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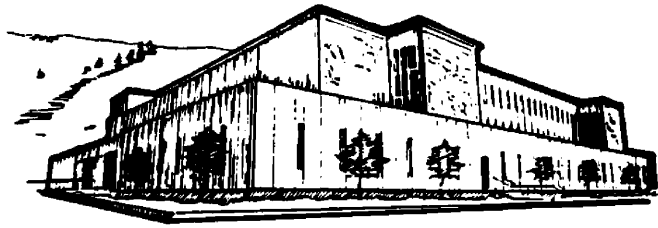
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University of
Montana

**A FEASIBILITY STUDY OF THE DEVELOPMENT OF
THE MONTANA TRAINING CENTER
IN VALLEY COUNTY, MONTANA**

by

Joseph S. Foster

B. S., Montana State University, 1981

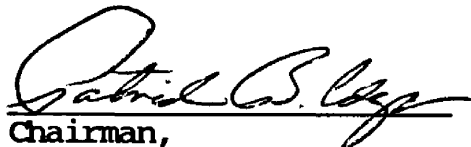
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for the degree of

MASTER OF PUBLIC ADMINISTRATION

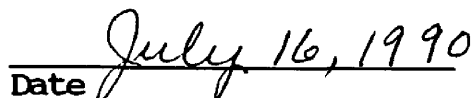
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CHAPTER ONE

OVERVIEW

The Montana Army National Guard (MT ARNG) has recently undergone a major reorganization of its structure, personnel and equipment resource base, and assigned wartime mission. The most fundamental change is the wartime mission. The MT ARNG is now structured primarily as a frontline combat force, designated as the 163d Armored Brigade (163d AR BDE). This status has necessitated a complete acquisition and deployment of new and upgraded weapons systems and the concurrent training needed to insure soldier proficiency in the corresponding military occupational specialties. Approximately 900 newly authorized positions have accompanied the reorganization, which has increased the authorized troop strength of the MT ARNG to 3,813 soldiers. (See Appendix A for the MT ARNG organizational structure.)

While the reorganization into an Armored Brigade structure carries with it the equipment, training and personnel needs as identified above, there is a basic and compelling change which must be understood and emphasized. The 163d AR BDE is now designated as frontline. If or

when a conflict occurs which, in accordance with existing "war plans", requires the Federal activation of the 163d AR BDE, it will be deployed not only to the location of the conflict, but in all likelihood, into the very heart of the hostilities.

The 163d AR BDE is a self-sufficient, frontline combat force. Its assets include organic medical, maintenance, engineer, transportation, administrative and food service resources which support the combat elements consisting of artillery, mechanized infantry (with armored personnel carriers) and armor (tanks). The primary weapon system is the M1 Abrams main battle tank, with 116 of them authorized between the two cavalry (CAV) battalions (see Appendix A).

The wartime mission and existence of the 163d AR BDE is based upon the application of armor technology and tactics. Classified military war plans position the 163d in historically one of the most volatile areas of Eurasia with a placement time sequence which will maximize deadly confrontation. This is particularly sobering since the 163d AR BDE is a Reserve Component force. The soldiers do not prepare for this level of intensity of conflict on a full-time basis as does the Active Component, nor are the resources available to the MT ARNG units as they are to their active duty counterparts. Yet the 163d AR BDE will ultimately be assigned to the "front", where the combat is

most intense and casualties the highest.

The MT ARNG command structure has a most critical and ominous responsibility. That responsibility is to optimally prepare soldiers for conflict on the 21st Century's version of a battlefield. Strategy and execution of combat plans and initiatives are dependent upon an incredibly complex integration of air and ground forces. The "state-of-the-art" technology in weapons, communication and information systems is ever more dependent upon the capabilities of the human resource, whose survival is determined by far too many circumstances beyond the individual soldier's control.

The optimal preparation of soldiers for combat can be boiled down into the fundamental concept of "training". Soldiers and entire organizations must be trained in the usage of their equipment and in performing tactical operations in a combat and noncombat context. For Army National Guard units, this is typically accomplished during a weekend "drill" called Inactive Duty Training (IDT), held once a month. Once a year, usually for a two-week period called Annual Training, this training on equipment and tactics is integrated at a training site where the unit applies its cumulative year of training into actual operations in a field environment. It is readily discernible that MT ARNG unit training is severely

hampered by time restrictions. One weekend a month and two additional weeks per year do not allow much time to train for the combat scenario previously described.

Although it may be desirable that more time be available to the MT ARNG for training activities, considering the demands of the combat environment, there is little latitude for change from the current system. Drilling one weekend a month is acceptable to most employers and families, however, any more than that may not be so acceptable. This leaves only the Annual Training period with viable potential for training enhancement. Policies exist whereby armor units can conceivably increase the length of Annual Training from two to three weeks. However, soldiers' employment, education and/or family commitments are not conducive for such an extension.

Since any alteration of the time available is not practical, other options must be considered. A viable and realistic option is to change where the Annual Training would be held. There are training sites that may be more conducive to maximizing the quality and quantity of the training experience to both soldier and organization alike. The most significant characteristics of an "optimal" training site for the MT ARNG include:

1. The training site should be large enough to allow all organic units of the 163d AR BDE to train concurrently. This would optimize the capability of the

organizational structure to maximally function in a coordinated, efficient and effective manner.

2. The training site should have topography representative of that to which the 163d AR BDE would be deployed, in accordance with the existing war plans.

3. The training site should be relatively close to the home location of the units which comprise the 163d AR BDE. Travel time to and from the training site directly affects the amount of training time which can be devoted to weapons and tactics.

4. The training site should have the capability to incorporate other military organizations into the training environment, i.e. "combined arms". Such organizations might include the Air Force and specific Army units, e.g., Special Forces (Rangers, paratroopers), communications, aviation, etc.. This would provide a realistic battle-field context because of the aforementioned need for coordination of ground and air resources in the integrated tactics of battle plans.

5. The training site should be responsive to the needs of the units to be trained, specifically in respect to the time-frame of the training. This would be optimized by State of Montana control over the training site, rather than control by the Department of Defense, Department of the Army or National Guard Bureau.

6. The training site should be economically sound. The State of Montana can, at best, ill afford an unanticipated outlay of money for training site development and the United States Department of Defense is looking at ways to trim its budget. Therefore, training site development and maintenance must be cost effective relative to the perceived benefits, i.e., training enhancement, national security, economic impact.

7. The training site should either have a minimal impact on the site's environment and/or the environment itself should be essentially uninhabited, unproductive and/or unusable for other commercial or personal uses inconsistent with the training activity.

Historically, the 163d AR BDE has held its Annual Training activities at Gowen Field, Idaho, located twelve miles south of Boise. Currently, the Montana National Guard is actively pursuing the acquisition of Federal, state, county and private lands and facilities in Valley County to develop what would be called the Montana Training Center (MTC). If developed, practically all MT ARNG training currently held and resources located at Gowen Field (and other locations) would be transferred to the MTC. The resultant impacts are very significant in military, economic, environmental and social perspectives.

This paper is a preliminary study of the feasibility of developing the Montana Training Center, a major

training area planned and designed for a wide spectrum of ground and air training activities. To be sure, the proposed size and activities of the MTC raise many pressing issues. In the course of this study, the most significant of these issues will be researched and presented. It must be noted that this professional paper contains information which is considered For Official Use Only (FOUO). This status does not constitute a security classification, (i.e., Confidential, Secret, etc.) and no material in this paper will compromise classified documentation or information. However, an FOUO status does necessitate controlled access to this report. Only those individuals who have a "need to know" should have said access. Issues to be researched and presented include:

1. The actual need of such a training site. In a context of disarmament, weapons and troop reductions, the need of the Montana Training Center is debatable.

2. The advantages and disadvantages of MT ARNG units utilizing the identified primary location, Gowen Field, for Annual Training activities.

3. A description of the Montana Training Center in terms of facilities, geographical location, configuration and projected training activities.

4. A description of the proposed training area's physical environment and the accompanying controversy.

5. The general economic status of Valley County and the State of Montana, with respective data showing Montana National Guard economic impact.

The hypothesis of this paper is that the development of the Montana Training Center would benefit the Montana Army National Guard and the State of Montana. Using quantitative models supported by qualitative understanding, an analysis will be constructed to arrive at an assessment of the proposed training center. The assessment will critically appraise the MTC, its physical and operational parameters, its developmental process, its impact upon the MT ARNG training program and its prospective economic impact on the state and on Valley County. Based upon said research, this paper will ultimately present recommendations regarding the development of the Montana Training Center.

Having asserted the intent of this paper, it must be noted that the development, usage and impacts of the Montana Training Center are both complex and controversial. Every effort has been made to present information pertinent to the issues in a concise and cumulative format, thereby providing a substantive feasibility study of the development of the Montana Training Center.

CHAPTER TWO

MONTANA ARMY NATIONAL GUARD ANNUAL TRAINING

The Montana Army National Guard is comprised primarily of the 163d AR BDE. Of the 3,212 soldiers (as of Jan. 3, 1990) who are in the MT ARNG, 2,555 (or 79.5 percent) are assigned to 163d AR BDE units. The other units (see Appendix A) are, as is the 163d, unique to each other in their resources and wartime mission. The primary commonality they share is that all are subordinate units to Headquarters, State Area Command (HQ STARC). Because of the differing specialties of the units, different training sites are required and utilized for the Annual Training period. While the 163d AR BDE Annual Training is typically held at Gowen Field because it is conducive to tank operations, the 1049th Engineer Platoon often performs its Annual Training at the city firefighting training center in Great Falls where it can optimally train for its military mission. An additional example is the 103d Public Affairs Detachment which has conducted its Annual Training periods in such places as Korea and Panama. These locations provide maximal training for this unit's mission, the gathering and reporting of news that

is military in nature. Appendix A lists the locations of each MT ARNG unit's typical Annual Training location.

The Gowen Field training site is, by far, the most extensively utilized Annual Training location by MT ARNG units. Therefore, it is the greatest training and economic investment that the MT ARNG makes each year. The Montana Training Center would replace Gowen Field as the Annual Training location for MT ARNG units. The primary advantages and disadvantages of training at Gowen Field are:

1. Gowen Field Training Advantages.

a. Gowen Field is operationally ready for Annual Training activities. The facilities (barracks, dining, medical/dental, social, etc.) and field training areas are established and functional.

b. Gowen Field is designated by National Guard Bureau as the regional maintenance/training center for the M1 Abrams main battle tank. The great majority of the 163d AR BDE's weapons and training activities revolve around the M1 Abrams main battle tank. It is critical, therefore, that the training site have a maintenance activity capable of supporting continuous, extensive usage of this tracked vehicle. A complimentary activity is the M1 tank maintenance training capability. This provides appropriate training to those soldiers of the 163d AR BDE who are tracked vehicle mechanics.

c. Gowen Field is the Mobilization Station for the great majority of MT ARNG units (see Appendix A). A Mobilization Station is the designated facility where MT ARNG units, upon Federalization, must travel to and stay for a specific period of time before, in accordance with classified timetables, they continue on to the embarkation site(s). While there, the Federalized unit will complete final preparations needed for deployment to its overseas assignment, in accordance with the instituted war plan. Having Annual Training at Gowen Field facilitates unit awareness, coordination and rapport with the mobilization activity's organization, personnel, equipment and structural resources.

2. Gowen Field Training Disadvantages.

a. Valuable training time is lost due to the length of time it takes to convoy troops and equipment to and from Gowen Field. While units in western Montana can lose up to 4 days due to travel time, units from eastern Montana can lose up to 6 days. Given that the total span of Annual Training is 15 days long, the travel time can account for, respectively, 25 to 40 percent of the total training time available. See Appendix B for mapped locations of 163d AR BDE units. Also the mileage from each unit to Gowen Field and the mileage to the Operations Center of the proposed Montana Training Center is shown.

Training time lost due to travel significantly detracts from the opportunity for the soldiers and command structure to increase proficiency on equipment, tactical operations, and command and control functions. The abbreviated training time also inhibits the unit's identification of capability and resource shortfalls and deficiencies. These must be identified so that they can be addressed and remedied. The Annual Training period at Gowen Field is the only time and place during the training year where comprehensive weapons, tactics, and command and control training activities/exercises can be conducted.

b. The Annual Training period assigned to Montana units is ultimately determined by the Gowen Field administration, with input from the MT ARNG command structure. Gowen Field is used extensively by many Active and Reserve Component military organizations. As a result, there has been a significantly decreasing capability for the MT ARNG to attain Annual Training dates most appropriate or convenient to MT ARNG needs. An example of this is the fact that there has been little consistency as to the time-span when Montana units are scheduled to train. The last few years have seen the Annual Training periods range from March to July. This negatively impacts, in varying degrees, a unit's yearly training program. Most serious, however, are the resultant problems created concerning Guardsman's

employment, education and/or personal needs.

The inconsistent Annual Training dates can create havoc with a soldier's employment, educational and/or personal responsibilities. This potentially leads to stress between the soldier and his/her employer, course instructor or family which can result in the soldier being forced to "choose" between the Guard or job/education/family. If this situation develops, typically the soldier will terminate his/her membership in the Guard. This is detrimental to the MT ARNG organization since the soldier and the resources invested into him/her are lost to the unit. Personnel turnover can result in a lessened unit readiness status because the skills of that soldier are no longer available and the unit is also, in effect, "shorthanded".

c. Gowen Field's facilities, training areas and support services are limited due to heavy usage by other military organizations. Even though the 163d AR BDE would be deployed as one unit if Federalized, it has never been able to train as one unit at Gowen Field. The inability for the entire 163d AR BDE to train at one time and place detracts from the ultimate capability of the organizational structure to function in a coordinated, efficient and effective manner. Needless to say, this also negates any possibility for the 163d AR BDE to train concurrently

with other military organizations. Given the battlefield context into which the 163d would be placed, combined arms training is increasingly vital to unit readiness and capability for mission accomplishment, and ultimately, survivability on the battlefield.

d. Expenditures in the form of organizational acquisitions such as fuel, rations (food), billets (housing) and personal outlays for recreation, etc. amount to a considerable outflow of fiscal resources from Montana and is, for the most part, lost from the Montana economy. This outflow is significant in that the wages, payments, etc. do not originate from the Montana public or private sector fiscal resource base. They are entirely federal funds.

CHAPTER THREE

THE MONTANA TRAINING CENTER

The Montana National Guard proposes to create a ground and air maneuver and gunnery training site in Valley County. It would encompass 981,366 acres (approximately 1,533 square miles, 30 percent of the county's land mass) and would be divided into two separate, major training sectors. The Operations Center of the Montana Training Center would be located at the currently deactivated Glasgow Air Force Base which is located about 19 miles north of the City of Glasgow. The MTC would be under the control of the State of Montana, with the Administrator of the State Department of Military Affairs, Office of The Adjutant General having full responsibility for all aspects of the Center's operations. Funding, prospectively, would be through a combination of federal and state sources under the auspices of The Adjutant General.

If developed, the MTC would be, by far, the largest training site in the United States.¹ This distinction is in terms of gross acreage and actual acreage used for training purposes. The National Training Center at Ft. Irwin, California, while currently the largest at almost

1000 square miles, would be but two-thirds the size. The immensity and geographical characteristics of the MTC make possible a vast spectrum of training activities which could range from accommodating a MT ARNG tank company (approximately 76 men and 14 tanks) during a weekend drill to the entire current force structure (163d AR BDE plus other units as identified in Appendix A) of the MT ARNG (potentially 3,813 personnel, 125 tanks, 148 armored personnel carriers, etc.) during an Annual Training period. This represents an unprecedented level of quality and flexibility of training for not only Montana National Guard units, but also for any other military combat organization that may hold its training there.

1. **Purpose.** The mission of the Montana Training Center is to plan, coordinate and conduct an advanced level of training for Army and Air Force units of both Reserve and Active Component forces under mid- to high-intensity combat conditions. This is accomplished by requiring participating units to deploy tactically in response to a realistic portrayal of potential enemy forces, all in the context of continuous, stressful "force on force" combat operations and actual weapons fire exercises. Each training activity would incorporate extensive analysis and feedback. The training activities would vary in complexity and purpose depending upon the needs of the participating unit(s).

2. Description of the Montana Training Center. The lands and facilities which make up the 981,366 acres are a mixture of federal, state, county and private ownership (see Appendix C). The great majority of the acreage (718,316 or 73 percent) belongs to the U.S. Bureau of Land Management (BLM). Access to BLM and state lands would be negotiated through long-term lease agreements to insure a stable development program. Private lands would be negotiated on a case by case basis. Presented below are the physical descriptions of the major sectors of the Montana Training Center and the most significant training activities to be conducted in each.

a. Valley County Airport Enterprise. Base operations would be located at what is termed the Valley County Airport Enterprise (VCAE), which is the former Glasgow Air Force Base installation (6,800 acres). The name was changed to reflect ownership by Valley County and is a corporate entity created by the county to do business. **The VCAE is considered part of the northern training sector of the Montana Training Center.**

Significant assets would be available to MTC operations and include, but are not limited to:

- (1) 13,500 x 300 ft. concrete airstrip capable of supporting loads in excess of one million pounds.
- (2) Airfield tower and operations building.

- (3) Aircraft hangers and maintenance facilities.
- (4) Multiple-bay fire station.
- (5) Billeting for 2,700 soldiers, permanent structures.
- (6) Central dining facility.
- (7) 50-bed hospital.
- (8) Dental clinic.
- (9) Extensive ammunition bunker complex.
- (10) Fuel storage capacity of 3,170,000 gallons.
- (11) Over 1 million sq. ft. of warehouse space.
- (12) Maintenance facilities for heavy motor vehicle repair, including tanks.
- (13) Extensive classroom and administration facilities.
- (14) Post office.
- (15) Library.
- (16) Chapel.
- (17) Theater.
- (18) Gymnasium.
- (19) Electrical power with transformer capacity of 10,000 KVA.
- (20) Modern water treatment plant with capacity of processing 3,009,600 gallons per day. Storage capacity of approximately 1,100,000 gallons.
- (21) Sewage collection and transport to lagoons through a system of lateral and main lines and lift stations. The

lagoons have a capacity of 334 acre feet, adequate for a base population of 8,500 personnel.

- (22) The structures are heated by natural gas.

No new construction is necessary to house Base Operations activities at the VCAE. Base Operations responsibilities include all administrative and logistical activities necessary in the day to day operations of the Montana Training Center. These include but are not limited to:

- (1) Administer training unit's schedules. Coordinate all activities peculiar to training exercise, i.e., air and ground support, special equipment, specific facilities, etc..
- (2) Assist in writing exercise scenarios.
- (3) Provide full support to personnel residing permanently at the VCAE.
- (4) Provide full support to personnel/units training at the VCAE.
- (5) Monitor compliance with established environmental protection/rehabilitation programs.
- (6) Administer and execute continual environmental rehabilitation program and process.
- (7) Manage equipment and supplies storage.
- (8) Schedule maintenance activities.
- (9) Manage VCAE and MTC security.
- (10) Purchase supplies (fuel, food, medicine, etc.).

Base Operations functions at the Montana Training Center

would draw upon the support of the local community. All supplies and equipment necessary for the normal operations of the MTC would, to the greatest extent possible, be purchased directly or contracted from local sources.

b. The Tactical Maneuver Area (northern section, 572,660 acres including the VCAE complex). The Tactical Maneuver Area (TMA) is located adjacent to the VCAE and extends north and northwest to the U.S./Canadian border. Activity in the TMA would be limited to ground maneuver and close air support activities conducted on a rotational basis through seven separate maneuver corridors. The corridor selection for training would be based upon multiple use, soils damage, reseeding, wildlife and other considerations. The units which are training can maneuver only in the selected corridor. Permanently assigned MTC personnel and designated "umpires" schedule corridor usage and monitor compliance. Appendix C illustrates the configuration of the TMA. Training activities to be conducted in the Tactical Maneuver Area include:

(1) Ground Movement. Military units would travel cross-country using tanks, armored personnel and artillery carriers, and wheeled vehicles. Cross-country movement would take place day and night.

(2) Tactical Road March. A tactical road

march is the movement of units from one location to another. Such movement is usually done with units moving along a route in a column formation. It usually is used to move units from one assembly area to another or from an assembly area to a defensive position.

(3) Assembly Area Operations. An assembly area is used to prepare for the training exercises. Activities in the assembly area include all the administrative and logistical activities necessary to conduct the exercise; such as loading ammunition, fueling vehicles and maintaining equipment. All training exercises begin in an assembly area.

(4) Attack Operations. Units move from the assembly area on several routes and in a variety of formations (such as side-by-side, column, etc.) to attack and occupy a designated piece of terrain.

(5) Defense Operations. Once the unit has achieved its objective (a designated piece of terrain), they occupy defensive positions. At some point in the exercise, the unit is attacked by an opposing force which attempts to test the unit's defensive positions. The unit must defend against the opposing force.

(6) Delay Operations. If the opposing force is successful, the unit is required to withdraw from its defensive positions. This is done by moving elements from respective defensive positions to a series of

preplanned defensive positions to the rear.

(7) Pursuit Operations. During combat the opposing force may retreat. Pursuit training deals with the tactics of pursuit.

(8) Withdrawal Operations. A unit withdrawal is conducted when it is ordered to leave its forward defensive positions and move to another area of the battlefield. A unit withdraws once another unit moves forward and takes over the battle positions and defensive mission. Fighting positions are turned over to the substituting element one at a time. The relieving unit moves into the same vehicle and personnel positions occupied by the withdrawing unit. The maneuver is conducted as rapidly and as quietly as possible so as to not alert the opposing force of the movement.

(9) Relief Operations. A relief is the exact opposite of a withdrawal. In a relief, a unit moves from the assembly area and occupies the defensive positions of a unit. The relief, movement and change-over must be done without letting the opposing force know what is occurring.

(10) Raid Operation. A raid is the penetration into enemy territory with a specialized force to destroy a specific target or capture specific information and return to friendly positions. It is

characterized by rapid maneuver and extensive use of supporting units.

(11) Disengagement Operations. During combat, it may be necessary to withdraw from the battle. Disengagement operations training deals with the tactics of "retreat".

(12) Guard Operations. A unit in a "guard" posture deploys along the side or rear of its parent unit. Its purpose is to protect these areas against surprise enemy activity. Guard requires extensive patrolling to ensure that enemy activity is detected and reported.

(13) Engineer Operations. Engineer training activities can be divided into four basic areas:

(a) Counter mobility Operations.

Counter mobility is obstacle construction. Obstacles are used to decrease the opposing force's mobility without hindering friendly maneuver. In open areas, obstacles extend the amount of time the opposing force's units will be exposed to the effects of "friendly fire". One example includes the various types of anti-tank ditches.

(b) Mobility Operations. Mobility operations reduce the effects of natural or man-made obstacles which impede the movement of friendly forces or supplies. Examples include the demolition or dismemberment of various obstacles.

(c) Survivability Operations. Surviv-

ability operations are characterized by the use of protective measures that decrease the effectiveness of the opposing force's firepower while units fight and maneuver. Survivability measures include the use of counter-surveillance measures such as camouflage, deception, smoke and the construction of protective positions.

(d) Sustainment Engineering Operations. Engineers complete tasks to ensure the continuous supply of support assets to units. These tasks include replacement of tactical bridges, construction and repair of support facilities, and area damage control.

NOTE: All engineer operations in the TMA are restricted to one specific location (see Appendix C).

(14) Simulated Chemical Weapons Operations. Non-toxic, simulated chemical weapons would be used throughout the training exercises to simulate chemical weapons attacks.

All activities listed are designed to be integrated for a comprehensive program of movement and tactics training. The TMA can accommodate an entire brigade through a 12-day exercise schedule or a company through a 3-day exercise schedule. Specific training activities can be conducted if time or needs do not necessitate the complete program. Training activities are rotated and time-spaced between corridors to minimize environmental damage and maximize

rehabilitation by natural and programmed processes.

c. **The Fire and Maneuver Area** (southern sector, 408,706 acres). The Fire and Maneuver Area (FMA) is designed to train units in the techniques of maneuver and target gunnery. The area would be divided into specialized firing ranges keyed to specific weapons systems. Ground units would move through the area in designated controlled corridors and shoot at predesignated targets. Aircraft would fly within designated airspace and shoot at ground and towed aerial targets or would drop bombs on ground targets. Some high-explosive ordnance would be used. All high-explosive ordnance would be fired or dropped into one designated target area. Appendix C identifies each range and area. Training activities to be conducted at the Fire and Maneuver Area include:

(1) Ground Movement Operations. Tactical Road March, Assembly Area Operations, Attack Operations, Defense Operations, Delay Operations, Pursuit Operations, Withdrawal Operations, Relief Operations, Raid Operations, Disengagement Operations, Guard Operations and Simulated Chemical Weapons Operations will be conducted in the FMA just as previously described in the Tactical Maneuver Area narrative.

(2) Engineer Operations. Combat engineers will construct various anti-tank ditches, bunker complexes and individual vehicle fighting positions. However, most

of the engineer efforts and projects will be in the TMA.

(3) Artillery Target Area. The artillery target area is the only designated high-explosive impact area. Exploding munitions would be fired into this impact area of approximately 5000 acres and would be (for safety reasons) the only part of the training area permanently restricted to other land users. All other impact areas would be designated for non-exploding munitions and would be unrestricted when not being used for gunnery exercises.

(4) Tank Target Area. Tanks and armored personnel carriers would fire 105mm cannon, anti-tank missiles, 25mm cannon, various machine guns, rifles and pistols at pop-up targets placed throughout the tank target area. Cannon and missile rounds are for practice only; they duplicate all characteristics of an explosive round except for the explosion itself.

(5) Attack Helicopter Target Area. Helicopters would fire 30mm cannon practice rounds, anti-tank missiles and machine guns at ground targets while flying and hovering in the target area.

(6) Tactical Air-to-Surface Gunnery Range. High-speed jet aircraft would fly into the area, shoot at and drop nonexploding bombs on ground targets. High-explosive bombs would be dropped only within the Artillery Target Area. Practice bombs would be dropped on targets

outside the artillery area.

(7) Air-to-Air Gunnery Range. An aerial target would be towed by an aircraft in an established pattern within the range. The aircraft doing the shooting would fly into the area and shoot at the towed target with 20mm cannon. The Air-to-Air Gunnery Impact Area is the surface danger zone within which all bullets fired at the target would fall.

(8) Controlled Air-to-Surface Gunnery Range. Aircraft would make precision-scored bombing runs on surveyed targets. The aircraft would drop 25 lb. practice bombs while being observed and scored by personnel in towers adjacent to the target area.

(9) Combined Arms Live Fire Exercise (CALFEX). A CALFEX trains unit commanders in the techniques and procedures involved with employing ground and air forces together in simulated battle. This exercise would be conducted in the Tank Target Area. A unit or task force would move down a set course with tanks and armored personnel carriers moving together. They would shoot at ground targets while on the move, as well as during predesignated stops. Infantrymen would exit the carriers and shoot at ground targets at certain points along the course. Aircraft would shoot at ground targets in combination with artillery support. The purpose of this range exercise is to test the commander's abilities

to coordinate all aspects of the battle, including the support assets available to his unit.

(10) Range Operations Center. Control and field administration of activities in the Fire and Maneuver Area during periods of maneuver and gunnery exercises would be done from a Range Operations Center. This would require the construction of facilities, installation of technical instrumentation, leveling and graveling of parking areas, drilling and installation of a water well, installation of a sewer system and introduction of electrical power. Live-fire exercises at the FMA would be conducted using the Army standard design Multi-purpose Range Complex (MPRC). The MPRC is an instrumented, fully automated target practice range which allows moving tanks, armored personnel carriers and personnel to maneuver through a pre-set course, firing at stationary and moving targets. It allows for helicopter and fighter aircraft and artillery fire engagements to take place simultaneously with the ground maneuver forces. It is designed to support technically advanced and tactically active training while replicating realistic combat conditions. The instrumentation system permits simulated or live-fire training scenarios approaching conditions to be found in battle and provides the data necessary to formulate an objective evaluation of the unit performance.

3. Montana Training Center Impact. The MTC would be unique, on a national scale, in its capabilities and potential. Facilities and training areas sufficient to conduct opposing brigade-sized Field Training Exercises and Combined Arms Live Fire Exercises are not in existence anywhere else in the United States.² Gunnery ranges would be available to train Army ground (tanks, armored personnel carriers, artillery, soldiers) and air (attack helicopter) assets as well as all Air Force (jet and bomber) assets in both actual exercise play or strictly weapons systems familiarization and/or qualification. The combined arms training would vary with the size and types of units involved; however, sufficient maneuver acreage is present to accommodate any foreseeable need.

Current training maneuvers planning has identified a prospective schedule which incorporates the environmental, geographical and social (i.e., hunting season) considerations of the proposed training area. Brigade sized training exercises could occur up to 4 times per year with each training exercise lasting approximately 15-21 days. Battalion and company-sized units could also conduct IDT training up to 46 times per year. Aerial gunnery exercises of up to 50 aircraft (fighters, bombers, attack helicopters) could take place on the ranges and in the associated airspace, including air-to-air gunnery approximately 72 days per year and air-to-ground gunnery

approximately 250 days per year. The size of the training area allows air and ground training activities to occur simultaneously, either in conjunction with or separate from each other.

As remarkable as it may seem, no other existing training area in the United States currently has the size, capability or flexibility as does the proposed Montana Training Center.

CHAPTER FOUR

ENVIRONMENTAL CONSIDERATIONS

The climate and topography in the Montana Training Center are representative of locations to which the 163d AR BDE and other MT ARNG units are expected to be deployed in the event of federal activation. These locations include (depending upon the specific unit) Europe, Korea and the Middle East. Weather and soil conditions allow ground maneuver training to occur 10 months a year; aerial training would occur throughout the year. If the MTC were to reach its full potential of utilization, the year-round training load would approximate 14,919 personnel, 3,194 wheeled vehicles and 1,553 tracked vehicles. Units would be in the field 230 days per year. Additionally, there would be localized training in the VCAE area. The only restrictions to the military training would occur during high-density multi-user periods, high-value wildlife use periods, critical periods of agricultural production and a total ban on ground maneuver training during the months of May and June. (Because these months receive the greatest quantity of rainfall for the year, the environment is most susceptible to tracked vehicle damage.) To say the least,

the presence of the Montana Training Center would have a marked, dominant and far-reaching impact on the environment in 30 percent of Valley County. Described below is the general environmental context of the Montana Training Center.³

1. Climate. Summer temperatures are hot with maximum temperatures into the 100 degree (plus) Fahrenheit range. Winters are cold at best and life-threateningly frigid at worst. Temperatures commonly are sub-zero with wind chill factors producing temperatures anywhere from -20 to -70 degrees Fahrenheit.

a. The training area averages 11.53 inches of precipitation annually, approximately 40 percent of which falls between 1 May and 30 June. The months of May and June are therefore closed to ground maneuver training in both the TMA and FMA.

b. Winds are prevalent year-round with typical intensity of 7-15 miles per hour. The predominant wind direction is from the northwest.

2. Air Quality. Air quality is excellent because of the lack of human activity and nearby industry. All the public lands have Class II air quality (good), as set by the State of Montana. Particulate concentrations are highest during spring and summer due to nearby farming operations (such as plowing) and are lowest in the winter.

3. Topography. The training area is located in the

glaciated Missouri Plateau. The topography consists of flat to gently rolling terrain with rugged denuded badlands type relief in some areas. Elevations within the area range from 2,000 feet in the southern sector of the area to 4,000 feet in the northern sector. Drainage systems in the northern sector are complex, with the West Fork of the Poplar River draining much of the hilly northeast corner, Porcupine Creek in the central area, and the Milk River, fed by many small (and usually dry) tributaries, the balance. The drainage in the predominately "badland" southern sector is easterly into Willow Creek, which drains into the Milk River. Typically, however, these drainages are dry.

4. Recreation. Big game, upland bird and waterfowl hunting are the major recreational activities in the proposed training area. The area is known locally as a source of trophy mule deer bucks. Reservoirs provide waterfowl habitat and some limited hunting opportunities. A few of the reservoirs serve as trout fisheries. Off-road vehicle use, usually associated with hunting, is common throughout the area. This use is restricted to designated roads, trails and vehicle ways. Local residents also use the area for snowmobiling during the heavier snow years. Other recreational uses include camping, backpacking and nature study.

5. Cultural. Information about cultural resources in the area has been collected mainly from clearances conducted for range projects by the Bureau of Land Management. Other archeological fieldwork (random sampling) has also contributed data which provides information about the number, quality and type of prehistoric and historic features present in the study area.

a. Remnants of human occupation dating back 12,000 years can be found in the region. Prehistoric people who frequented the area were hunters and gatherers. They shifted residences in response to seasonal changes in food resource opportunities and the never-ending needs of defense, shelter, water, fuel and raw materials for tool production. These groups were usually small, possessing only what appears to be a limited set of stone, wood and bone tools. Bison eventually became a major food source as newer techniques of trapping the animals were developed. The remaining traces of these early peoples include teepee rings, lithic scatters, bison butchering sites and isolated stone tools. Examples of these sites are situated throughout the proposed training area, the majority located in the vicinity of water sources.

b. A portion of the public lands in the proposed training site area is what were termed "land utilization lands" or "homestead". These lands were in private ownership for a time and then reverted back to

public ownership when the settlers vacated the area, primarily because of the harsh environment and national depression in the 1930's.

6. Watershed/Soils. The training area is composed of several distinct soil types, two of which make up the majority of the proposed training center. The first type includes approximately 70 percent of the area and consists of shallow to moderately deep acid clay soils on moderately steep to very steep shale uplands. These lands consist of dissected drainage systems with shale outcrops on the ridge crests and steep side slopes. The rangelands are marginal with only 35-45 percent ground cover. The surface is characterized in many places by deposits of glacial rock. The soils are characterized by moderate to high runoff and the erosion potential is considered moderate to severe. The second type of soil includes the remaining 30 percent of the area and contains high bench remnants of continental glacial till. The soils are deep clay loam glacial till mantle on nearly level to gently rolling topography, supporting substantially more ground cover and higher production potential. Runoff and erosion potential are both moderate.

7. Water Quality. There is a very limited supply of water in the proposed training area, consisting of primarily ephemeral streams and man-made reservoirs,

typically less than 5 acres in size. Water plays a minimal role in the recreational use of this area, but no doubt played a maximal role in the transiency of homesteaders during the land utilization program days. Waters in the area typically contain high concentrations of ionic salts (highly saline) and are rated as fair to poor depending on the time of the year and the source.

8. Vegetation. The most common plant species in the area include western wheatgrass, needle and thread, blue grama, prairie sanreed, native legumes, silver sagebrush, creeping juniper, chokecherries, silver buffaloberry and isolated non-commercial strands of aspen. No commercial timber exists in the area.

a. No rare or endangered plant species are known to exist on the public lands in the proposed training area.

b. Leafy spurge is the only noxious plant found in the area and is found at various locations throughout the training site. Known sites are treated with herbicides which have not allowed the size of the infestation to grow.

c. Plants poisonous to livestock are found in the area but have not posed any major problems to date. These species include cocklebur, greasewood and chokecherry.

9. Wildlife. The wildlife found in the proposed

training site is typical of the eastern glaciated plains. The abundance of some species is attributed to the higher percentage of badlands/breaks and open rolling prairie landform in the area.

a. Mule deer are abundant throughout the area. The badland/breaks topography combined with native prairie landform lends itself to the needs of these deer on a yearlong basis and several acreages are considered particularly important as winter habitat. This acreage is located primarily along water course beds and adjoining hillsides.

b. A few white-tailed deer occur in a small portion of the area. The quaking aspen groves around the eastern perimeter of the Bitter Creek area (northern sector) provide the only suitable whitetail habitat of any consequence.

c. Antelope use both the breaks and benchlands located throughout the area. Their spring, summer and fall numbers vary in any one location due to the topography. Winter concentrations of pronghorn occur in the general location of the mule deer winter habitat.

d. Sage and sharp-tailed grouse can be found. Population levels of these two species would best be characterized as moderate. Small numbers and widely scattered flocks of gray, or Hungarian partridge also

occur within the area.

e. All the geese, ducks and shorebird species common to the glaciated plains can be found in the area. They do not occur in any large concentrations or in large numbers.

10. Threatened/Endangered Species. Migrating bald eagles pass through this area. However a 1984 nesting survey found no nesting pairs in the county. Peregrine falcons migrate through selected areas, but there is no known existing or potential nesting habitat. There is the potential for black-footed ferret habitat, but no sightings have been made.

11. Energy and Mineral Resources. There is no known mineral production within the area. However, the area does have varying potential for bentonite, uranium, natural gas, sand and gravel and geothermal energy sources.

a. Natural gas is the only energy resource having a high potential for occurrence in the area. However, no successful wells have been drilled to date. From 1972 to 1981, Valley County's wildcat success rate was 0 percent while adjacent Phillips County's success rate was 15 percent.

b. The Federal government owns the mineral rights on all the public lands in the area. There is one abandoned bentonite mine in the southern sector. The

mineral rights on this 160 acre parcel are privately owned.

c. The State of Montana owns all surface and mineral rights on state lands. These state lands are subject to development and access, and are open to mineral and grazing leasing. The lands are physically similar to the surrounding federal land.

12. Private Land Holdings. There are 151,150 acres of private land located within the proposed training site. These private inholdings are subject to development and reasonable access rights. Except for farming in selected locations, stock water ponds, and vehicle ways, the private inholdings are undeveloped and physically similar to the surrounding public and state lands.

Considerable apprehension exists among Valley County residents and other interested parties concerning the impact of training site activities on the land and wildlife. The majority of the apprehension is centered on the tracked vehicles, particularly the 60-ton M1 Abrams main battle tank and, to a lesser degree, the 18-ton armored personnel carrier. There is no question that these vehicles will definitely disturb the natural state of the ground. The balance of said apprehension centers on the effect of the noise emitted from the vehicles and aircraft on the wildlife. Several local landowners and

environmental groups, including Preserve Rural America, Citizen's Alert, The Rural Alliance for Military Accountability, SKYGUARD, the Northern Plains Research Council and the National Wildlife Federation (among others) are decidedly opposed to the development.

Certainly, a very extensive and intensive Environmental Impact Statement (EIS) must be developed to fully address all of the concerns of the Valley County residents and environmentalist community; and to also satisfy the mandates of the National Environmental Policy Act (NEPA) and Threatened and Endangered Species Act. The NEPA directed EIS would meet the legal and administrative requirements of the Montana Environmental Policy Act (MEPA), to which the development of the MTC is also subject. This would then preclude EIS duplication by the State of Montana or its subordinate agencies such as the State Departments of Lands or Military Affairs. It also provides the mechanism by which the State Department of Land's holdings can be included in the EIS. The evaluation of the Montana Training Center and the products thereof must meet the mandates of the Federal Land Use Policy and Management Act (FLPMA). The quality of the data, supporting materials, and the resulting evaluation of the MTC must be such that it can be readily understood by the public and cooperating agencies, and ultimately, be able to withstand the scrutiny and/or challenge of

Congress and the courts. Estimates of the cost of the EIS range from \$250,000.00 to a hefty \$6,819,600.00.⁴ The wide disparity in the estimated cost of the EIS is due to who would prepare the EIS. If the BLM prepares it, it will cost the maximum. Interested contractors have projected the minimum.

The VCAE and the MT ARNG signed a 2-year lease agreement, effective July of 1989, allowing tracked vehicle training on the Enterprise premises and usage of specific structural resources. A reclamation program is currently underway which is studying the most effective method of rehabilitating the soil displaced by the tracked vehicles. Four different reclamation methods have been initiated, these include:

1. No reclamation attempted.
2. Chisel-plow the impacted area.
3. Grade the impacted area.
4. Grade and seed the impacted area.

This study will span a three-year period. It is designed to provide reclamation data which will be applied to the "rotation" system of tracked vehicle training to be conducted in the different corridors.

CHAPTER FIVE

ECONOMIC IMPACT

While there are those who would favor Montana's National Guard having a state-based major training site for the sake of a better prepared military force, there are probably just as many who would prefer to keep such an activity out of Montana for environmental and/or ideological reasons. Ultimately, any prospective state investment of financial and political resources or widespread populace support for such a training area is dependent upon a demonstrated potential for generating revenue in excess of the developmental and maintenance costs. Indeed, the basic methodological problem is quantifying the various costs and benefits associated with such a proposal. The full extent of the expense, given construction, refurbishment and maintenance needs, private lands acquisition, impact on school trust lands revenue, recreation, EIS, etc. cannot be fully determined at this time. Just as certainly, the economic benefits of such a site are unclear and cannot be accurately measured. There is, however, evidence of the economic impact the Montana National Guard has had on Montana and in Valley County.

This information will be presented in the general context of Montana's and Valley County's economic environment.

1. The General Economic Environment of Montana. An article in the most recent edition of Montana Business Quarterly stated that the state's economy, as measured by non-farm labor income will grow by 1.7 percent in 1989 and then improve 1.5 percent annually in 1990 and 1991. Paul Polzin, Director of the University of Montana's Business and Economic Research, states that "This is only a modest increase by U.S. standards, but it certainly looks good compared to the declines we've experienced in six of the last nine years." What growth the state has experienced is due primarily to the expansion of Montana's mining industries and the stabilization of employment declines for railroads and oil and gas exploration companies. However, Polzin also states that if a predicted nationwide recession occurs, "all bets are off". Even if the national economy remains stable, Montana's economy will still trail the expected national pace of about 2.3 percent annual growth, and in fact, the economy of Montana has shrunk by an estimated 9 percent during the past decade. This is evidenced by the projection that an increase of approximately 6,000 non-farm jobs between 1988-91 will make the job total in 1991 only slightly higher than in 1979.⁵

Montana's economy has lost significant ground during the

1980's and if Mr. Polzin's projections are valid, the early 1990's will regain little of the state's lost economic strength. One of the more discouraging indicators of the Montana economy is a decrease in population significant enough to possibly lose a seat in the United States House of Representatives. The state's personal property tax is regarded by many as the primary growth retardant. Dennis Burr, President of the Montana Taxpayers Association maintains that the high tax rates on business personal property has made Montana noncompetitive with other states in the region. He states, "The tax system has become an important element in location decisions and business has been leaving Montana for more favorable tax treatment in other states." He further notes that between 1985 and 1988 more than \$300 million worth of business machinery and equipment has been removed from Montana, and therefore, Montana's property tax base. Comparative examples of Montana's personal property tax and its impact on business are:⁶

a. Stone Container is in the paper products industry with 175 facilities and sales of \$6 billion. In 1990, the Missoula plant will pay almost \$4 million in personal property taxes. This represents the highest of the 12 facilities in Stone's mill division. The next highest personal property tax cost is at the mill in

Snowflake, Arizona which pays \$1.5 million. Plants in Hodge, Louisiana and in Florida and Georgia will pay about \$1.2 million and \$1 million respectively.

b. General Mills operates seven flour mills in six states. Its plant in Great Falls produces 8 percent of total daily production, but accounts for 25 percent of the total property tax paid on the seven plants. Property taxes in Great Falls are equivalent to \$43.00 per hundredweight of product compared to an average in the other states of \$9.20.

c. The Western Sugar plant in Billings produces 24 percent of the company's sugar and pays 52 percent of the company's property tax. A piece of equipment on which property taxes of \$1,278.00 were paid in 1988 in Lovell, Wyoming is assessed a \$9,366.00 tax in Billings.

d. U.S. West paid property taxes equivalent to \$32.15 per \$1,000.00 of investment in Montana in 1985, but averaged \$15.44 per \$1,000.00 in the other seven states in which it operates.

A strategy the Montana Legislature has used is to offer specific out-of-state business interests personal property tax breaks as an incentive to locate in Montana. Examples include the now established Canola plant in Butte and a proposed (though ultimately not placed) malting barley plant in Billings. There are those who would wonder why a Montana business does not deserve a tax break at least as

much as an out-of-state concern. At any rate, Montana's economic development strategy problems are further compounded by the adversarial relationship between the Governor's Office and the State Legislature. 1991's version of the annual budget shortfall is expected to be \$107 million.⁷ If past performance is any indicator, the deficit remedy will be in the form of another surtax on personal income.

The property tax remains the primary source of revenue for Montana's state and county budgets. The state's reliance on property taxes to pay for government services is the highest in the nation with 48 percent of the total state and local tax revenue coming from the property tax. The national average is 30 percent.⁸ The introduction of a sales tax designed to proportionally reduce the personal property tax is biannually presented as the heart of a revamped tax system which would (supposedly) encourage economic development. However, it has been proven time and time again that the passage of such a tax is politically unrealistic in the foreseeable future. Given the inability for Montana's government to fashion a viable program of economic development, the state continues to be dependent upon national and international economic policy and developments, with little control over its own economic destiny. An obvious example is the oil and gas

industry. In 1984, Montana collected \$134 million in oil tax revenue. Unfortunately, by 1988 the "boom" was a "bust" and only \$17 million was collected.⁹ Indeed, there are few areas in which Montana has demonstrated any capability of control over its own economic destiny. However, the tourism and mining are currently the two most rapidly expanding and promising industries.

2. The General Economic Condition of Valley County. As the economy of Montana counties and communities has generally suffered (with the exception of those few who have benefited due to the tourism and mining industries), so has that of Valley County. Valley County's economy is dependent upon the agriculture industry, i.e., farming, stock production and supporting businesses such as implement, seed and fertilizer dealers. This dependence on agriculture carries with it the vulnerabilities of that industry. The economy is vulnerable in that the federal government is an ever more dominant (and unreliable) factor in the "success" of the farm or ranch. Additionally, there is still "Mother Nature" to deal with in the form of drought, flood, windstorm and other natural disasters. Personal income in wages and salaries has dropped to \$42,369,000.00 in 1986 compared to \$62,252,000.00 in 1981.¹⁰ Reflective of the very substantial economic recession in the county is the drop in population. In 1980, Valley County had 10,250

residents, in 1988 the population was 8,400. The loss of 1,900 people was the fourth largest population loss in the state and the -18.2 percent loss rate was second highest. Glasgow's loss of 1,040 people was the third largest statewide and the -23.4 percent loss rate was the highest of any city over 1,000 residents (third overall behind Plevna, -30.9 percent and Walkerville, -24.9 percent).¹¹

3. Montana National Guard Economic Impact.

a. MONTANA. Total federal expenditures on the Montana National Guard for fiscal year 1988 (October 1, 1987 thru September 30, 1988) was \$61,107,000.00. This figure is comprised of pay, local purchases for items such as food and fuel, operating expenses required to maintain the unit armories located throughout the state and expenses related to the reorganization of the Montana Army National Guard into the 163d AR BDE. Additionally, the State of Montana contributed \$804,900.00 for operations and maintenance for a total of \$61,911,900.00 (98.6 percent of which is federal). Of particular interest is "wages, local purchases and contracting" (\$45,723,700.00), which represents the monies that have the greatest impact on the individual communities in which Guard units are located. Of the \$45,723,700.00, \$44,918,800.00 (98 percent) are federal funds.¹² Appendix D lists the said expenditures in each community where an MT ARNG unit is

located (as of Sep. 30, 1988). These figures are based upon the \$45,723,700.00 figure.

b. VALLEY COUNTY. As identified in Appendix D, Valley County and Glasgow specifically benefit from the presence of an Army National Guard unit. In fiscal year 1988, the total federal and state expenditure was \$306,600.00, \$295,600.00 (96.4 percent) of said total being federal funds.¹³

4. Prospective Economic Impact of the Montana Training Center. The full economic impact of the activation of the Montana Training Center is impossible at this time to ascertain. Data solicited from the National Training Center at Ft. Irwin, CA (which most closely represents the types of training activities to be conducted at the MTC) indicates that a single brigade-sized Annual Training period generates approximately \$1 million in payments to the training center location specifically and state generally.¹⁴ Plans call for the Montana Training Center to, upon full activation, rotate four brigade-sized elements through the training cycle per year. Additionally, it is estimated that 150 to 200 people would be employed at the MTC if fully activated.

Under the current usage context whereby MT ARNG units train at the VCAE one to two weekends per month (as part of the aforementioned lease agreement between the VCAE and the Montana Army National Guard), approximately \$13,000.00

in direct payment to the community is generated for fuel and food. Additionally, approximately \$10,000.00 is paid in wages for a total of \$23,000.00. This infusion of federal funds is a conservative estimate for one unit consisting of 80-100 soldiers.¹⁵ Four soldiers have been hired full-time in support of the current training activities at the VCAE and planning activities for the proposed Montana Training Center. Two of the soldiers, with a combined annual payroll of \$41,688.00, live in Valley County. The other two, with a combined annual payroll of \$62,018.00, live in Helena.

As illustrated earlier in the general assessments of the state's and Valley County's economic status, each unit's home location and the state generally benefits from the presence of the National Guard. Unfortunately, a significant amount of funds is still lost to the state. Approximately \$2 million per year is spent training soldiers and airmen outside the state while at Annual Training.¹⁶ These training and equipment maintenance monies would be kept in-state if the Montana Training Center were developed.

5. Possible Negative Economic Impact to Valley County. Just as the positive economic impacts cannot be assessed at this time, neither can the negative. Listed are the areas most visibly vulnerable to the development

of the Montana Training Center.

a. Of the approximate 701 ranch and farm operations in Valley County, 110 of them, holding 86 federal, state and county grazing leases, have operations on land in the proposed training area. The ranches are cow-calf and yearling operations, and the farms are dry-land grains and fodder. The majority of the ranches and farms are family-owned with a few of the operations having more than one family associated with the operation (the 110 ranches involve 130 families). Livestock sales and cash crops are the primary source of income in the area.¹⁷ A very significant factor is that great value is placed on the Bureau of Land Management and State Lands leases a farmer/rancher may possess. In fact, the value of the holdings is linked directly to that leased land. If that land is lost to the farmer/rancher, there may be a potentially serious, negative economic impact.

b. Hunting is the primary recreational activity in the area that generates revenue other than ranching and farming. It is estimated that hunting expenditures for travel, food, lodging and fees (variable expenditures) average \$41.00 per day for resident and nonresident hunters (1988 Net Economic Value of Hunting in Montana, Montana Department of Fish, Wildlife and Parks). Based on 6,818 hunter days annually in the training area, hunting deer and antelope generates about \$257,424.00 annually in

direct expenditures to the local economy (i.e., sporting goods stores, motels, service stations, etc.).¹⁸

c. 105,100 acres belong to the Montana Department of State Lands. This acreage produces about \$80,000.00 for the state schools, specifically those in Valley County.¹⁹

6. Summary. The economic problems Montana endure are deeply entrenched and unlikely to be resolved in the foreseeable future. The state, counties and cities seek to widen their respective tax bases to more adequately fund public services, however, to do so requires more business/industrial activity. If said activity develops, more jobs are available and as the population increases to fill those positions, the tax base is strengthened.

Statistics show that Valley County and the City of Glasgow have been particularly hard hit by Montana's recession. Additionally, the two industries that show the greatest promise currently for the state, mining and tourism, are not likely to benefit either the county or city. Of low profile is the significant statewide economic impact of the Montana National Guard. Projected usage by Montana Guard resources and prospective utilization by out-of-state entities coupled with existing economic impact data from comparable training sites present a potential economic impact which Valley County

and Montana cannot ignore or trivialize.

The proposed EIS to be prepared by the BLM or another mutually acceptable contracted entity would include an in-depth and comprehensive economic impact analysis. Preliminary economic indicators would seemingly support the development of the Montana Training Center.

CHAPTER SIX

THE NEED

The actual need for the Montana Training Center is a controversial issue which is amplified given the enormous size, prospective training activities, perceived multiple-use conflicts and the proposed withdrawal of 5,000 acres of public lands. Given the generally acknowledged lessening of worldwide tensions, the argument of whether or not the training center fulfills a valid military need is fundamental to the case made by both the opponents and proponents of the Montana Training Center. Addressed below, in the context of military need, are identified "pros" and "cons" of the development.

1. It is NOT Needed.

a. The economy of the United States has become increasingly dependent upon military spending. In 1978, defense oriented industries employed 5,839,000 persons. When this figure is combined with civilian and military personnel directly hired by the Department of Defense and defense related government agencies, the combined employment supporting the defense system for 1978 was 8,942,000, or 10.5 percent of all employment, both public

and private, in the United States!²⁰ Of course, this does not take into account the unprecedented defense spending buildup during the Reagan years. The main point is that an economy based upon defense spending is not good economics and, in fact, may be one of the primary causes of the budget deficit.

b. In response to increasing Congressional pressure to reduce Department of Defense expenditures, the Secretary of Defense has proposed an initial cut of \$20 billion for fiscal year 1991 with an additional \$180 billion in cuts programmed for the years 1992-1994. Accompanying the cuts, the Army plans to cut 200,000 personnel (civilian, reserve and active duty) from its force structure.²¹

c. The world is witnessing history in Eastern Europe. The collapse of the Communist governments throughout the region is as breathtaking in its rapidity as it is stunning in its potential economic and political impacts. These in turn will impact the Warsaw Pact. This military organization of Eastern European Communist countries was formed to counterbalance the North Atlantic Treaty Organization (NATO). The Soviet Union has always been the dominate member of the Warsaw Pact, overseeing and exercising ultimate command over the military organizations of each member nation. This was directly attributable to the Soviet Union's authority over each

nation's Communist governments. This authority has been dramatically eroded by the continuing movement towards and formation of non-communist governments. Two factors play heavily into the expected deterioration of the Warsaw Pact:

(1) The governments of the countries are mandated by the people to improve each respective nation's economies. The limited resources will be, in varying degrees, reallocated from the military to economic development programs.

(2) The reallocation of national resources from the military will be more probable because the governments are now more accountable and answerable to the populace rather than to the Soviet Union.

The erosion of the Warsaw Pact, with respect to solidarity and resource commitment, can be viewed as a reduction in tensions and the probability of conflict between it and NATO. NATO member nations will respond in kind. It is even possible that the Warsaw Pact could dissolve. If this were to happen, NATO conceivably would follow suit. Such a development may even be the result of negotiations between the two organizations.

d. Prior to the landmark political changes in Eastern Europe, the Soviet Union and United States had already agreed upon and implemented military reductions in

equipment and personnel in Europe. Significant quantities of U.S. military forces based in Europe are in the process of reassignment back to the mainland. Additional troop reductions have been proposed by President Bush.

e. Training areas existing in both Montana and out-of-state locations have been utilized for years and have provided satisfactory training. It is not necessary to build another one.

f. Given the facts that the Department of Defense is cutting its budget, Montana has no visible funding available to finance a training site and peace is "breaking out all over" in Europe, it is simply not appropriate to burden the taxpayer with building the largest training site of its type in the nation.

These considerations, separately and in total, present just cause to critically question the military need for developing the Montana Training Center.

2. It IS Needed.

a. There exists in the United States a very limited quantity of training centers where large-scale combined arms training integrated with ground and air gunnery ranges exist: the National Training Center at Ft. Irwin and Camp Pendleton, California, Ft. Bliss and Ft. Hood, Texas, Yakima Firing Center, Washington, Ft. Carson, Colorado and Gowen Field, Idaho. All listed, with the exception of Gowen Field, are federal installations which

predominately train Active Component units.²² They are all very heavily utilized and are incapable of programming additional training time in that they are used year-round at their full potential. The reassignment of U.S. Army units from overseas to the U.S. only intensifies the current limitations present in training sites at both the national and state levels. The units reassigned must still train and since all will have returned from NATO combat elements, it follows that many will be tank and artillery units which require maneuver and gunnery ranges on which to train (as opposed to Military Police, Intelligence and communications units which do not require such areas to maintain and/or enhance their operational readiness). This presents two options. One is that new areas must be developed to meet this need. The second, assuming that no new areas can be developed, is that the existing training sites schedule units in for training on a less frequent basis or for a shorter period of time to accommodate the additional unit load. This situation would have a negative impact on the operational readiness of the affected military forces. The same considerations exist for Air Force units which are reassigned back to the United States. The expected Pentagon recommendation to close twenty-four military bases located in the U.S. further necessitates additional training areas since those

assets at the closed bases will have been lost.

b. While the currently programmed and prospective troop reductions, troop stationing realignments and base closures negatively impact the availability of training areas, they also pose logistical problems for the equipment and supplies organic to each organization. Although an armor division, for instance, may be deactivated, the tanks, armored personnel carriers, rifles, food service equipment and communications equipment will not disappear as the manpower might. There will be the need for storage, security and maintenance of very large quantities of equipment and supplies. There is in excess of 1 million square feet of unused warehouse space (all of which can be heated) at the abandoned Glasgow Air Force Base which could be made available, exclusive of the storage needs of the Montana National Guard.

c. Low-altitude NATO forces flight training in Europe is increasingly controversial, unpopular, dangerous and unavailable. The relatively small land mass and large population does not avail itself to the type of training the air forces need, i.e., air-to-ground and air-to-air weapons training and low-altitude flying skills enhancement. This impacts all NATO nations and has resulted in increasing quantities of NATO aircraft training at ranges in the United States and Canada.

d. The "hub center" concept airlines use in the

U.S. has significantly impacted Air Force jet and Army helicopter flight training. Many of the military bases are located near major cities which are "hubs" for air travel. A hub's air traffic congestion is continuous and covers an extremely large air space, thus requiring that the training be conducted a long distances from the base.

The aforementioned considerations reflect national and even international training needs supportive of developing additional training sites with capabilities comparable to that of the Montana Training Center. A more immediate consideration, however, is the needs of the Montana National Guard. Both the Montana Army and Air Guards must conduct the great majority and the most significant (in terms of tactics and weapons) of their training out-of-state. This presents three militarily negative impacts:

a. The time required to proceed to and return from the designated training site detracts from the quantity of training which can be conducted.

b. The limited capabilities of the assigned training sites detract from the quality of the training which is conducted (i.e., the 163d AR BDE cannot train as one organizational structure even though, if Federalized, it would be deployed as one).

c. The limitations on the quantity and quality of current training site resources have a negative impact

on the unit's combat readiness, capability for mission accomplishment and ultimate survivability of the soldiers.

CHAPTER SEVEN

RECOMMENDATIONS

The preceding sections have been presented for the purposes of identifying a major shortcoming in the Montana National Guard's training program, the proposed solution to that shortfall (development of the Montana Training Center) and the key areas of consideration and controversy. Each key area has, to the most attainable extent, been illustrated, delineated and/or investigated to present as complete a view as possible. The ultimate purpose and expression of this presentation is to conduct a preliminary study of the feasibility of developing the Montana Training Center and, ultimately, to state any recommendations that are derived from this process.

Researching the "hard" data, attending the BLM public meeting in Helena, visiting with various interested and effected individuals, and touring the land where the Montana Training Center would be located have led to certain findings. These are described below with each followed by an appropriate recommendation:

1. The single most persuasive concept to most people is the economic impact of the proposed development

and current Montana National Guard operations statewide. Both the present operations and the potential of the Montana Training Center represent significant infusion of primarily federal monies into the state and county.

Recommendation: The Montana National Guard must invest in an updated, comprehensive economic impact analysis of Guard operations statewide and prepare as detailed an analysis as possible of the prospective economic impacts of the Montana Training Center, both in strictly Montana National Guard utilization and fully developed contexts. Upon completion, the analysis should be distributed statewide to the general populace and to specific organizations such as Chambers of Commerce, Rotary Clubs and VFWs.

2. The mandated reductions of U.S. Army military personnel because of defense budget and perceived military threat considerations, in reality, adds to the nation's dependence on the Reserve Component (RC), i.e., Army National Guard and Army Reserve, and RC training assets. The United States military strength depends on what is termed the Total Force. No longer is the Active Component solely responsible for combat readiness and duty. It is much less expensive to the American taxpayer to upgrade the Reserve Component in authorized quantity of personnel, training opportunity and equipment than it is to do the equivalent to the Active Component. Therefore, there are

developments such as Montana's reorganization into an armored brigade which requires more units, more soldiers, more expensive equipment (M1 tanks, latest editions of armored personnel carriers, etc.), more full-time support personnel and more money for training soldiers in the resultant additional military occupational specialties. It is a fact that the U.S. could not engage in an extended or intensive conflict without activating Reserve Component units. Appendix E provides examples of the relationship between the Army's Active and Reserve Components.²³ With reductions in the Active Component, the Reserve Component assumes a greater role in the nation's defense. With that increased dependence comes the increasingly more urgent needs of operational readiness, i.e., training.

Recommendation: The Montana citizenry must be educated as to the impacts that overseas troop reassignment and in-country base closures actually have on training site resources. Additionally, the vital and integrated role that the Montana National Guard plays in national defense should be presented. I further recommend that the presentation be part of the updated economic impact analysis referred to in "b."

3. The great majority of the land on which the Montana Training Center would be located is, at best, marginal for agricultural interests. It is land that is

generally so bare that ranchers need 80 acres to sustain one cow for six months. A land that is so generally devoid of human environmental comforts that the entire southern section, 408,706 acres, is uninhabited by man. The National Wildlife Federation and the Natural Resources Defense Council have determined that 42 percent of the more than 39 million acres of BLM rangeland is in poor condition, suffering from overgrazing, mismanagement and underfunding.²⁴

Recommendation: The status of Montana BLM rangeland, specifically that which is in Valley County, should be determined. This would be accomplished by researching BLM, National Wildlife Federation and Natural Resources Defense Council studies and data. Objectives would be to find out if current rangeland usage is the most appropriate and beneficial for the land, provides the best return on the dollar for the taxpayer and is utilized in the best interests of the common good.

4. A little considered potential economic impact is in regards to Native Americans living in the northeast sector of the state whose unemployment rates commonly run as high as 70 percent. A tribal-backed group in Wolf Point, the Wolf Point Community Organization recently purchased and moved to Wolf Point the Great Divide Manufacturing Company of Helena which manufactures military silhouettes for target practice.

Recommendation: The potential economic impact and opportunities the development of the Montana Training Center could have on Native Americans should be studied as part of a larger study which would identify potential defense-related industries which may be attracted to the VCAE complex. This study would be based such factors as facilities available, environmental assets (clean air, small population), potential workforce and legislatively mandated inducements designed to attract the businesses or facilitate development by in-state investors.

5. The expense of an Environmental Impact Study is prohibitive if sole reliance is on state resources, be the price-tag \$250,000.00 or \$7,000,000.00.

Recommendation: If the arguments of significant positive impact for national defense are valid, financial support from the Department of Defense should be available. Montana's U.S. Senators and Representatives must be lobbied for their **active** support and persistent efforts to obtain the needed funding for the EIS.

6. Glasgow Air Force Base was built in 1959 for \$110 million and was designed for 3,500 military and an additional 5,000 family members. Within twenty years the base was closed down due to treaty negotiations (as opposed to ratifications) between the United States and the Soviet Union. The structural resources are

astounding. Cases in point include storage capabilities of over 1 million square feet, housing quarters complete with furniture, appliances, even dishes, and a runway which at over 13,000 feet in length is the third longest in the nation and is the fourth alternative for landing the space shuttle. All the structures and facilities are in exceptional shape because of a \$4 million grant the Air Force gave Valley County when the base was deeded over. These funds were specifically for maintenance and development of the base, but are expected to be completely expended this fiscal year.²⁵

Recommendation: The taxpayer investment into Glasgow Air Force Base is large and the intent of using the facility for military purposes is unquestioned. Because maintenance monies are expended, it is critical that the facilities and structures be used immediately or deterioration will rapidly take its toll and the complex will be rendered, in large part, unusable. The former air base was constructed for the military and its optimum usage is by the military. Given demonstrable need, the base should be available for training/administrative activities of the Montana National Guard.

7. The existence of the 5,000 acre artillery range has the greatest potential to "derail" the land lease agreement with the BLM. The Engle Act requires that any proposal to withdraw 5,000 or more acres of public land

from public use must be reviewed by the Federal Lands and Parks Subcommittee in the House of Representatives. Administrative review by this subcommittee would essentially "kill" the proposal since it is Chaired by Representative Vento of Wisconsin. The Congressman has publically denounced the efforts of the military to create or enlarge training areas in the United States.

Recommendation: The Montana National Guard must be prepared to terminate the proposed withdrawal of the high-explosive impact area and use it as the other ranges are envisioned and planned, for **nonexplosive** munitions.

8. The most controversial issue of the proposed development is the expected damage to the land resulting from tracked vehicle training maneuvers. Though a comprehensive reclamation study program is underway (as identified in page 41) and the latest of environmental management technologies is utilized in all stages of development, there is still (understandably) great public concern and skepticism as to the National Guard's ability to fulfill its environmental responsibilities.

Recommendation: It is essential that, to the greatest extent possible, public participation in all areas of environmental concern be maximized. The primary benefits of this would be two-fold. First, the National Guard can benefit from the input of those citizens who have first-

hand knowledge and experience with the land impacted by "Guard" training. This should result in more efficient, practical and reasonable land usage and reclamation programs. Secondly, the general populace will perceive that the Montana "Guard" is responsive to public concerns and input and is, indeed, making a good faith attempt at being a "good neighbor". This should result in greater cooperation and good will between the "Guard" and public. Additionally, as public recommendations are incorporated into the planning and training processes, the public will gain "ownership" in said processes. This facilitates support and trust in the Montana National Guard.

In summation, this study concludes that development of the Montana Training Center at the (former) Glasgow Air Force Base appears feasible and desirable in light of Montana National Guard training needs. However, as identified by each specific recommendation, additional study and/or project development is required in specific areas.

APPENDIX A

KEY

AHC	ATTACK HELICOPTER COMPANY
AR BDE	ARMORED BRIGADE
ASGD	ASSIGNED
AT	ANTI-TANK
AUTH	AUTHORIZED
AVN	AVIATION
CAV	CAVALRY
DET	DETACHMENT
ENGR PLT	ENGINEER PLATOON
FA	FIELD ARTILLERY
HHC	HEADQUARTERS COMPANY
HQ STARC	HEADQUARTERS, STATE AREA COMMAND
HQ & SVC AHB	HEADQUARTERS AND SERVICE ATTACK HELICOPTER BATTALION
IN	INFANTRY
LOC	LOCATION
MAINT	MAINTENANCE
MED	MEDICAL
MOB	MOBILIZATION
PAD	PUBLIC AFFAIRS DETACHMENT
PER SVC CO	PERSONNEL SERVICES COMPANY
S&T	SERVICE AND TRANSPORTATION
SPT BN	SUPPORT BATTALION
TRP	TROOP

APPENDIX A (cont.)

MONTANA ARMY NATIONAL GUARD UNITS

	LOCATION	PERSONNEL		ANNUAL	MOB
		ASGD	AUTH	TRNG LOC	STATION
HQ STARC	HELENA	271	231	YEAR-RD	HELENA
DET 1 HQ STARC	HELENA	27	29	YEAR-RD	HELENA
DET 2 HQ STARC	HELENA	5	5	YEAR-RD	HELENA
103D PAD	HELENA	17	13	VARIES	FT LEWIS, WA
1049TH ENGR PLT	HELENA	20	22	GOWEN FLD	GOWEN FLD ID
210TH PER SVC CO	HELENA	39	57	YEAR-RD	UNDETERMD
HQ & SVC AHB CO 1-189TH AVN	HELENA	167	166	VARIES	FT LEWIS, WA
CO A AHC	HELENA	39	37	VARIES	FT LEWIS
CO B AHC	HELENA	39	37	VARIES	FT LEWIS
CO C AHC	HELENA	33	37	VARIES	FT LEWIS

163D AR BDE UNITS

HHC(-) 163D AR BDE	BOZEMAN	195	190	GOWEN FLD	GOWEN FLD
DET 1 HHC	LIVINGSTON	69	69	GOWEN FLD	GOWEN FLD
DET 2 HHC	HARLOWTON	48	60	GOWEN FLD	GOWEN FLD
1063D(-) ENGR CO	MISSOULA	82	70	GOWEN FLD	GOWEN FLD
DET 1 1063D	GR. FALLS	79	122	GOWEN FLD	GOWEN FLD
TRP E(-) 163D CAV	MALTA	68	65	GOWEN FLD	GOWEN FLD
DET 1 TRP E	GLASGOW	85	72	GOWEN FLD	GOWEN FLD
1-163D CAV BN					
HHC(-) 1-163D CAV	BUTTE	131	131	GOWEN FLD	GOWEN FLD
DET 1 HHC	DEER LODGE	33	51	GOWEN FLD	GOWEN FLD
DET 2 HHC	ANACONDA	41	52	GOWEN FLD	GOWEN FLD
CO A 1-163D CAV	DILLON	73	76	GOWEN FLD	GOWEN FLD
CO B 1-163D CAV	HAMILTON	59	76	GOWEN FLD	GOWEN FLD
CO C 1-163D CAV	HELENA	57	76	GOWEN FLD	GOWEN FLD
CO D 1-163D CAV	GR. FALLS	54	76	GOWEN FLD	GOWEN FLD
2-163D CAV BN					
HHC(-) 2-163D CAV	KALISPELL	109	131	GOWEN FLD	GOWEN FLD
DET 1 HHC	LIBBY	47	51	GOWEN FLD	GOWEN FLD
DET 2 HHC	WHITEFISH	38	52	GOWEN FLD	GOWEN FLD

APPENDIX A (cont.)

163D AR BDE UNITS	LOCATION	PERSONNEL ASGD	AUTH	ANNUAL TRNG LOC	MOB STATION
2-163D CAV BN (cont.)					
CO A 2-163D CAV	KALISPELL	58	76	GOWEN FLD	GOWEN FLD
CO B 2-163D CAV	MISSOULA	56	76	GOWEN FLD	GOWEN FLD
CO C 2-163D CAV	MISSOULA	54	76	GOWEN FLD	GOWEN FLD
CO D 2-163D CAV	SHELBY	44	76	GOWEN FLD	GOWEN FLD
1-163D IN BN					
HHC 1-163D IN	BILLINGS	165	243	FT CARSON CO	GOWEN FLD
CO A 1-163D IN	BILLINGS	64	110	FT CARSON	GOWEN FLD
CO B(-) 1-163D IN	GLENDIVE	47	50	FT CARSON	GOWEN FLD
DET 1 CO B	SIDNEY	33	60	FT CARSON	GOWEN FLD
CO C(-) 1-163D IN	CULBERTSON	42	50	FT CARSON	GOWEN FLD
DET 1 CO C	PLENTYWOOD	41	60	FT CARSON	GOWEN FLD
CO D(-) 1-163D IN	LEWISTOWN	46	50	FT CARSON	GOWEN FLD
DET 1 CO D	CHINOOK	49	60	FT CARSON	GOWEN FLD
CO E(AT) 1-163D IN	MILES CITY	52	73	FT CARSON	GOWEN FLD
495TH SPT BN					
HHC 495TH SPT	HAVRE	157	154	VARIES	GOWEN FLD
CO A(-) S&T 495TH	MISSOULA	64	77	VARIES	GOWEN FLD
DET 1 CO A	BILLINGS	54	76	VARIES	GOWEN FLD
CO B MAINT 495TH	HELENA	171	276	VARIES	GOWEN FLD
CO C(MED) 495TH	BILLINGS	65	110	VARIES	GOWEN FLD
163D AR BDE UNITS TOTAL		2555	3173		
OTHER UNITS TOTAL		657	640		
PERSONNEL TOTALS		3212	3813		

NOTE: TWO ADDITIONAL 163D AR BDE UNITS ARE LOCATED IN WYOMING: DET 1 CO B 495TH SPT BN & 3-49TH FA BN

BECAUSE THEY ARE IN WYOMING, THEY ARE PART OF THE WYOMING ARMY NATIONAL GUARD ORGANIZATION. HOWEVER, THEY WOULD MOBILIZE WITH THE MT ARNG.

APPENDIX B

163D AR BDE UNITS

UNITS	LOCATION	DISTANCE (MILEAGE) TO:	
		GOWEN FIELD	MTC OP CENTER
HHC(-) 163D AR BDE	BOZEMAN	525	384
DET 1 HHC	LIVINGSTON	551	358
DET 2 HHC	HARLOWTON	621	279
1063D(-) ENGR CO	MISSOULA	350	458
DET 1 1063D	GREAT FALLS	596	290
TRP E(-) 163D CAV	MALTA	797	89
DET 1 TRP E	GLASGOW	867	19
1-163D CAV BN UNITS			
HHC(-) 1-163D CAV	BUTTE	443	443
DET 1 HHC	DEER LODGE	467	436
DET 2 HHC	ANACONDA	451	462
CO A 1-163D CAV	DILLON	378	487
CO B 1-163D CAV	HAMILTON	375	505
CO C 1-163D CAV	HELENA	507	379
CO D 1-163D CAV	GREAT FALLS	596	290
2-163D CAV BN UNITS			
HHC(-) 2-163D CAV	KALISPELL	465	438
DET 1 HHC	LIBBY	540	527
DET 2 HHC	WHITEFISH	479	432
CO A 2-163D CAV	KALISPELL	465	438
CO B 2-163D CAV	MISSOULA	350	458
CO C 2-163D CAV	MISSOULA	350	458
CO D 2-163D CAV	SHELBY	673	279
1-163D IN BN UNITS			
HHC 1-163D IN	BILLINGS	666	298
CO A 1-163D IN	BILLINGS	666	298
CO B(-) 1-163D IN	GLENDIVE	888	170
DET 1 CO B	SIDNEY	937	159
CO C(-) 1-163D IN	CULBERTSON	970	122
DET 1 CO C	PLENTYWOOD	1012	164
CO D(-) 1-163D IN	LEWISTOWN	678	222
DET 1 CO D	CHINOOK	730	156
CO E(AT) 1-163D IN	MILES CITY	811	216
495TH SPT BN UNITS			
HHC 495TH SPT	HAVRE	709	177
CO A(-) S&T SPT	MISSOULA	350	458
DET 1 CO A	BILLINGS	666	298
CO B(-) MAINT SPT	HELENA	507	379
CO C(MED) SPT	BILLINGS	666	298

APPENDIX C

**MONTANA TRAINING CENTER
ACREAGE OWNERSHIP/CONFIGURATION**

TACTICAL MANEUVER AREA (Northern Sector)

BUREAU OF LAND MANAGEMENT	354,640 ACRES	(62%)
PRIVATE	132,340 ACRES	(23%)
STATE	78,880 ACRES	(14%)
VALLEY COUNTY AIRPORT ENTERPRISE. .	6,800 ACRES	(<1%)
TOTAL:	<u>572,660 ACRES</u>	

FIRE AND MANEUVER AREA (Southern Sector)

BUREAU OF LAND MANAGEMENT	363,676 ACRES	(89%)
PRIVATE	18,810 ACRES	(4.6%)
STATE	26,200 ACRES	(6.4%)
TOTAL:	<u>408,706 ACRES</u>	

NORTHERN AND SOUTHERN SECTOR TOTALS

BUREAU OF LAND MANAGEMENT	718,316 ACRES	(73.7%)
PRIVATE	151,150 ACRES	(15.5%)
STATE	105,100 ACRES	(10.7%)
VALLEY COUNTY AIRPORT ENTERPRISE. .	6,800 ACRES	(<.01%)
TOTAL:	<u>981,366 ACRES</u>	

MAP COLOR KEY (APPENDIX C cont.)

YELLOW - BLM

PINK - OTHER FEDERAL LANDS (LAND UTILIZATION LANDS)

BLUE - STATE LANDS

WHITE - PRIVATE

APPENDIX D**MONTANA NATIONAL GUARD EXPENDITURES BY COMMUNITY**

(As of September 30, 1988)

<u>CITY</u>	<u>PAYROLL</u>	<u>OPERATING EXPENSES</u>	<u>TOTAL</u>
ANACONDA	\$ 180,900	\$ 32,200	\$ 213,100
BILLINGS	1,499,200	168,200	1,667,400
BOZEMAN	1,109,800	121,600	1,231,400
BUTTE	640,800	46,500	687,300
CHINOOK	353,500	32,500	386,000
CULBERTSON	337,600	43,400	381,000
DEER LODGE	181,300	26,000	207,300
DILLON	268,800	35,900	304,700
GREAT FALLS	21,114,600	336,200	21,450,800
GLASGOW	269,600	37,000	306,600
GLENDIVE	208,600	35,300	243,900
HAMILTON	255,900	37,400	293,300
HARLOWTON	132,200	26,800	159,000
HAVRE	986,300	74,900	1,061,200
HELENA	11,763,400	749,600	12,513,000
KALISPELL	992,700	111,100	1,103,800
LEWISTOWN	301,400	42,200	343,600
LIBBY	201,600	29,400	231,000
LIVINGSTON	190,500	30,800	221,300
MALTA	279,500	41,600	321,100
MILES CITY	275,500	46,400	321,900
MISSOULA	1,045,300	154,600	1,199,900
PLENTYWOOD	209,600	28,500	238,100
SHELBY	183,100	33,700	216,800
SIDNEY	199,500	27,300	226,800
WHITEFISH	169,200	24,200	193,400
TOTALS	<u>\$43,350,400</u>	<u>\$2,373,300</u>	<u>\$45,723,700</u>

APPENDIX E

**CONTRIBUTIONS OF ARMY RESERVE COMPONENTS
TO THE
TOTAL ARMY**

(As of Sept. 30, 1988)

<u>UNIT TYPES</u>	<u>% OF TOTAL ARMY: ARMY NAT'L GUARD</u>	<u>% OF TOTAL ARMY: ARMY RESERVE</u>	<u>* MT ARNG UNITS</u>
INFANTRY SCOUT TROOPS	100		*
TOW LIGHT ANTI-TANK INFANTRY BATTALIONS	100		
HEAVY HELICOPTER UNITS	100		
PUBLIC AFFAIRS UNITS	58	29	*
HEAVY EQUIPMENT MAINTENANCE COMPANIES	76	10	*
SEPARATE BRIGADES	73	7	*
ENGINEER BATTALIONS (COMBAT)	52	25	
HOSPITAL UNITS	8	69	
ENGINEER BRIDGE COMPANY	43	31	
TRUCK COMPANIES	37	30	*
MILITARY POLICE COMPANIES	44	21	
FIELD ARTILLERY BATTALIONS	52	9	* (in Wyoming)
SIGNAL (COMMUNICATION) BATTALIONS	43	14	
INFANTRY BATTALIONS	50	5	*
SPECIAL FORCES GROUPS	25	25	
ARMORED BATTALIONS	43	2	*

GLOSSARY

ACTIVATION: By issuance of an official order, a soldier is placed on active duty.

ACTIVE COMPONENT: Comprised of all branches of the Armed Forces who are on active duty, i.e., full-time.

ASSIGNED TROOP STRENGTH: The actual quantity of soldiers who are in a unit.

AUTHORIZED TROOP STRENGTH: The quantity of soldiers identified by National Guard Bureau as appropriate for a unit.

COLUMN FORMATION: Vehicles or personnel arranged one after the other, a row.

COMBINED ARMS: The incorporation and integration of various military resources during tactical operations.

DEPLOYMENT: The relocation of troops to overseas areas of operations.

EMBARKATION: The loading of troops, supplies and equipment onto ships or aircraft for deployment to overseas locations.

FEDERALIZATION, FEDERALIZED: The transfer of Reserve Component units from reserve status to active duty status. This action is accomplished by issuance of an official order.

FIELD ENVIRONMENT: An area for military operations or maneuvers.

FORCE STRUCTURE: The organization of military units and their relationship to each other.

LOGISTICS, LOGISTICAL: The procedures and actions of procurement, maintenance and transportation of military material, facilities and personnel.

MILITARY OCCUPATIONAL SPECIALTY: The job, skill or "slot" in the military a soldier possesses.

GLOSSARY (cont.)

NATIONAL GUARD BUREAU: The division of the Department of Defense responsible for overall management of United States National Guard functions. Federal funds and Department of Defense policy are channeled through National Guard Bureau eventually to the state level. However, National Guard Bureau is not in the chain-of-command of National Guard organizations.

RESERVE COMPONENT: Comprised of National Guard and Reserve units of all branches of the Armed Forces, i.e., Army, Navy, Air Force and Marine Corps.

SCENARIO: An account or synopsis of a projected course of action or events.

STRENGTH: The number of soldiers assigned to a unit.

TACTICS, TACTICAL: Relating to combat operations. The process of disposing and maneuvering forces in combat or simulated combat).

TOTAL FORCE: The combination and utilization of Active and Reserve Component units in planning, policy and execution.

WAR PLANS: Those plans made at the highest levels of the Department of Defense which address specific threats to national security and identify the military response. The response, among other things, identifies specific Active and Reserve Component units which will respond. War plans carry security classifications of SECRET and TOP SECRET.

FOOTNOTES

¹U.S., Department of the Army, Training Site General Information, National Guard Bureau Pamphlet 25-1 (5 February 1988), p.p. 1-1 thru 6-98.

²Ibid.

³Montana, Montana Training Center (MTC) Site Development Plan (20 November 1989), p. 1-5.

⁴U.S., Department of the Interior, Bureau of Land Management, Executive Correspondence, 1616.041 (1 December 1989).

⁵University of Montana Bureau of Business and Economic Research, "Growth Expected for Montana's Economy," Montana Business Quarterly 27 (Autumn 1989):19.

⁶Montana Taxpayer Association, "Attracting New, Keeping Old Business Hinges on Adjusting our Tax Policy," Montana Taxpayer XXIII (November 1989):1-4.

⁷"Montana's Cupboard is Bare", Ibid. p.2.

⁸"Attracting New, Keeping Old Business Hinges on Adjusting our Tax Policy", op. cit., p.1.

⁹Ibid., p.2.

¹⁰Montana, Montana County Profiles Supplement to the Fifth Edition - Valley County (May 1989), sec. 06.

¹¹U.S., Bureau of Census, Local Population Estimates (1988 Population), (1990).

¹²Montana, The Impact of the Montana National Guard (29 December 1988), p.p. 14-43.

¹³Ibid. p.25.

¹⁴Interview with Captain Dinan, Budget Officer at the National Training Center, Fort Irwin, California, 16 January 1990.

FOOTNOTES (cont.)

¹⁵ Interview with Captain Russell, Project Officer for the Montana Training Center, Helena, Montana, 24 January 1990.

¹⁶ Interview with Sergeant First Class Wing, Pay Examinations Supervisor - United States Property and Fiscal Office, Fort Harrison, Montana, 25 January 1990.

¹⁷ Montana, Montana Training Center (MTC) Site Development Plan (20 November 1989), encl. 6-5.

¹⁸ Ibid., encl. 6-6.

¹⁹ Ibid., "Footnotes".

²⁰ Robert D. Lee, Jr. and Ronald W. Johnson, Public Budgeting Systems 3d ed. (Baltimore: University Park Press, 1984), p.p. 25-26.

²¹ "Army Plans to cut 200,000 Personnel," Helena Independent Record, 21 November 1989, sec. A, p. 8.

²² U.S., Department of the Army, Training Site General Information, National Guard Bureau Pamphlet 25-1 (5 February 1988), p.p. 1-1 thru 6-98.

²³ "Contributions by Army Reserve Components to the Total Army", Defense '89 Almanic (Sep/Oct 1989):16-17.

²⁴ "Study: Nevada's Rangelands are Dying," Reno Gazette-Journal, 16 November 1989, sec. B, p.p. 1-2.

²⁵ CPT Russell, op. cit.

BIBLIOGRAPHY

- U.S. Department of the Army. Training Site General Information Summary. National Guard Bureau Pamphlet 25-1 (1988).
- Montana. Montana Training Center (MTC) Site Development Plan (1989).
- Montana. Montana County Profiles - Valley County 5th ed (1985).
- Montana. Montana County Profiles Supplement to the Fifth Edition - Valley County (1989).
- U.S. Department of the Interior. Bureau of Land Management, Executive Correspondence, 1616.041 (December 1989).
- University of Montana Bureau of Business and Economic Research. "Growth Expected for Montana's Economy." Montana Business Quarterly 27 (Autumn 1989):19.
- Montana Taxpayer Association. "Attracting New, Keeping Old Business Hinges on Adjusting our tax policy." Montana Taxpayer XXIII (November 1989):1-4.
- Lee, Robert D., Jr., and Johnson, Ronald. Public Budgeting Systems 3d ed. Baltimore: University Park Press, 1984.
- Montana. The Impact of the Montana National Guard (December 1988).
- "Contributions by Army Reserve Components to the Total Army." Defense '89 Almanac (Sep/Oct 1989):16-17.
- "Army Plans to cut 200,000 Personnel." Helena Independent Record, 21 November 1989, sec. A, p. 8.
- "Study: Nevada's Rangelands are Dying." Reno Gazette-Journal, 16 November 1989, sec. B, p.p. 1-2.
- Dinan, Captain. Budget Officer at the National Training Center, Fort Irwin, California. Interview, 16 January 1990.

BIBLIOGRAPHY (cont.)

Russell, Captain. Project Officer for the Montana Training Center. Helena, Montana. Interview, 24 January 1990.

Wing, Sergeant First Class. Pay Examinations Supervisor - United States Property and Fiscal Office. Fort Harrison, Montana. Interview, 24 January 1990.