence? We believe there are several reasons:

- With World events such as the Iranian hostage situation rallying Americans, there has been a resurgence of patriotism. Many young people are joining the Minnesota Guard because they want to serve their country.
- Economic conditions and financial need has caused some Minnesotans to join because the Guard provides a viable second income (an additional \$1,500 per year for the first term soldier). Prior service people can earn even more because they can be reinstated at their previous rank, in most cases.
- During the biennium, the Department of Defense authorized an expansion of enlistment bonuses of \$1,500 cash over four years or \$4,000 toward educational expenses over the same period, for many job skill specialties. The following units could offer bonuses for virtually every open enlisted position: 2nd Battalion 136th Infantry, 1st Battalion 125th Field Artillery, 257th Military Police Company and the 109th Light Equipment Maintenance Company.
- Other units with skill specialties of combat, medical and military police were also able to offer the bonus for these positions. More than 1,000 new enlistees have taken advantage of the various bonuses since their inception.
- A program called the Simultaneous Membership Program was started and has increased our junior officer candidates. It allows individuals to be members of Army ROTC and the National Guard at the same time, receiving training and pay from both while the individual pursues a college degree.
- Production recruiters in the state have been increased from 23 to 35. Also, a state level retention program was instituted, bringing aboard two full-time retention NCO's to direct retention activities and career counseling for enlisted Guard members. The program is designed to better manage losses and improve the career progression of enlisted personnel.

## RECRUITING AND RETENTION SECTION (ARMY)

In the middle of the biennium, Minnesota Army Guard strength started what turned out to be a dramatic increase. In July, 1979 strength was at 7,741 or 78% of authorized. By July of 1980, the strength had slumped to an end-of-the-draft-era low of 7,453 or 74.3% of authorized. From that time forward, all of the news has been positive. Virtually every month in late 1980 and 1981 has seen an increase in the numbers of new recruits; also the retention rate of those already in the Guard average 74%—a 9% rise since the previous biennium.



*CPT.  
Elwyn L. Kropuenske  
Recruiting and  
Retention Officer*

As of 30 June, 1981, the strength of the Army Guard in Minnesota was at 8,120 or 81.7% of the authorized 9,938, which translates into a personnel shortage of 1,815. Enlistments of non-prior service people were up 32% from two years ago, while losses due to incompatible occupations, change of residence and unspecified other reasons were down a dramatic 40% (1,795) from the previous biennium's 3,000.



*The first enlistee under the new bonus program is sworn in by Governor Quie*



Last, but certainly not least, in our reasons for increased strength is the fact that National Guard training, the many possibilities for training tours to Europe, Alaska and military posts around the U.S. has helped to make the Minnesota Army National Guard an exciting and rewarding organization to serve in. The training posture continues to improve and every training day is a meaningful one for all Guard members.

During this biennium, the Minnesota Army Guard enlisted a total of 4,264 new members. In this number were 2,226 non-prior service, 1,442 prior service and 597 officer personnel. With continued emphasis by the President and Congress on improving the military, to include the Guard and Reserves, we are looking to continued recruiting and retention successes during the coming biennium.

## TECHNICIAN PERSONNEL OFFICE

The Minnesota National Guard is supported throughout the year by full-time employees called technicians. As members of the National Guard themselves, these technicians perform duties ranging from recruiting to maintenance and administration, helping their units maintain continuity between monthly Guard drills.

Until 1979, all recent Guard federal technicians were civil service employees of the Department of the Army or Air Force, with employment and administrative authority delegated to the state Adjutant General. While this delegation authority continues, the status of some employees has changed to active military duty. During FY 80, 59 Minnesota Army Guard technician positions and 27 Air Guard positions were converted to active duty status. All of these positions were locally-filled, usually by members of the Minnesota Guard. At the biennium close, 148 positions were active duty status.

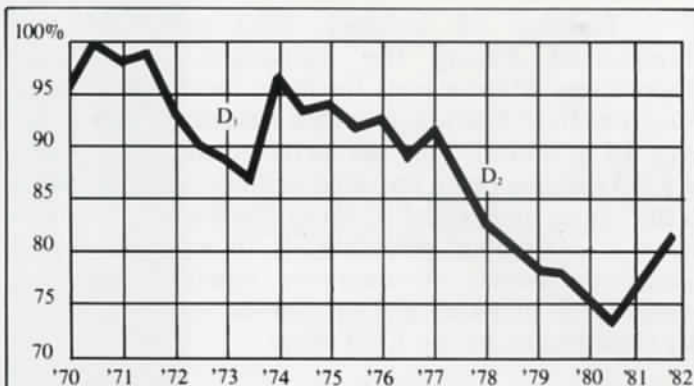
The Technician Personnel Office is responsible for the administration, personnel management and direction of the Minnesota National Guard Technician program, to include these personnel employed on active duty status.

Federal funds expended for technician salaries during this biennium were:

1 Jul 79 - 30 Jun 81	
Army National Guard - Statewide	\$23,893,959
Duluth Air National Guard Base	\$12,184,432
Mpls. - St. Paul Air National Guard Base	\$9,930,632
<b>TOTAL (100% Federal Funds)</b>	<b>46,009,023</b>



COL. Robert L. Blevins  
Technician Personnel  
Officer



## MINNESOTA ARMY GUARD STRENGTH\* 1970-81

*D<sub>1</sub> = End of draft era*

*D<sub>2</sub> = Separation of draft era enlistees*

*\*Each percentage point approximates 100 troops*

At the close of this biennium, there were 603 technicians and active duty personnel supporting the Army National Guard and 496 supporting the Minnesota Air Guard for a total of 1099.

## EQUAL OPPORTUNITY PROGRAMS

The Equal Employment Opportunity Section (EEO) of the Adjutant General's Office administers several programs for the equal employment of full-time National Guard technicians and part-time Guard members.

Minnesota's Guard was the first in the nation to formally declare an equal opportunity policy, based upon Governor Luther K. Youngdahl's 1948 Executive Order, which committed the Guard to "equality of opportunity and treatment of all."

The EEO Section is staffed by one full-time person who has been trained in this field. One of the important programs supervised and monitored by this office is the Human Relations/Equal Opportunity Program, which provides materials for unit level training on personal and institutional discrimination, sexual harassment and effective interpersonal relations.

The National Guard's goal in this area is to achieve a technician workforce and part-time Guard membership that is racially and ethnically representative of the communities in which the units are located, while meeting statutory requirements. Both Air Guard bases and all major Army Guard headquarters have part-time equal opportunity personnel who assist their commanders and the state EEO Section in implementation of policies and education programs.



CPT.  
William D. McNally  
Technician EEO Officer



Training of assigned EEO personnel was emphasized during the biennium. The Equal Opportunity Management Institute, located at Patrick Air Force Base, Florida, provided resident education for assigned personnel. This has increased the effectiveness of EEO training being provided to units. Also, emphasis in the causes and effects of sexual harassment has been made in classroom presentations to technicians and Guard personnel. A quarterly equal opportunity newsletter is prepared and distributed to all Army and Air Guard units by the EEO office.

Since the close of the last biennium, the Minnesota Army Guard's female strength has increased 13.9% for an end total of 475; 44 of whom are officers. Female Air Guard personnel increased by 22.2% in the same period, for an end total of 176, 16 of whom are officers. Women now comprise 5.9% of the Minnesota Army Guard membership and 8.4% of the Air Guard members.

Minnesota's Army and Air National Guard minority participation had an end-of-biennium total of 186 personnel, a 22.4% increase since June 30, 1979. The total represents a 1.8% minority participation which reflects the predominantly rural and small town basing of Guard units in Minnesota.



The Minority Recruiting Council was established to "Sell the Guard"

## SELECTIVE SERVICE SECTION

The Minnesota Army National Guard State Headquarters includes a Selective Service Section. Like the sections maintained by other reserve components in Minnesota, this section consists of a part-time nucleus that would be activated and expanded upon emergency mobilization. The section consists of five officers and one warrant officer.

Until this biennium, registration for Selective Service had ended in 1975 and was relegated to a standby posture. Pursuant to the President's request and approval of Congress in the spring of 1980, registration was resumed. During July 1980, all males born in 1960 and 1961 were required to register. Started in 1981, all young men are now required to register during a 60 day period that starts 30 days before their 18th birthday.

### MINNESOTANS IN THE NATIONAL GUARD (AS OF 30 JUNE 1981)

Part-time	Army Guard	8,120	10,233
	Air Guard	2,103	
Full-time	Federally Paid*	1,092	1,329
	State Paid	237	

\*Most full-time Federally-paid technicians also are members of part-time Guard units.

The National Guard's State Selective Service Section has played an important role in the local board procurement program in that section members, along with their Reserve counterparts, have interviewed prospective board members for the 200 positions throughout the state. The results of their interviews were forwarded to the State Director, who recommends the appointments to the local boards. There are seven Reservists representing three components in the Air Force Reserve "Flight Q" who work with our six section members. The breakdown is: two—Air Force, two—Navy and three—Army.

During 1980 and 1981, the section performed two weeks annual training at various sites including training sessions at the Great Lakes Regional Office, Purdue University and Lansing, MI. During annual training periods, the section also contacted and trained active component recruiters who would augment Selective Service in the event of emergency mobilization. Section members also coordinated with the active component recruiters the preparation and improvement of plans for Selective Service post-mobilization operations should it ever become a reality.



Guardsmen registering with Selective Service

Revitalization of the Selective Service System was further continued during 1981 when the Local Board Procurement Program was implemented. Under this program at least five members are selected for each of the 40 local boards in Minnesota. This is designed as a further step to reduce the response time if a draft becomes necessary.





*Members of the 257th Military Police Company providing security at Har-Mar Mall after a tornado struck Roseville, June 1981*

## MILITARY SUPPORT TO CIVIL AUTHORITIES SECTION

When natural disaster, public disorder or similar emergencies require activation of Minnesota Army or Air National Guard forces, the Military Support to Civil Authorities Section forms the coordination point between the Adjutant General, civil authorities and National Guard emergency forces. This section is prepared to handle any state activation on a round-the-clock basis.

At the onset of this biennial period, the Guard was still involved in providing assistance in response to the independent truckers' strike emergency. Involvement in this emergency encompassed the period 19 June 1979 through 11 July 1979. During this emergency, the production and transportation of vital commodities, such as gasoline, fuel oil and grain were threatened. The National Guard was called upon to assist state and local authorities in reestablishing and ensuring the continued flow of these commodities to the populace. Guard missions included the provision of security for oil storage depots and oil and grain terminals; and furnishing Guard members to assist the Minnesota State Patrol in highway security duties.

The unusually dry conditions throughout the state made fire prevention and fire fighting a high priority concern, especially during the spring and summer months of 1980. In April 1980, the National Guard was requested to assist the Department of Natural Resources and hundreds of community volunteers in battling fires that were burning in the Motley, MN., area. Guard units were called out to assist fighting the fires and constructing fire breaks. Control of these fires was achieved and Guard assistance was concluded after three days of duty.



*COL. Duane J. Marholz  
Military Support Plans  
Officer*



*Guardsmen fight the Motley fires, April 1980*

When the devastating effects of a tornado caused extensive damage to commercial and residential property in the area of Roseville, Minnesota, on 14 June 1981, the Guard promptly provided assistance to the Ramsey County Sheriff's Department, in securing the affected areas, in the interest of safety and security.

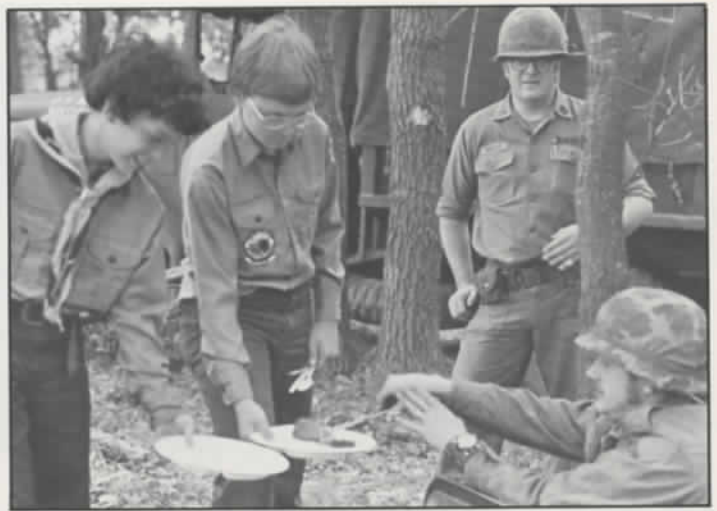
In all, the Minnesota Army and Air National Guard spent 890 mandays on emergency state duty during this biennium, providing support on the two occasions mentioned above. Under the Minnesota Emergency Relief Act (Minnesota State Statute 9.061), the Section assists the Adjutant General in investigating and verifying disaster relief claims for damage to community and county facilities beyond their financial capability. After investigation and verification, such claims are forwarded to the State Executive Council for final disposition.

The Section was formally reorganized in October 1978, with the introduction of the State Area Command (STARC) concept to Minnesota. Under this system, 29 Guard members plan for state and federal mobilization contingencies which would be ready to assist Minnesota forces in the event of any call-up. This Section forms the nucleus for a 123-member command which would be set up in the event of a major Federal mobilization.

Other Section responsibilities include: implementation of the National Guard's security program, management of community support and domestic action programs, all forms of contingency planning and ongoing coordination with State, local and Federal agencies on matters of mutual concern.



47th S & T color guard march in Winnebago's 125th Anniversary Parade



Boy Scouts try out some Army chow



Escort for Secretary of State Joan Growe at the opening of the 1981 Legislature



The Guard's 47th Division Band presents concerts the year round

## NATIONAL GUARD

The Guard's community service and domestic action programs, supervised by the Military Support to Civil Authorities Section, responded to more than 400 formal requests from Minnesota civic organizations, government agencies and communities during FY 80 and 81.

Minnesota Army and Air Guard units supported numerous requests for color guards, marching units and honor guards; displayed helicopters and taught aviation science courses at high schools; presented band concerts at various fairs and events; provided helicopter orientation flights and equipment support to ROTC cadets and explorer scouts; community vehicle safety spot checks; built a driving training course and temporary bridge to meet a communities needs; and voluntarily participated in events to render assistance to the needy or disabled.

Requests for Guard support are usually submitted



The shooting van is a popular attraction at fairs, displays and open houses





*Guard engineers help construct a driver safety course at Dakota County*



*A Guard member escorts one of the performers at the Sister Kenny Institute Talent Show*

## COMMUNITY SERVICE

to the local units located throughout the state, and then forwarded to the Adjutant General's Office where they are individually considered for approval. The National Guard can provide support for activities that relate to Guard training and military skills, which insures that the time spent supporting such projects compliments unit training. The community service program has made possible many worthwhile projects that otherwise could not have been undertaken.

In addition to the community service program, several units sponsored Boy Scout and Explorer troops, and many Minnesota youths graduated from Guard-sponsored firearms safety courses.

National Guard armories were made available for meetings of non-profit, non-political civilian groups, such as the Civil Air Patrol and Scouting organizations.



*MG. Sieben makes a presentation to Alexandria City Manager, James R. Clayton*



*A Capitol Rotunda display commemorates the 40th anniversary of the call-up of the Brainerd unit*



*Stillwater high school students are given an orientation to a Guard helicopter and other equipment in conjunction with their classwork*



## SAFETY OFFICE

The State Safety Office serves as the catalyst for all safety and occupational health activities within the Minnesota Army National Guard such as:

Providing safety educational materials (films, tapes, posters, pamphlets etc.) to National Guard units throughout the state.

Conducting classes on defensive driving, cardiopulmonary resuscitation, industrial hygiene, weapons safety, hearing conservation, eye and foot protection, fire prevention and other safety and health related subjects.

Sponsoring workshops and seminars for Guard commanders and supervisors to instruct in ways of motivating Guard members and department employees to work safely.

Inspecting all Army National Guard facilities in the state to ensure compliance with Occupational Safety and Health (OSHA) regulations.

During this biennium, the Department



*MAJ. Richard S. Reiter  
State Safety Officer*

implemented an intensive campaign to reduce the number of backing accidents in government vehicles. As a result of this campaign, there were no accidents of this kind in 1981 as compared to an average of 12 each year in the previous biennium. Other successful safety promotions included a new hearing conservation policy which has resulted in all Army Guard members and department employees wearing hearing protection devices whenever exposed to hazardous noise levels; the issue of prescription safety glasses to all persons requiring prescription eyewear and exposed to eye injury hazards; issue of safety shoes to all persons exposed to foot injuries in their workplace.

In July, 1980, the Minnesota Army National Guard received the "Meritorious Safety Program" award from the National Guard Bureau, in recognition of its outstanding accident prevention program for fiscal year 1979.

The Safety Office coordinates with the Minnesota Safety Council, Federal Safety and Health Council, Minnesota Department of Public Safety and other agencies concerned with safety and health. The department's program complies with Guard Bureau regulations and is designed to create safe conditions on the job and promote safe practices for military and civilian personnel on and off duty.

## CAMP RIPLEY TRAINING SITE

Camp Ripley, 53,000 acres in size, is the primary training site for the 94 units of the Minnesota Army National Guard. Located seven miles north of Little Falls, the camp encompasses the site of Old Fort Ripley, a frontier outpost occupied from 1848 to 1877. Owned entirely by the State of Minnesota, Camp Ripley facilities and operations are primarily Federally-funded.

The camp contains dozens of firing ranges capable of accommodating all weapons used by an infantry division. With 50,500 acres of field and forest, Camp Ripley's varied terrain is ideal for military tactical training.

The cantonment area of Camp Ripley can house more than 12,000 troops during summer training periods and approximately 2,500 during winter months. Increasingly, Camp Ripley is becoming a major training site for active and reserve component units from throughout the United States, particularly during winter. Recognized as one of the top winter training sites in the continental U.S., Camp Ripley draws units from as far away as California, New Mexico and Wyoming.



*COL. Richard L. Hayes  
Training Site Manager*



*Summer billeting at Camp Ripley*





*Naval Reserve provide medical support at some annual training periods, here visited by Secretary of State Joan Growe*

Troops presently utilizing Camp Ripley for training include personnel from the Army and Air National Guard, Regular Army, Regular Marine Corps, Regular Air Force, Army Reserve, Air Force Reserve, Marine Corps Reserve and Naval Reserve. More and more active component units are expressing an interest in training at Camp Ripley. A 5,000 foot, asphalt-surfaced runway has been completed, as of publication time for this report. With the exception of the asphaltting, the work was done entirely by National Guard engineer units from Minnesota, Missouri and North Dakota. Air Guard experts from both Minnesota and the National Guard bureau provided the runway planners with the technical requirements necessary for Air Force aircraft and were a continual source of information for the runway design. Designed to accommodate Air Force and Air Guard C-130 transport aircraft, the runway will greatly enhance the Training Site's accessibility to out-of-state military units. The number of troops visiting the central Minnesota post in the years ahead is expected to jump markedly. During this biennium—for the first time in history—C-130's landed at Camp Ripley, delivering troops and equipment to and from the post for winter training.

Other aviators have used Camp Ripley for training over the years. Minnesota Army Guard helicopter pilots study nap-of-the-earth flying techniques above Camp Ripley's treetops; and, pilots from the Duluth Air Guard base regularly practice low-level photo reconnaissance over the uninhabited forestland of Ripley. Other training commands also bring their organic helicopters to the post for training.

Full-time, year-round personnel of the Training Site Section at Camp Ripley provide operational and maintenance support for training activities at the post. This section is manned by 47 persons, who are Federally-paid. During annual training periods, this section is augmented with additional manpower, as required, which is funded by the U.S. Government.

Also located at Camp Ripley are major administrative, logistic and maintenance facilities of the Minnesota Army Guard; the U.S. Property and Fiscal Office; the Office of the Military Architect and Engineer; the State Maintenance Office; and, the bulk of the Minnesota Army Guard's warehouse space.



*Troopers preparing for field training*



*Pilot's eye view of the new runway at Ripley*



*Mortarmen place a round in the tube*



*Troops off-loading from C-130 aircraft for winter training at Camp Ripley—the first time in its history*



Camp Ripley has an important economic impact on central Minnesota, and especially the towns of Little Falls and Brainerd. More than \$10 million in salaries and wages was earned during this biennium by Army National Guard technicians and full and part time maintenance and operational personnel. And, in FY 80 alone, more than 15,000 non-Minnesota guard troops trained at Camp Ripley for two-week periods, with many spending a portion of their military income in central Minnesota. This number is up 5,000 from the previous biennium. Some of these non-Minnesotans bring families with them to stay at nearby campgrounds or resorts; or, becoming acquainted with this resort area, return here for their vacations. The Federal Government spent more than \$1,125,000.00 during this biennium for construction, maintenance and repair projects at Camp Ripley, with most of the work performed by Minnesota contractors.

In addition to its strictly military usage, Camp Ripley facilities are used by civic groups, such as Boy Scouts, Girl Scouts, Camp Fire Girls, church groups and sporting clubs.

The Minnesota Department of Natural Resources operates and manages Camp Ripley's natural resources through a comprehensive program of game management and resource control. Archery hunting for deer, snowmobiling and cross-country skiing on Camp Ripley are administered by the DNR, balancing access to these recreational activities with resource management.

As a State facility, Camp Ripley is open to State government agency meetings, seminars and training sessions. During this biennium, Camp Ripley was used for 13 different government agency functions, with activities as varied as DNR fire-fighting training and Department of Administration seminars.

### MILITARY TRAINING AT CAMP RIPLEY FY 80-81\*

Type Training	Time Periods	No. of Troops	Training Mandays
Summer Annual Training	Twelve 2-week Periods	26,239	393,585
Winter Annual Training	Eight 2-week Periods	11,100	166,500
Weekend Drill Training	88 Weekends	9,480	18,960
Ski Instructor School	Two 9-day Periods	660	6,340
Other Training	Year-round	28,920	76,760
		76,399	662,145

\*Does not include numerous aerial missions flown over Camp Ripley.



Ripley's recreational areas are used by military and civilians throughout the year

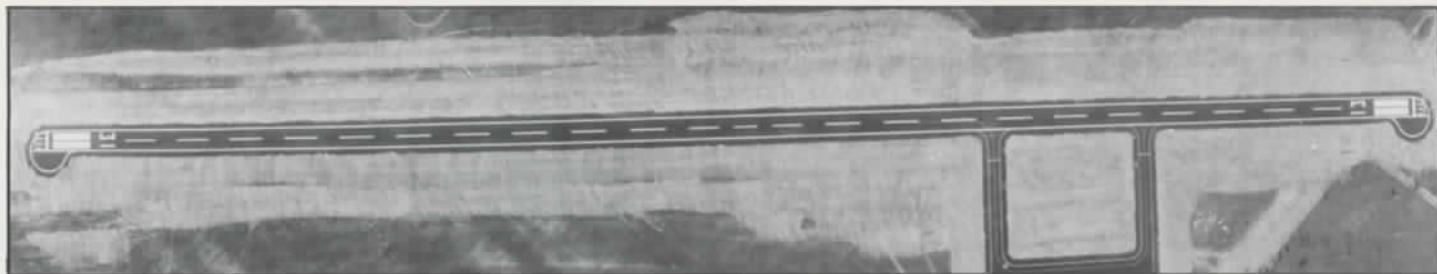


During the summer 1981 training period, the Ripley theater was the site for physical fitness testing



Established in 1981, the Alternative Center is a recreational facility where people performing duty at Ripley can go for chaplain counseling or nonalcoholic entertainment





A reconnaissance photo of the new Camp Ripley airstrip

## OFFICE OF THE MILITARY ARCHITECT AND ENGINEER

The Office of the Military Architect and Engineer supervises the construction, maintenance and repair of all Army National Guard facilities throughout Minnesota (68 Armories, 19 Organizational Maintenance Shop Facilities, 1 Aviation Facility, and Camp Ripley Facilities). The Office acts as the State's representative for all contracted Army National Guard construction and maintenance and repair.

The Office furnishes professional architectural and engineering services, controls a traveling State employed maintenance and repair crew, arranges construction by formal contract, purchases materials and equipment required for work, and maintains formal records embracing the entire activity. A standardized work order system has been implemented during this biennium to improve accountability of materials and labor costs for facilities. The Office has recently been directed to provide consumable inventory items, through the State warehouse, for all Army National Guard facilities. Responsibility for all phases of State janitorial supply system has recently been placed with this office. Twenty persons are employed by the Office, nineteen of whom are State employees.

An active State building program over the past three decades has helped replace dated, obsolete structures, while also phasing in new and needed facilities. Since 1961, 16 armories, 13 maintenance facilities, a new vehicle storage and maintenance facility at Camp Ripley, and the United States Property and Fiscal Office at Camp Ripley have been constructed. Thirteen allweather billets have been constructed at Camp Ripley, increasing winter training capacity to 2,500 troops.

Through this Office, the Federal Government spent \$1,125,000 during this biennium for construction, maintenance and repair projects at Camp Ripley. This amount includes \$850,000 for a 5,000 foot aircraft runway, taxiways and parking apron. Federal funds in the amount of \$158,500 were encumbered for



MAJ. Wayne Johnson  
Facilities Management  
Officer



The architects' design moves toward reality as the St. Peter Armory groundbreaking ceremony took place. This is part of the \$4.6 million planned for construction during the 1981-1983 biennium.

modifications to the security systems at Army National Guard facilities throughout the State. State of Minnesota funds in the amount of \$320,000 were spent during this biennium for construction, maintenance and repair work accomplished at Guard facilities throughout the State.

Major new projects under design during this biennium include new armories at Bloomington, St. Peter and Owatonna (valued at \$3,854,000); alterations and additions to the Combined Support Maintenance Shop at Camp Ripley (valued at \$621,000); and additions and alterations to Organizational Maintenance Shop No. 1 at New Brighton (valued at \$176,000).

This Office works closely with the Minnesota Energy Agency, Energy Conservation Division, in an effort to determine the best methods for reducing energy consumption at Guard facilities. "Energy audits" are being performed on all facilities. The information formulated by these audits will be submitted to obtain State and Federal funds for energy conservation projects. In addition, the Office is involved with handicapped access and OSHA related construction/modifications.

Two supervisory personnel retired from the Office of the Military Architect and Engineer during this biennium: COL John W. Hohncke, staff architect for twenty-six years, retired in October of 1980; and, Leo H. Virnig, employed by the Office for thirty-six years, retired in July of 1979.





*This drill operator is one of 303 technicians who perform the maintenance mission*



*TOW gunner optically tracks the missile into the target*

## STATE MAINTENANCE OFFICE

The State Maintenance Office supervises the statewide maintenance program for surface equipment assigned to the Minnesota Army National Guard. This office exercises operational control over Camp Ripley's Combined Support Maintenance Shop and the Mobilization and Training Equipment Site, as well as exercising technical supervision for 19 Army Guard Organizational Maintenance Shops located across Minnesota.



*COL Lawrence R. Kiefer  
State Maintenance  
Officer*

The Combined Support Maintenance Shop provides direct and general support maintenance for all surface equipment, as well as calibration support repairing or calibrating more than 14,000 items each year. Supported equipment includes approximately 2,040 wheeled vehicles, 250 armored vehicles, 1,050 trailers, 60 artillery pieces, 13,100 individual and crew-served weapons, 500 pieces of construction and material handling equipment, 800 radios and electronic items, 625 power generators, 6,000 canvas items (such as tents) and various amounts of TOW and DRAGON missile equipment. Shop personnel provide technical assistance to equipment users upon request and provide Maintenance Assistance Instruction Teams to units, as well as conduct annual maintenance inspections of each Minnesota Army Guard unit.

The Mobilization and Training Equipment Site is an organizational maintenance facility with the mission of storing, maintaining and issuing large quantities of wheeled vehicles, armored vehicles, artillery pieces, construction equipment and miscellaneous items stored at Camp Ripley for training. This equipment is temporarily loaned to units while they train at Camp Ripley, saving the federal government the expense of transporting these items back and forth for training.

Equipment stored at the Mobilization and Training Equipment Site is utilized by personnel of the Active Army, United States Marine Corp, United State Marine Corp Reserve and United States Army Reserve, as well as National Guard units from numerous states. The equipment on hand consists of 662 major items, (tanks, personnel carriers, etc.) plus three highway bridges and one foot bridge.

Personnel in 19 Organizational Maintenance Shops located statewide provide unit-level maintenance on surface equipment issued or loaned to Minnesota Army Guard units. Organizational maintenance generally consists of cleaning, inspecting, servicing, lubricating, adjusting and replacing parts and minor assemblies. Organizational Maintenance Shops are located at Rochester, Tracy, Willmar, Detroit Lakes, New Ulm, Appleton, Cloquet, New Brighton, Austin, Hibbing, St. Paul, White Bear Lake and Camp Ripley.

To accomplish the maintenance mission of the Minnesota National Guard, the State Maintenance Office is authorized a total of 303 full-time technicians; five in the administrative headquarters; 100 in the Combined Support Maintenance Shop; 50 in the Mobilization and Training Equipment Site; and 148 at the 19 Organizational Maintenance Shops spread across the State.

### New Equipment:

The tube launched, optically tracked, command wire link guided missile (TOW) anti-tank missile system was received and placed into service during the last biennium. Several new devices have entered the training system. These items include subcalibre devices used in the actual weapon to lazer devices. The use of these devices gives the soldier feel and handle of the actual weapon at a reduced cost per firing.

Federal funds in the amount of \$600,000.00 have been allocated to the Minnesota National Guard for remodeling of the Combined Support Maintenance Shop at Camp Ripley during the next biennium.

As this biennium ended, Colonel DeWayne J. Schwanke retired as the State Maintenance Officer. He had held this position since December, 1977.





*Gunner fires the DRAGON missile at annual training for a direct hit on its tank target*

## 47th "VIKING" INFANTRY DIVISION



The 47th "Viking" Infantry Division, one of our nation's eight Army National Guard Divisions (there are 16 active Army Divisions) is based in Minnesota and incorporates 71 of Minnesota's 94 Army Guard Units. The Division, commanded by Major General Robert Walker since 24 June 1979, includes over 80% of the State's Army Guard personnel, as well as elements from Illinois, Iowa, New Mexico and Wisconsin. Symbolic of their Northland home and winter warfare mission, the members of the Division wear the 47th's distinctive Viking helmet patch.



*Maj. Gen.  
Robert G. Walker  
Commander  
47th "Viking"  
Infantry Division*

The 47th Division consists of Infantry, Armor, Artillery, Aviation, Engineer and support and service units—all the elements necessary to form an integrated fighting force. The major Minnesota-based elements are the 47th Division Headquarters; the First Brigade, headquartered in Stillwater; 47th Division Artillery, headquartered in Anoka; and the Minneapolis-based 47th Division Support Command. Major out-of-state elements are: Iowa's 34th Infantry Brigade; Illinois' 66th Infantry Brigade; New Mexico's 2nd Battalion, 200th Air Defense Artillery; and an Aviation Company from Wisconsin. Those Minnesota Army Guard members not assigned to the 47th Division are with separate Infantry and Artillery battalions, an MP company, two service and support detachments and elements of the Guard's State Headquarters. These units as a rule train with the 47th Division units, but are designated for different missions in the event of a national emergency.



*Brig. Gen.  
Lyle C. Doerr  
Assistant Division Commander  
47th "Viking"  
Infantry Division*

Collective training on the squad, platoon and company levels was the primary training emphasis of the Division during this biennium. Utilization of the Army Readiness Training Evaluation Program (ARTEP), which defines the conditions and standards by which various military operations are conducted, further increased the combat and mobilization readiness of the Division in its dual role; that of supporting the active Army in national emergencies, and providing units for emergencies within the State. The Army's Battalion Training Management System (BTMS) was fully implemented, giving unit commanders more latitude in managing training time and more flexibility in making training both challenging and interesting. Maximum use is being made of hands-on training, using actual equipment and outdoor training areas, rather than lecture-format classes. Army Skills Qualifications Tests (SQTs) are being utilized to facilitate the standardization and measurement of each soldier's training and performance under all types of conditions.



*Infantrymen deploy during an airmobile exercise*





*A mechanized infantry squad performs an area reconnaissance during annual training maneuvers*



*Guardsman makes an adjustment on the TOW wire guided anti-tank missile launcher*



*Trooper clears the M-60 machinegun before getting more ammunition*



*Commanders formalize the partnership between the 4th Infantry Division and the 47th Infantry Division*

Division officers and non-commissioned officers developed their military knowledge and expertise through a combination of local schools, correspondence courses, active duty schools and training exercises. One such exercise, "Viking Shield", conducted by the 75th Maneuver Area Command, from Houston, TX., brought in representatives of out-of-state elements as well as Minnesota units to Camp Ripley to simulate combat conditions and problems. The exercise put the Division through a difficult and challenging set of problems based on possible wartime situations. Active Army observers critiqued the exercise and the Guardmembers' abilities to handle numerous unpredictable problems.

The Division supports the Minnesota Military Academy--Officer Candidate (OCS) and Noncommissioned Officer Education System (NCOES)--with both instructors and students.

A significant development for the 47th Division took place in May 1980. A Division Partnership Program was formalized between the 47th Division and the 4th Infantry Division (Mech), an active Army division, located at Fort Carson, Colorado. The partnership program was developed to improve the training readiness of both the active and Guard divisions. The association has been most successful and productive for both partners. The 4th Division has provided training and logistical expertise in the form of mobile training teams. They have supported and evaluated the annual training of the 47th Division units. Individuals of the 47th Division have been integrated into exercises "Fiat Lux" and "Hot Rapier" conducted by the 4th Infantry Division (Mech) at Ft. Carson. In addition, selected units of the 47th Division have taken their annual training with the 4th Division at Ft. Carson. The Minnesota Army National Guard, in turn, has trained 4th Division personnel as Winter Operations Instructors. Also, 47th Division personnel have been placed "on loan" to aid in





*The engineer mobile bridge launcher can span 60-foot streams*



*Artilleryman mounts one of the 175th Field Artillery's three new 8 inch self-propelled howitzers*

the training of the 4th Division troops in logistics management, maintenance management and command of their Division Artillery. 47th Division personnel accompanied their active Army partners to Germany to participate in operation "Reforger '81", a multi-Division exercise conducted by U.S. Army, Europe.

Although most division units conduct two week annual training periods during the summer months, winter training continues to be an area of major emphasis with troops training at Camp Ripley, Ft. Greely, Alaska, and Camp Torpo, Norway. Three battalions participated in winter annual training during both 1980 and 1981. 1982 is expected to see an increase in winter training participation due to planned visits to Camp Ripley by out-of-state units of the Division. Summer training is conducted primarily at Camp Ripley, although certain 47th Division units, requiring specialized facilities, train at active Army posts around the United States.

Active Army evaluators annually review the 47th Division units for combat readiness and proficiency. During the 1981 summer annual training, evaluators rated the readiness of many division elements the equivalent of their own active Army units. Overall, the 47th Division received a "Satisfactory" rating with many commendable remarks, during both years of the biennium.

Through an intensive recruiting program by the Minnesota Army National Guard and a renewed interest by young people in service to their country, there has been a significant increase in the strength of the 47th Division. At the close of this biennium, the 16,000 authorized positions of the 47th Division were approximately 77% manned, a 7% increase over the previous reporting period, with the Minnesota elements of the Division increasing to 78.3% strength.



*Division troops in winter training*



*Division tankers maneuver through the Ripley terrain*



*Studying is important for improving military skills*





*Minnesota 148th TRG RF-4 "Phantom" jet in flight over Germany in August, 1979 with German Counterpart.*

## MINNESOTA AIR NATIONAL GUARD

The Minnesota Air National Guard, like the Army Guard, has both State and Federal roles. In the State role, the Air Guard compliments the Army Guard in providing modern equipment and professionally trained citizen-soldiers for state emergencies. In the Federal role, the Minnesota Air Guard is a partner to the active Air Force in the Total Force policy of national defense. It is recognized as a "Ready Now" force capable of immediate mobilization and rapid deployment, prepared for combat missions upon arrival anywhere in the world.

Air Guard preparedness was demonstrated on several occasions with successful deployments of the 148th Tactical Reconnaissance Group to Erding, Germany in August 1979 and the 133rd Tactical Airlift Wing to Panama in Aug-Sep 1979 and Sep-Dec 1980 and to Athens, Greece in May 1981.

These deployments are now common to the Air Guard which has undertaken many new roles in direct support of the U.S. Air Force. Increasingly, the augmentation capabilities of the Air Guard, demonstrated through combined training-support missions are setting the pattern for effective utilization of professionally trained citizen-airmen and modern aircraft on a volunteer basis, short of mobilization.

Although the Federal Government bears a great percentage of the expenses of the Air Guard (which is a logical arrangement in view of the predominant performances of Federal missions) the Air Guard remains constitutionally a State military force and an organized, disciplined military body for use in State missions.

Twenty-three of the twenty-four Air Guard units in Minnesota are stationed at either Minneapolis-St. Paul International Airport or Duluth International Airport. The other unit, a weather information flight, is stationed at the St. Paul Downtown Airport. Manpower is split almost evenly between the Duluth and Twin Cities areas.



*A 133rd TAW C-130 "Hercules" turbo prop transport lands at Camp Ripley*

## AIR NATIONAL GUARD STATE HEADQUARTERS

The Minnesota Air National Guard State Headquarters is located in the Adjutant General's office. This headquarters is the link between the Adjutant General and the Minnesota Air Guard and its two air bases.

Major Air Guard personnel actions-enlistments, promotions, separations, discharges - are processed in this office and all current personnel records are stored here. All active duty, temporary duty and personnel orders of the Minnesota Air Guard are controlled by this headquarters.

The State Headquarters develops policies and directives for the Minnesota Air Guard and provides guidance to ensure that U.S. Air Force regulations are adhered to by all Air Guard units. The headquarters supervises logistics, training, spending, operations, maintenance, recruiting and personnel administration. Additionally, an Air Surgeon is assigned to the headquarters staff to review all medical examinations, certify flying physicals, manage the inoculation and weight control programs and advise the Chief of Staff on the general welfare and physical well-being of all Air Guard personnel.



## AIR GUARD COMMAND AND COORDINATION

The Minnesota Air National Guard's Chief of Staff commands all Air Guard forces in the State. He is responsible for the overall readiness of the Air Guard, as well as all training and mission assignments.

The Executive Support Officer is the fulltime Adjutant General's staff officer responsible for ensuring that policies and directives of the Adjutant General are applied to the day-to-day administration and operation of the Air Guard bases. He also manages the Air Guard Section administrative and staff functions.



Maj. Gen.  
Wayne C. Gatlin  
Chief of Staff  
Minnesota Air Guard



COL. Joseph A. Kazek  
Exec. Spt. Staff Officer



The 237th Air Traffic Control Flight loading a mobile tower aboard a C-141 for departure to Florida

### AIR NATIONAL GUARD STRENGTH

FY 80 (June 1980)      FY 81 (June 1981)

Authorized	Assigned	Authorized	Assigned
2,079	1,968	2,110	2,103

Air National Guard strength began and ended the biennium with 99.6%, however there was a net increase of 124 people during the period.

### MINNESOTA'S AIR NATIONAL GUARD AIRCRAFT

C-130A Hercules Transports*	9
RF4 Phantom Fighter-Reconnaissance Aircraft**	20
Total:	29
Value:	\$71,350,000.00

\*Stationed at Minneapolis-St. Paul International Airport

\*\*Stationed at Duluth International Airport



### MINNESOTA AIR NATIONAL GUARD UNITS, BY LOCATION:

#### St. Paul, Adjutant General's Office:

Headquarters, Minnesota Air National Guard

#### Minneapolis-St. Paul International Airport:

Headquarters, 133rd Tactical Airlift Wing  
109th Tactical Airlift Squadron  
133rd Combat Support Squadron  
133rd Mobile Aerial Port Squadron  
133rd Weapons System Security Flight  
133rd Consolidated Aircraft Maintenance Squadron  
133rd Tactical Hospital  
133rd Civil Engineering Flight  
133rd Communications Flight  
133rd Field Training Flight  
210th Electronic Installation Squadron  
237th Air Traffic Control Flight  
109th Aeromedical Evacuation Flight  
133rd Resource Management Squadron

#### Duluth International Airport:

Headquarters, 148th Tactical Reconnaissance Group  
179th Tactical Reconnaissance Squadron  
148th Combat Support Squadron  
148th Consolidated Aircraft Maintenance Squadron  
148th Weapons System Security Flight  
148th Tactical Clinic  
148th Civil Engineering Flight  
148th Resource Management Squadron  
148th Communications Flight

#### St. Paul Downtown Airport:

208th Weather Flight





Ground crewman putting the Hercules to bed

## 133rd TACTICAL AIRLIFT WING

Headquartered at Minneapolis-St. Paul International Airport, the 133d Tactical Airlift Wing encompasses all Twin Cities area Air National Guard units and three flying units: located in Charleston, West Virginia; Martinsburg, West Virginia; and Schenectady, New York. The Wing is commanded by Brigadier General Robert W. Schaumann. The 133d's C-130 Hercules, four-engined turbo prop transports, have a worldwide cargo and troop airlift mission capability that makes the Wing an integral part of the U.S. Air Force's Military Airlift Command. Minnesota elements of the 133TAW have their own medical and legal staffs, communications and electronics capability, aircrews and maintenance crews, and are independent of out-state units. The Wing has consistently been highly rated by the active Air Force for its combat readiness and has been nominated for the Air Force's Outstanding Unit Award during the current reporting period.

The Minnesota unit that flies the 133d Wing's camouflage-painted transports, the 109th Tactical Airlift Squadron, is a direct descendent of the 109th



Brig. Gen.  
Robert W. Schaumann  
Commander  
133rd Tactical  
Airlift Wing

Observation Squadron, which in 1921 was the first Air National Guard flight granted Federal recognition.

During this biennium, the Wing continued its support of the U.S. Southern Command in the Republic of Panama at Howard Air Force Base. This is an active duty mission known as "Volant Oak," shared by Air National Guard and Air Force Reserve units flying the C130, from throughout the United States on a two-week rotating basis. During the December 1980 rotation, a Minnesota crew was credited with a search and rescue "save". The aircraft and crew were scrambled to search for a father and daughter adrift at sea in a sailboat with a broken rudder. The sailboat was in danger of sinking and had no lifeboat. After three-and-a-half hours of searching in adverse weather, the stricken craft was sighted. The C-130 dropped a survival kit and liferaft and then directed a merchant vessel to the scene to pick up the 68-year-old father and 18-year-old daughter.

The syndicated TV program, PM Magazine, featured the Minnesota Air Guard's "Volant Oak" mission, including the air-sea search and rescue operation noted above.

In addition to the flights in Central and South America, the 133d also flew Minnesota Army Guardsmen to Alaska and Norway for training; as well as transporting Norwegian Home Guard troops to Minnesota for training at Camp Ripley. The Wing participated in numerous active Air Force exercises and flew support missions to Spain, Southern Europe and Greece.

Many thousands of taxpayer dollars were again saved during the biennium through the efforts of the 133d Civil Engineering Flight and the 210th Electronic Installation Squadron. These two units renovated or constructed new facilities at the Minneapolis-St. Paul Air Guard Base and at other Guard and active duty bases in the U.S. and in foreign countries. Out-of-state Air Guard construction units also came to Minnesota where they assisted local construction elements on various projects, including the upgrading of the Mobility Control Center and modernizing the workroom and kitchen of the mess hall. Not only did these projects result in considerable savings, they also helped Air Guard personnel maintain their skill proficiency.

The 237th Air Traffic Control Flight continued its practical training running the control tower at Anoka County Airport on weekends.

The 109th Aerial Port Flight supported the active Air Force in deployments around the U.S. and to bases in the Azores and the Philippines.

Members of the Tactical Hospital and the 109th Aeromedical Evacuation Flight participated in numerous exercises and deployments around the world. During the biennium, the Tactical Hospital was rated one of the best in the Air National Guard.





Members of the 109th Aeromedical Evacuation Flight in "Wet Pitching" training



Actual rescue of a disabled sailboat as seen from the C-130 after a 3 1/2 hour search in the Pacific Ocean west of Panama

### 133D PERSONNEL STRENGTH (as of June 1981)

Authorized		Assigned	
Officer	Enlisted	Officer	Enlisted
169	984	167	1012
TOTAL: 1153		TOTAL: 1179	

Officer strength: 98.3% of authorized.

Enlisted strength: 102.8% of authorized.

Total strength: 102% of authorized

## 148th TACTICAL RECONNAISSANCE GROUP

The Duluth-based 148th Tactical Reconnaissance Group, equipped with RF-4C "Phantom" jet aircraft, has the mission of low-level surveillance over a battlefield, using sensors, radar and cameras aboard the aircraft to discover and document activities on the ground.

The 148th Group is trained to photograph sites far behind enemy lines, return to base where the photographs and other data are developed and interpreted; then get the data to a friendly unit headquarters via airdrop to waiting intelligence personnel.

It has been announced that the 148th is becoming part of the Rapid Deployment Force (RDF) as of 1 July 1981. This will commit the Group to a quick response world-wide mission. The RDF was conceived under the Carter Ad-



COL. John H. Spencer  
Commander  
148th Tactical  
Reconnaissance Group

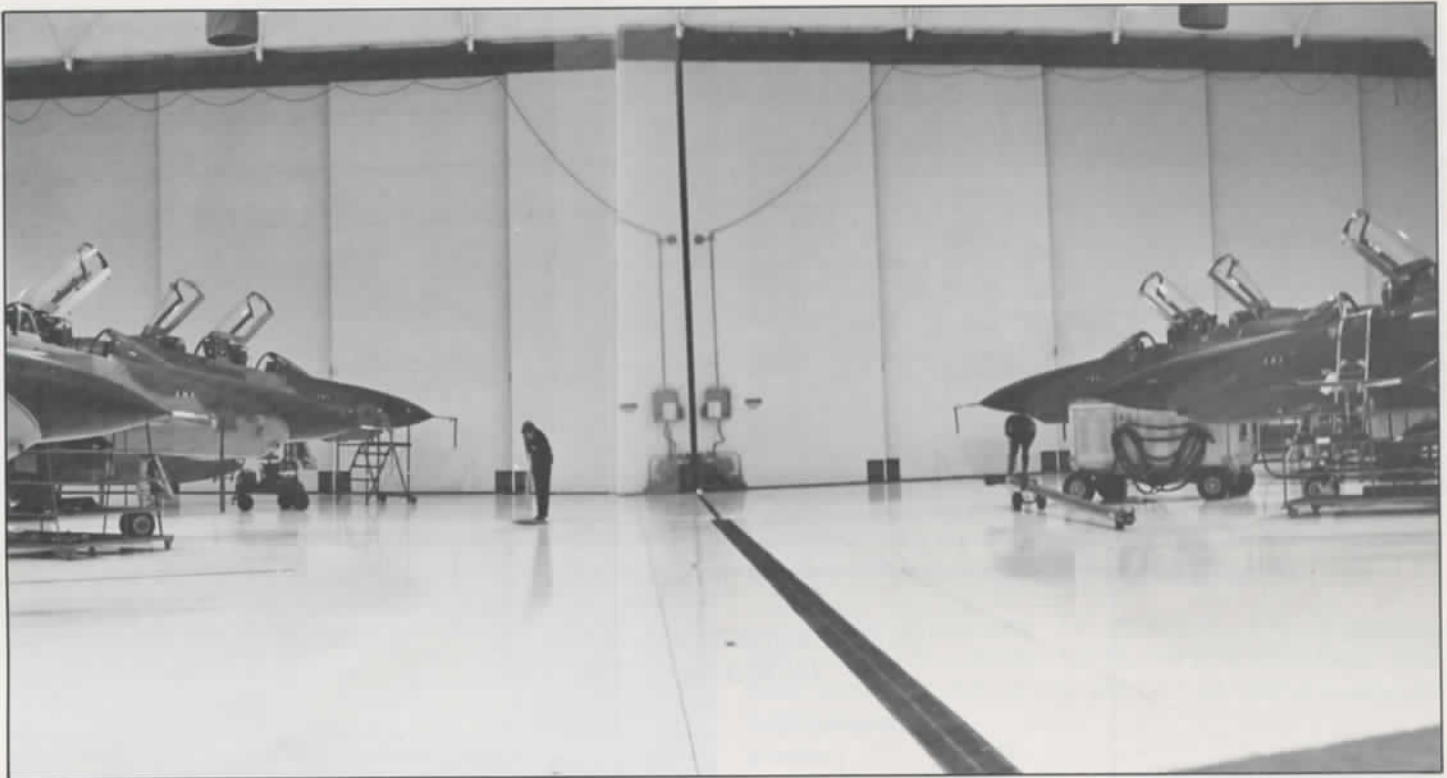
ministration to give the U.S. a quick response option to protect our critical interests in the oil-rich Middle East.

The unit made many training deployments during the biennium. During the period 3-24 August 1979, the 148th deployed to Erding Air Base, Germany. Eight of the unit's 20 RF-4C aircraft flew over on 2 August and returned on the 24th.

While in Germany, unit members participated in the exercise "Coronet Bridle" and performed in a superior manner. They flew 182 sorties (missions) in 12 days; and had an impressive 96% rate of successful launches, averaging one hour and 52 minutes per sortie. The majority of these missions provided reconnaissance support for German and U.S. Army operations. Significant advances were made in joint operations capabilities between German Air Force and U.S. Army Military Intelligence Battalion Aerial Reconnaissance (MIBAR) operations. This was the first time a reconnaissance unit was deployed and integrated with MIBAR Operations in Europe.

During the week of 20-27 October 1979, the 148th participated in Exercise Photo Finish, which is a national competition among Air Force and Air National Guard reconnaissance units. The unit placed third in the overall competition and won the best overall crew performance





*Hangar modifications at Duluth include an interior design utilizing 100% white acrylic paint, selected after an intensive test program. The result is higher visibility, better work conditions and fuel savings.*

award for the exercise. The "Best Aircrew" were Major John Broman and Major Roger Nelson. Seven Air National Guard units and two Air Force units competed. The teams flew a total of 12 sorties each; two day and two night missions with each aircrew flying four. Judges were provided by the National Guard Bureau and the host unit-124th Tactical Reconnaissance Group, Boise, Idaho.

During 1980, the 148th Communications Flight deployed to Patrick Air Force Base, Florida from 23 February to 8 March. At the same time, part of the Finance Section of the 148th Resource Management Squadron and four clinic personnel went to McDill Air Base, Florida.

From 21-29 June 1980, the entire group went to Volk Field, Wisconsin for an Operational Readiness Inspection (ORI). The purpose of the inspection was to evaluate the generation, mobility, deployment, regeneration and employment capabilities of the 179th Tactical Reconnaissance Squadron and support provided to it by the 148th. Eighteen of the 20 aircraft were deployed and the unit did extremely well in all evaluated areas.

From 29 October-3 November, one-half of the 179th participated in RF-4C simulator training at Lincoln Air National Guard Base, Nebraska. Selected Squadron officers participated in a "Blue Flag" exercise 29 Nov.-4 Dec. at Hurlbert Field, Florida. This was a non-flying exercise based upon a European simulated situation.

The following deployments occurred in early 1981: 148th Communications Flight to Travis Air Force

Base, California-5-15 February; Fire Department, 148th CE Flight to Nellis AFB, Nevada-14-28 February; 148th Weapons Security Flight to Langley AFB, Virginia-21 Feb.-7 Mar.; and the 148th CE Flight to Nellis AFB-21 Mar.-4 Apr. From 5-14 May 1981, some 112 personnel and six aircraft participated in the joint training exercise "Solid Shield". Its purpose was to train all four of the component services that make up the Atlantic Command in working jointly toward coordinated participation in combat. The Tactical Air Command (under which the 148th TRG serves) exercised its role in tactical air support of the Army, Navy and Marine forces in a simulated combat environment.

In January 1980 the 148th Civil Engineering Flight began operating under a new manning structure. The new structure organized the flight into one 70-man construction team, two 12-man fire fighting teams and one 3-man fire fighting team. They developed to Wheeler AFB, Hawaii 19 Apr.-6 May 1980 and on 19 May 1980 moved into a new fuel cell building. The building is designed to provide maintenance for aircraft fuel systems and also corrosion control for the aircraft.

In January 1981, a new floor for the main hangar as well as ceiling work was completed. The new floor has provisions for the installation of hydraulic and electrical lines. In addition, the hangar now has insulated doors and walls.

Lieutenant Colonel John Spencer assumed command of the Group from Colonel William H. Carr on 7 June 1981.



## MARKSMANSHIP COMPETITION

The Minnesota National Guard marksmanship program is designed to encourage participation in local, state and national competition. During this biennium, Minnesota National Guard competitors demonstrated the expertise that has earned Minnesota Guard personnel the respect of adversaries from Gettysburg to Monte Cassino.

The Minnesota Guard sponsors two annual matches for Guard members - The Adjutant General's Rifle and Pistol Match, held at Camp Ripley, and the Minnesota National Guard Smallbore Matches, held in Minneapolis.

Indicative of the successes enjoyed by Minnesota Guard personnel, six individuals from Minnesota have been selected for the All-Guard Teams during this biennium. They are:

Highpower Rifle	MAJ John Andres-MN Air Guard SSG Dwight Barth-MN Army Guard SGT Gary Zacharias-MN Army Guard
Pistol	SFC Blaine Nelson-MN Army Guard SP4 Terry Currie-MN Army Guard
Smallbore Rifle	SGT Lance Peters-MN Army Guard

Biathlon, a Winter Olympic event that combines cross-country skiing and rifle marksmanship continued to be a popular activity during the biennium. However, Minnesota Guard biathletes were greatly handicapped in training for the U.S. National Guard Championships because of a lack of snow in Minnesota during the last two winters. In 1980, 2LT Jeffrey A. Thielen was named

to the 10-man All-Guard Biathlon Squad, which represented the entire National Guard at higher levels of competition. The Minnesota team ranked third in relays in the Championship competition.



*Pistol team member practices for competition*

### State Marksmanship Matches

Adjutant General's High-Power  
Rifle and Pistol Matches

Rifle	1980	Pistol
Company B, 2nd Battalion, 136th Infantry, Thief River Falls-Crookston		Company A, 147th Signal Battalion East St. Paul
Rifle	1981	Pistol
Company B, 2nd Battalion, 136th Infantry, Thief River Falls-Crookston		148th Tactical Reconnaissance Group, Duluth

### Minnesota Army and Air National Guard Smallbore Matches

Rifle	1980	Pistol
Company C, 1st Battalion, 135th Infantry, Faribault- Owatonna		148th Tactical Reconnaissance Group, Duluth
Rifle	1981	Pistol
133d Tactical Airlift Wing Mpls-St. Paul Int'l Airport		148th Tactical Reconnaissance Group, Duluth



# MINNESOTA ARMY NATIONAL GUARD STRENGTH

	<u>AUTHORIZED</u>	<u>ASSIGNED</u>
FY 80 (30 June 80)	10,018	7,453
FY 81 (30 June 81)	9,938	8,120

## Minnesota Army National Guard strength, by unit, at the end of FY-81.

### Units Not In The 47th Infantry Division

### 47th Infantry Division Units

Unit	Station	Authorized	Assigned	% Strength	Unit	Station	Authorized	Assigned	% Strength
Headquarters, Headquarters Detachment, Minnesota Army National Guard	St. Paul	157	152	96.8	Headquarters, Headquarters Company, 47th Infantry Division	St. Paul	163	132	80.9
Command and Control Headquarters, Minnesota Army National Guard	St. Paul	221	168	76.0	47th Military Police Company	St. Paul	207	142	68.5
125th Public Affairs Detachment	St. Paul	13	13	100.0	Headquarters, Headquarters Company, 47th Aviation Battalion	St. Paul	67	63	94.0
Army National Guard Training Site	Camp Ripley	115	115	100.0	Company "A", 47th Aviation Battalion	St. Paul	173	126	72.8
256th Medical Detachment	Camp Ripley	10	8	80.0	Company "E", 47th Aviation Battalion	St. Paul	194	149	76.8
47th Air Traffic Control Company	St. Paul	31	26	83.8	Headquarters, Headquarters Company, 147th Signal Battalion	Minneapolis	92	105	114.1
257th Military Police Company	White Bear Lake	115	116	100.8	Company "A", 147th Signal Battalion	East St. Paul	217	83	38.2
109th Light Equipment Maintenance Company	Duluth	143	133	93.0	Company "B" (-), 147th Signal Battalion	Hastings	113	80	70.7
723rd Ordnance Detachment	Moorhead	2	1	50.0	Company "B" (Det 1), 147th Signal Battalion	Stillwater	50	8	16.0
798th Transportation Detachment	St. Paul	4	1	25.0	Company "C", 147th Signal Battalion	W. St. Paul	174	75	43.1
Headquarters, Headquarters Company, 2d Battalion 136th Infantry	Moorhead	188	142	75.5	Headquarters, Headquarters Company, 682d Engineer Battalion	Roseville	175	124	70.8
Company "A" (-), 2d Battalion, 136th Infantry	Wadena	87	91	104.5	Company "A", 682d Engineer Battalion	Litchfield	135	133	98.5
Company "A" (Part), 2d Battalion, 136th Infantry	Fergus Falls	66	57	86.3	Company "E", 682d Engineer Battalion	Hutchinson	89	89	100.0
Company "B" (-), 2d Battalion, 136th Infantry	Thief River Falls	73	69	94.5	Company "E" (Det 1), 682d Engineer Battalion	Northfield	64	64	100.0
Company "B" (Part), 2d Battalion, 136th Infantry	Crookston	80	71	88.7	Headquarters, Headquarters Troop, (-), 1st Squadron 194th Cavalry	Brainerd	106	90	84.9
Company "C" (-), 2d Battalion, 136th Infantry	Bemidji	87	95	109.1	Headquarters, Headquarters Troop (Part), 1st Squadron 194th Cavalry	Milaca	47	30	63.8
Company "C" (Part), 2d Battalion, 136th Infantry	Park Rapids	66	56	84.8	Troop "A" (-), 1st Squadron, 194th Cavalry	Grand Rapids	70	69	98.5
Support Company, 2d Battalion, 136th Infantry	Detroit Lakes	145	158	108.9	Troop "A" (Part), 1st Squadron, 194th Cavalry	Aitkin	75	52	69.3
Headquarters, Headquarters Battery, 1st Battalion 125th Field Artillery	New Ulm	116	107	92.2	Headquarters, Headquarters Company, 1st Brigade, 47th Infantry Division	Stillwater	94	76	80.8
Battery "A", 1st Battalion 125th Field Artillery	Windom	96	86	89.5	Headquarters, Headquarters 1st Battalion, 135th Infantry	Rochester	155	178	114.8
Battery "B", 1st Battalion 125th Field Artillery	Jackson	96	71	73.9	Company "A", 1st Battalion 135th Infantry	Albert Lea	155	109	70.3
Battery "C", 1st Battalion 125th Field Artillery	St. James	96	90	93.7	Company "B", 1st Battalion 135th Infantry	Red Wing	155	104	67.0
Service Battery, 1st Battalion, 125th Field Artillery	St. Peter	57	61	107.0					

### 47th INFANTRY DIVISION UNITS

Unit	Station	Authorized	Assigned	% Strength
Company "C", (-), 1st Battalion, 135th Infantry	Faribault	74	63	85.1
Company "C" (Part), 1st Battalion, 135th Infantry	Owatonna	81	49	60.4
Support Company, 1st Battalion, 135th Infantry	Winona	127	124	97.6
Headquarters, Headquarters 2d Battalion, 135th Infantry	Mankato	137	139	101.4
Company "A" (-), 2d Battalion, 135th Infantry	Luverne	83	34	40.9
Company "A" (Part), 2d Battalion, 135th Infantry	Worthington	72	56	77.7
Company "B" (-), 2d Battalion, 135th Infantry	Pipestone	97	94	96.9
Company "B" (Part), 2d Battalion, 135th Infantry	Marshall	76	57	75.0
Company "C" (-), 2d Battalion, 135th Infantry	Tracy	83	78	93.9
Company "C" (Part), 2d Battalion, 135th Infantry	Redwood Falls	72	54	75.0
Support Company, 2d Battalion, 135th Infantry	Fairmont	127	81	63.7
Headquarters, Headquarters Company, 1st Battalion, 136th Infantry	St. Cloud	146	117	80.1
Company "A" (-), 1st Battalion, 136th Infantry	Morris	96	62	64.5
Company "A" (Part), 1st Battalion, 136th Infantry	Benson	59	31	52.5
Company "B", 1st Battalion, 136th Infantry	Willmar	155	89	57.4
Company "C", 1st Battalion, 136th Infantry	Sauk Centre	155	150	96.7
Support Company, 1st Battalion, 136th Infantry	St. Cloud	127	133	104.7
Headquarters, Headquarters Company, 1st Battalion, 94th Armor	Duluth	165	122	73.9
Company "A", 1st Battalion, 94th Armor	Hibbing	80	47	58.7
Company "B", 1st Battalion, 94th Armor	Eveleth	80	49	61.2
Company "C", 1st Battalion, 94th Armor	Chisholm	80	64	80.0
Support Company, 1st Battalion, 94th Armor	Virginia	75	76	101.3
Headquarters, Headquarters Battery, 47th Division Artillery	Anoka	201	168	83.5
Battery "E", 151st Field Artillery	Minneapolis	143	72	50.3
Headquarters, Headquarters Battery, 1st Battalion, 151st Field Artillery	Duluth	161	78	48.4

### 47th INFANTRY DIVISION UNITS

Unit	Station	Authorized	Assigned	% Strength
Battery "A", 1st Battalion 151st Field Artillery	Cloquet	79	70	88.6
Battery "B", 1st Battalion 151st Field Artillery	Minneapolis	79	53	67.0
Battery "C", 1st Battalion 151st Field Artillery	Minneapolis	79	42	53.1
Service Battery, 1st Battalion, 151st Field Artillery	Pine City	55	50	90.9
Headquarters, Headquarters Battery, 1st Battalion, 175th Field Artillery	Montevideo	140	92	65.7
Battery "A", 1st Battalion, 175th Field Artillery	Dawson	95	61	64.2
Battery "B", 1st Battalion, 175th Field Artillery	Madison	95	63	66.3
Battery "C", 1st Battalion, 175th Field Artillery	Ortonville	95	71	74.7
Battery "D", 1st Battalion, 175th Field Artillery	Olivia	87	86	98.8
Service Battery, 1st Battalion, 175th Field Artillery	Appleton	66	54	81.8
Headquarters, Headquarters Company, 47th Division Support Command	Minneapolis	98	94	95.9
47th Adjutant General Company	St. Paul	169	124	73.4
47th Division Material Management Center	Minneapolis	130	95	73.0
147th Finance Company	Roseville	87	69	79.3
Headquarters, Headquarters 47th Supply and Transportation Battalion	Camp Ripley	43	43	100.0
Company "A", 47th Supply and Transportation Battalion	Roseville	116	104	89.6
Company "B", 47th Supply and Transportation Battalion	Austin	147	142	94.4
Headquarters, Support Company, 204th Medical Battalion	Minneapolis	133	141	106.0
Company "D", 204th Medical Battalion	Zumbrota	74	79	106.7
Headquarters, Company A (-), 747th Maintenance Battalion	Camp Ripley	103	95	92.2
Company "G", 747th Maintenance Battalion	Long Prairie	51	51	100.0
Company "D", 747th Maintenance	Alexandria	113	98	86.7
Company "F" (-), 747th Maintenance Battalion	Princeton	131	116	88.5
Company "F" (Part), 747th Maintenance Battalion	Camp Ripley	87	105	120.6



## AWARDS AND DECORATIONS

### INDIVIDUAL AWARDS

Presented To Minnesota  
National Guard Members  
1980-1981

### ACTIVE SERVICE AWARDS

#### U.S. Air Force

Air Force Commendation	22
Legion of Merit	1

#### U.S. Army

Meritorious Service Medal	14
Army Commendation Medal	89
Legion of Merit	3

### MINNESOTA NATIONAL GUARD AWARDS

Minnesota Distinguished Service Medal	8
Minnesota Medal for Merit	22
Minnesota Commendation Ribbon	188
Minnesota Dist Recruiting Ribbon	135

### UNIT AWARDS

#### FEDERAL

#### U.S. Air Force

Flying Safety Plaque	148th Tactical Recon Group
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#### STATE

### EISENHOWER TROPHY

(Outstanding Minnesota Army Guard Unit)

#### 1980

Service Battery, 1st  
Battalion, 125th  
Field Artillery, St. Peter

#### 1981

None

### EFFICIENCY IN MAINTENANCE AWARD

#### 1980

Company C, 147th Signal  
Battalion, St. Paul

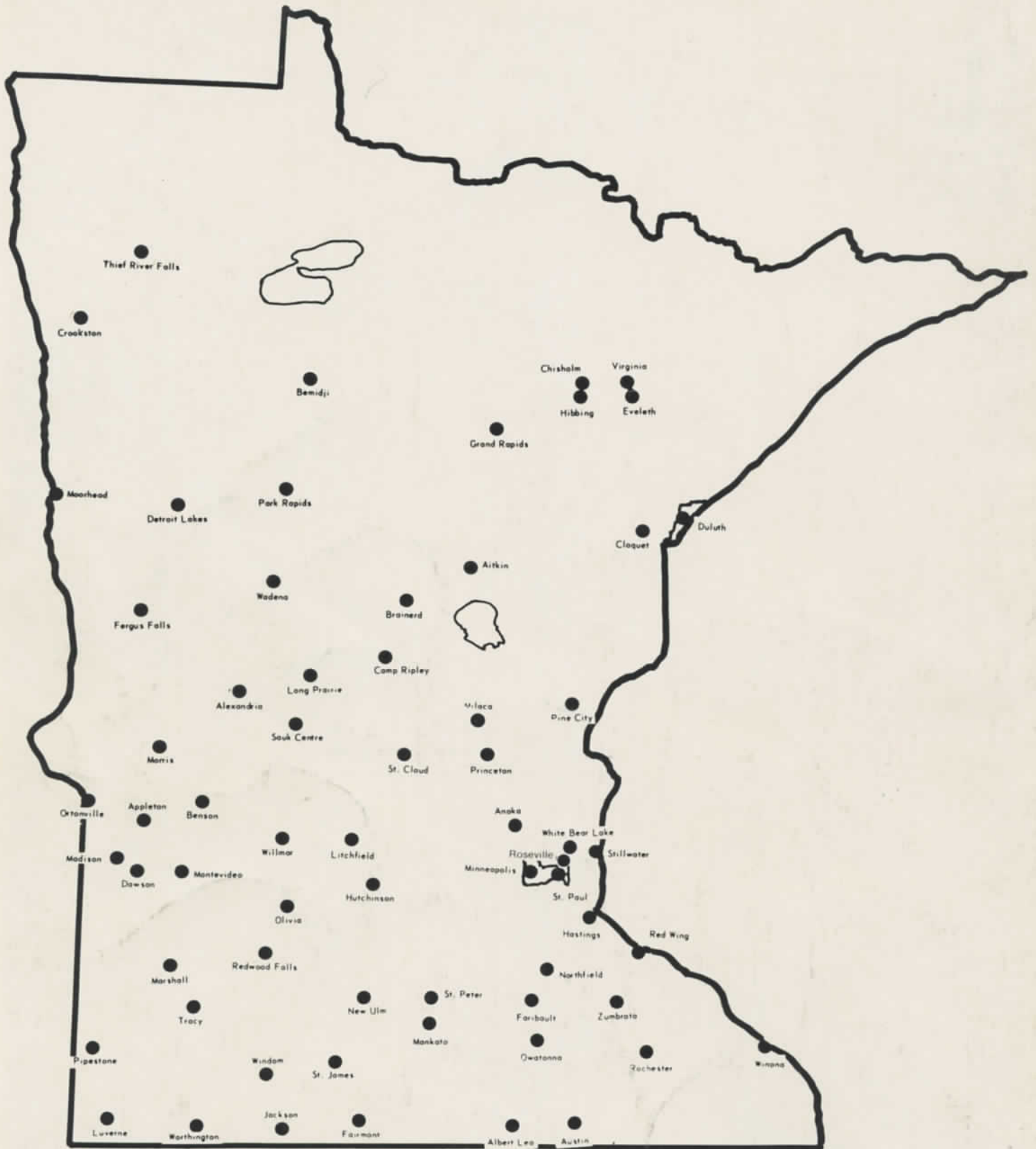
#### 1981

Battery B, 1st  
Battalion, 175th Field  
Artillery, Olivia



*A parting shot of Minnesota engineer troops working on the Camp Ripley airstrip*





**"MINNESOTA NATIONAL GUARD UNIT LOCATIONS"**

BACKGROUND INFORMATION

18 February 1981

I. MINNESOTA ARMY AND AIR NATIONAL GUARD STRENGTH:

<u>ARMY NATIONAL GUARD (31 Jan 81)</u>	<u>AIR NATIONAL GUARD (31 Jan 81)</u>
Auth; 9954	Auth; 2091
Assd: 7723	Assd: 2081
Shortage: 2231	Shortage: 10
% of Auth: 78.1%	% of Auth: 99.5%

MINNESOTA NATIONAL GUARD STATE AGGREG (31 Jan 81)

Auth: 12,045  
Assd: 9,804  
Shortage: 2241  
% of Auth: 81.4%

If all Minnesota National Guard slots were filled, it would generate an additional \$5,250,000 per year in salaries alone.

II. FEDERAL DEFENSE COSTS FOR THE NATIONAL GUARD:

The entire National Guard annual appropriation for the last FY amounted to less than 2 percent of the total U.S. defense budget. Five-six National Guard personnel can be sustained for what it costs to sustain one active duty soldier/airman.

III. NATIONAL GUARD PERCENTAGE OF TOTAL DEFENSE STRUCTURE:

- 27 percent of total Army Strength
- 33 percent of Combat Divisions
- 72 percent of Separate Combat Brigades
- 57 percent of Armored Cavalry Regiments
- 63 percent of Infantry Battalions
- 41 percent of Mechanized Infantry Battalions
- 42 percent of Armor Battalions
- 48 percent of Field Artillery Battalions
- 33 percent of Special Forces Units
- 21 percent of Medical Units
- 100 percent of Scout Infantry Groups (Alaska)

AIR GUARD:

- 17 percent of the Entire Air Force Aircraft Inventory
- 25 percent of Tactical Fighter Aircraft
- 60 percent of Air Defense Interceptors
- 30 percent of Tactical Transport Aircraft ( cargo)



IV CURRENT IDENTIFIABLE SHORTAGES IN THE MINNESOTA NATIONAL GUARD:

1. Like the Air National Guard, the Army National Guard faces very limited funding for schools, particularly in the area of travel. Great sophistication of today's equipment - both at the user and maintenance level - require higher degrees of training, which is difficult to meet without sufficient school funds.
2. Equipment shortages in the Minnesota Army National Guard:
  - a. 56 5-ton trucks
  - b. 44 2½ ton trucks
  - c. 3 Armorer Personnel Carriers
  - d. 6 Carrier Command Post
  - e. Numerous pieces of radio sets, now substituted by sets that are two and even three generations behind state-of-art. Many sets are not compatible with sets they expected to intergrate with during an emergency
  - f. To give some idea of the numerous other shortages, the following list covers 47th Division Artillery units alone:
    - (1) 3 Radar Sets
    - (2) 1 Sound Ranging Set
    - (3) 32 Radio Sets
    - (4) 9 Radio Teletype Sets
    - (5) 34 Ammo Trailers 1½ ton
    - (6) 1 Expandable Van, 5 ton
    - (7) 6 Field Survey Sets
    - (8) 4 Self-propelled 8" Howitzers
    - (9) 4 155MM Towed Howitzers