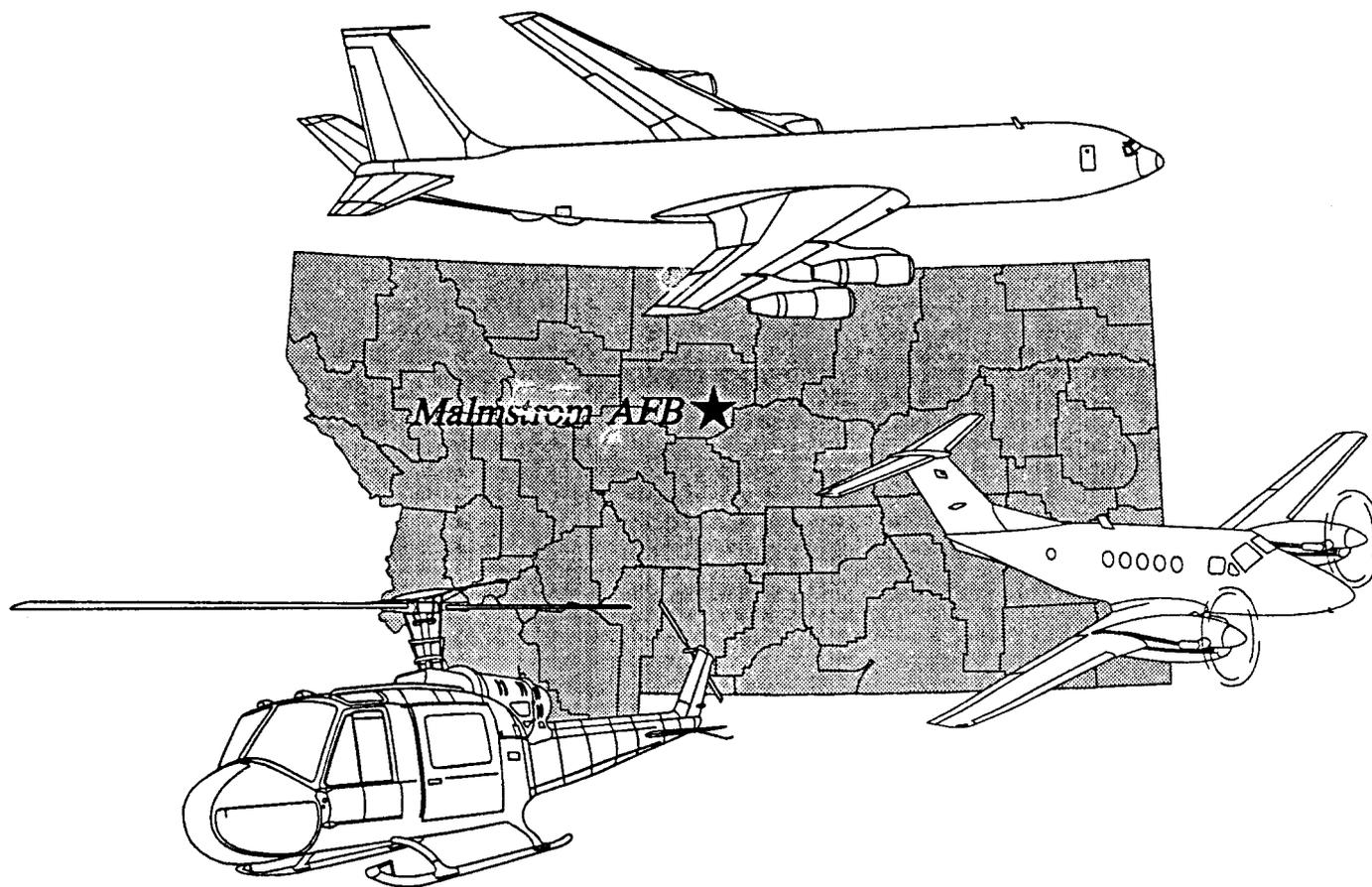


AICUZ STUDY

Volume I



UNITED STATES AIR FORCE
MALMSTROM AFB, MONTANA
1994



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 43D AIR REFUELING WING (AMC)

31 Mar 94

MEMORANDUM FOR GREAT FALLS AREA GOVERNMENTS

FROM: 43 ARW/CC
21 77th Street North, Suite 254
Malmstrom AFB, Montana 59402-7538

SUBJECT: Malmstrom Air Force Base Air Installation Compatible Use Zone (AICUZ) Study
- INFORMATION MEMORANDUM

1. This Air Installation Compatible Use Zone (AICUZ) Study for Malmstrom Air Force Base is an update of the original AICUZ study dated May 1978. The update was initiated because of changes in air operations and improvements in noise mapping software. It is a reevaluation of aircraft noise and accident potential related to Air Force flying operations and is designed to aid in the development of local planning mechanisms which will protect public safety and health, as well as preserve the operational capabilities of Malmstrom Air Force Base.
2. The report outlines the location of the runway clear zones, aircraft accident potential zones, and noise contours and recommends compatible land uses for areas in the vicinity of the base. We provide this information for your consideration as you develop your community plans, zoning ordinances, subdivision regulations, building codes, and other related documents.
3. The basic objective of the AICUZ program is to achieve compatible uses of public and private lands in the vicinity of military airfields by controlling incompatible development through local actions. This update provides noise contours based upon Day-Night Average A-Weighted Sound Level (DNL) metric used by the Air Force, and it provides the information necessary to maximize beneficial use of the land surrounding Malmstrom Air Force Base while minimizing the potential for degradation of the health and safety of the affected public.
4. We greatly value the positive relationship Malmstrom Air Force Base has experienced with its neighbors over the years. As a partner in the process, we have attempted to minimize noise disturbances through such actions as confining most flight operations and ground engine run-ups to the hours between 7:00 a.m. and 10:00 p.m. and avoiding flights over noise-sensitive locations.
5. We believe it would be mutually beneficial to all concerned to follow the recommended actions and guidelines presented in the AICUZ study.

Gary A. Voellger
GARY A. VOELLGER
Brigadier General, USAF
Commander

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SECTION 1 PURPOSE AND NEED

1.1 Introduction

This study is an update of the 1978 Malmstrom AFB Air Installation Compatible Use Zone (AICUZ) Study. The update presents and documents the changes to the AICUZ for the period of 1978 to 1993. It reaffirms Air Force policy of promoting public health, safety, and general welfare in areas surrounding Malmstrom AFB. The report presents changes in flight operations since the last study and provides current noise contours and compatible use guidelines for land areas surrounding the base. It is hoped this information will assist local communities and serve as a tool for future planning and zoning activities.

The changes in the AICUZ are attributed to:

- Changes in the types of based aircraft.
- Changes in the number of flying operations.
- Technical improvements to the NOISEMAP program.

1.2 Purpose and Need

As stated in the previous Malmstrom AFB AICUZ Study, the purpose of the AICUZ program is to promote compatible land development in areas subject to aircraft noise and accident potential. Community cooperation regarding recommendations made in the earlier AICUZ Study has been outstanding. As Cascade County and the city of Great Falls prepare and modify their land use development plans and zoning maps, recommendations from this updated AICUZ Study should be included in their planning process to prevent incompatibility that may compromise Malmstrom AFB's ability to fulfill its mission requirements. Accident potential and aircraft noise should be major considerations in their planning processes.

Air Force AICUZ land use guidelines reflect land use recommendations for clear zones, accident potential zones I and II, and four noise zones. These guidelines have been established on the basis of studies prepared and sponsored by several federal agencies, including the Department of Housing and Urban Development, Environmental Protection Agency, Air Force, and state and local agencies. The guidelines recommend land uses which are compatible with airfield operations while allowing maximum beneficial use of adjacent properties. The Air Force has no desire to recommend land use regulations which render property economically useless. It does, however, have an obligation to the inhabitants of the Malmstrom AFB environs and to the citizens of the United States to point out ways to protect the people in adjacent areas as well as the public investment in the installation itself.

The AICUZ program uses the latest technology to define noise levels in areas near Air Force installations. An analysis of flying operations was performed, including types of aircraft, flight

patterns utilized, variations in altitude and power settings, number of operations, and hours of operations. This information was used to develop the noise contours contained in this study. The DoD NOISEMAP methodology and the Day-Night Average A-Weighted Sound Level (DNL) metric were used to define the noise zones for Malmstrom AFB.

1.3 Process and Procedure

Preparation and presentation of this update to Malmstrom AFB's AICUZ Study is part of the continuing Air Force participation in the local planning process. It is recognized that, as local communities prepare land use plans and zoning ordinances, the Air Force has the responsibility to provide inputs on its activities relating to the community. This study is presented in the spirit of mutual cooperation and assistance by Malmstrom AFB to aid in the local land use planning process. This study updates information on base flying activities since 1978. The noise contours depicted on the AICUZ maps are based on current missions.

Data collection was conducted 10-13 August, 1993. Aircraft operational and maintenance data was obtained to derive average daily operations by runway and type of aircraft. This data is supplemented by flight track information (where they fly), flight profile information (how they fly), and ground runup information. After verification for accuracy, data was input into the NOISEMAP program and converted to Day-Night Average A-Weighted Sound Level (DNL) noise contours. Noise contours were plotted on an area map and overlaid with clear zones and accident potential zones. Volume II, Appendix A contains detailed information on the development of the AICUZ program.

SECTION 2 INSTALLATION DESCRIPTION

2.1 Mission

Malmstrom AFB, an Air Mobility Command installation, is home to two operational command wing missions, that of the 43rd Air Refueling Wing (ARW) and the 341st Missile Wing (MW), as well as several associate units. The 43 ARW, reporting to the 15th Air Force at Travis AFB, California, provides combat ready KC-135R aircraft and aircrews to support the nation's Single Integrated Operational Plan (SIOP) and world-wide contingencies that require aerial refueling. As host wing, the 43 ARW provides total base support. The 341 MW, an Air Force Space Command unit reporting to the 20th Air Force at F.E. Warren AFB, Wyoming, provides combat-ready crews and 200 Minuteman II and III intercontinental ballistic missiles (ICBMs) in accordance with emergency war orders in support of SIOP. The missile wing provides national nuclear threat deterrence through quick retaliatory ability. The flying organizations at Malmstrom AFB fly the KC-135R refueling aircraft, the C-12 training aircraft, and the UH-1N "Huey" helicopter.

2.1.1 91st and 97th Air Refueling Squadrons (AREFS)

In support of the 43 ARW, the 91 and 97 AREFS provide global aerial refueling support for bombers, airlift, fighters and air defense and special mission aircraft as directed by the Department of Defense. In addition, these squadrons conduct training missions throughout the continental United States to maintain operational effectiveness and to provide the capability of projecting its force worldwide in a minimum amount of time.

2.1.2 Companion Training Program (CTP)

The Companion Training Program is a cost effective method to provide Air Force copilots increased *flying and decision-making opportunities before becoming aircraft commanders*. Copilots assigned to the 43 ARW at Malmstrom AFB participate in this program using the C-12 aircraft. While participating in this program, copilots fly a variety of missions to develop their judgement, maturity, and decision-making skills.

2.1.3 Detachment 5, 341st Operations Group (OG)

The primary mission of Det. 5, 341 OG is aerial security for the 341 MW's 23,000 square mile ICBM complex, with overall surveillance of missile convoy movements throughout Montana. Det. 5, 341 OG provides airlift support for missile maintenance, security, and operation. Additionally, the detachment provides a search and rescue function for the local area. In its nineteen years of continuous service, the detachment has performed more than 270 rescues in adverse conditions and mountainous terrain.

2.2 Economic Impact

Malmstrom AFB occupies over 3,570 acres within the political boundaries of Cascade County, Montana, approximately two miles east of the city of Great Falls. The base's economic impact region (EIR) is the geographic area subject to significant base-generated economic impacts. It is assumed to cover a radius of fifty miles around the base and includes all or parts of Cascade, Judith Basin, Lewis and Clark, Teton, Pondera, and Chouteau Counties.

The available modes of transport for people, goods, and raw materials has aided development and commerce in Great Falls. Early development was directly affected by the navigational potential of the Missouri River. Today, however, the upper Missouri River is used more for other purposes such as power generation and recreation. The Great Falls area is serviced by several commercial airlines with daily arrivals and departures via the Great Falls International Airport. Road transportation to and from Great Falls is provided by Interstate 15, and U.S. Highways 87, 89, and 91. In addition, rail freight transport through the Great Falls area is provided by rail lines from the Burlington Northern, Inc.

In a predominantly rural area dominated by agricultural interests, Malmstrom AFB employs nearly seven percent of the county's population and is the largest single employer in the region. During 1992, the base employed a total of 4,251 active duty personnel, 1,962 of which rent or own housing off-base. In addition, 488 appropriated fund and 577 non-appropriated fund civilian personnel were employed by Malmstrom AFB during 1992. In sum, Malmstrom AFB personnel received over \$144 million in payroll, providing an indirect economic benefit, from the respending of payroll dollars in the local area, of approximately \$87 million. To maintain and ensure operational effectiveness during 1992 and beyond, Malmstrom AFB spent over \$19 million on construction and services and nearly \$27 million on materials, equipment and supplies. These expenditures resulted in a contribution to the local economy of approximately \$114 million. These figures are tabulated in Tables 2.1 and 2.2 on the following pages.

In an area which has experienced a loss in its population base and whose economy is largely dependent upon the fluctuations of an agricultural market, the presence of Malmstrom AFB provides economic stability to the city and the region. Implementation of appropriate land use controls in the areas affected by Malmstrom AFB's flying operations will help assure the viability of the installation in years to come.

Table 2.1 FISCAL YEAR 1992 PERSONNEL BY CLASSIFICATION AND HOUSING

CLASSIFICATION	LIVING ON-BASE	LIVING OFF-BASE	TOTAL
ACTIVE DUTY MILITARY	2,289	1,962	4,251
APPROPRIATED FUND CIVILIAN			488
NONAPPROPRIATED FUND CIVILIAN			
CIVILIAN NAF		165	165
CIVILIAN AAFES		105	105
CONTRACT		275	275
PRIVATE BUSINESS AND OTHER		32	32
TOTAL CIVILIAN			1,065
TOTAL PERSONNEL			5,316

Table 2.2 FISCAL YEAR 1992 EXPENDITURES

CLASSIFICATION	AMOUNT
PAYROLL EXPENDITURES	
ACTIVE DUTY MILITARY	\$124,646,136
APPROPRIATED FUND CIVILIAN	\$15,946,128
NONAPPROPRIATED FUND CIVILIAN	\$3,461,093
CONSTRUCTION AND SERVICE EXPENDITURES	
CONSTRUCTION	\$6,406,385
SERVICES	\$12,867,134
COMMISSARY/AAFES	\$274,690
HEALTH, EDUCATION & TDY	\$6,722,907
MATERIALS, EQUIPMENT, AND SUPPLIES EXPENDITURES	\$26,999,103
TOTAL EXPENDITURES	\$197,323,576
TOTAL LOCAL ECONOMIC IMPACT*	\$114,737,668

*Based on multipliers provided by the 43 ARW/PA.
SOURCE: 43 ARW/PA, 1993.

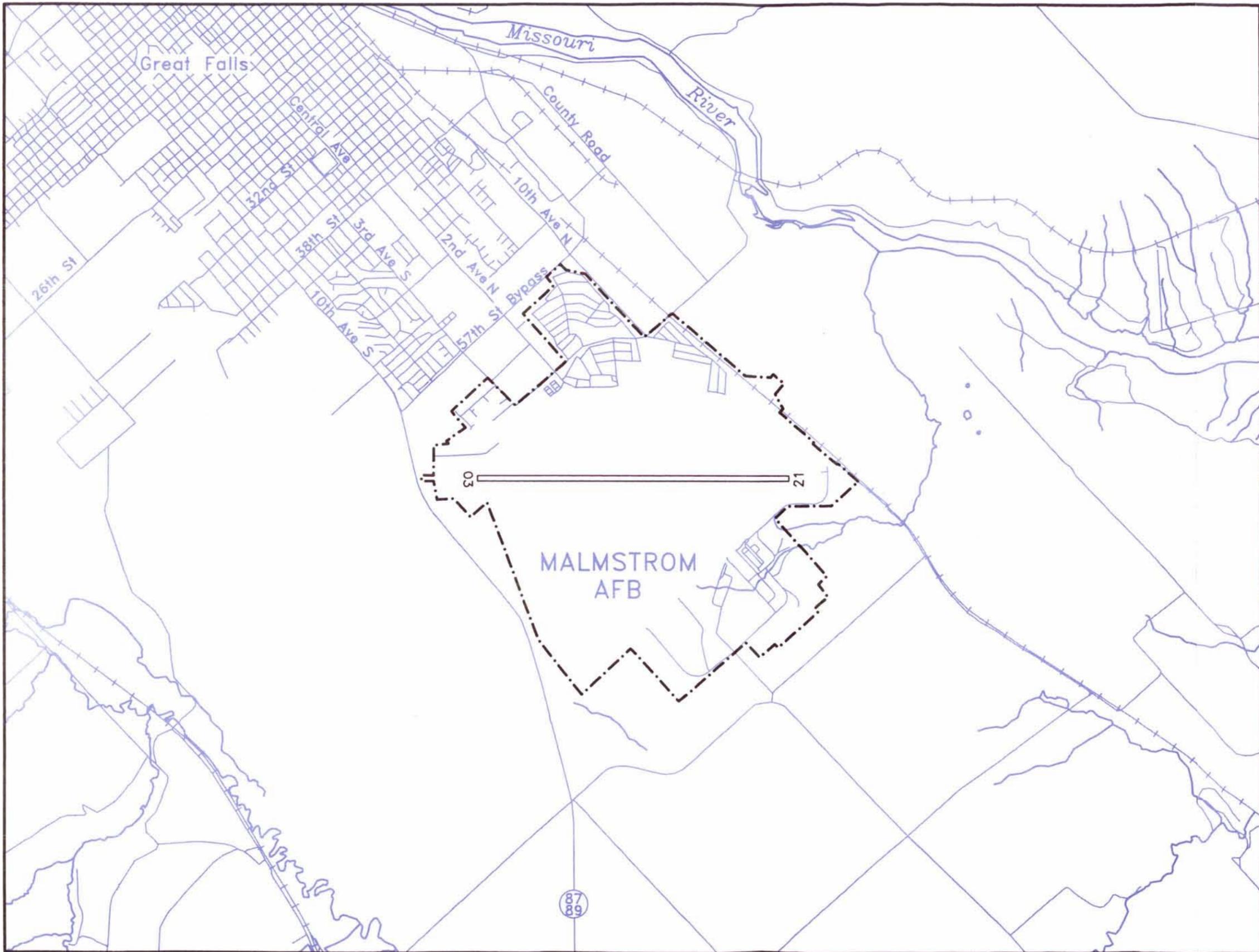


Figure 1

Malmstrom Air Force Base
Vicinity

Legend:

 Base Boundary

SOURCE:
(1) Bureau of the Census
TIGER/Line Data-1990

True North 

 Magnetic North
Var. 16.2°E
Apr 1994

SCALE IN THOUSANDS OF FEET



2.3 Flying Activity

To describe the relationship between aircraft operations and land use, it is necessary to fully evaluate the exact nature of flying activities. An inventory has been made of such things as the types of aircraft based at Malmstrom AFB, where those aircraft fly, how high they fly, how many times they fly over a given area, and at what time of day they operate.

The principal aircraft operating from Malmstrom AFB and the average number of daily operations for each aircraft are shown below. An operation is defined as one departure, one approach, or half a closed pattern. A closed pattern consists of both a departure portion and an approach portion-- i.e. two operations.

<u>TYPE OF AIRCRAFT</u>	<u>AVERAGE DAILY OPERATIONS</u>
KC-135R	50
C-12	20
UH-1N	56

In addition to these assigned aircraft, numerous transient aircraft from other military installations land and take-off from Malmstrom AFB. Noise impacts from these transient aircraft have been included in this study.

Malmstrom AFB aircraft use the following basic flight patterns:

- Straight out/in departure/approach.
- Overhead landing pattern.
- Instrument flight rules (IFR) or radar closed pattern.
- Visual flight rules (VFR) or closed pattern.
- Re-entry VFR pattern.

Malmstrom AFB flight patterns (Figure 2) result from several considerations, including:

- Takeoff patterns routed to avoid heavily populated areas as much as possible.
- Air Force criteria governing the speed, rate of climb, and turning radius for each type of aircraft.
- Efforts to control and schedule missions to keep noise levels low, especially at night.
- Coordination with the Federal Aviation Administration (FAA) to minimize conflicts with civilian aircraft operations, especially those related to Great Falls International Airport.

To the maximum extent possible, engine runup locations have been established in areas that minimize noise for people on-base, as well as for those in the surrounding areas. Normal base

operations do not include late night engine runups, but heavy work loads or unforeseen contingencies sometimes require a limited number of nighttime engine runups.

Airfield environs planning is concerned with three primary aircraft operational/land use determinants: (1) accident potential to land users, (2) aircraft noise, and (3) hazards to operations from land uses (height obstructions, etc.). Each of these concerns is addressed in conjunction with mission requirements and safe aircraft operation to determine the optimum flight track for each aircraft type. The flight tracks depicted in Figure 2 are the result of such planning.

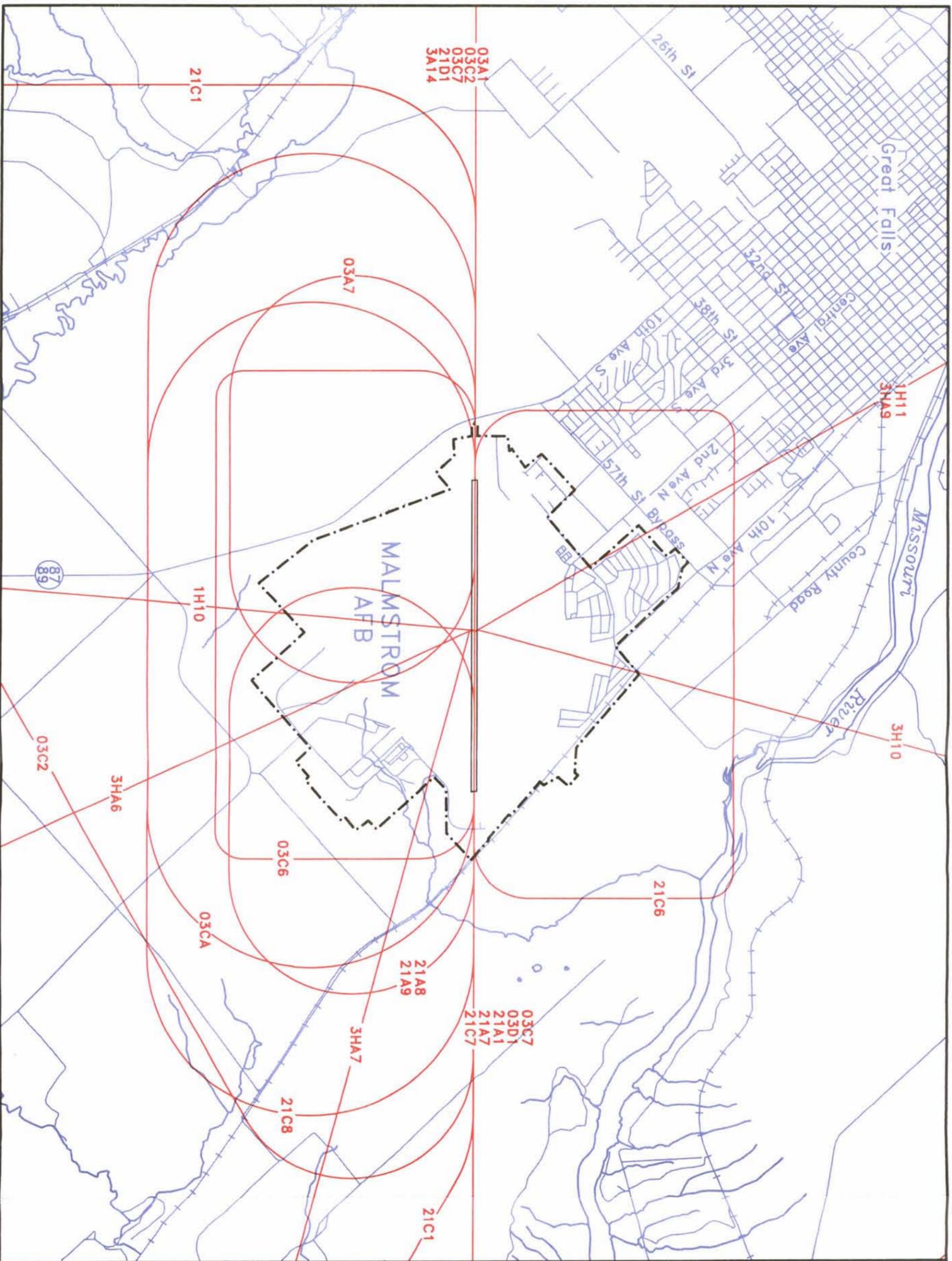


Figure 2

Malmstrom Air Force Base
Flight Tracks

- SOURCES:
- (1) Bureau of the Census
TIGER/Line Data-1990
 - (2) NOISEMAP Version 6.1

True North 

Magnetic North
Var. 16.2°E
Apr 1994 

SCALE IN THOUSANDS OF FEET



SECTION 3 LAND USE COMPATIBILITY GUIDELINES

3.1 Introduction

The Department of Defense (DoD) developed the Air Installation Compatible Use Zone (AICUZ) program for military airfields. Using this program, DoD works to protect aircraft operational capabilities at its installations and to assist local government officials in protecting and promoting the public health, safety, and quality of life. The goal is to promote compatible land use development around military airfields by providing information on aircraft noise exposure and accident potential.

AICUZ reports describe three basic types of constraints that affect, or result from, flight operations. The first constraint involves areas which the Federal Aviation Administration (FAA) and DoD have identified for height limitations (see Height and Obstruction Criteria in Volume II, Appendix D). Air Force obstruction criteria are based upon those contained in Federal Aviation Regulation Part 77 under Subpart C.

The second constraint involves noise zones produced by the computerized Day-Night Average A-Weighted Sound Level (DNL) metric and the DoD NOISEMAP methodology. Using the NOISEMAP noise modeling program, which is similar to FAA's Integrated Noise Model, DoD produces noise contours showing the noise levels generated by current aircraft operations. The AICUZ report contains noise contours plotted in increments of 5 dB, ranging from DNL 65 dB to DNL ≥ 80 dB (Figure 3). Additional information on noise methodology is contained in Volume II, Appendix C of this report.

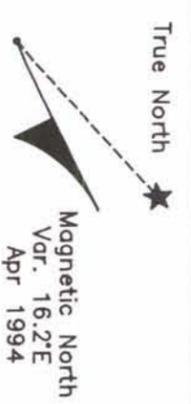
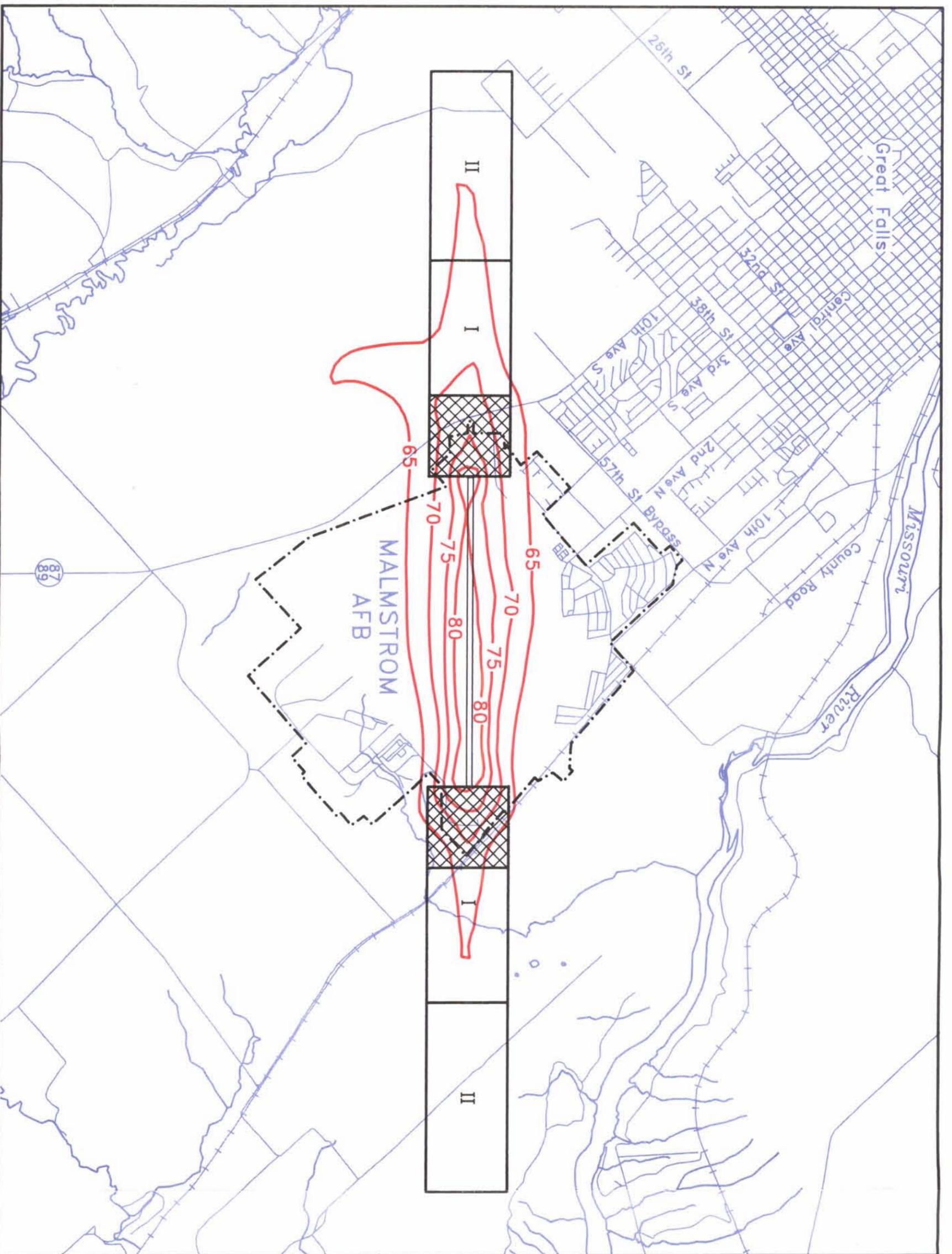
The third constraint involves accident potential zones based on statistical analysis of past DoD aircraft accidents. DoD analysis has determined that the areas immediately beyond the ends of runways and along the approach and departure flight paths have significant potential for aircraft accidents. Based on this analysis, DoD developed three zones that have high relative potential for accidents. The clear zone, the area closest to the runway end, is the most hazardous. The overall risk is so high that DoD generally acquires the land through purchase or easement to prevent development. Accident potential zone I (APZ I) is an area beyond the clear zone that possesses a significant potential for accidents. Accident potential zone II (APZ II) is an area beyond APZ I having measurable potential for accidents. While aircraft accident potential in APZs I and II does not warrant acquisition by the Air Force, land use planning and controls are strongly encouraged in these areas for the protection of the public. A sample population density standard for use in APZs is provided in Volume II, Appendix F. The clear zones at Malmstrom AFB are 3,000 feet wide by 3,000 feet long. APZ I is 3,000 feet wide by 5,000 feet long, and APZ II is 3,000 feet wide by 7,000 feet long (Figure 3). Additional information on accident potential is contained in Volume II, Appendix B of this report.

Figure 3

Malmstrom Air Force Base
Noise Zones and
Accident Potential Zones

- Legend:
-  Clear Zone
 -  Accident Potential Zone I
 -  Accident Potential Zone II

- SOURCES:
- (1) Bureau of the Census
TIGER/Line Data—1990
 - (2) NOISEMAP Version 6.1



3.2 Land Use Compatibility

Each AICUZ report contains land use guidelines. Figure 4 lists land uses versus all possible combinations of noise exposure and accident potential at Malmstrom AFB, showing land uses that are compatible or incompatible. Noise guidelines are essentially the same as those published by the Federal Interagency Committee on Urban Noise in the June 1980 publication, *Guidelines for Considering Noise in Land Use Planning and Control*. The U.S. Department of Transportation publication, *Standard Land Use Coding Manual (SLUCM)*, has been used for identifying and coding land use activities.

3.3 Participation In The Planning Process

As local communities prepare their land use plans, the Air Force must be ready to provide additional inputs. The Base Civil Engineer is the official liaison with the local community on all planning matters. This office is prepared to participate in the continuing discussion of zoning and other land use matters as they may affect, or may be affected by, Malmstrom AFB.

Figure 4
LAND USE COMPATIBILITY

SLUCM NO.	LAND USE NAME	ACCIDENT POTENTIAL ZONES			NOISE ZONES			
		CLEAR ZONE	APZ I	APZ II	65-70	70-75	75-80	80+
10	Residential							
11	Household units							
11.11	Single units; detached	N	N	Y ¹	A ¹¹	B ¹¹	N	N
11.12	Single units; semidetached	N	N	N	A ¹¹	B ¹¹	N	N
11.13	Single units; attached row	N	N	N	A ¹¹	B ¹¹	N	N
11.21	Two units; side-by side	N	N	N	A ¹¹	B ¹¹	N	N
11.22	Two units; one above the other	N	N	N	A ¹¹	B ¹¹	N	N
11.31	Apartments; walk up	N	N	N	A ¹¹	B ¹¹	N	N
11.32	Apartments; elevator	N	N	N	A ¹¹	B ¹¹	N	N
12	Group quarters	N	N	N	A ¹¹	B ¹¹	N	N
13	Residential hotels	N	N	N	A ¹¹	B ¹¹	N	N
14	Mobile home parks or courts	N	N	N	N	N	N	N
15	Transient lodgings	N	N	N	A ¹¹	B ¹¹	C ¹¹	N
16	Other residential	N	N	N ¹	A ¹¹	B ¹¹	N	N
20	Manufacturing							
21	Food & kindred products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
22	Textile mill products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
23	Apparel and other finished products made from fabrics, leather, and similar materials; manufacturing	N	N	N ²	Y	Y ¹²	Y ¹³	Y ¹⁴
24	Lumber and wood products (except furniture); manufacturing	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴

Malmstrom AFB, MT

SLUCM NO.	LAND USE NAME	ACCIDENT POTENTIAL ZONES			NOISE ZONES			
		CLEAR ZONE	APZ I	APZ II	65-70	70-75	75-80	80+
25	Furniture and fixtures; manufacturing	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
26	Paper & allied products; manufacturing	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
27	Printing, publishing, and allied industries	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
28	Chemicals and allied products; manufacturing	N	N	N ²	Y	Y ¹²	Y ¹³	Y ¹⁴
29	Petroleum refining and related industries	N	N	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
30	Manufacturing							
31	Rubber and misc. plastic products, manufacturing	N	N ²	N ²	Y	Y ¹²	Y ¹³	Y ¹⁴
32	Stone, clay and glass products manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
33	Primary metal industries	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
34	Fabricated metal products; manufacturing	N	N ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
35	Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks manufacturing	N	N	N ²	Y	A	B	N
39	Miscellaneous manufacturing	N	Y ²	Y ²	Y	Y ¹²	Y ¹³	Y ¹⁴
40	Transportation, communications and utilities							
41	Railroad, rapid rail transit and street railroad transportation	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
42	Motor vehicle transportation	N ³	Y	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
43	Aircraft transportation	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
44	Marine craft transportation	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴

Malmstrom AFB, MT

SLUCM NO.	LAND USE NAME	ACCIDENT POTENTIAL ZONES			NOISE ZONES			
		CLEAR ZONE	APZ I	APZ II	65-70	70-75	75-80	80+
45	Highway & street right-of-way	N ³	Y	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
46	Automobile parking	N ³	Y ⁴	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
47	Communications	N ³	Y ⁴	Y	Y	A ¹⁵	B ¹⁵	N
48	Utilities	N ³	Y ⁴	Y	Y	Y	Y ¹²	Y ¹³
49	Other transportation communications and utilities	N ³	Y ⁴	Y	Y	A ¹⁵	B ¹⁵	N
50	Trade							
51	Wholesale trade	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
52	Retail trade-building materials, hardware and farm equipment	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
53	Retail trade-general merchandise	N	N ²	Y ²	Y	A	B	N
54	Retail trade-food	N	N ²	Y ²	Y	A	B	N
55	Retail trade-automotive, marine craft, aircraft and accessories	N	Y ²	Y ²	Y	A	B	N
56	Retail trade-apparel and accessories	N	N ²	Y ²	Y	A	B	N
57	Retail trade-furniture, home furnishings and equipment	N	N ²	Y ²	Y	A	B	N
58	Retail trade-eating and drinking establishments	N	N	N ²	Y	A	B	N
59	Other retail trade	N	N ²	Y ²	Y	A	B	N
60	Services							
61	Finance, insurance and real estate services	N	N	Y ⁶	Y	A	B	N
62	Personal services	N	N	Y ⁶	Y	A	B	N
62.4	Cemeteries	N	Y ⁷	Y ⁷	Y	Y ¹²	Y ¹³	Y ^{14,21}
63	Business services	N	Y ⁸	Y ⁸	Y	A	B	N
64	Repair services	N	Y ²	Y	Y	Y ¹²	Y ¹³	Y ¹⁴
65	Professional services	N	N	Y ⁶	Y	A	B	N

Malmstrom AFB, MT

LAND USE		ACCIDENT POTENTIAL ZONES			NOISE ZONES			
SLUCM NO.	NAME	CLEAR ZONE	APZ I	APZ II	65-70	70-75	75-80	80+
65.1	Hospitals, nursing homes	N	N	N	A*	B*	N	N
65.1	Other medical facilities	N	N	N	Y	A	B	N
66	Contract construction services	N	Y ⁶	Y	Y	A	B	N
67	Governmental services	N	N	Y ⁶	Y*	A*	B*	N
68	Educational services	N	N	N	A*	B*	N	N
69	Miscellaneous services	N	N ²	Y ²	Y	A	B	N
70	Cultural, entertainment and recreational							
71	Cultural activities (including churches)	N	N	N ²	A*	B*	N	N
71.2	Nature exhibits	N	Y ²	Y	Y*	N	N	N
72	Public assembly	N	N	N	Y	N	N	N
72.1	Auditoriums, concert halls	N	N	N	A	B	N	N
72.11	Outdoor music shell, amphitheaters	N	N	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	N	N	N	Y ¹⁷	Y ¹⁷	N	N
73	Amusements	N	N	Y ⁸	Y	Y	N	N
74	Recreational activities (including golf courses, riding stables, water recreation)	N	Y ^{8,9,10}	Y	Y*	A*	B*	N
75	Resorts and group camps	N	N	N	Y*	Y*	N	N
76	Parks	N	Y ⁸	Y ⁸	Y*	Y*	N	N
79	Other cultural, entertainment and recreation	N	Y ⁹	Y ⁹	Y*	Y*	N	N
80	Resources production and extraction							
81	Agriculture (except livestock)	Y ¹⁶	Y	Y	Y ¹⁸	Y ¹⁹	Y ²⁰	Y ^{20,21}
81.5 to 81.7	Livestock farming and animal breeding	N	Y	Y	Y ¹⁸	Y ¹⁹	Y ²⁰	Y ^{20,21}

Malmstrom AFB, MT

SLUCM NO.	LAND USE NAME	ACCIDENT POTENTIAL ZONES			NOISE ZONES			
		CLEAR ZONE	APZ I	APZ II	65-70	70-75	75-80	80+
82	Agricultural related activities	N	Y ⁵	Y	Y ¹⁸	Y ¹⁹	N	N
83	Forestry activities and related services	N ⁵	Y	Y	Y ¹⁸	Y ¹⁹	Y ²⁰	Y ^{20,21}
84	Fishing activities and related services	N ⁵	Y ⁵	Y	Y	Y	Y	Y
85	Mining activities and related services	N	Y ⁵	Y	Y	Y	Y	Y
89	Other resources production and extraction	N	Y ⁵	Y	Y	Y	Y	Y

LEGEND

SLUCM - Standard Land Use Coding Manual, U.S. Department of Transportation.

Y - (Yes) - Land use and related structures are compatible without restriction.

N - (No) - Land use and related structures are not compatible and should be prohibited.

Y^x - (yes with restrictions) - Land use and related structures generally compatible; see notes 1-21.

N^x - (no with exceptions) - See notes 1-21.

NLR - (Noise Level Reduction) - NLR (outdoor to indoor) to be achieved through incorporation of noise attenuation measures into the design and construction of the structures. See Appendix E, Vol II.

A, B, or C - Land use and related structures generally compatible; measures to achieve NLR for A (DNL 66-70), B (DNL 71-75), or C (DNL 76-80) need to be incorporated into the design and construction of structures. See Appendix E, Vol II.

A*, B*, and C* - Land use generally compatible with NLR. However, measures to achieve an overall noise level reduction do not necessarily solve noise difficulties and additional evaluation is warranted. See appropriate footnotes.

* - The designation of these uses as "compatible" in this zone reflects individual federal agency and program consideration of general cost and feasibility factors, as well as past community experiences and program objectives. Localities, when evaluating the application of these guidelines to specific situations, may have different concerns or goals to consider.

NOTES

1. Suggested maximum density of 1-2 dwelling units per acre, possibly increased under a Planned Unit Development (PUD) where maximum lot coverage is less than 20 percent.
2. Within each land use category, uses exist where further definition may be needed due to the variation of densities in people and structures (See Vol 2, Appendix F).
3. The placing of structures, buildings, or above-ground utility lines in the clear zone is subject to severe restrictions. In a majority of the clear zones, these items are prohibited. See AFR 19-9 and AFR 86-14 for specific guidance.
4. No passenger terminals and no major above-ground transmission lines in APZ I.
5. Factors to be considered: labor intensity, structural coverage, explosive characteristics, and air pollution.
6. Low-intensity office uses only. Meeting places, auditoriums, etc., are not recommended.
7. Excludes chapels.
8. Facilities must be low intensity.
9. Clubhouse not recommended.
10. Areas for gatherings of people are not recommended.
11.
 - a. Although local conditions may require residential use, it is discouraged in DNL 66-70 dB and strongly discouraged in DNL 71-75 dB. An evaluation should be conducted prior to approvals, indicating that a demonstrated community need for residential use would not be met if development were prohibited in these zones, and that there are no viable alternative locations.
 - b. Where the community determines the residential uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) for DNL 66-70 dB and DNL 71-75 dB should be incorporated into building codes and considered in individual approvals. See Appendix E for a reference to updated NLR procedures.
 - c. NLR criteria will not eliminate outdoor noise problems. However, building location and site planning, and design and use of berms and barriers can help mitigate outdoor exposure, particularly from near ground level sources. Measures that reduce outdoor noise should be used whenever practical in preference to measures which only protect interior spaces.
12. Measures to achieve the same NLR as required for facilities in the DNL 66-70 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
13. Measures to achieve the same NLR as required for facilities in the DNL 71-75 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
14. Measures to achieve the same NLR as required for facilities in the DNL 76-80 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
15. If noise sensitive, use indicated NLR; if not, the use is compatible.
16. No buildings.
17. Land use is compatible provided special sound reinforcement systems are installed.
18. Residential buildings require the same NLR required for facilities in the DNL 66-70 dB range.
19. Residential buildings require the same NLR required for facilities in the DNL 71-75 dB range.
20. Residential buildings are not permitted.
21. Land use is not recommended. If the community decides the use is necessary, hearing protection devices should be worn by personnel.

SECTION 4 LAND USE ANALYSIS

4.1 Introduction

Land use planning and control is a dynamic process. The specific characteristics of land use determinants will always reflect, to some degree, the changing conditions of the economic, social, and physical environment of a community, as well as changing public concerns. The planning process accommodates this fluidity in that decisions are normally not based on boundary lines, but rather on more generalized area designations.

Malmstrom AFB was built in a relatively undeveloped area to the east of Great Falls. Currently, the base is bordered on three sides by agricultural land uses, with mixed commercial, residential, and open land uses to the west. Commercial development along 10th Avenue South has increased, and new residential development is occurring southwest of the base. While incompatible land uses have not impacted the base's flying mission, should incompatible development occur within the accident potential and noise zones, the base's flying mission could be affected.

Computer technology has enabled Malmstrom AFB to more precisely display its flight tracks and noise contours for land use planning purposes. This same technology has revealed that the base's region of influence extends generally northeast and southwest of the base, along and beyond the runway centerline.

For the purposes of this study, land use and zoning classifications are as follows:

- Residential. Includes all types of residential activity, such as single and multi-family residences, and mobile homes, at unit densities of one per acre and greater.
- Commercial. Offices, retail establishments, restaurants, etc..
- Industrial. Manufacturing, warehouses, power production, and other similar uses.
- Public/Quasi-Public. Publicly owned lands and lands open to public access; including military reservations, public buildings, schools, churches, cemeteries, and hospitals.
- Recreational. Land designated for recreational activity, including parks, golf courses, and state and national parks.
- Open/Agricultural/Low Density. Undeveloped lands, agricultural areas, grazing lands, and low density residential activity of less than one dwelling unit per acre.

4.2 Existing Land Use

The city of Great Falls is located west of Malmstrom AFB along the shores of the Missouri River, near its confluence with the Sun River. Great Falls, platted in 1883 and incorporated in 1888, has played an important role in the settlement of the region, serving as the county seat and as the civic and commerce center of the area. It contains a grid-like road system, with north/south streets and east/west avenues. Great Falls is one of the largest cities in Montana, containing approximately 55,000 of Cascade County's 77,000 residents. As such, the city and adjacent unincorporated lands contain significant amounts of residential, commercial, industrial, and recreational development that provide housing, employment, services, and recreational opportunities. Development density within the city is quite concentrated, diminishing to the east as it approaches Malmstrom AFB. The bulk of development near Malmstrom AFB occurs on the western side, within and adjacent to Great Falls, with the remainder being mostly open farm and range lands.

The 10th Avenue South corridor, on the south side of Great Falls, is one of the most significant areas of commercial development in Great Falls and supports a diverse array of commercial uses. Commercial development is primarily restricted to the immediate road front, with extensive amounts of residential development dominating to the north, and residential development followed by open land to the south. Less than a quarter of a mile south of 10th Avenue South, at the 50th Street block, a Kampgrounds of America (KOA) campground is sited overlooking Gibson Flats. This campground is west of the Malmstrom AFB DNL 65 dB noise zone and west of the southern APZ I.

Directly west and northwest of the base, land is used for mixed purposes including industrial, commercial, residential, agricultural, and public use. Between 10th Avenues North and South, and east of 15th Street, the primary land use is single-family residential, although there are also several apartment complexes, schools, neighborhood parks, and, toward the east, vacant land parcels. Mixed land uses are present along 2nd Avenue North, the primary access route to Malmstrom AFB. These uses include large and small retail outlets, small restaurants, single-family residences, and open areas, all being low intensity uses. The intersection of 57th Street Bypass and 2nd Avenue North contains commercial uses on three corners, with the southwest corner remaining vacant. Loy School, a public land use, is on the east side of 57th Street Bypass and adjacent to Malmstrom AFB housing. North of 10th Avenue North, and northwest of Malmstrom AFB, land areas are primarily open with a few industrial uses. Further north, along the Missouri River, recreational uses are associated with Great Springs Heritage Park and Fish Hatchery. These areas are not impacted by Malmstrom AFB noise and accident potential zones.

Areas north, east, and south of Malmstrom AFB are currently being used for growing grain, predominantly wheat. Due to the lack of development demand and economic benefits of maintaining the land in agricultural production, this use is expected to continue.

Malmstrom AFB AICUZ noise zones do not extend over the Great Falls corporate boundaries and impact no developed land areas. AICUZ noise zones from Malmstrom AFB's flying operations impact approximately 800 acres of private agricultural land used for grain production.

The only development within Malmstrom AFB accident potential zones exists within the southeast corner of the southern APZ II. Large lots of the Eaton Addition, in Gibson Flats, contain uninhabited structures impacted by aircraft overflight. The majority of these lots are undeveloped and used for grazing and farming purposes, with one area being used for light industrial uses. Intensive development of this area is unlikely due to natural development constraints. The Eaton Addition is within a floodplain that restricts utility service and its development potential. Current land uses are portrayed in Figure 5.

4.3 Current Zoning

The city of Great Falls has adopted conventional zoning ordinances designating land uses within the city limits and beyond for a distance of four and a half miles. The Great Falls City-County Planning Board retains zoning jurisdiction within this area. Much of the Malmstrom AFB region of influence extends over undeveloped, agricultural land areas of unzoned Cascade County.

Zoning within the Great Falls area follows the same pattern as the existing land uses. Areas designated for commercial uses occur along 10th Avenue South, 2nd Avenue North, and 57th Street Bypass. North and east of Malmstrom AFB, between the railroad tracks and the riverfront recreational area, land is zoned for industrial purposes. Remaining land areas within Great Falls are predominantly designated for residential purposes. Land along the river to the north of the base, and in an area west and south of the base containing the Mount Olivet Cemetary, are zoned for suburban uses, allowing low intensity, open air uses.

Two small areas beyond the southeast corner of Great Falls' corporate limits, and either adjacent to the west of Malmstrom AFB or within the southern APZ I, are impacted by the DNL 65 dB noise zone. Although these areas are currently undeveloped, zoning allows commercial uses north of 10th Avenue South and residential uses south of 10th Avenue South.

Land areas beyond the jurisdiction of the Great Falls City-County Planning Board, where the majority of the Malmstrom AFB impact exists, are unzoned. Great Falls zoning ordinances do not address height restrictions within runway approach and departure zones and no building codes exist which address noise level reduction in building construction. However, insulation from the winters in this part of Montana significantly reduce interior noise levels from outdoor sources. Zoning in the Malmstrom AFB/Great Falls vicinity are depicted in Figure 6.

4.4 Future Land Use

Most of the land area within Great Falls has been built up, with no change in land use expected. However, 57th Street Bypass and the eastern end of 2nd Avenue North contain significant amounts of vacant land. Vacant land north and south of 2nd Avenue North, and fronting 57th Street Bypass

to the east, is expected to be developed for commercial uses, with a small area to remain in agricultural use. Vacant properties south of 10th Avenue North are expected to remain in agricultural use, while industrial uses to the north are expected to expand.

Croplands north, east, and south of Malmstrom AFB are expected to remain in agricultural production for the foreseeable future. Great Falls has experienced a population decline in the past few years, as has the state of Montana, and it is unlikely that development demands will warrant the conversion of prime cropland to other uses. However, should conditions change, land use controls in these areas would ensure development compatible with Malmstrom AFB operations. A generalized future land use map, as depicted in the *Year 2000 Great Falls Land Use Plan* of 1981, is provided by Figure 7.

4.5 Incompatible Land Uses

Incompatible land uses within AICUZ environs are generally characterized in two ways: land uses within accident potential zones which exceed development or population density guidelines, and/or; land uses which expose large numbers of people to high levels of sound.

4.5.1 Clear Zones and Accident Potential Zones

Malmstrom AFB clear zones and accident potential zones extend over open lands used for agricultural purposes. Control of clear zone areas which extend off-base has been accomplished by Malmstrom AFB through perpetual easements that restrict incompatible land uses. Beyond the clear zones, Malmstrom AFB accident potential zones contain agricultural land. This use, provided it does not attract large amounts of birds or release vision obscuring dust hazardous to air operations, is compatible with Malmstrom AFB operations. The southern APZ II contains un-inhabited farming and ranching structures compatible with Malmstrom AFB flying operations.

4.5.2 Noise Zones

No developed off-base areas in the Malmstrom AFB environs are impacted by noise greater than DNL 65 dB. As such, there are currently no areas containing incompatible land uses.

4.6 Planning Considerations

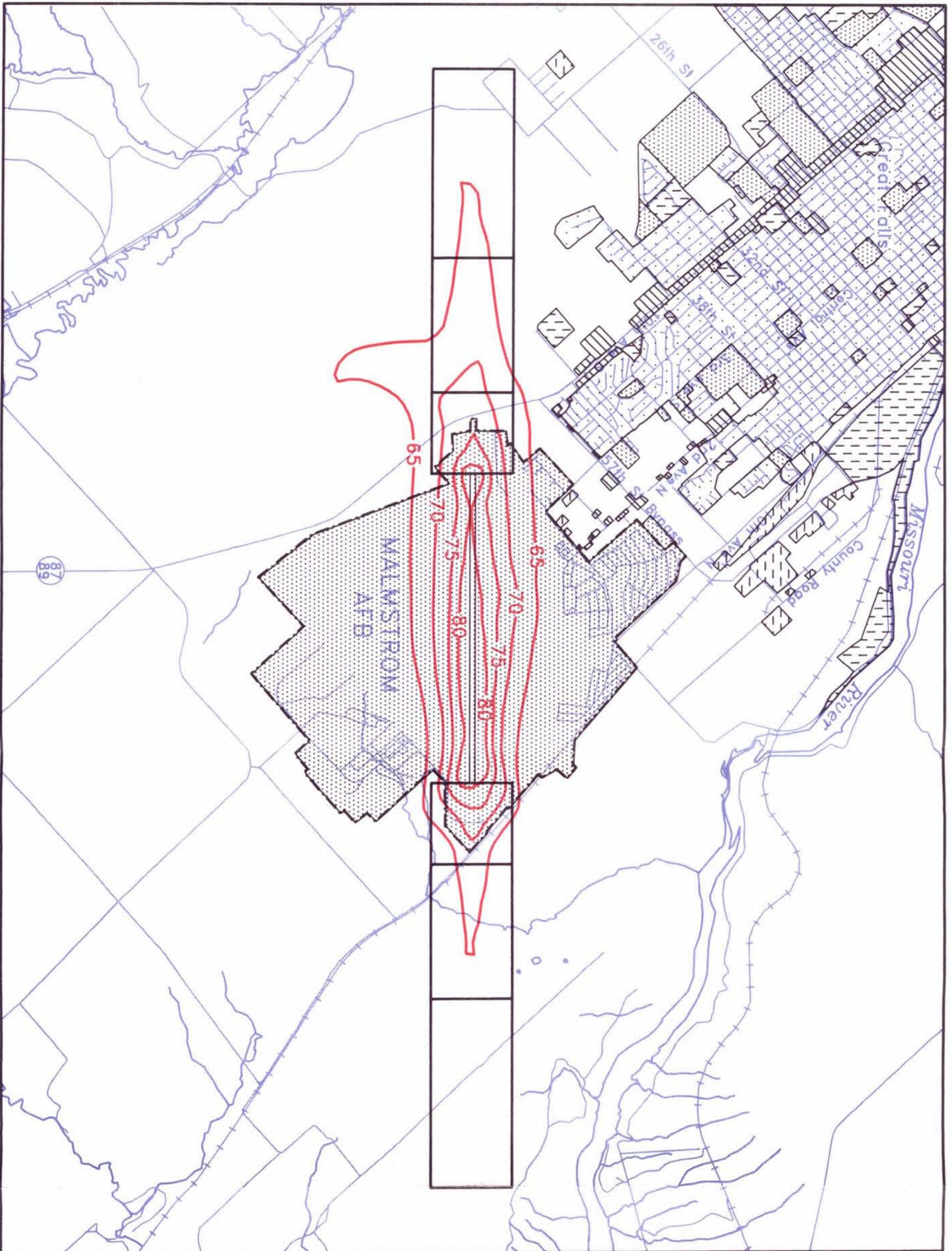
AICUZ noise contours describe the noise characteristics of a specific operational environment and, as such, will change if a significant operational change is made. If the local communities that make up the Malmstrom AFB environs attempt to use AICUZ noise contours as boundary lines for zoning districts, it is conceivable that problems would result. Should a new mission be established at Malmstrom AFB, adding a larger number of airplanes or additional model types, the AICUZ could be amended.

Additionally, the Air Force recommends that AICUZ data be utilized with all other planning data. Therefore, specific land use control decisions should not be based solely on AICUZ boundaries.

Malmstrom AFB, MT

With these thoughts in mind, Malmstrom AFB has revised the 1978 AICUZ Study and has provided flight track, accident potential zone, and noise contour information in this report that reflect the most current and accurate representation of aircraft activities.

Figure 5



Malmstrom Air Force Base
Generalized
Existing Land Use

- Legend:
- Residential
 - Commercial
 - Industrial
 - Public/Quasi—Public
 - Recreational
 - Open/Agricultural/
Low Density

- SOURCES:
- (1) Bureau of the Census
TIGER/Line Data—1990
 - (2) NOISEMAP Version 6.1
 - (3) Great Falls, MT Existing Land
Use Map—1980, USGS 7.5'
Topographic Charts—1975
Great Falls, MT & Vicinity
Street Map—1991
 - (4) Field Survey Spectrum
Sciences & Software—1993

True North

Magnetic North
Var. 16.2°E
Apr. 1994

SCALE IN THOUSANDS OF FEET

0 3 6 9

Figure 7

Malmstrom Air Force Base
Generalized
Future Land Use

Legend:

-  Residential
-  Commercial
-  Industrial
-  Public/Quasi—Public
-  Recreational
-  Open/Agricultural/
Low Density

SOURCES:

- (1) Bureau of the Census
TIGER/Line Data—1990
- (2) NOISEMAP Version 6.1
- (3) Year 2000 Land Use
Projections—1981

True North 

 Magnetic North
Var. 16.2°E
Apr 1994

SCALE IN THOUSANDS OF FEET

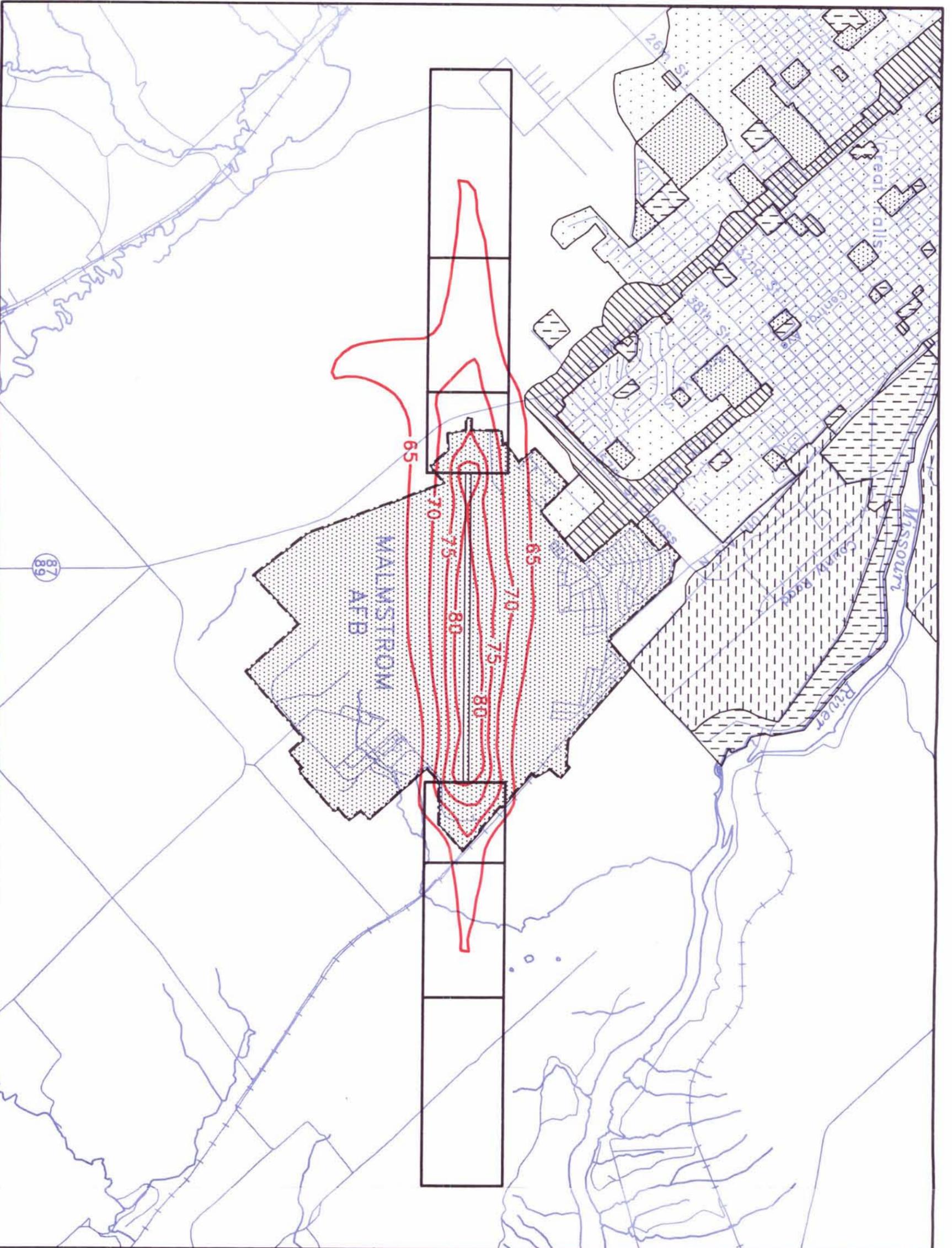


Figure 6

Malmstrom Air Force Base
Generalized
Zoning

Legend:

-  Residential
-  Commercial
-  Industrial
-  Recreational
-  Open/Agricultural/
Low Density

SOURCES:

- (1) Bureau of the Census
TIGER/Line Data-1990
- (2) NOISEMAP Version 6.1
- (3) Zoning Maps:
City Of Great Falls, MT-1985
Revised-1993
Cascade County, MT-1981

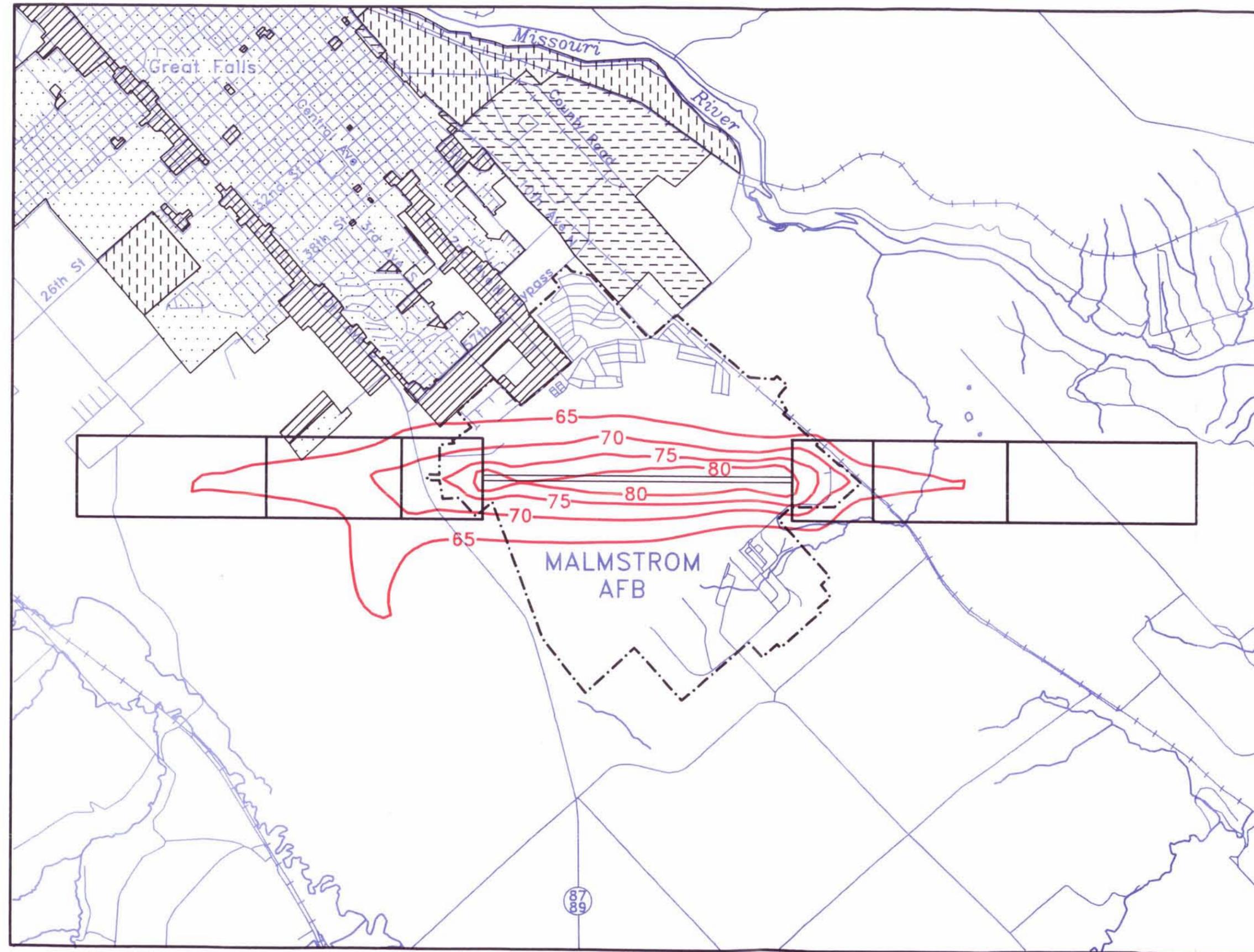
True North 

Magnetic North
Var. 16.2°E
Apr 1994

SCALE IN THOUSANDS OF FEET



Spectrum Sciences & Software, Inc.



SECTION 5 IMPLEMENTATION

Implementation of the AICUZ Study must be a joint effort between the Air Force and adjacent communities. The Air Force's role is to minimize the impact on the civilian community by Malmstrom AFB operations. The role of the civilian community is to ensure that development in its environs is compatible with accepted planning and development principles and practices.

5.1 Air Force Responsibilities

In general, the Air Force perceives its AICUZ responsibilities as encompassing the areas of flying safety, noise abatement, and participation in the land use planning process.

Well maintained aircraft and well trained aircrews do much to assure that aircraft accidents are avoided. Despite the best training of aircrews and maintenance of aircraft, however, history makes it clear that accidents do occur. It is imperative that flights be routed over sparsely populated areas as much as possible to reduce the exposure of lives and property to a potential accident.

By Air Force regulation, commanders are required to periodically review existing traffic patterns, instrument approaches, weather minima, and operating practices, and evaluate these factors in relationship to populated areas and other local situations. This requirement is a direct result and expression of Air Force policy that all AICUZ plans must include an analysis of flying and flying related activities designed to reduce and control the effects of such operations on surrounding land areas. Noise is generated from aircraft both in the air and on the ground. At Malmstrom AFB, noise mitigation practices implemented include routing flight tracks to avoid heavily populated areas, adjusting power settings and climb rates to minimize noise, and restricting night ground engine maintenance and flight operations to a minimum.

The preparation and presentation of the 1994 Malmstrom AFB AICUZ update is one phase of the continuing Air Force participation in the local planning process. It is recognized that as the local community updates its land use plans, the Air Force must be ready to provide additional inputs.

It is also recognized that the AICUZ program will be an ongoing activity even after compatible development plans are adopted and implemented. Base personnel are prepared to participate in the continuing discussion of zoning and other land use matters as they may affect, or may be affected by, Malmstrom AFB. Base personnel will also be available to provide information, criteria, and guidelines to state, regional, and local planning bodies, civic associations, and similar groups.

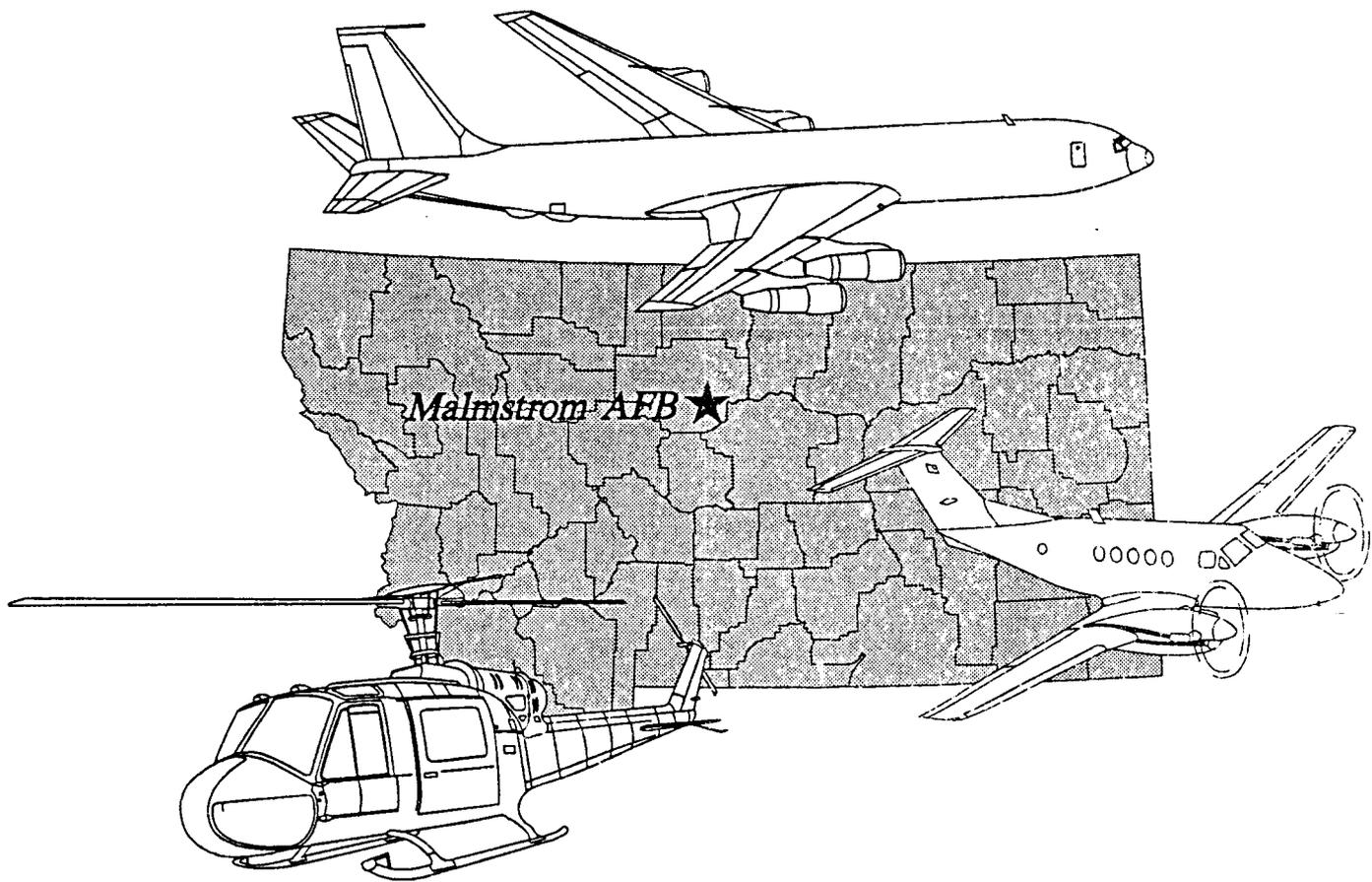
5.2 Local Community Responsibilities

The residents of Cascade County and the personnel of Malmstrom AFB have a long history of working together for mutual benefit. Installation leaders at Malmstrom AFB feel that adoption of the following recommendations will strengthen this relationship, increase the health and safety of the public, and help protect the integrity of the base's flying mission:

- Incorporate AICUZ policies and guidelines into comprehensive plans in the city of Great Falls and Cascade County. Use overlay maps of the AICUZ noise contours and Air Force Land Use Compatibility Guidelines to evaluate existing and future land use proposals.
- Modify existing zoning ordinances and subdivision regulations as necessary to support the compatible land use guidelines outlined in this study.
- Implement height and obstruction ordinances which reflect current Air Force and Federal Aviation Regulation (FAR) Part 77 requirements.
- Modify building codes to ensure that new construction within the AICUZ area has the recommended noise level reductions incorporated into the design and construction of these facilities.
- Apply to the DoD Office of Economic Adjustment (OEA) for matching funds to develop a Joint Land Use Study (JLUS). The JLUS is a cooperative effort between the installation and local governments to develop an enforceable airport-compatible land use plan. The development of such a plan will facilitate compatible future development near the base and minimize encroachment.
- Continue to inform Malmstrom AFB of planning and zoning actions that have the potential of affecting base operations. Develop a working group representing city planners, county planners, and base planners to meet at least quarterly to discuss AICUZ concerns and major development proposals that could affect airfield operations.

AICUZ STUDY

Volume II APPENDICES



UNITED STATES AIR FORCE
MALMSTROM AFB, MONTANA
1994

MALMSTROM AFB AICUZ STUDY

**VOLUME II:
APPENDICES**

This is the companion document to Volume I of the follow-on Air Installation Compatible Use Zone (AICUZ) Study prepared for Malmstrom AFB, Montana in 1994. It contains supplemental AICUZ information.

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APPENDIX A

THE AICUZ CONCEPT, PROGRAM, METHODOLOGY, AND POLICIES

A.1 Concept

Federal legislation, national sentiment, and other external forces which directly affect the United States Air Force mission have served to greatly increase the Air Force's role in environmental and planning issues. Problems of airfield encroachment from incompatible land uses surrounding installations, as well as air and water pollution and socio-economic impact, require continued and intensified USAF involvement. The nature of these problems dictates direct USAF participation in comprehensive community and land use planning. Effective, coordinated planning that bridges the gap between the federal government and the community requires the establishment of good working relationships with local citizens, local planning officials, and state and federal officials. This depends upon creating an atmosphere of mutual trust and helpfulness. The Air Installation Compatible Use Zone (AICUZ) concept has been developed in an effort to:

- Protect local citizens from the noise exposure and accident potential associated with flying activities.
- Prevent degradation of the Air Force's capability to achieve its mission by promoting compatible land use planning.

The land use guidelines developed herein are a composite of a number of other land use compatibility studies that have been refined to fit the Malmstrom AFB aviation environment.

A.2 Program

Installation commanders establish and maintain active programs to achieve the maximum feasible land use compatibility between air installations and neighboring communities. The program requires that all appropriate government bodies and citizens be fully informed whenever AICUZ or other planning matters affecting the installation are under consideration. This includes positive and continuous programs designed to:

- Provide information, criteria, and guidelines to federal, state, regional, and local planning bodies, civic associations, and similar groups.
- Inform such groups of the requirements of the flying activity, noise exposure, aircraft accident potential, and AICUZ plans.
- Describe the noise reduction measures that are being used.

- Ensure that all reasonable, economical, and practical measures are taken to reduce or control the impact of noise-producing activities. These measures include such considerations as proper location of engine test facilities, provision of sound suppressors where necessary, and adjustment of flight patterns and/or techniques to minimize the noise impact on populated areas. This must be done without jeopardizing safety or operational effectiveness.

A.3 Methodology

The AICUZ consists of land areas upon which certain land uses may obstruct the airspace or otherwise be hazardous to aircraft operations and land areas which are exposed to the health, safety, or welfare hazards of aircraft operations. The AICUZ includes:

- Accident potential zones (APZ) and clear zones (CZ) based on past Air Force aircraft accidents and installation operational data (Appendix B).
- Noise zones (NZ) produced by the computerized Day-Night Average A-Weighted Sound Level (DNL) metric (Appendix C).
- The area designated by the Federal Aviation Administration and the Air Force for purposes of height limitations in the approach and departure zones of the base (Appendix D).

The APZ, CZ, and NZ are the basic building blocks for land use planning with AICUZ data. Compatible land uses are specified for these zones, and recommendations on building materials and standards to reduce interior noise levels inside structures are provided in Appendix E.

As part of the Air Installation Compatible Use Zone program, the only real property acquisition for which the Air Force has requested and received congressional authorization and the base and major commands request appropriation are the areas designated as the clear zone. Land use control through restrictive easements has been acquired by Malmstrom AFB for all developable property within the clear zones, giving the base control over the use of the property. Compatible land use controls for the remaining airfield environs should be accomplished through the community land use planning processes.

A.4 AICUZ Land Use Development Policies

The basis for any effective land use control system is the development of, and subsequent adherence to, policies which serve as the standard by which all land use planning and control actions are evaluated. Malmstrom AFB recommends the following policies be considered for incorporation into the comprehensive plans of agencies in the vicinity of the base environs:

A.4.1 Policy 1. In order to promote the public health, safety, peace, comfort, convenience, and general welfare of the inhabitants of airfield environs, it is necessary to:

- Guide, control, and regulate future growth and development.
- Promote orderly and appropriate use of land.

- Protect the character and stability of existing land uses.
- Prevent the destruction or impairment of the airfield and the public investment therein.
- Enhance the quality of living in the areas affected.
- Protect the general economic welfare by restricting incompatible land use.

A.4.2 Policy 2. In furtherance of Policy 1, it is appropriate to:

- Establish guidelines of land use compatibility.
- Restrict or prohibit incompatible land use.
- Prevent establishment of any land use which would unreasonably endanger aircraft operations and the continued use of the airfield.
- Incorporate the Air Installation Compatible Use Zone concept into community land use plans, modifying them when necessary.
- Adopt appropriate ordinances to implement airfield environs land use plans.

A.4.3 Policy 3. Within the boundaries of the AICUZ, certain land uses are inherently incompatible. The following land uses are not in the public interest and must be restricted or prohibited:

- Uses that release into the air any substance, such as steam, dust, or smoke, which would impair visibility or otherwise interfere with the operation of aircraft.
- Uses that produce light emissions, either direct or indirect (reflective), which would interfere with pilot vision.
- Uses that produce electrical emissions which would interfere with aircraft communication systems or navigation equipment.
- Uses that attract birds or waterfowl, such as operation of sanitary landfills, maintenance or feeding stations, or growth of certain vegetation.
- Uses that provide for structures within ten feet of aircraft approach-departure and/or transitional surfaces.

A.4.4 Policy 4. Certain noise levels of varying duration and frequency create hazards to both physical and mental health. A limited, though definite, danger to life exists in certain areas adjacent to airfields. Where these conditions are sufficiently severe, it is not consistent with public health, safety, and welfare to allow the following land uses:

- Residential.
- Retail business.
- Office buildings.
- Public buildings (schools, churches, etc.).
- Recreation buildings and structures.

- A.4.5 Policy 5. Land areas below takeoff and final approach flight paths are exposed to significant danger of aircraft accidents. The density of development and intensity of use must be limited in such areas.
- A.4.6 Policy 6. Different land uses have different sensitivities to noise. Standards of land use acceptability should be adopted, based on these noise sensitivities. In addition, a system of Noise Level Reduction guidelines (Appendix E) for new construction should be implemented to permit certain uses where they would otherwise be prohibited.
- A.4.7 Policy 7. Land use planning and zoning in the airfield environs cannot be based solely on aircraft-generated effects. Allocation of land used within the AICUZ should be further refined by consideration of:
- Physiographic factors.
 - Climate and hydrology.
 - Vegetation.
 - Surface geology.
 - Soil characteristics.
 - Intrinsic land use capabilities and constraints.
 - Existing land use.
 - Land ownership patterns and values.
 - Economic and social demands.
 - Cost and availability of public utilities, transportation, and community facilities.
 - Other noise sources.

Each runway end at Malmstrom AFB has a 3,000 foot by 3,000 foot clear zone and two accident potential zones (Appendix B). Accident potential on or adjacent to the runway or within the clear zone is so high that the necessary land use restrictions would prohibit reasonable economic use of land. As stated previously, it is Air Force policy to request Congress to authorize and appropriate funds for the necessary real property interests in this area to prevent incompatible land uses. At Malmstrom AFB, land use control within clear zones is compatible with AICUZ recommendations.

Accident potential zone I is less critical than the clear zone, but still possesses a significant risk factor. This 3,000 foot by 5,000 foot area has land use compatibility guidelines which are sufficiently flexible to allow reasonable economic use of the land, such as industrial/manufacturing, transportation, communication/utilities, wholesale trade, open space, recreation, and agriculture. However, uses that concentrate people in small areas are not acceptable.

Accident potential zone II is less critical than accident potential zone I, but still possesses potential for accidents. Accident potential zone II, also 3,000 feet wide, is 7,000 feet long extending to 15,000 feet from the runway threshold. Acceptable uses include those of accident potential zone I, as well as low density single family residential and those personal and business services and commercial/retail trade uses of low intensity or scale of operation. High density functions such as multi-story buildings, places of assembly (theaters, churches, schools, restaurants, etc.), and high density office uses are not considered appropriate.

High people densities should be limited to the maximum extent possible. The optimum density recommended for residential usage (where it does not conflict with noise criteria) in accident potential zone II is one dwelling per acre. For most non-residential usage, buildings should be limited to one story and the lot coverage should not exceed 20%.

A.5 Basic Land Use Compatibility

Research on aircraft accident potential, noise, and land use compatibility is ongoing at a number of federal and other agencies. One such effort is the Concentrations of Persons per Acre Standard developed by the Sacramento Area Council of Governments for incorporation into the land use planning process (Appendix F). These and all other compatibility guidelines must not be considered inflexible standards. They are the framework within which land use compatibility questions can be addressed and resolved. In each case, full consideration must be given to local conditions such as:

- Previous community experience with aircraft accidents and noise.
- Local building construction and development practices.
- Existing noise environment due to other urban or transportation noise sources.
- Time period of aircraft operations and land use activities.
- Specific site analysis.
- Noise buffers, including topography.

These basic guidelines cannot resolve all land use compatibility questions, but they do offer a reasonable framework within which to work.

A.6 Accident Potential

Land use guidelines for the two APZs are based on a hazard index system which compares the relationship of accident occurrence for five areas:

- On or adjacent to the runway.
- Within the clear zone.
- In APZ I.
- In APZ II.
- In all other areas within a 10 nautical mile radius of the runway.

Accident potential on or adjacent to the runway or within the clear zone is so high that few uses are acceptable. The risk outside APZ I and APZ II, but within the 10 nautical mile radius area, is significant, but is acceptable if sound engineering and planning practices are followed.

Land use guidelines for APZs I and II have been developed. The main objective has been to restrict all people-intensive uses because there is greater risk in these areas. The basic guidelines aim at prevention of uses that:

- Have high residential density characteristics.
- Have high labor intensity.
- Involve above-ground explosive, fire, toxic, corrosive, or other hazardous characteristics.
- Promote population concentrations.
- Involve utilities and services required for area-wide population, where disruption would have an adverse impact (telephone, gas, etc.).
- Concentrate people who are unable to respond to emergency situations, such as children, elderly, handicapped, etc.
- Pose hazards to aircraft operations.

There is no question that these guidelines are relative. Ideally, there should be no people-intensive uses in either of these APZs. The free market and private property systems prevent this where there is land development demand. To go beyond these guidelines, however, substantially increases risk by placing more people in areas where there may ultimately be an aircraft accident.

A.7 Noise

Nearly all studies analyzing aircraft noise and residential compatibility recommend no residential uses in noise zones above DNL 75 dB. Usually, no restrictions are recommended below noise zone DNL 65 dB. Between DNL 65-75 dB there is currently no consensus. These areas may not qualify for federal mortgage insurance in residential categories according to the Department of Housing and Urban Development (HUD) Regulation 24 CFR 51B. In many cases, HUD approval requires noise attenuation measures, the Regional Administrator's concurrence, and an Environmental Impact Statement. The Department of Veterans Affairs also has airfield noise and accident restrictions which apply to their home loan guarantee program. Whenever possible, residential land use should be located below DNL 65 dB according to Air Force land use recommendations.

Most industrial/manufacturing uses are compatible in the airfield environs. Exceptions are uses such as research or scientific activities which require lower noise levels. Noise attenuation measures are recommended for portions of buildings devoted to office use, receiving the public, or where the normal background noise level is low.

The transportation, communications, and utilities categories have a high noise level compatibility because they generally are not people-intensive. When people use land for these purposes, the use is generally very short in duration. Where buildings are required for these uses, additional evaluation is warranted.

The commercial/retail trade and personal and business services categories are compatible without restriction up to DNL 70 dB; however, they are generally incompatible above DNL 80 dB. Between

DNLs 70-80 dB, noise level reduction measures should be included in the design and construction of buildings.

The nature of most uses in the public and quasi-public services category requires a quieter environment, and attempts should be made to locate these uses below DNL 65 dB (an Air Force land use recommendation), or else provide adequate noise level reduction.

Although recreational use has often been recommended as compatible with high noise levels, recent research has resulted in a more conservative view. Above DNL 75 dB, noise becomes a factor which limits the ability to enjoy such uses. Where the requirement to hear is a function of the use (i.e., music shell, etc.), compatibility is limited. Buildings associated with golf courses and similar uses should be noise attenuated.

With the exception of forestry activities and livestock farming, uses in the resources production, extraction, and open space category are compatible almost without restrictions.

APPENDIX B

ACCIDENT POTENTIAL ZONES

B.1 Guidelines For Accident Potential

Urban areas around airports are exposed to the possibility of aircraft accidents even with well-maintained aircraft and highly trained aircraft crews. Despite stringent maintenance requirements and countless hours of training, past history makes it clear that accidents are going to occur.

When the AICUZ program began there were no current comprehensive studies on accident potential. In support of the program, the Air Force completed a study of Air Force accidents that occurred between 1968 and 1972 within 10 nautical miles of airfields. The study of 369 accidents revealed that 75 percent of aircraft accidents occurred on or adjacent to the runway (1,000 feet to each side of the runway centerline) and in a corridor 3,000 feet (1,500 feet either side of the runway centerline) wide, extending from the runway threshold along the extended runway centerline for a distance of 15,000 feet.

Three zones were established based on crash patterns: The clear zone, accident potential zone (APZ) I, and accident potential zone (APZ) II. The clear zone starts at the end of the runway and extends outward 3,000 feet. It has the highest accident potential of the three zones. The Air Force has adopted a policy of acquiring property rights to areas designated as clear zones because of the high accident potential. APZ I extends from the clear zone an additional 5,000 feet. It includes an area of reduced accident potential. APZ II extends from APZ I an additional 7,000 feet in an area of further reduced accident potential.

The Air Force research work in accident potential was the first significant effort in this subject area since 1952 when the President's Airport Commission published "The Airport and Its Neighbors," better known as the "Doolittle Report." The recommendations of this earlier report were influential in the formulation of the accident potential zone concept.

The risk to people on the ground of being killed or injured by aircraft accidents is small. However, an aircraft accident is a high consequence event and when a crash does occur, the result is often catastrophic. Because of this, the Air Force does not attempt to base its safety standards on accident probabilities. Instead, the Air Force approaches this safety issue from a land use planning perspective.

B.2 Accident Potential Analysis

Military aircraft accidents differ from commercial air carrier and general aviation accidents because of the variety of aircraft used, the type of missions, and the number of training flights. In 1973, the

U.S. Air Force (USAF) performed a service-wide aircraft accident hazard study in order to identify land near airfields with significant accident potential. Accidents studied occurred within ten nautical miles of airfields and were related airfield-associated in-flight mishaps.

The study reviewed 369 major USAF accidents during 1968-1972, and found that 61 percent of the accidents were related to landing operations and 39 percent were takeoff related. It also found that 70 percent occurred in daylight, and that fighter and training aircraft accounted for 80 percent of the accidents.

Because the purpose of the study was to identify accident hazards, the study plotted each of the 369 accidents in relation to the airfield. This plotting found that the accidents clustered along the runway and its extended centerline. To further refine this clustering, a tabulation was prepared which described the cumulative frequency of accidents as a function of distance from the runway centerline along the extended centerline. This analysis was done for widths of 2,000, 3,000, and 4,000 total feet. The location analysis found the following:

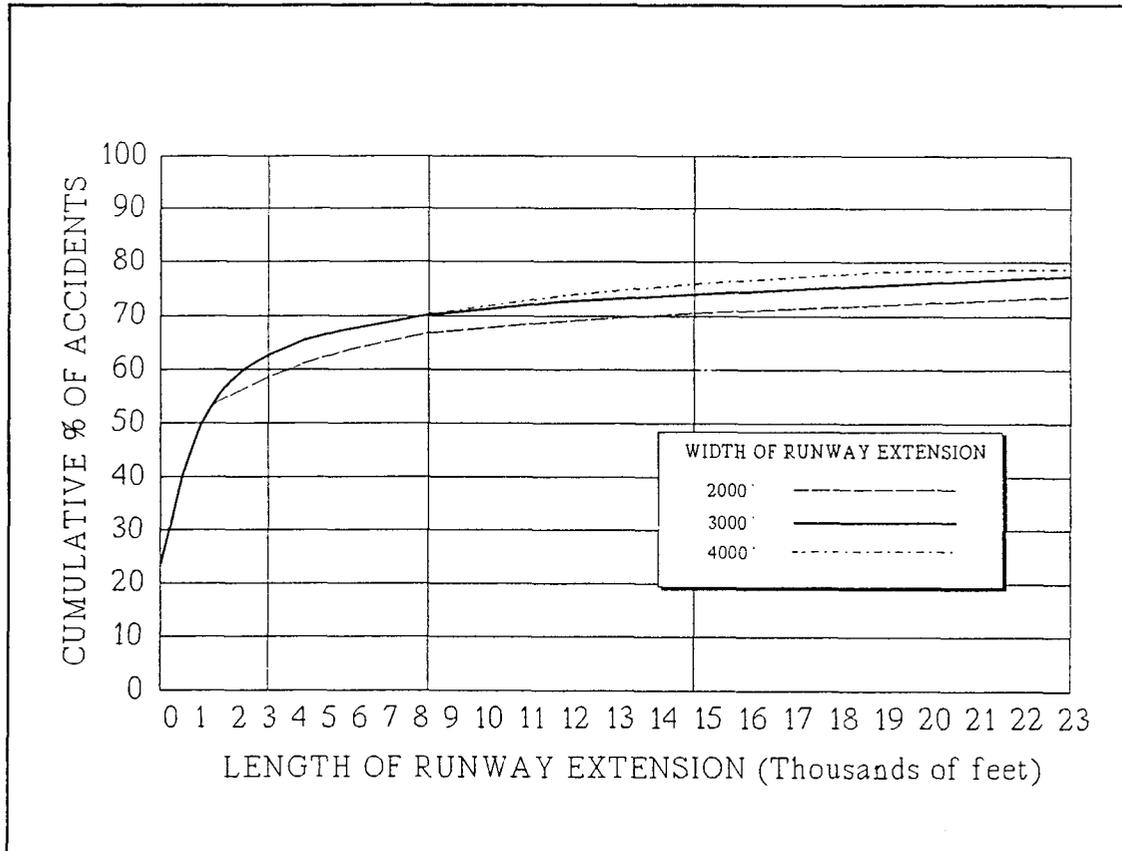
Table B.1 LOCATION ANALYSIS

Length From Both Ends of Runway (feet)	Width of Runway Extension (Feet)		
	2,000	3,000	4,000
Percent of Accidents			
On or Adjacent to Runway (1,000 feet to each side of runway centerline)	23	23	23
0 to 3,000	35	39	39
3,000 to 8,000	8	8	8
8,000 to 15,000	5	5	7
Cumulative Percent of Accidents			
On or Adjacent to Runway (1,000 feet to each side of runway centerline)	23	23	23
0 to 3,000	58	62	62
3,000 to 8,000	66	70	70
8,000 to 15,000	71	75	77

Figure B-1 indicates that the cumulative number of accidents rises rapidly from the end of the runway to 3,000 feet, rises more gradually to 8,000 feet, then continues at about the same rate of increase to 15,000 feet, where it levels off. The location analysis also indicates that the optimum width of the runway extension, which would include the maximum percentage of accidents in the smallest area, is 3,000 feet.

Figure B-1

DISTRIBUTION OF AIR FORCE AIRCRAFT ACCIDENTS

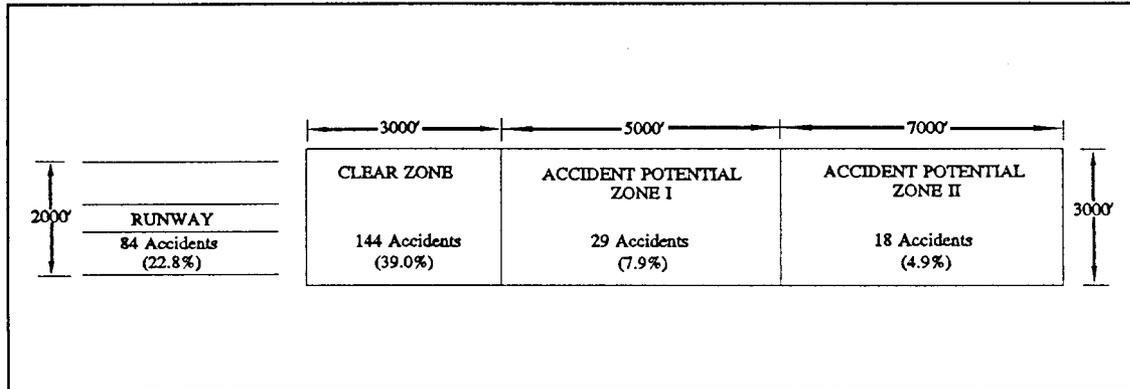


Using the optimum runway extension width, 3,000 feet, and the cumulative distribution of accidents from the end of the runway, zones were established which minimized the land area included and maximized the percentage of accidents included. The zone dimensions and accident statistics for the 1968-1972 study are shown in Figure B-2.

Figure B-2

AIR FORCE AIRCRAFT ACCIDENT DATA

(369 Accidents - 1968-1972)



Other Accidents Within 10 Nautical Miles

94 Accidents

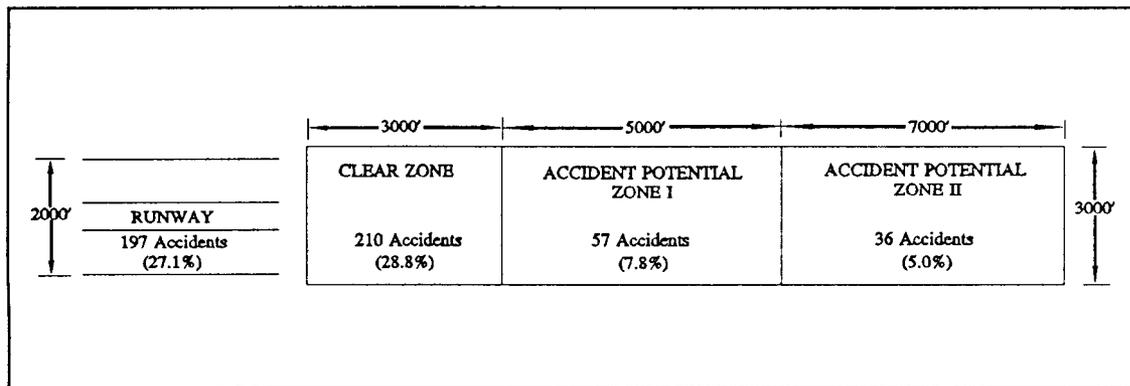
25.4%

The original study was updated to include accidents through 1985. The updated study now includes 728 accidents during the 1968-1985 period. Using the optimum runway extension width of 3,000 feet, the accident statistics of the updated study are shown below.

Figure B-3

AIR FORCE AIRCRAFT ACCIDENT DATA

(728 Accidents - 1968-1985)



Other Accidents Within 10 Nautical Miles

228 Accidents

31.3%

Using the designated zones and accident data, it is possible to calculate a ratio of percentage of accidents to percentage of area size. These ratios indicate that the clear zone, with the smallest area size and the highest number of accidents, has the highest ratio, followed by the runway and adjacent area, APZ I, and then APZ II.

Table B.2 ACCIDENT TO AREA RATIO

Ratio of Percentage of Accidents to Percentage of Area						
(Air Force Accident Data 1968 - 1985)						
Area ¹ (acres)	Number ² Accident	Accident Per Acre	% Total Area	% Total Accident	Ratio: ³ Accident to Area	
Runway Area	487	197	1 Per 2.5	0.165	27.1	164
Clear Zone	413	210	1 Per 1.9	0.140	28.8	206
APZ I	689	57	1 Per 12.1	0.233	7.8	33
APZ II	964	36	1 Per 26.7	0.327	5.0	15
Other	292,483	228	1 Per 1282.8	99.135	31.3	.3

1. Area includes land within 10 nautical miles of runway.
2. Total number of accidents is 728 (through 1985).
3. Percent total accidents divided by percent total area.

- 70% occurred in daylight.
- 80% were related to fighter and training aircraft operations.
- 27% occurred on the runway or within an area extending 1,000 feet out from each side of the runway.
- 29% occurred in an area extending from the end of the runway to 3,000 feet along the extended centerline and 3,000 feet wide, centered on the extended centerline.
- 13% occurred in an area between 3,000 and 15,000 feet along the extended runway centerline and 3,000 feet wide, centered on the extended centerline.
- U.S. Air Force aircraft accident statistics found that 75% of aircraft accidents resulted in definable impact areas. The size of the impact areas were:
 - 5.1 acres overall average.
 - 2.7 acres for fighters and trainers.
 - 8.7 acres for heavy bombers and tankers.

APPENDIX C

DESCRIPTION OF THE NOISE ENVIRONMENT

C.1 Noise Contours

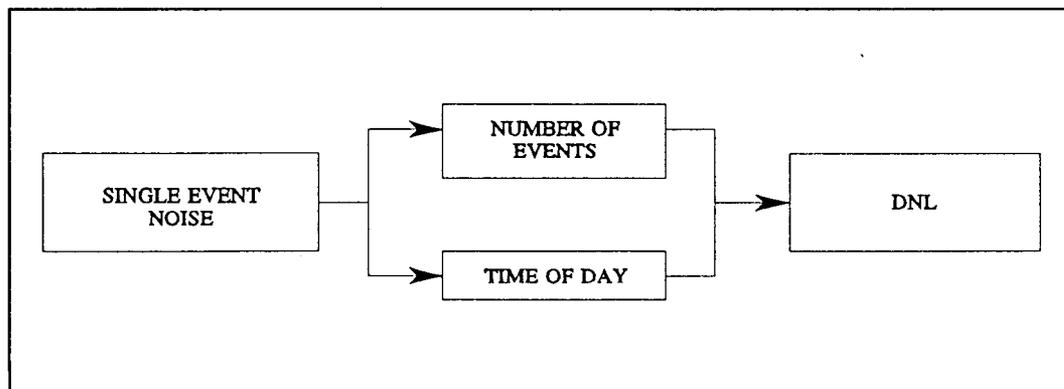
The following paragraphs describe the methodologies used to produce the noise contours contained in this AICUZ Study.

C.2 Noise Environment Descriptor

The noise contour methodology used herein is the Day-Night Average A-Weighted Sound Level (DNL) metric for describing the noise environment. Efforts to provide a national uniform standard for noise assessment have resulted in adoption by the Environmental Protection Agency of DNL as the standard noise prediction metric for this procedure. The Air Force uses the DNL descriptor as the method to assess the amount of exposure to aircraft noise and predict community response to the various levels of exposure. The DNL values used for planning purposes are 65, 70, 75, and 80+ dB. Land use guidelines are based on the compatibility of various land uses with these noise exposure levels. DNL is a measurable quantity and can be measured directly.

It is generally recognized that a noise environment descriptor should consider, in addition to the annoyance of a single event, the effect of repetition of such events and the time of day in which these events occur. DNL begins with a single event descriptor and adds corrections for the number of events and the time of day. Since the primary development concern is residential, nighttime events are considered more annoying than daytime events and are weighted accordingly. DNL values are computed from the single event noise descriptor, plus corrections for number of flights and time of day (Figure C-1).

Figure C-1 DAY-NIGHT AVERAGE A-WEIGHTED SOUND LEVEL (DNL)

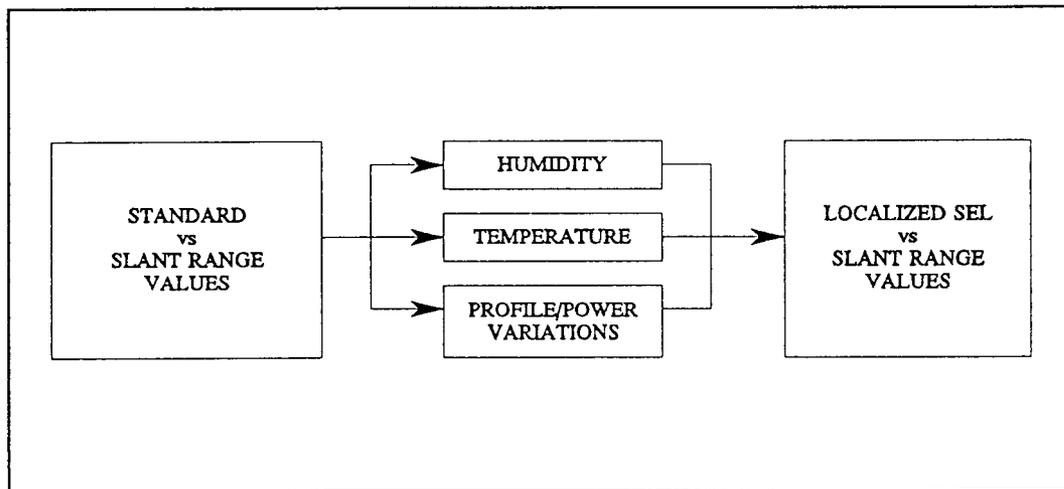


As part of the extensive data collection process, detailed information is gathered on the type of aircraft and number and time of day of flying operations for each flight track during a typical day. This information is used in conjunction with the single event noise descriptor to produce DNL values. These values are combined on an energy summation basis to provide single DNL values for the mix of aircraft operations at the base. Equal value points are connected to form the contour lines.

C.3 Noise Event Descriptor

The single event noise descriptor used in the DNL system is the Sound Exposure Level (SEL). The SEL measure is an integration of an "A" weighted noise level over the period of a single event, such as an aircraft flyover, in dB. Frequency, magnitude, and duration vary according to aircraft type, engine type, and power setting. Therefore, individual aircraft noise data are collected for various types of aircraft/engines at different power settings and phases of flight. The following diagram shows the relationship of the single event noise descriptor (SEL) to the source sound energy.

Figure C-2 SOUND EXPOSURE LEVEL (SEL)



SEL vs. slant range values are derived from noise measurements made according to a source noise data acquisition plan developed by Bolt, Beranek, and Newman, Inc., in conjunction with the Air Force's Armstrong Laboratory (AL), and carried out by AL. These standard day, sea level values form the basis for the individual event noise descriptors at any location and are adjusted to the location by applying appropriate corrections for temperature, humidity, and variations from standard profiles and power settings.

Ground-to-ground sound propagation characteristics are used for altitudes up to 500 feet absolute with linear transition between 500 and 700 feet and air-to-ground propagation characteristics above 700 feet.

In addition to the assessment of aircraft flight operations, the DNL system also incorporates noise resulting from engine/aircraft maintenance checks on the ground. Data concerning the orientation of the noise source, type of aircraft or engine, number of test runs on a typical day, power settings used and their duration, and use of suppression devices are collected for each ground run up or test position. This information is processed and the noise contribution added (on an energy summation basis) to the noise generated by flying operations to produce noise contours reflecting the overall noise environment with respect to aircraft air and ground operations.

C.4 Noise Contour Production

Data describing flight track distances and turns, altitudes, airspeeds, power settings, flight track operational utilization, maintenance locations, ground runup engine power settings, and number and duration of runs by type of aircraft/engine is assembled by each AFB. The data is screened by the Major Command (MAJCOM) and Headquarters, Air Force Center for Environmental Excellence (HQ AFCEE/DGP). Trained personnel process the data for input into a central computer. Flight track maps are generated for verification and approval by the base/MAJCOM. After any required changes have been incorporated, DNL contours are generated by the computer using the supplied data and standard source noise data corrected to local weather conditions. These contours are plotted and prepared for photographic reproduction. A set of these contours is provided in the body of the report.

Additional technical information on the DNL procedures are available in the following publications:

- *Community Noise Exposure Resulting from Aircraft Operations: Applications Guide for Predictive Procedure*, AMRL-TR-73-105, November 1974, from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22151.
- *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with Adequate Margin of Safety*, EPA Report 550/9-74-004, March 1974, from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

APPENDIX D

HEIGHT AND OBSTRUCTIONS CRITERIA

D.1 Height And Obstructions Criteria

D.1.1 General

This appendix establishes criteria for determining whether an object or structure is an obstruction to air navigation. Obstructions to air navigation are considered to be:

- Natural objects or man-made structures that protrude above the planes or surfaces as defined in the following paragraphs, and/or;
- Man-made objects that extend more than 500 feet above the ground at the site of the structure.

D.1.2 Explanation of Terms

The following will apply (see Figure D-1):

- Controlling Elevation. Whenever surfaces or planes within the obstructions criteria overlap, the controlling (or governing) elevation becomes that of the lowest surface or plane.
- Runway Length. Malmstrom AFB has one runway with 11,500 feet of pavement designed and built for sustained aircraft landings and takeoffs.
- Established Airfield Elevation. The elevation, in feet above mean sea level, for Malmstrom AFB is 3,526 feet.
- Dimensions. All dimensions are measured horizontally unless otherwise noted.

D.1.3 Planes and Surfaces.

Definitions are as follows:

- Primary Surface. This surface defines the limits of the obstruction clearance requirements in the immediate vicinity of the landing area. The primary surface comprises surfaces of the runway, runway shoulders, and lateral safety zones and extends 200 feet beyond the runway end. The width of the primary surface for a single class "B" runway is 2,000 feet, or 1,000 feet on each side of the runway centerline.
- Clear Zone Surface. This surface defines the limits of the obstruction clearance requirements in the vicinity contiguous to the end of the primary surface. The

length and width (for a single runway) of a clear zone surface is 3,000 feet by 3000 feet.

- Approach-Departure Clearance Surface. This surface is symmetrical about the extended runway centerline, begins as an inclined plane (glide angle) 200 feet beyond each end of the primary surface of the centerline elevation of the runway end, and extends for 50,000 feet. The slope of the approach-departure clearance surface is 50:1 along the extended runway (glide angle) centerline until it reaches an elevation of 500 feet above the established airfield elevation. It then continues horizontally at this elevation to a point 50,000 feet from the start of the glide angle. The width of this surface at the runway end is 2,000 feet; it flares uniformly, and the width at 50,000 feet is 16,000 feet.
- Inner Horizontal Surface. This surface is a plane, oval in shape at a height of 150 feet above the established airfield elevation. It is constructed by scribing an arc with a radius of 7,500 feet above the centerline at the end of the runway and interconnecting these arcs with tangents.
- Conical Surface. This is an inclined surface extending outward and upward from the outer periphery of the inner horizontal surface for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation. The slope of the conical surface is 20:1.
- Outer Horizontal Surface. This surface is a plane located 500 feet above the established airfield elevation. It extends for a horizontal distance of 30,000 feet from the outer periphery of the conical surface.
- Transitional Surfaces. These surfaces connect the primary surfaces, clear zone surfaces, and approach-departure clearance surfaces to the outer horizontal surface, conical surface, other horizontal surface, or other transitional surfaces. The slope of the transitional surface is 7:1 outward and upward at right angles to the runway centerline. To determine the elevation for the beginning of the transitional surface slope at any point along the lateral boundary of the primary surface, including the clear zone, draw a line from this point to the runway centerline. This line will be at right angles to the runway axis. The elevation at the runway centerline is the elevation for the beginning of the 7:1 slope.

The land areas outlined by these criteria should be regulated to prevent uses which might otherwise be hazardous to aircraft operations. The following uses should be restricted and/or prohibited.

- Uses which release into the air any substance which would impair visibility or otherwise interfere with the operation of aircraft (i.e. steam, dust, or smoke).
- Uses which produce light emissions, either direct or indirect (reflective), which would interfere with pilot vision.
- Uses which produce electrical emissions which would interfere with aircraft communications systems or navigational equipment.
- Uses which would attract birds or waterfowl, including but not limited to, operation of sanitary landfills, maintenance of feeding stations, or the growing of certain vegetation.
- Uses that provide for structures within ten feet of aircraft approach-departure and/or transitional surfaces.

D.2 Height Restrictions

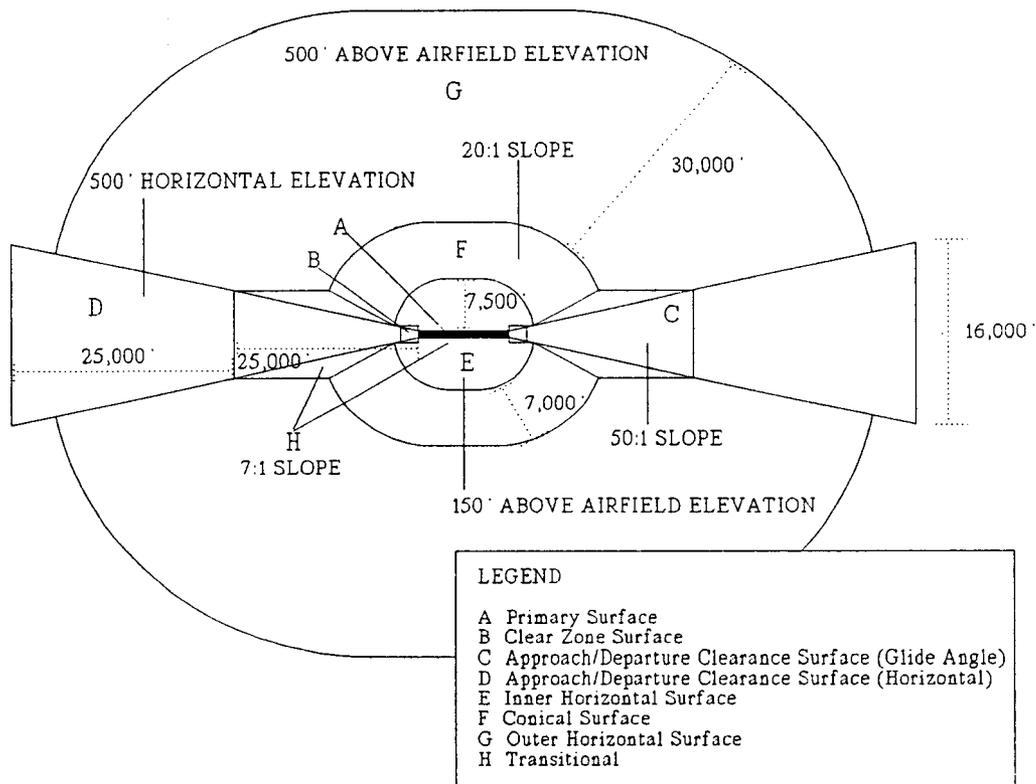
City/County agencies involved with approvals of permits for construction should require developers to submit calculations which show that projects meet the height restriction criteria of FAR Part 77 as described, in part, by the information contained in this Appendix.

Malmstrom AFB, Montana

Coordinates and Elevations

Airport Elevation		3,526 Ft. MSL
Coordinates	RUNWAY 03/21	Lat. 47° 29' 39.3" N Long. 111° 11' 58.9" W
		Lat. 47° 31' 3.1" N Long. 111° 10' 6.1" W

**Figure D-1
AIRSPACE CONTROL SURFACE PLAN**



For a more complete description of airspace control surfaces, refer to FAR Part 77, Subpart C or AFR 86-14.

APPENDIX E

NOISE LEVEL REDUCTION GUIDELINES

A study which provides in-depth, state-of-the-art noise level reduction guidelines was completed for the Naval Facilities Engineering Command and the Federal Aviation Administration, by Wyle Laboratories in November 1989. The study title is *Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations*, Wyle Research Report WR 89-7. A copy of this study may be obtained by calling the Defense Technical Information Center at 1-800-225-3842.

APPENDIX F

SAMPLE POPULATION DENSITY GUIDELINES

Uses are compatible if they do not result in a gathering of individuals in an area that would result in an average density of greater than 25 persons per acre per hour during a 24 hour period, not to exceed 50 persons per acre at any time. Population density guidelines were developed by the Sacramento Area Council of Governments.

F.1 Average Density

Average densities of persons per hour during a 24-hour period are determined by calculating the number of persons per acre expected on a site, multiplying by the number of hours they will be on the site, and dividing the total by 24.

- Example #1. One 8-hour shift of 30 workers on a one acre site.
Avg. density = 30 persons expected X 8-hours on site = 240
Then $240/24=10$: Thus avg. density = 10 persons per acre per hour per a 24-hour period.
- Example #2. Two 8-hour shifts of 30 workers on a one acre site.
Avg. density = 30 persons expected X 16 hours on site = 480
Then $480/24=20$: Thus avg. density = 20 persons per acre per hour per a 24-hour period.

F.2 Maximum Density

The maximum number of persons allowed per acre per hour is calculated by dividing the number of hours persons will be on site by 24 hours, and then dividing 25 persons per acre per hour by the result. The resulting number is the maximum number of persons allowed per acre per hour, provided it does not exceed 50. Fifty persons per acre at any one time is the maximum number of persons allowed under the standard.

- Example. Maximum density for two 8-hour shifts on a one acre site.
- 25 divided by $16/24 = 37.5$ persons per acre per hour allowed.

Application of this formula results in the following table which specifies the maximum persons per acre per hour for the duration of the time that persons are expected to be on site during a 24-hour period.

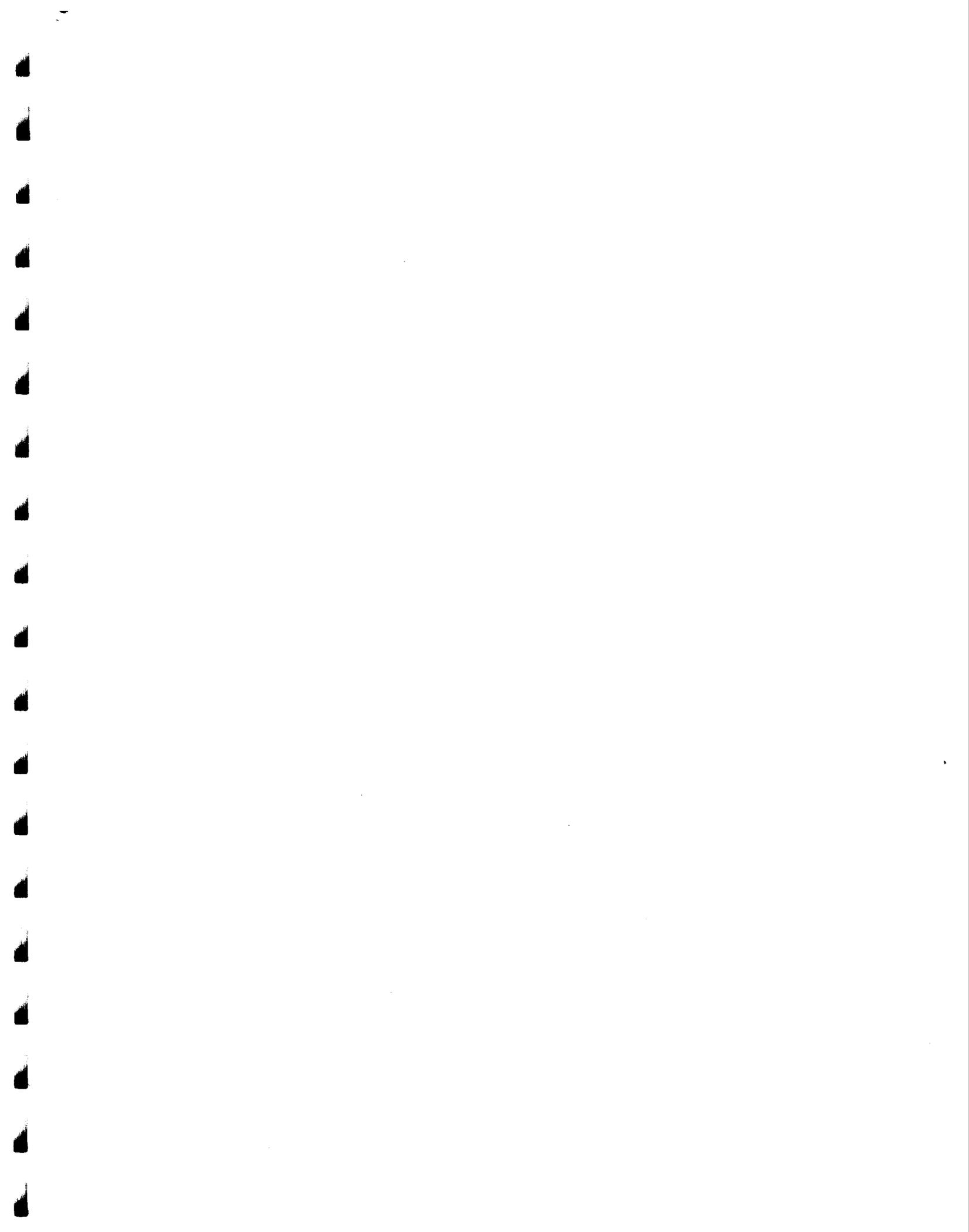
Table F.1

PERSONS PER ACRE

HOURS OF OPERATION PER DAY	MAXIMUM PERSONS ALLOWED PER ACRE/DURING EACH HOUR
24	25
23	26
22	27
21	28
20	30
19	31
18	33
17	35
16	37
15	40
14	42
13	46
12 or Less	50*

Notes: ■ Fractions in the maximum persons allowed column are rounded to the lowest whole number.

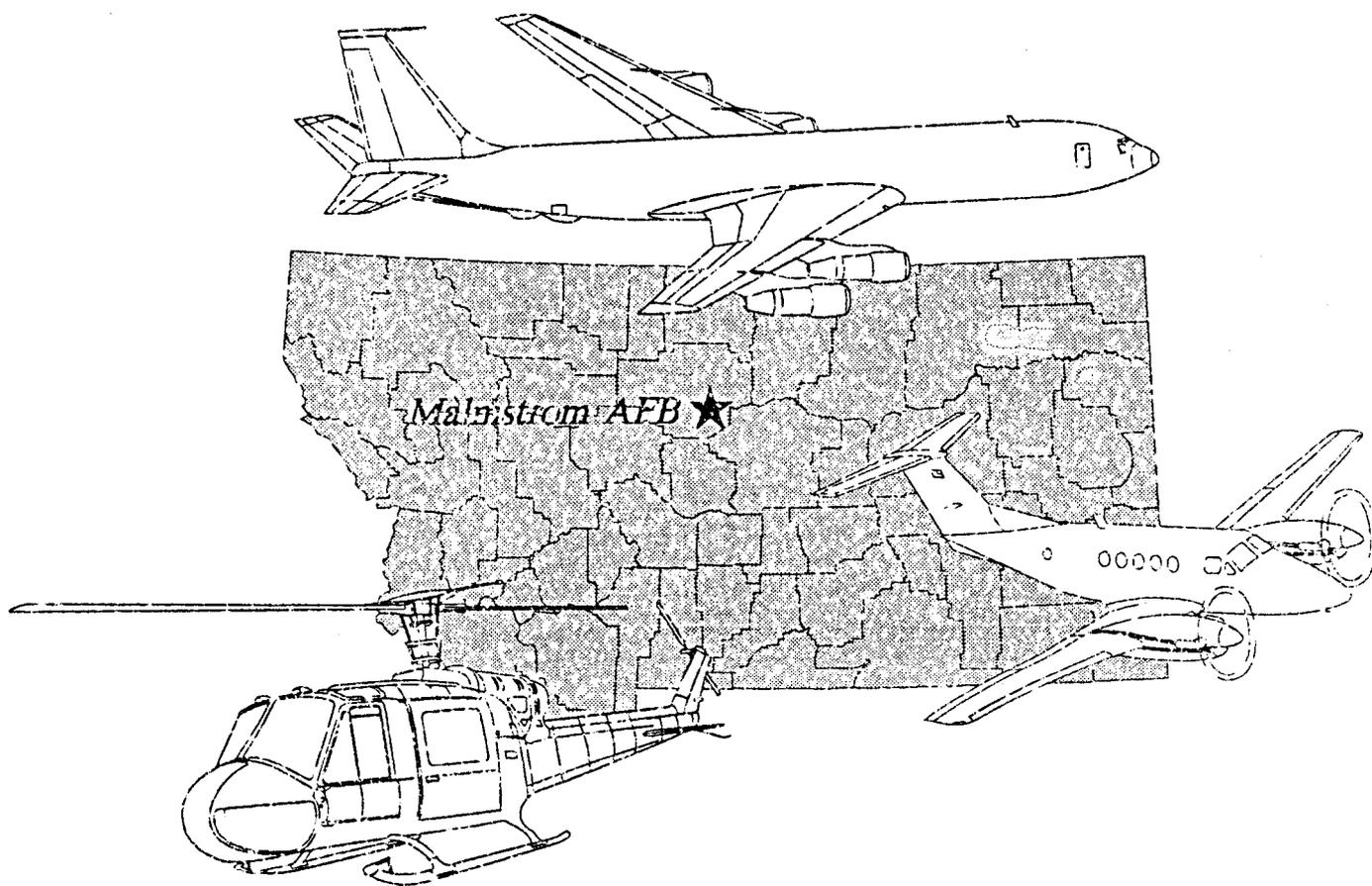
* Concentration of people may not exceed 50 people/acre at any time.



Document Separator

AICUZ STUDY

Volume III IMPLEMENTATION AND MAINTENANCE PLAN



UNITED STATES AIR FORCE
MALMSTROM AFB, MONTANA
1994

Malmstrom AFB AICUZ STUDY

**VOLUME III:
IMPLEMENTATION AND MAINTENANCE PLAN**

This is a companion document to the *Air Installation Compatible Use Zone (AICUZ) Study* prepared for Malmstrom AFB in 1994. It contains information designed to assist the base in its AICUZ public release process and is not intended for public distribution.

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SECTION 1 INTRODUCTION

Considerable effort has been expended by HQ USAF, HQ Air Mobility Command, and Malmstrom AFB to develop compatible land use guidelines for the land surrounding the base. An effective procedure for public release of the information contained within the AICUZ Study is essential for encouraging local governments to use that information in their planning efforts.

Malmstrom AFB is responsible for informing local citizens of the need for taking positive action to prevent incompatible land uses around the base. It is important to involve local officials and private citizens from all adjacent communities in the AICUZ program. Participants in this effort should be aware that the AICUZ program is designed to protect the health and safety of community residents, as well as to protect the airfield from encroachment.

Within the past few years, some local government jurisdictions have restricted construction along flood plains, on steep slopes, in potential earthquake hazard areas, and in areas with high water tables. In terms of safety and health, airfield operations should be of equal concern to local planning agencies and should be included as a factor in land use planning. The regulation of land use has traditionally been exercised by the state through delegation to local governments. Action needs to be taken now to advise local governments that corrective measures are essential to protect the health, safety, and welfare of the public from aircraft noise and accident hazards, and, in turn, to protect the military installation from the adverse impacts of random urbanization of nearby lands.

SECTION 2 CONCEPTS/ACTIONS

This AICUZ Implementation and Maintenance Plan is designed to assist the base in its efforts to acquaint local communities and their officials with the Malmstrom AFB AICUZ program. In addition, a well executed public release process will give the base community planner a strong foundation for follow-on efforts.

The first step in providing AICUZ information is to initiate informal discussions with key officials and planning staffs of the affected government units. These meetings are used to set forth the basic principles of the AICUZ program, i.e., that it is a planning tool, that the program is based upon a cooperative effort between the Air Force and local communities, and that the role of the Air Force is to provide information for use in land use planning within the vicinity of Malmstrom AFB (it is important to stress that it is not the intent of the AICUZ program to preempt the land use control prerogative of local governments). This initial step is accomplished through an AICUZ concept briefing which will be prepared by representatives from Civil Engineer and Public Affairs. The informal briefing should be conducted by representatives from Civil Engineer, Public Affairs, or the Command Section. The briefing should contain examples of AICUZ programs at other bases and an update on the existing AICUZ Study at Malmstrom AFB. The date, setting, attendees, and procedures for the public release of the study should also be discussed and established at this time.

Specific AICUZ data, including noise contour maps for Malmstrom AFB, should NOT be made available to anyone outside the Air Force prior to full public release. It is imperative that there is no possibility for any group to be given a special advantage by receiving prior knowledge. Prior to public release, the AICUZ Study is considered an internal working paper and, under the provisions of AFR 12-30, is exempt from the Freedom of Information Act.

Prior to the actual public release, base personnel designated to attend the public release should conduct a thorough review of the impacts the AICUZ program could have on local communities and landowners. These individuals, in their review, should answer the following questions:

- What is the existing land use?
- What is the future planned land use?
- What factors determine future land use?
- What are alternatives for future land use?
- Who decides what future land uses are?
- Which property owners are involved?

This review should also include possible effects upon municipalities, counties, regional councils, water districts, utility companies, highway/transportation planning agencies, etc. A determination should also be made concerning to what extent the recommended AICUZ criteria is in agreement

with current local land use planning and zoning ordinances. This "brainstorming" will assist in answering questions which may be asked during the public release process.

The basic forum for full release of the AICUZ Study is a public presentation meeting. Attendees should include appropriate government officials, the general public, and the media. This meeting will also be the occasion for the first distribution of the actual AICUZ Study. The official release at this time will ensure that no one is excluded from the process, and that no one single interested or impacted group is provided with information prior to others. A follow-on meeting to respond to questions, if necessary, should also be arranged.

The Air Force Center for Environmental Excellence (AFCEE/CCR-D) will arrange for appropriate federal agency representation at the initial public meeting. This is accomplished in accordance with AFR 19-9.

Following the initial public meeting, the AICUZ Study is forwarded to local and state clearinghouses as part of the Executive Order 12372 process.

SECTION 3 ORGANIZATION

The installation commander releases the AICUZ Study during the public meeting. The briefer selected to explain the AICUZ process should be thoroughly familiar with the base-specific data gathering, current base area compatible and incompatible land uses, and the information contained within the documents. The Base Civil Engineer, 43d Operations Group, Public Affairs, and Staff Judge Advocate assist the commander by developing and implementing the public release and by participating at the public meeting. Complete awareness of the recommended AICUZ criteria is essential because public misinformation or lack of information can be detrimental to objectives desired. The Public Affairs Office (PAO) is responsible for all public news releases and responses to public inquiries. The PAO should work with the media to ensure timely notice to the public of the date, location, and purpose of the AICUZ public meeting.

Remember that presentations on the AICUZ program are given to inform and enlist the cooperation and support of local political officials, special interest groups, and others. Groups which are formally briefed on the AICUZ Study are reflected in Section 4. A general schedule for presentations of the AICUZ Study is included in Section 5. Those presenting the AICUZ report must be well acquainted with the information contained within the AICUZ Study. They should be able to deal knowledgeably with the questions of laymen and professionals alike.

The Air Force should state its views and recommendations with respect to what should be done to establish compatible land use within the vicinity of the airfield, but this should be expressed in a low-key manner and without any pressure brought to bear on local governmental officials. Use of information contained within the AICUZ report is the responsibility of local officials.

SECTION 4 INDIVIDUALS/ORGANIZATIONS TO BE GIVEN AICUZ PRESENTATIONS

The following persons/organizations play key roles in the land development process in areas surrounding Malmstrom AFB. Many of them will be consulted in informal briefings and presentations, and all will be invited to the AICUZ Public Release.

4.1 Local Government

- City of Great Falls Elected Official
 - City Council
P.O. Box 5021
(2 Park Drive South/Civic Center)
Great Falls, MT 59403-5021
Ms. Gayle Morris, Mayor
Ms. Vicki Emerson
Ms. Joan Bennett
Mr. Robert Deming
Mr. John Gilbert
- City of Great Falls Appointed Officials
 - Mr. John Lawton, City Manager
P.O. Box 5021
(2 Park Drive South/Civic Center)
Great Falls, MT 59403-5021
(406) 771-1180
 - Ms. Cheryl Patton, Director
Community Development
P.O. Box 5021
(2 Park Drive South/Civic Center)
Great Falls, MT 59403-5021
(406) 771-1180
 - Mr. Erling (Earle) Tufte, Director
Public Works
P.O. Box 5021
(2 Park Drive South/Civic Center)
Great Falls, MT 59403-5021
(406) 771-1180
 - Mr. John Mooney, Director
Great Falls City-County Planning Board
P.O. Box 5021
(2 Park Drive South/Civic Center)
Great Falls, MT 59403-5021
(406) 771-1180

- Mr. Joe Attwood, Director
Great Falls International Airport
P.O. Box 5021
Great Falls International Airport
Great Falls, MT 59403-5021
(406) 727-3404

4.2 County Government

- Cascade County Elected Officials
 - County Commission
Cascade County Commissioner's Office
Court House Annex
Great Falls, MT 59401
(406) 454-6810
Mr. Harry Mitchell, Chairman
Mr. Jack Whitaker
Mr. Roy Aafedt
- Cascade County Appointed Officials
 - Mr. Roger Sanders, Director
Cascade County Planning Board
415 Third Avenue Northwest
Great Falls, MT 59404
(406) 454-6904
 - Mr. Don Ryan, Clerk & County Recorder
Cascade County Courthouse
Great Falls, MT 59401
(406) 454-6800
 - Mr. Tom Yashenko
Information Services
Court House Annex
Great Falls, MT 59401
(406) 454-6795
 - Mr. Peter Fontana, Assessor
Cascade County Courthouse
Great Falls, MT 59401
(406) 454-6740
 - Ms. Diane Green, Auditor
Court House Annex
Great Falls, MT 59401
(406) 454-6770
 - Mr. Bob Batista, County Surveyor
415 Third Avenue Northwest
Great Falls, MT 59404
(406) 454-6910

4.3 State Government

- Elected Montana State Officials
 - Honorable Marc Racicot, Governor
State Capitol, Room 204
Helena, MT 59601
(406) 444-3111
 - Honorable Dennis Rehberg, Lt. Governor
State Capitol, Room 207
Helena, MT 59601
(406) 444-5551
 - Senator B.F. "Chris" Christiaens
709 Fourth Avenue North
Great Falls, MT 59401
(406) 452-0032 (Home)
 - Senator Steve Doherty
1531 Third Avenue Southwest
Great Falls, MT 59404
(406) 435-7484 (Home)
 - Senator Eve Franklin
421 Fourth Avenue South
Great Falls, MT 59405
(406) 761-6815 (Home)
 - Senator William F. "Bill" Wilson
1305 Second Avenue North
Great Falls, MT 59401
(406) 452-7866 (Home)
 - Representative Edward J. Dolezal
3236 Fifth Avenue South
Great Falls, MT 59405
(406) 727-3594 (Home)
 - Representative Patrick Galvin
105 29th Avenue Northwest
Great Falls, MT 59404
(406) 453-8464 (Home)
 - Representative Sheila Rice
1501 Fourth Avenue North
Great Falls, MT 59401
(406) 453-0198 (Home)
 - Representative William M. "Bill" Ryan
8 18th Avenue South
Great Falls, MT 59405
(406) 727-5745 (Home)
 - Representative Richard D. Simpkins
1221 Park Garden Road
Great Falls, MT 59404
(406) 727-5745 (Home)

- Representative William S. "Bill" Strizich
736 31st Street South
Great Falls, MT 59404
(406) 761-7156 (Home)
- Representative William R. "Bill" Wiseman
3310 Centennial Court
Great Falls, MT 59404
(406) 452-3078 (Home)
- Representative Diana E. Wyatt
300 31st Street South
Great Falls, MT 59405
(406) 452-4766 (Home)

4.4 Federal Government

- Elected Federal Officials
 - Honorable Conrad Burns
U.S. Senate
104 4th Street North
Great Falls, MT 59401
(202) 224-2644 1-800-344-2644
 - Honorable Max Baucus
U.S. Senate
107 5th Street North
Great Falls, MT 59401
(202) 224-2651 1-800-332-6106
 - Honorable Pat Williams
House of Representatives
Washington, D.C. 20515
(202) 225-3211
- Appointed Federal Officials
 - Department of Transportation
Federal Aviation Administration
FSS Administrative Office
3015 Airport Lane
Great Falls, MT 59405
(406) 452-4892

4.5 Chambers Of Commerce (CoC) and Military Affairs Committees (MAC)

- Great Falls Chamber of Commerce
P.O. Box 2127
(815 Second Street South)
Great Falls, MT 59403
(406) 761-4434
- Military Affairs Committee
 - Mr. Arthur "Art" Dickhoff, Chairman
1101 First Avenue North
Great Falls, MT 59401
(406) 761-1408

- Mr. James A. Cummings
1200 25th Street South
Great Falls, MT 59405
(406) 761-3010

4.6 Land Owners and Developers

- Land Owners
 - Montana Power Company
100 First Avenue North
Great Falls, MT 59401
(406) 727-1231
 - Mr. John T. Mitchell, Trustee
P.O. Box 738
Great Falls, MT 59403-0738
(406) 452-2424
 - Holtz Farms, Inc.
149 Bickford Road
Great Falls, MT 59401
(406) 727-8235
 - Mr. David E. Roehm
Highwood Star Route, Box 41
Great Falls, MT 59405
(406) 727-5294
 - Norwest Capital Management and Trust Company
Attn: Mr. Robert C. Doerk
P.O. Box 5011
(21 Third Street North)
Great Falls, MT 59403-5011
(406) 761-0200
 - Northwestern National Bank of Great Falls, Trustee
P.O. Box 5011
(21 Third Street North)
Great Falls, MT 59403-5011
(406) 761-0200
 - Elton Campbell Ranches, Inc.
500 Tenth Street North
Great Falls, MT 59401
(406) 453-8895
 - Sue Ford Bovey Trust
P.O. Box 1569
Great Falls, MT 59403-1659
 - Herman McMahon Johnson, ETAL
6100 Vine #41
Lincoln, NE 68305
 - Mr. Dana and Ms. Lora J. Huestis
2904 Fourth Avenue North
Great Falls, MT 59401
(406) 453-2137

- Mr. Chris Huestis
3 Highwood Star Route
Great Falls, MT 59405
(406) 761-0960
- Ms. Betty Lehrman
1401 Libby
Clarkston, WA 99403
(502) 758-3602
- Mr. Edward R. and Ms. Ruthy Teddy
2416 Third Avenue South
Great Falls, MT 59405
(406) 452-6170
- Dr. Charles and Dr. Catherine Steele
25 Willow Run Lane
Great Falls, MT 59405
(406) 727-3655 (Home)
- The Dufrense Foundation
P.O. Box 1484
Great Falls, MT 59403-1484
- Mr. Barry and Ms. Cindy O'Connell
285 Swift Road
Great Falls, MT 59405
(406) 761-6438
- Winger Ranches Inc.
1200 32nd Street South #25
Great Falls, MT 59405
(406) 453-8600
- L. Johnson Inc.
123 Gibson Flat Road
Great Falls, MT 59405
(406) 452-9196
- Mr. Mike Pursley
1375 13th Street SW, Apt. 2
Great Falls, MT 59401
(406) 452-1568
- Developers
 - AAA Construction and Excavating
3128 Upper River Road
Great Falls, MT 59404
(406) 452-0300
 - Brummer Enterprise
1601 2nd Avenue North
Great Falls, MT 59404
(406) 727-7453
 - Dick Anderson Construction
2525 16th Street Northeast
Great Falls, MT 59404
(406) 761-8707

- Eklund Enterprises Construction
2205 11th Street Southwest
Great Falls, MT 59404
(406) 727-8555
- Electric City Concrete
215 11th Street Southwest
Great Falls, MT 59404
(406) 453-5076
- First General Services of Montana
205 1st Avenue Northwest
Great Falls, MT 59404
(406) 453-5033
- Fish Construction
101 Riverview Place
Great Falls, MT 59404
(406) 453-1349
- Gordon-Prill, Incorporated
8 5th Street North
Great Falls, MT 59404
(406) 727-9097
- D.M. Gray Company Incorporated
4106 North Star Boulevard
Great Falls, MT 59404
(406) 761-8506
- Hardin Thomas Construction
Black Eagle Industrial Park
Great Falls, MT 59404
(406) 454-2046
- Home Sweet Home Builders
Great Falls, MT 59404
(406) 453-9428
- John Rosenbaum Builders
1208 10th Avenue North
Great Falls, MT 59404
(406) 771-0161
- George Jaap
4241 2nd Avenue North
Great Falls, MT 59404
(406) 453-9661
- Archie M. Johnson
3111 Vaughn Road
(406) 453-5776
- James Kraus Construction
38 Eden Park Lane
Great Falls, MT 59404
(406) 452-1173
- Lewis Construction Company
1025 11th Avenue North
Great Falls, MT 59404
(406) 454-1373

Malmstrom AFB, MT

- Liggett Construction
3104 6th Street Northeast
Great Falls, MT 59404
(406) 452-3622
- Lucke Construction
1920 20th Avenue South
Great Falls, MT 59404
(406) 452-6610
- Joe McKay Construction
4790 13th Street South
Great Falls, MT 59404
(406) 771-7410
- Mealey Construction Company
P.O. Box 7277
Great Falls, MT 59404
(406) 453-0045
- C.E. Mitchell and Sons
308 4th Avenue South
Great Falls, MT 59404
(406) 453-1489
- Morgen and Oswood Construction
500 49th Street Southwest
Great Falls, MT 59404
(406) 761-1420
- Bob Murray Construction Company, Incorporated
2101 8th Street Northeast
Great Falls, MT 59404
(406) 761-3958
- Nelson Construction
204 Glenwood Court
Great Falls, MT 59404
(406) 727-4950
- Phillips Construction
43 North Manchester Road
Great Falls, MT 59404
(406) 453-7161
- Precision Design Group
205 9th Avenue South
Great Falls, MT 59404
(406) 727-6142
- Tabacco and Sons Construction
917 4th Avenue Northwest
Great Falls, MT 59404
(406) 452-4488
- Rockwell Foundation Company
2704 3rd Avenue North
Great Falls, MT 59404
(406) 452-5586

Malmstrom AFB, MT

- Rocky Mountain Homestead
1115 8th Avenue South
Great Falls, MT 59404
(406) 452-7933
- Ron Zarr Construction
109 Riverview Place
Great Falls, MT 59404
(406) 452-8789
- Rountree Construction
2228 Upper River Road
Great Falls, MT 59404
(406) 452-0321
- Sletten Construction Company
1000 25th Street North
Great Falls, MT 59404
(406) 761-7920
- Sunshine Construction Company
110 62nd Street South
Great Falls, MT 59404
(406) 727-7770
- Talcott Building Company
711 3rd Street Northwest
Great Falls, MT 59404
(406) 453-7686
- James Talcott Construction, Incorporated
205 1st Avenue Northwest
Great Falls, MT 59404
(406) 761-0018
- Tamietti Construction
4930 9th Avenue South
Great Falls, MT 59404
(406) 727-4922
- R.R. Tietjen Company
1701 Park Garden Road
Great Falls, MT 59404
(406) 452-8913
- Truchot Construction Company, Incorporated
1324 Central Avenue West
Great Falls, MT 59404
(406) 761-5757
- United Materials, Incorporated
2100 9th Avenue North
Great Falls, MT 59404
(406) 453-7692
- Volk Construction, Inc.
1505 15th Street Southwest
Great Falls, MT 59404
(406) 761-4260

Malmstrom AFB, MT

- Wieck Construction
1007 11th Street North
Great Falls, MT 59404
(406) 727-8244
- Williams Construction
306 Swift Road
Great Falls, MT 59404
(406) 452-5208
- Glen Workman Construction
Northwest Bypass
Great Falls, MT 59404
(406) 452-1311
- Jim Workman Construction
4949 2nd Avenue North
Great Falls, MT 59404
(406) 727-7682
- Zion House Moving and Construction
4307 North Star Boulevard
Great Falls, MT 59404
(406) 453-9096
- Dickman Excavating
130 Gibson Flat Road
Great Falls, MT 59405
(406) 761-6785
- Falls Construction Inc.
1001 River Drive North
Great Falls, MT 59401
(406) 727-5300
- Gaither & Associates Builders
3409 Coyote Lane
Great Falls, MT 59404
(406) 761-7408
- Donald P. Harmon Construction
2100 17th Street South
Great Falls, MT 59405
(406) 435-9651
- Jurasek Construction Inc.
78 Comanche Trail
Great Falls, MT 59405
(406) 452-7968
- Mattingly Enterprises Inc.
62 Elk Drive
Great Falls, MT 59404
(406) 453-2020
- Dick Olson Construction Inc.
1124 24th Street South
Great Falls, MT 59405
(406) 452-4772

- Rising Wolf Construction Inc.
4106 North Star Blvd.
Great Falls, MT 59405
(406) 761-4431
- Wadsworth Builders
P.O. Box 2073
Great Falls, MT 59403-2073
(406) 771-1460

4.7 Media

- Newspapers
 - *Great Falls Tribune*
P.O. Box 5468
Great Falls, MT 59403
(406) 791-1444
POC: Barb Henry, Publisher
- Television
 - KFBB
P.O. Box 1139
Great Falls, MT 59403
(406) 453-4377
POC: Dick Pompa, News Director
 - KRTV
P.O. Box 1331
Great Falls, MT 59403
(406) 453-2431
POC: Joel Lundstad, News Director
 - KTGF
118 6th Street South
Great Falls, MT 59403
(406) 761-8816
- Radio
 - K99M KAAK/KXGF
1300 Central Avenue West
Great Falls, MT 59403
(406) 727-7211
 - KEIN
811 1st Avenue North
Great Falls, MT 59403
(406) 761-1310
 - KGPR Public Radio
1400 1st Avenue North
Great Falls, MT 59403
(406) 761-8292
 - KLFM
811 1st Avenue North
Great Falls, MT 59403
(406) 761-7060

Malmstrom AFB, MT

- KMON AM & FM
20 3rd Avenue North
Great Falls, MT 59403
(406) 761-7600
- KQDI - Q 106
525 Central Avenue
Great Falls, MT 59403
(406) 761-1565

SECTION 5 SCHEDULE OF EVENTS

The following is a suggested schedule for the presentation of the AICUZ report to the community:

DATE	EVENT
X	After all AICUZ Study changes are made and once approval of the final AICUZ documents has been given by HQ USAF/CEVP, print final documents. Citizen's Brochure (#) copies; AICUZ Report (Vol. I) (#) copies; Appendices (Vol. II, A-F) (#)copies.
X+30 DAYS	Set up and inform higher headquarters of the date, time, and location of the public release meeting.
X+60 DAYS	Internal distribution of final documents. Ensure that 12 final copies are sent to HQ USAF/CEVP via commercial express courier to facilitate advance congressional notification. Also send additional copies to HQ AMC (2) and AFCEE/CCR-D (7) via regular mail for federal agency notification.
X+65 DAYS	Pre-brief local officials. Send out invitations for public meeting and make public announcement (news release).
X+75+DAYS	Hold initial public meeting, distribute AICUZ, respond to news/media queries. Distribute additional copies of AICUZ documents per the Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) process, as described in AFR 19-9.

The Public Affairs Office will ensure that appropriate news releases are made. Many people may be affected by the AICUZ Study, and it is important that local government leaders and planning bodies be the center of focus rather than the Air Force. It is also imperative that this information be communicated in a low key manner as being one way of enhancing the future development of Cascade County.

All AICUZ program briefings are coordinated with the Public Affairs Office. Only speakers who are knowledgeable of the AICUZ program and its intent and are adept at public presentations should be asked to speak.

SECTION 6 FORMAT FOR AICUZ PUBLIC RELEASE MEETING

- DATE/TIME
- LOCATION
- FORMAT
- BRIEFING OFFICER
- KEY PERSONNEL & SUPPORT PANEL
 - Provide support to speaker during question and answer period - Panel members should include:

43 ARW/CC/CV/JA/PA/SE

43 SPTG/CC/CE

43 OPG/CC

- MEETING ATTENDEES
 - Local government officials, media, landowners in AICUZ Study area, homeowners associations, etc.

SECTION 7 AICUZ PUBLIC RELEASE INVITATION

Dear (See lists, Sec. 4)

Malmstrom AFB's Air Installation Compatible Use Zone (AICUZ) Study has been updated and will be released in a public meeting at (time) on (date) 199(), at (address). The AICUZ Study addresses aircraft noise and accident potential zones created by current flying operations at Malmstrom AFB. The study contains information on building height restrictions and provides data for use in establishing land uses which are compatible with the current flying mission.

AICUZ data is intended for use by local citizens and government officials involved in land use planning and facility development. The purpose of the AICUZ program is to help ensure the health, safety, and welfare of the citizens in the surrounding communities while preserving the operational capabilities of Malmstrom AFB.

The presentation will outline the overall AICUZ program, its methodology, potential uses of the study, and Air Force and community responsibilities for compatible land use. A question and answer period will follow the formal presentation.

As Cascade County and the city of Great Falls continue to grow and prosper, we believe it is important that we join with government and business leaders in a cooperative effort to implement mutually beneficial planning for the future. I hope you will be able to attend this very important and informative meeting. In the event you are not able to attend, copies of the AICUZ report are available upon request by calling the Malmstrom AFB Public Affairs Office.

Sincerely,

Gary A. Voellger
Brigadier General, USAF
Commander

SECTION 8 IMPLEMENTATION STRATEGIES

- Write transmittal letter to local government officials advising that the 1978 AICUZ Study has been revised.
- Brief the AICUZ Study to city and county planners, county commissioners, and city council members prior to adoption or revision of any local comprehensive plan.
- Work closely with Cascade County and local community planners. Follow development of comprehensive planning efforts within the area, and encourage use of the information provided in the AICUZ in decision-making wherever possible.
- Add Malmstrom AFB to the list of both local, regional, state, and federal intergovernmental coordination participants, and continue to keep Malmstrom AFB "in the loop." (Use AFCEE/CCR-D to assist in your IICEP efforts.)
- Keep AFCEE/CCR-D in the loop by providing informational copies of correspondence concerning ongoing AICUZ activities at Malmstrom AFB. Under the IICEP program, AFCEE/CCR-D will coordinate with and distribute AICUZ information to federal agency regional offices (HUD, VA, FmHA, etc.), per their responsibilities to the AICUZ program as specified by FMC 75-2.

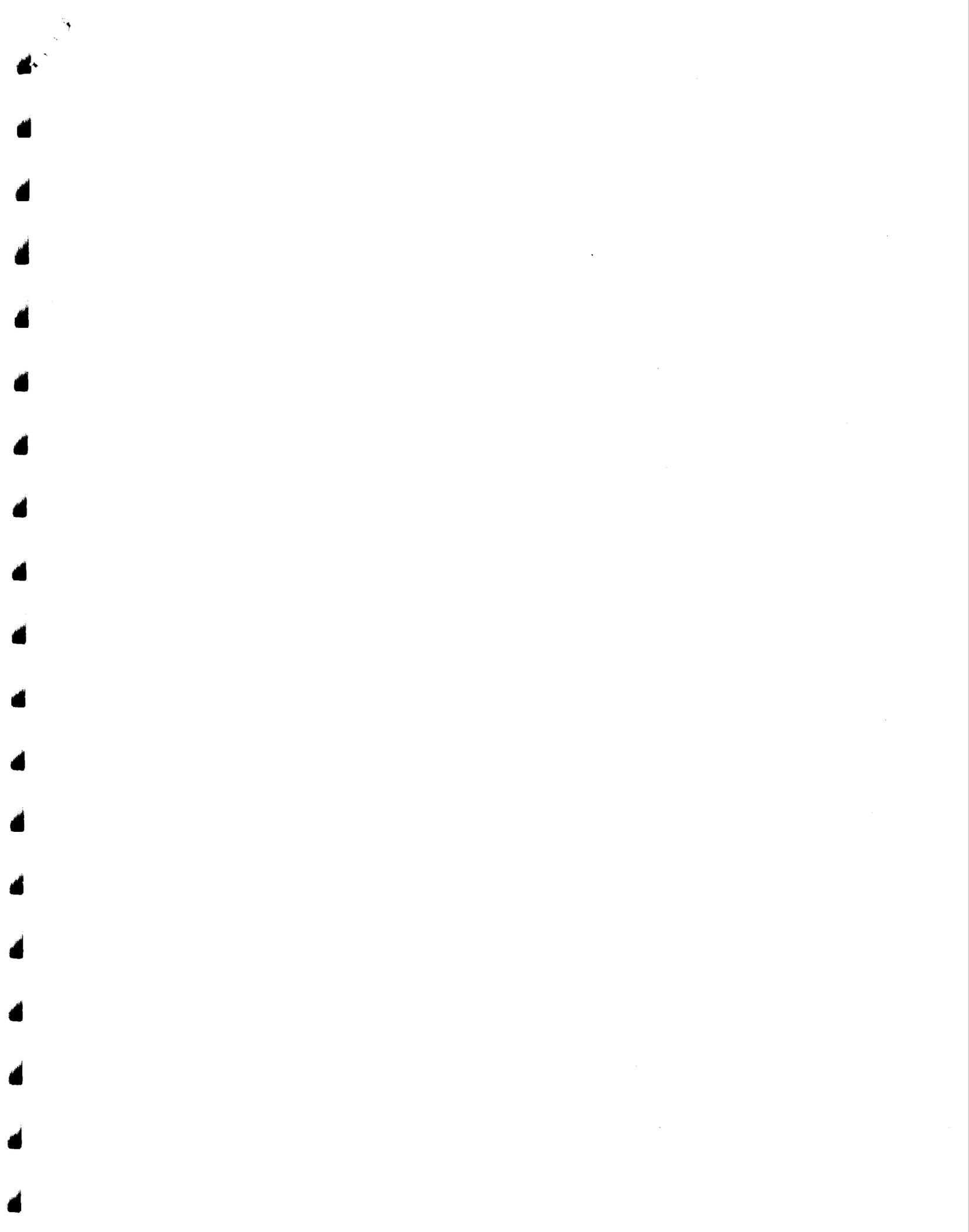
SECTION 9 AICUZ REVIEW STRATEGIES (ONGOING)

- AICUZ data should be reviewed and revalidated every two years (including re-run of an AICUZ noise map) unless required sooner in conjunction with an EIAP action.
- Every two years, conduct an analysis of land use compatibility within the vicinity of Malmstrom AFB. Maintain a working relationship with surrounding communities to re-establish compatible land use designations as incompatible designations are identified.
- The base should conduct and submit to HQ AMC a brief AICUZ survey on a biennial basis. This survey should summarize the status of the AICUZ program, emphasizing foreseeable changes in the program including any issues involving civilian development which could impact on the mission (This survey is required by HQ USAF/CEVP).
- The base should attend all zoning hearings which can potentially affect Malmstrom AFB.
- The base should provide information to communities on modification of flight procedures that may affect noise in the area.

- The base should maintain constant, positive contact with key public officials.
- Keep senior base leaders fully informed on the AICUZ program.
- Closely monitor county and city comprehensive planning processes to ensure that Malmstrom AFB's interests continue to be represented.

SECTION 10 CURRENT MALMSTROM AFB AICUZ CONCERNS

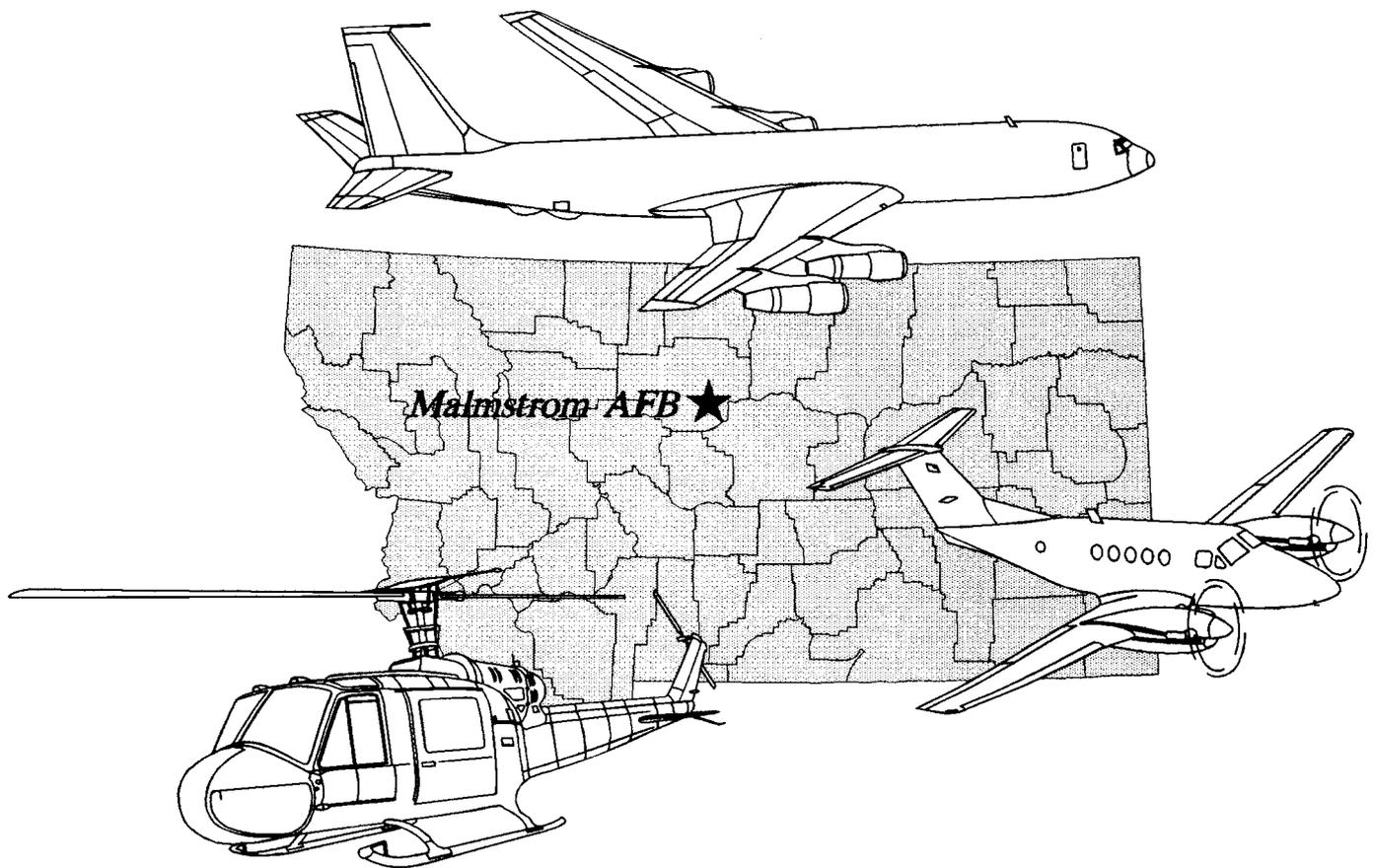
- Land within Malmstrom AFB accident potential zones, and beyond the jurisdiction of the Great Falls City County Planning Board, is currently unzoned. As such, no restrictions are in effect which prohibit incompatible development within these areas.



Document Separator

AICUZ STUDY

CITIZEN'S BROCHURE



UNITED STATES AIR FORCE
MALMSTROM AFB, MONTANA
1994

What is AICUZ?

Air Installation Compatible Use Zone (AICUZ) is a program concerning people; their comfort, safety, and protection. This brochure briefly summarizes the AICUZ study - an extensive analysis of the effects of noise, aircraft accident potential, and land use and development upon present and future neighbors of Malmstrom Air Force Base. AICUZ seeks a cooperative understanding and a reasonable solution to this intricate problem.

Is there a problem?

Military airfields attract development to immediately surrounding areas. In the absence of compatible land use controls, inappropriate uses may be made of property near or adjacent to the installation causing eventual conflicts between flight operations and landowners. Because land close to Malmstrom AFB is subject to high noise levels and aircraft accident potential, certain types of development are not suitable.

What has been done?

Malmstrom AFB has attempted to be a good neighbor by restricting flying activities that could adversely affect its neighbors. For example, flying operations are normally conducted between the hours of 7:00 A.M. and 10:00 P.M., when expected noise disruptions are less than they would be during evening hours. Malmstrom AFB has installed blast deflectors along the northern aircraft parking apron to minimize ground level impact from the noise of ground engine runups. Flight pattern altitudes and the runway approach angles have been adjusted over the years in an effort to reduce noise impacts while maintaining safe operations. The base has demonstrated a spirit of cooperation by participating with communities in the area-wide planning process. Continued cooperation by Malmstrom AFB, local governments, and the local populace will further reduce potential land use conflicts. This action will help ensure that future land use is compatible and beneficial.

What are the benefits?

In addition to protecting the public safety and health, primary benefits include protecting the taxpayer's investment in national defense provided by Malmstrom AFB and protecting economic benefits to the surrounding communities generated by base activities and employment. The local economy is enhanced by Malmstrom AFB's expenditures for salaries, contracts, construction, retirement pay, tuition aid to schools, health insurance payments, and off-base accommodations for travelers. With over 4,250 active duty and 1,065 civilian personnel affiliated with Malmstrom AFB during fiscal year 1992, Malmstrom AFB is the largest single employer in the region. Annual payroll from these personnel amounted to over \$144 million. Furthermore, Malmstrom AFB fiscal year 1992 construction, service, and supply expenditures totalled more than \$53 million. Respending of these dollars within the local area resulted in an estimated local economic impact of nearly \$115 million. While shrinking budgets challenge the leadership at Malmstrom AFB, the base continues to be a strong partner in the economic future of the local communities and Cascade County.

Why AICUZ now?

Residential development southwest of the base is occurring, and open land areas on three sides of the base offer development potential should the demand arise. Presently, no land use controls are in effect that would ensure compatible development within areas impacted by the base's flying operations. Modifications to flight operations at Malmstrom AFB have resulted in changes to the noise contours outlined in the 1978 AICUZ report. Information provided in the 1994 AICUZ report is intended to offer assistance to those planning the future of Cascade County and its communities. By using the updated AICUZ map and information provided in the 1994 AICUZ Study, neighboring communities are better equipped to make land use decisions and adopt land use controls which are compatible with Malmstrom AFB, yet able to accommodate growth.

What does AICUZ mean to me?

AICUZ means protection of the public safety and health as well as protection of the Air Force's national defense mission. The AICUZ itself is a composite of many factors: average noise levels, accident potential, and aircraft flight paths and altitudes. The noise and accident potential zones have been combined and displayed on the AICUZ map found on page six of this brochure. The numbers 65 dB through 80 dB indicate the average sound levels in decibels for a particular area using the Day-Night Average A-Weighted Sound Level (DNL) metric for describing the noise environment. The clear zones and accident potential zones (APZs) are based upon statistical analysis of past DoD aircraft accidents. The clear zone, the area closest to the runway end, is the most hazardous. The overall risk is so high that DoD generally acquires the land through purchase or easement to prevent development. APZ I is an area beyond the clear zone that possesses a significant potential for accidents. APZ II is an area beyond APZ I having reduced, yet still significant, potential for accidents. While aircraft accident potential in APZs I and II does not warrant acquisition by the Air Force, land use planning and controls are strongly encouraged in these areas for the protection of the public. An additional constraint involves areas which the Federal Aviation Administration (FAA) and DoD have identified for height limitations. Air Force obstruction criteria are based upon those contained in Federal Aviation Regulation Part 77, Subpart C.

The accompanying AICUZ generalized land use charts and map provide a quick reference to the various noise and accident potential zones around Malmstrom AFB. More detailed information can be found in the Malmstrom AFB 1994 AICUZ Study, Volume I.

COMPATIBILITY CHART*

LAND USE/AIRCRAFT NOISE

Generalized Land Use	DNL NOISE CONTOURS			
	65-70 dB	70-75 dB	75-80 dB	80+ dB
Residential	No ¹	No ¹	No	No
Manufacturing	Yes	Yes	Yes	Yes
Transportation, Communications, and Utilities	Yes	Yes	Yes	No
Trade, Business, and Offices	Yes	Yes	Yes	No
Shopping Districts	Yes	Yes	Yes	No
Public and Quasi-Public Service	Yes	No ¹	No ¹	No
Recreation	Yes	Yes	No	No
Public Assembly	Yes	No	No	No
Agriculture and Mining	Yes	Yes	Yes	Yes

¹Unless sound attenuation materials are installed.

*This chart is for general information. Refer to Volume I, Figure 4 for specific land uses and guidelines.

COMPATIBILITY CHART* LAND USE/ACCIDENT POTENTIAL ZONES

Generalized Land Use	ACCIDENT POTENTIAL ZONES		
	Clear Zone	APZ I	APZ II
Residential	No	No	Yes ¹
Manufacturing	No	Yes ²	Yes ²
Transportation, Communications, and Utilities	No	Yes ²	Yes ²
Trade, Business, and Offices	No	Yes ²	Yes ²
Shopping Districts	No	No	Yes ²
Public and Quasi-Public Service	No	No	Yes ²
Recreation	No	Yes ²	Yes ²
Public Assembly	No	No	No
Agriculture and Mining	No ³	Yes ²	Yes ²

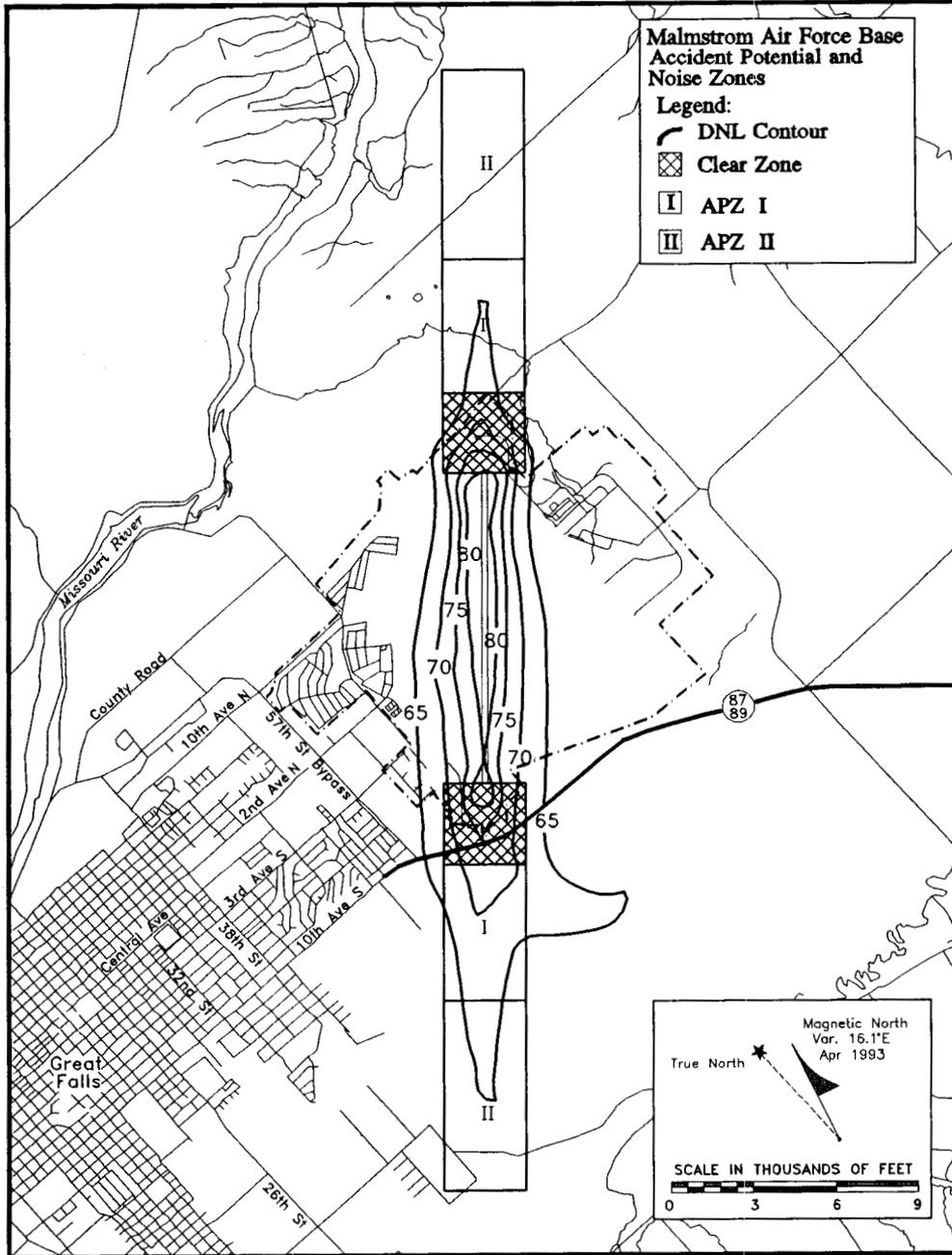
¹Suggested maximum density 1 dwelling unit per acre.

²Only limited low-density, low-intensity uses recommended.

³Except limited agricultural uses are permitted.

*This chart is for general information. Refer to Volume I, Figure 4 for specific land uses and guidelines.

AICUZ MAP



The AICUZ report includes the following recommendations:

The AICUZ report *should be adopted by affected jurisdictions as an official guideline for future planning.*

Zoning ordinances *should be adopted, or modified to reflect the compatible land uses outlined in the Malmstrom AFB AICUZ Report.*

Fair disclosure ordinances *should be enacted to specify disclosure to the public those AICUZ items directly related to operations at Malmstrom AFB.*

Height control *of structures near flight paths should be regulated by incorporating AICUZ recommendations into zoning ordinances.*

Subdivision regulations *should reject new subdivisions not compatible with AICUZ land use objectives and provide controls for continued development in existing subdivisions.*

Building codes *should require noise level reduction in areas impacted by DNL noise levels greater than 65 dB.*

Capital improvement programs *should be carefully reviewed to discourage incompatible land use patterns, with particular emphasis on infrastructure planning.*

How can I help?

Historically, the citizens of Cascade County and the personnel of Malmstrom AFB have worked together in cooperative and harmonious efforts to better serve the needs and desires of all concerned. We have collectively found solutions which have maximized the benefits of Malmstrom AFB while minimizing annoyances. If the future of Malmstrom AFB is to be as bright as its past, you, the citizens of Cascade County, need to participate in achieving a suitable resolution of our mutual concerns. We request your careful and considered review of the recommendations contained in the Malmstrom AFB 1994 AICUZ study.

Who prepared the AICUZ study?

The AICUZ study was developed by many concerned people at Malmstrom AFB under supervision of Headquarters United States Air Force and Headquarters Air Mobility Command. The complete report is available at Malmstrom AFB from the Public Affairs Office, and copies have been placed in local public libraries and are on file with the Cascade County Recorder. Only the major points of the complete AICUZ study are included in this brochure.



Document Separator

Draft

AICUZ DATABASE

SECTION 1 GENERAL

- | | | |
|----|----------------------------------|---|
| 1. | Base and Year of this survey | <u>Malmstrom AFB, MT 1993</u> |
| | A. Responsible Base Office | <u>43 CES/CEV</u> |
| | B. DSN & Civilian Numbers | <u>DSN 632-6165/(406) 731-6165</u> |
| | C. Current AICUZ Manager | <u>Mr. Jake Karnop</u> |
| 2. | Parent Command | <u>Air Mobility Command</u> |
| | A. Responsible Office | <u>HQ AMC/CEPR</u> |
| | B. DSN & Civilian Numbers | <u>DSN 576-5749/(618)256-5749</u> |
| | C. Current AICUZ Manager | <u>Mr. Mike Flahive</u> |
| 3. | Contractor | <u>Spectrum Sciences & Software, Inc.</u> |
| | A. Responsible Office | <u>242 Vicki Leigh Road</u> |
| | | <u>Ft. Walton Beach, FL 32547</u> |
| | B. Civilian Number | <u>(904) 862-3031</u> |
| | C. Current AICUZ Project Manager | <u>Mr. Pat Carpenter</u> |

Release date of initial study: 1978 N/A Exempted N/A Waived

Release date of last AICUZ update or amendment: 1978

- | | |
|---|--------------------|
| - Is the publicly released AICUZ still valid? | <u>No</u> |
| - Date of most recent data revalidation | <u>August 1993</u> |
| - Date of next scheduled data revalidation | <u>1995</u> |
| - Is AICUZ currently being or soon to be updated? | <u>Yes</u> |

If yes, complete the following:

<u>Phase</u>	<u>Completion Date</u>	
	Actual	Estimated
I Data Gathering	Aug 1993	
II Data Review/Validation	Aug 1993	
III Map Preparation	Sept 1993	
IV Plan Preparation	Sept 1993	
Base Approval	Jan 1994	
USAF/MAJCOM Approval	Feb 1994	
V Public Release		May 1994
VI Implementation/Maintenance		Ongoing

April 18, 1994

Draft

Draft

SECTION 2 ENCROACHMENT

4. Runway/Clear Zone/Accident Potential Zone Dimensions (in feet).

R/W DESG	Length	Width	CZ Width	CZ Length	APZ I Width	APZ I Length	APZ II Width	APZ II Length
03	200	11,500	3,000	3,000	3,000	5,000	3,000	7,000
21	200	11,500	3,000	3,000	3,000	5,000	3,000	7,000

5. Has all clear zone acquisition (Fee and/or Easement) been completed? Yes ___ No X
If no, indicate the runway and approach and the number of acres remaining.

Control of clear zone areas extending off-base has been acquired by MAFB through perpetual easement. A small portion of the southern Clear Zone within the Hwy 87/89 right-of-way has not been acquired because it is un-developable. Therefore, for all practical purposes, clear zone acquisition is complete.

6. Indicate the status of local controls to implement AICUZ recommendations by placing an "X" next to the appropriate statement. Provide necessary explanations in the area provided after question 17.

- a. Height and obstruction ordinances are in effect.
- b. AICUZ recommendations are totally implemented in the local comprehensive plan.
- c. AICUZ is implemented in local zoning ordinances.
- d. AICUZ recommendations requiring state legislative action are completed/pending.
- e. Adoption of compatible land use controls are in progress/complete.
- f. Development proposals that are incompatible with AICUZ recommendations are normally disapproved.

Draft

7. Land Use Status for Accident Potential Zones

RUNWAY	Est Pop	Acres	% Incomp L-U	% OFF BASE LAND USE WITHIN THE FOLLOWING CATEGORIES					
				Res	Com	Ind	Pub/Quasi-Pub	Rec	Open/Ag/Low Density
r/w 21									
CZ	0	207	0	0	0	0	50	0	50
APZ 1	0	344	0	0	0	0	0	0	100
APZ 2	0	482	0	0	0	0	0	0	100
r/w 03									
CZ	0	207	0	0	0	0	42	0	58
APZ 1	0	344	0	0	0	0	0	0	100
APZ 2	0	482	0	0	0	0	0	0	100

Describe the current base encroachment.

- Land use within Malmstrom AFB accident potential zones is open agricultural.

8. Which jurisdiction, if any, has zoning authority in the accident potential zones and noise contour areas.

Name(s): Great Falls Planning and Zoning Board

Local Agencies Responsible for Implementing AICUZ Recommendations:

Agency

Point of Contact

Great Falls City-County Planning Board

Mr. John Mooney
2 Park Drive South
Great Falls, MT 59401
(406) 727-5881

Cascade County Planning Office

Mr. Roger Sanders
County Surveyor's Office
415 3rd Street Northwest
Great Falls, MT59405
(406) 761-5114

April 13, 1994

Draft

Draft

SECTION 3 NOISE

9. Indicate which statements concerning noise abatement activities are applicable by placing an "X" next to the appropriate statement. Provide necessary explanations in the area provided after question 15.

- a. Flight tracks are routed to minimize noise impacts on the surrounding community.
- b. Engine run-up areas and test cells are sited to reduce noise disturbance.
- c. Hush houses and sound suppressors are in use.
- d. A preferential runway is in use due to noise complaints.
- e. A "Quiet Hours" restriction has impacted the base operational mission.
- f. AICUZ recommendations for sound attenuation are incorporated into the local building codes.
- g. Sound attenuation design is incorporated into on-base construction.
- h. Noise abatement procedures impact the conduct of operational missions.

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10. Land Use Status For Noise Zones.

DNL	Location	EST POP	ACRES	% Incomp L-U off-base	% OFF BASE LAND USE WITHIN THE FOLLOWING CATEGORIES					
					Res	Com	Ind	Pub/Quasi- Pub	Rec	Open/Ag/ Low Density
NOISE SENSITIVE AREAS BETWEEN DNL 60 dB AND DNL 65 dB										
60-65 *	OFF-BASE	1,041	2,091	0	3	<1	<1	<1	<1	95
	ON-BASE	1,466	525							
ROUTINE AICUZ ANALYSIS										
65-70	OFF-BASE	1	670	0	0	0	0	0	0	100
	ON-BASE	12	530							
70-75	OFF-BASE	0	127	0	0	0	0	0	0	100
	ON-BASE	0	378							
75-80	OFF-BASE	0	5	0	0	0	0	0	0	100
	ON-BASE	0	130							
80+	OFF-BASE	0	0	0	0	0	0	0	0	0
	ON-BASE	0	276							
> DNL 80 dB IMPACTS OUTSIDE IMMEDIATE RUNWAY ENVIRONMENT										
80-85 **	OFF-BASE	0	0	0	0	0	0	0	0	0
	ON-BASE	0	230							
85+ **	OFF-BASE	0	0	0	0	0	0	0	0	0
	ON-BASE	0	46							

* In California Only per AICUZ Public Release

** Do Not Place in AICUZ Studies for Public Release Without Clearance from HQ USAF. This Information is Typically for NEPA/EIAP Purposes.

Describe the current base encroachment.

- Currently, the only Malmstrom AFB noise zone which impacts developed land areas off-base is the DNL 60-65 dB zone. No land use restrictions apply in this noise zone. Higher noise zones impact land used for agricultural purposes.

11. How many valid noise complaints have been recorded by the base in the last two years? 140

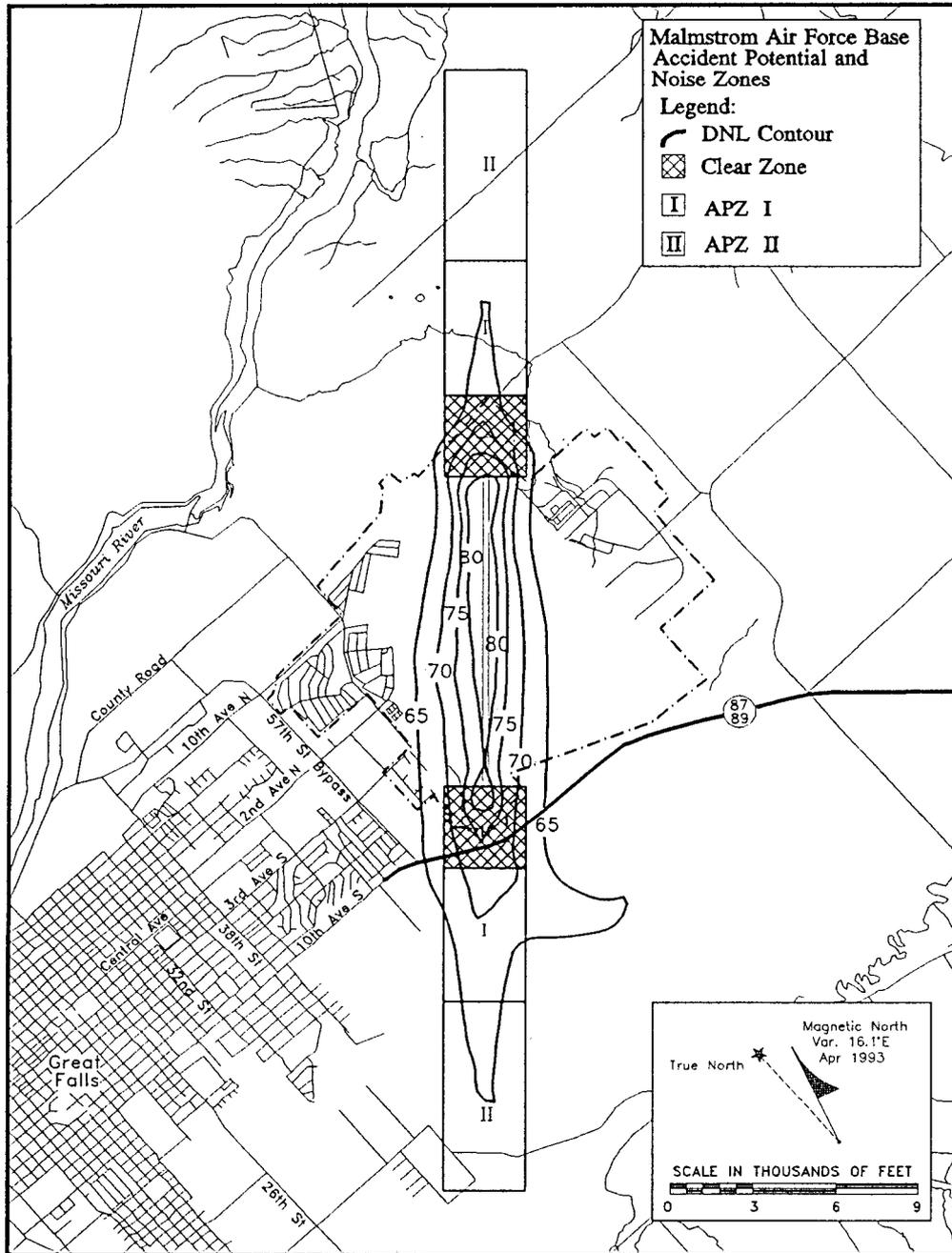
Malmstrom AFB Public Affairs does not maintain a noise complaint log. They do receive an average of five complaints per month; however, approximately 90 percent of these complaints are not MAFB assigned aircraft. Most of the complaints are from the bombing range near Havre, MT.

April 13, 1994

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Draft

SECTION 5 MAP



April 13, 1994

Draft

Draft

SECTION 4 AIRSPACE

12. Indicate the status of the airspace environs by placing an "X" next to statements that describe the flying environment. Provide necessary explanations at the end of the questionnaire.

- a. Air missions are canceled weekly due to non-availability of ranges.
- b. The mission schedule includes additional lines that compensate for those that are anticipated to be lost because of range/airspace availability.
- c. Missions declared incomplete are primarily a result of airspace availability.
- d. Low level training is normally not conducted from this base.
- e. Air traffic restrictions limit the tactical training that can be accomplished.
- f. A near miss with a civilian aircraft was recorded within the last year.
- g. Air traffic control ground delays cause frequent mission cancellations.
- h. Transition training is normally accomplished at another location.
- i. Airspace restrictions are such that we cannot train on essential aircraft systems from this base.

None of these situations apply to the Malmstrom AFB operational environment.

13. Is the base a joint use facility? Yes No

14. Does the base have any pending airspace request? Yes No

15. Have any routes or range operations been altered to avoid encroachment? Yes No

Malmstrom AFB routes and operations are designed to avoid populated and environmentally sensitive areas.

General Encroachment Comments: If related to a particular question, provide a reference number.

- 6a. Height and obstruction ordinances are not in effect in the MAFB environs.
- 6b. Recommendations from the last published AICUZ, dated 1978, are not incorporated in local planning documents. The environs around Great Falls International Airport contain land use restrictions to ensure compatible development around the airport. It is expected that recommendations within the 1994 MAFB AICUZ will be incorporated into local planning policy.
- 6c. AICUZ is not addressed in local zoning ordinances.
- 6e. Adoption of compatible land use controls are not in progress.
- 9c. Malmstrom AFB does not have hush houses or sound suppressors.
- 9d. Runway preference is due to wind direction and not noise mitigation.
- 9e. Malmstrom AFB does not have a published quiet hours.
- 9f. Local building codes do not contain NLR in the areas around Malmstrom AFB. However, the harsh winter climate of the Great Falls area requires thermal insulation that performs NLR.
- 9h. Noise abatement does not impact the conduct of Malmstrom AFB flight operations.

April 13, 1994

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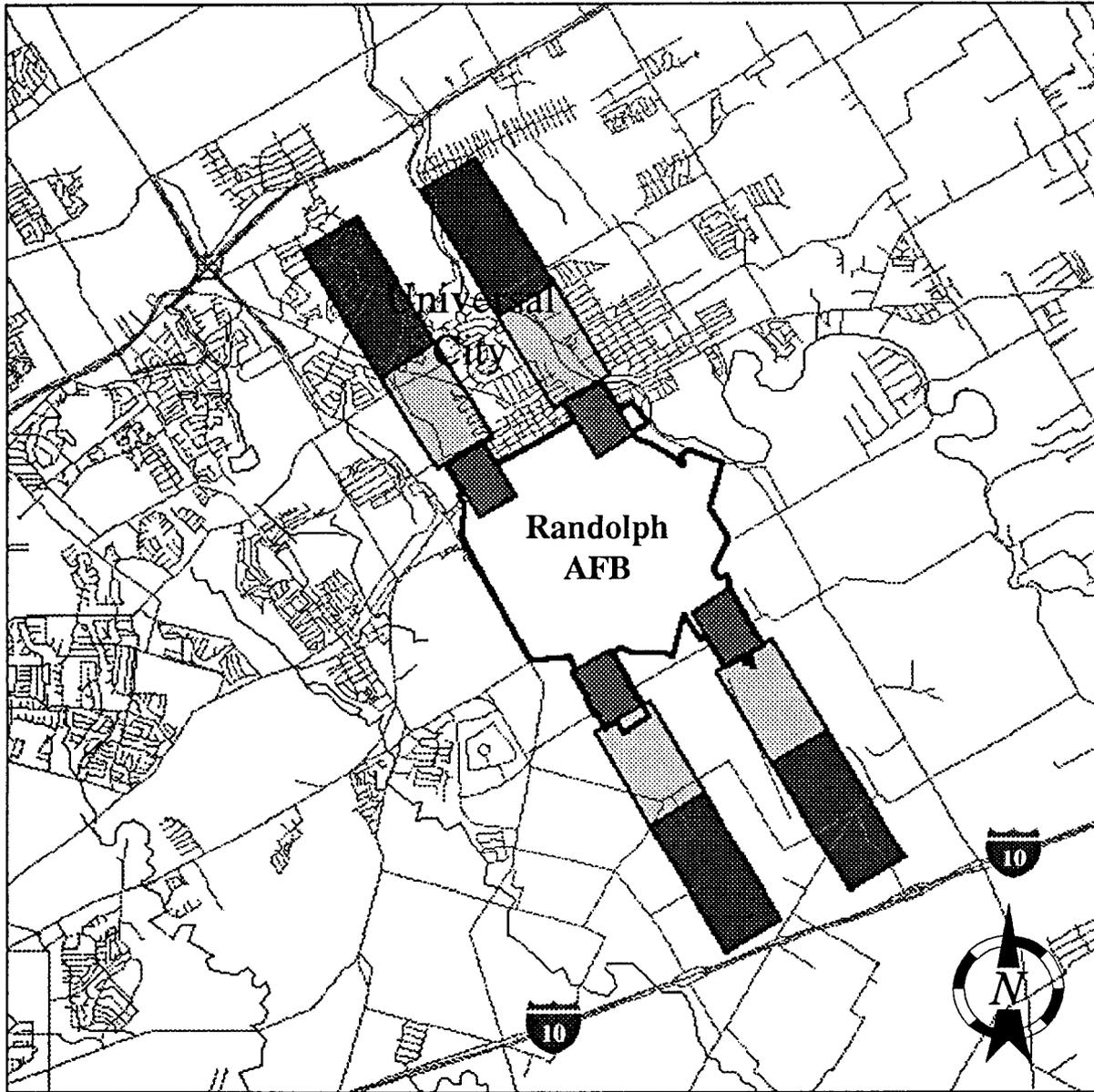
Document Separator

AICUZ PROGRAM

- Landuse Program Using Noise and Safety as Determinante
- Impact of Aircraft Noise on Surrounding Population
- Non-government Landuse Compatibility Studies
- Analyzed Data Used as Part of the BRAC Analysis



Randolph Air Force Base San Antonio, Texas



-  Clear Zone
-  Accident Potential Zone I
-  Accident Potential Zone II

Aircraft Flight Tracks for AICUZ Baseline Study



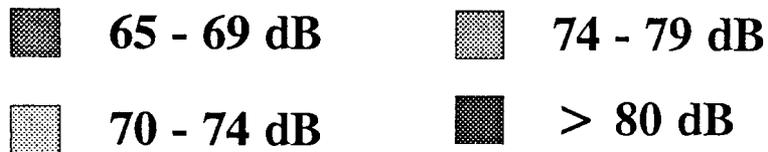
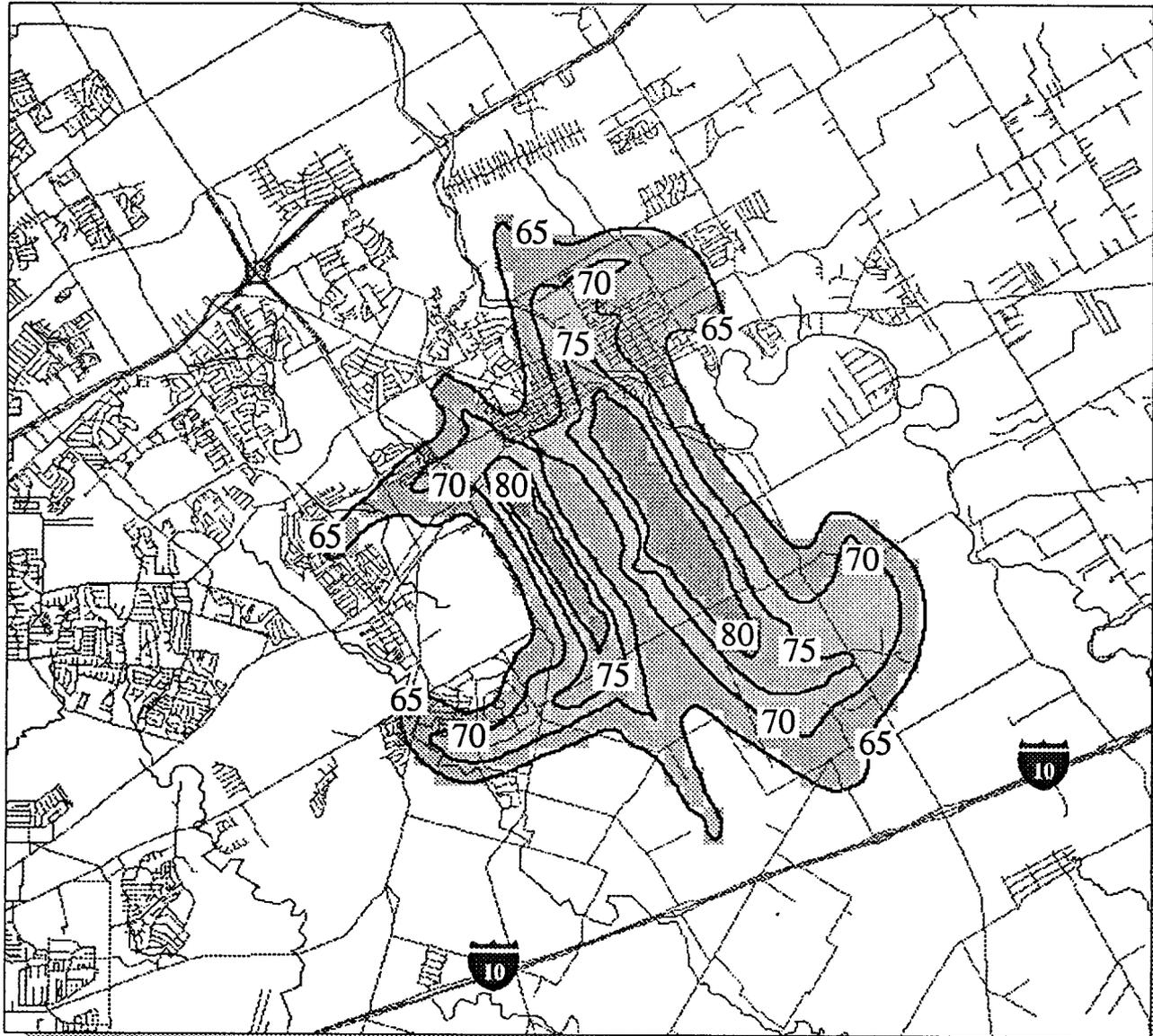
- Flight Tracks input to BASEOPS using PWP forms and converted to GRASS vector format

Aircraft Flight Tracks & Noise for AICUZ Baseline Study



- **Resulting Noise Grid generated by NOISEMAP using input from BASEOPs**

Reclassified Noise Grid with Contour Lines



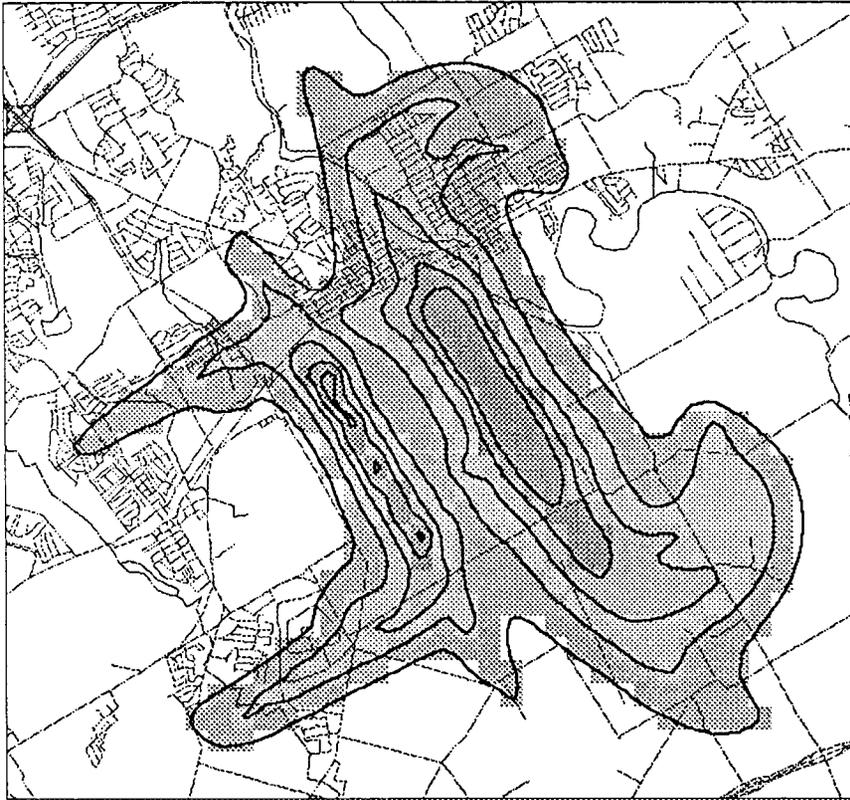
- Contours generated by the NMPLLOT smoothing package

Detailed Noise Studies

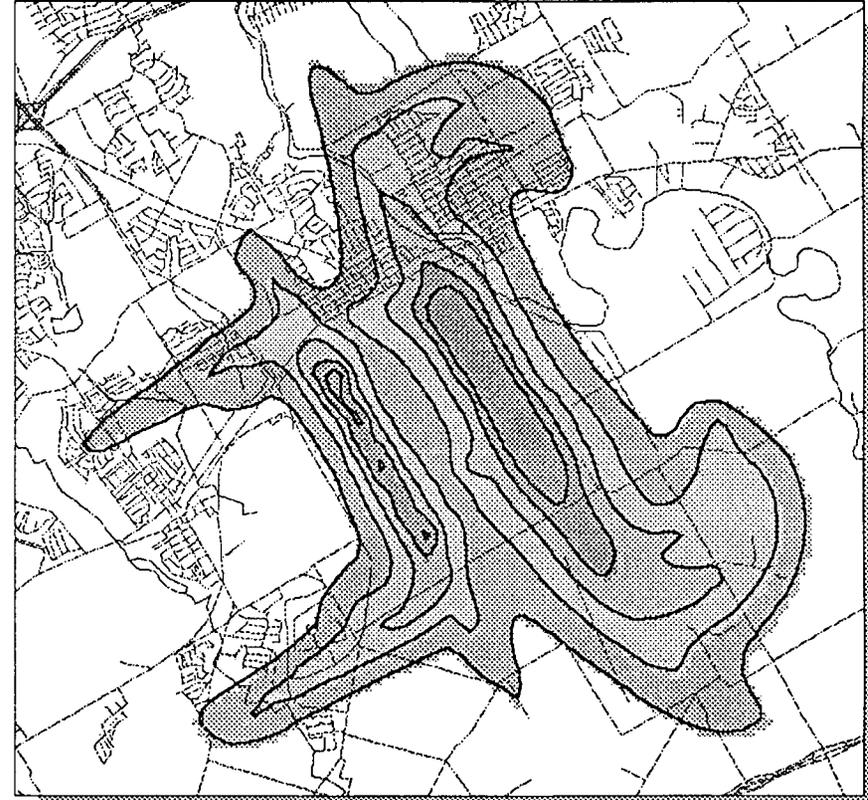
200' Noise Grid Over Area of Interest



Reclass of Original
NOISEMAP Grid File
(1000 ft Resolution)

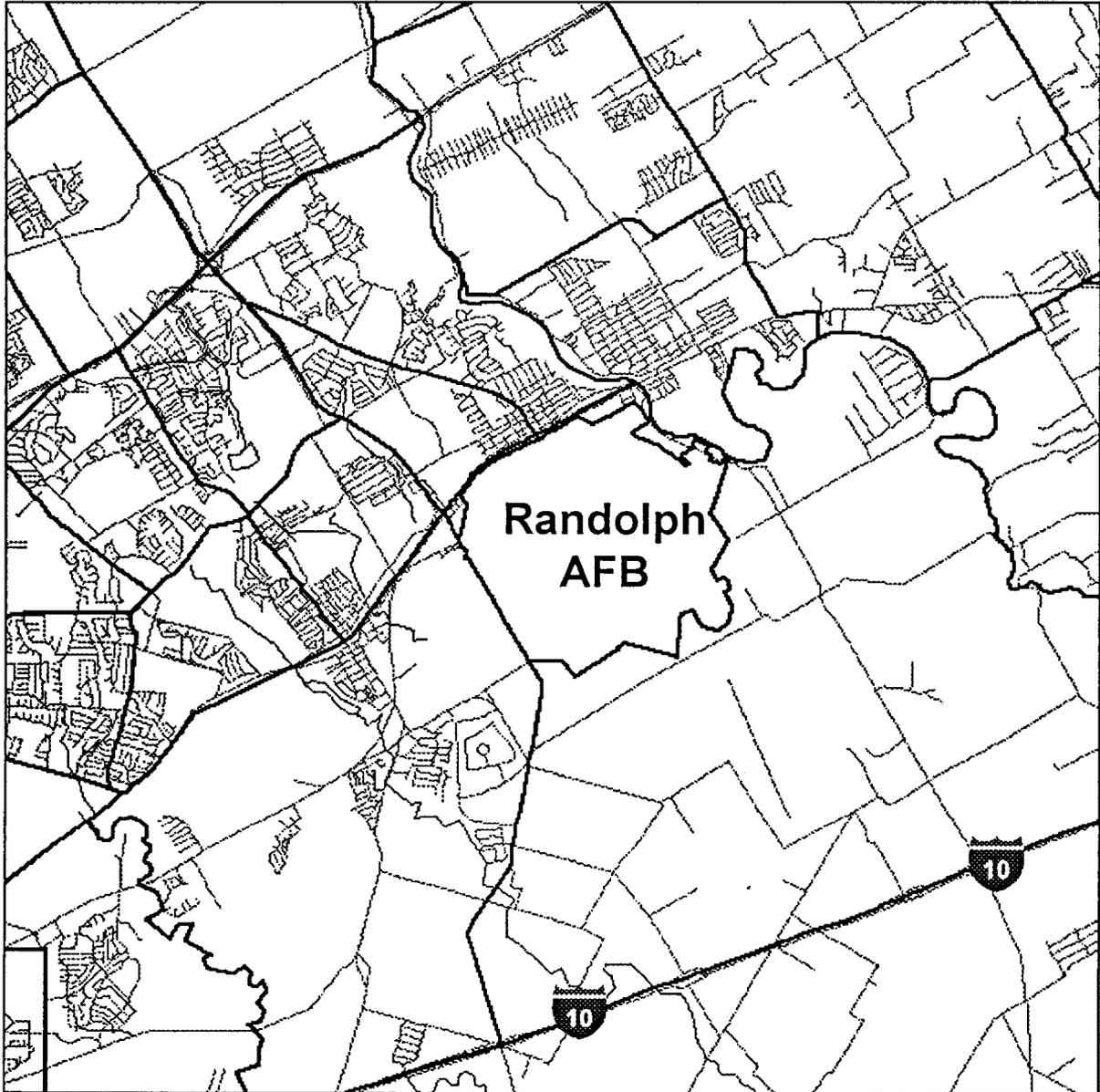


Grid Smoothing of Original
NOISEMAP Grid File
(255 ft Resolution)



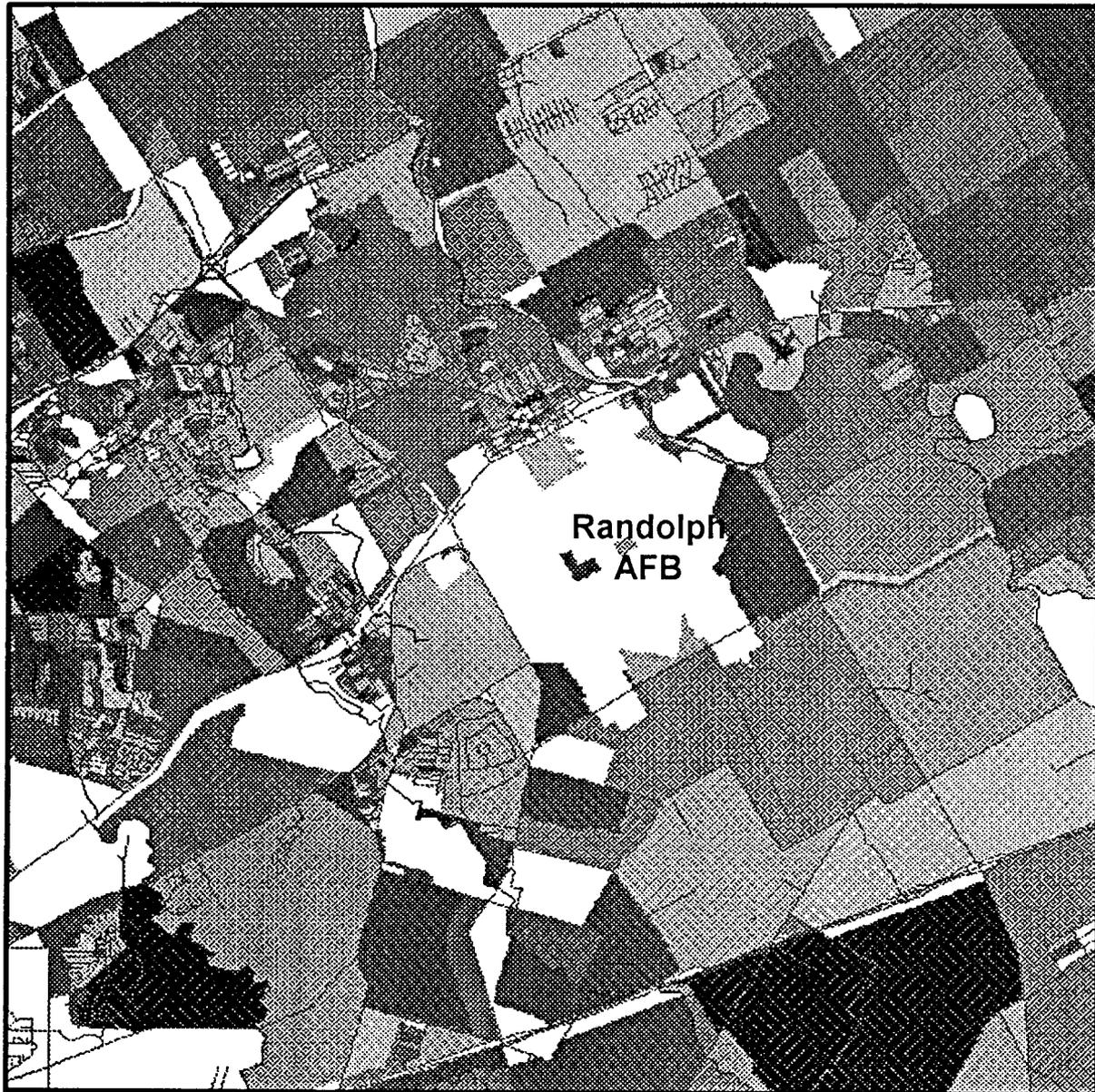
- The NOISEMAP grid data smoothed using bilinear interpolation to increase resolution of raster data.
- Smoothed raster data accurately replicates NMPLLOT Contours

US Census Tracts for Randolph AFB



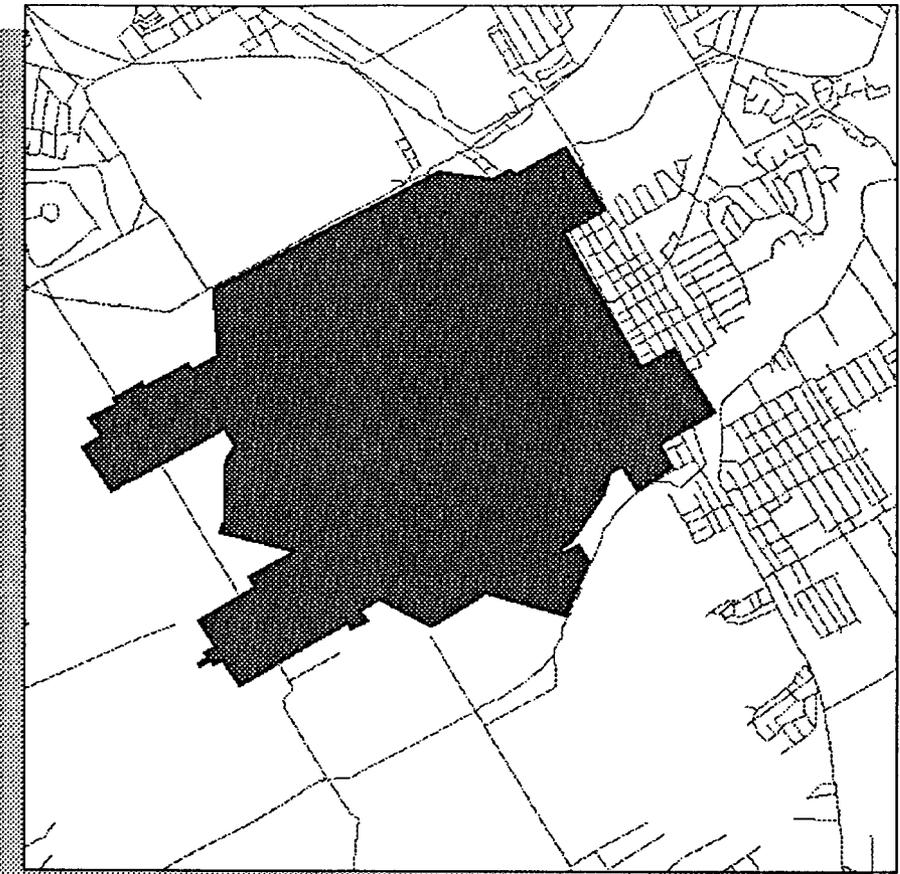
- Census Tract Boundary Lines
- Primary & Secondary Roads
- Major Rivers & Streams

US Census Blocks with Assigned Population Attributes

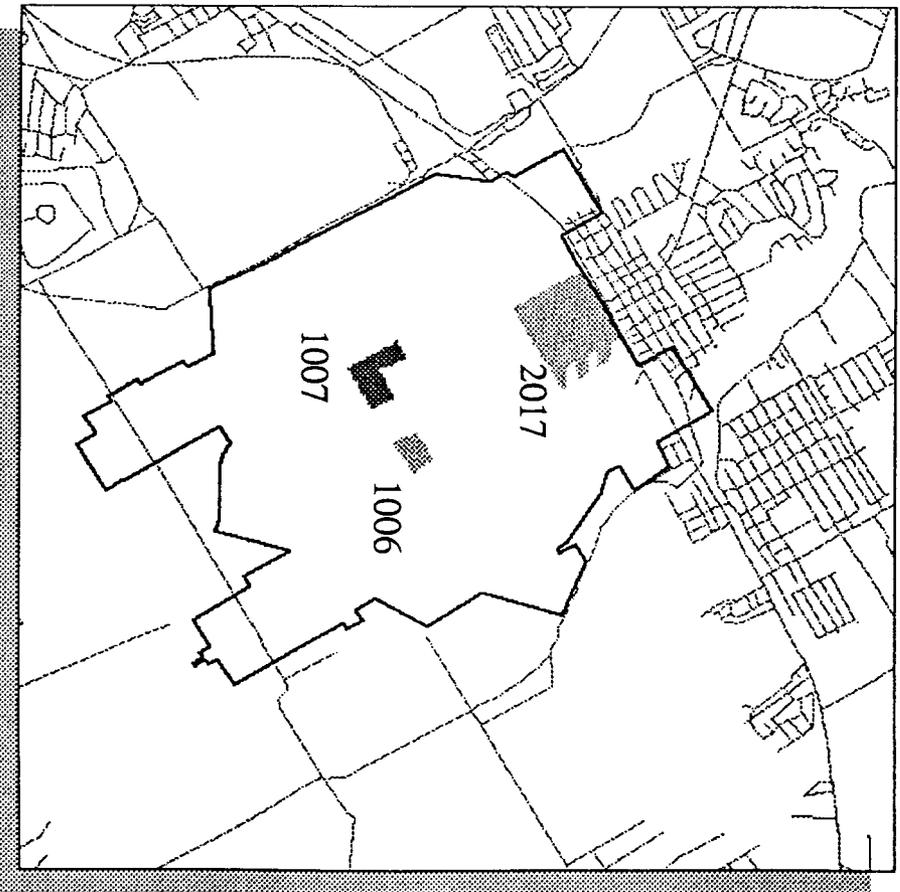


- A Census block contains the total population count
- Areas have been assigned random colors bases on population within a block

Correction for Randolph AFB Population Numbers

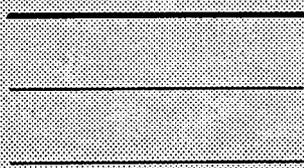
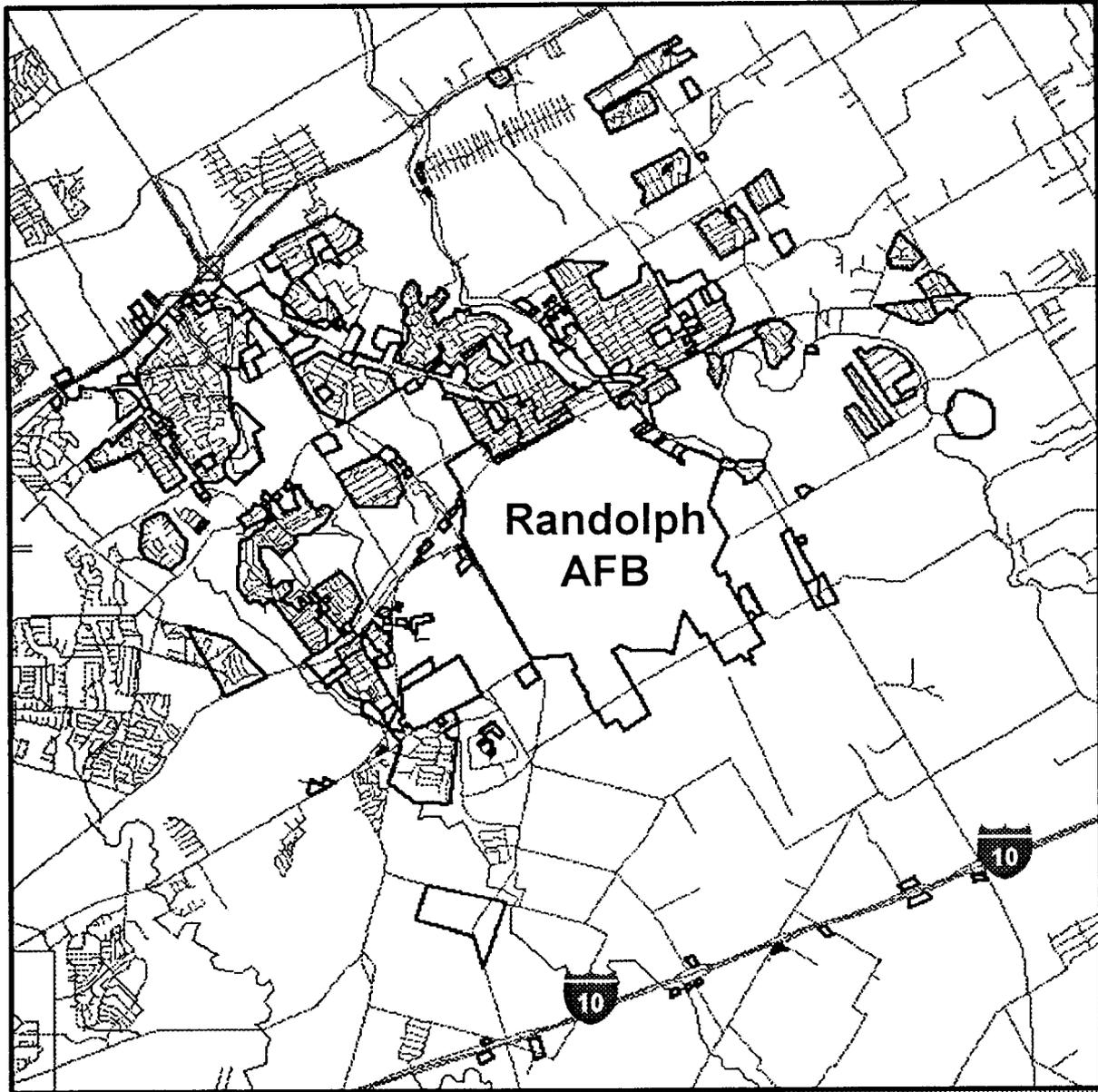


Demographic Block
for Randolph AFB
(Population - 4030)



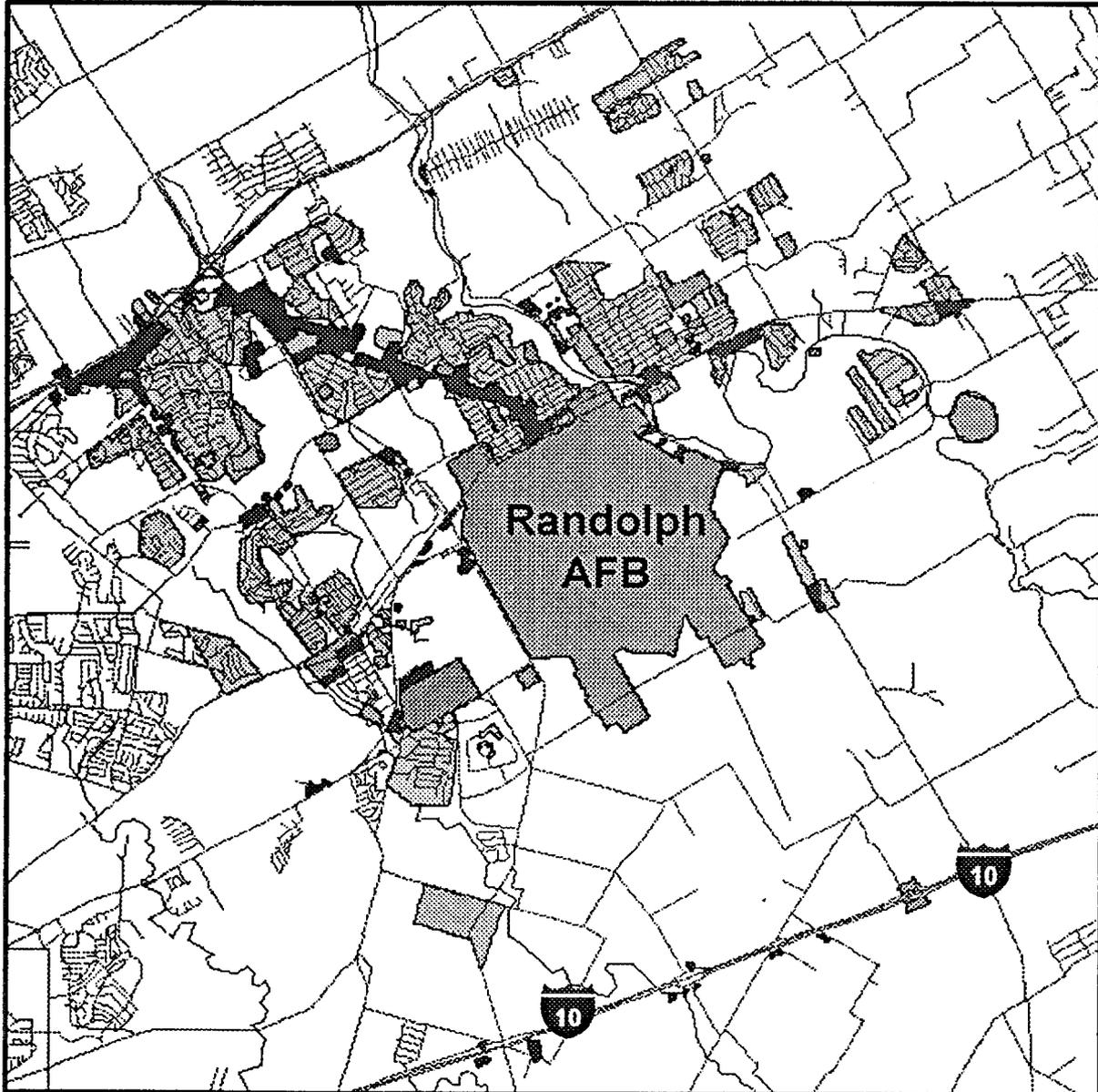
Corrected Population Areas
(Base Housing)

Digitized Land Use Areas



Digitized Land Use Areas
Primary & Secondary Roads
Major Rivers & Streams

Thematic Land Use Map



Commercial

Recreational

Industrial

Residential

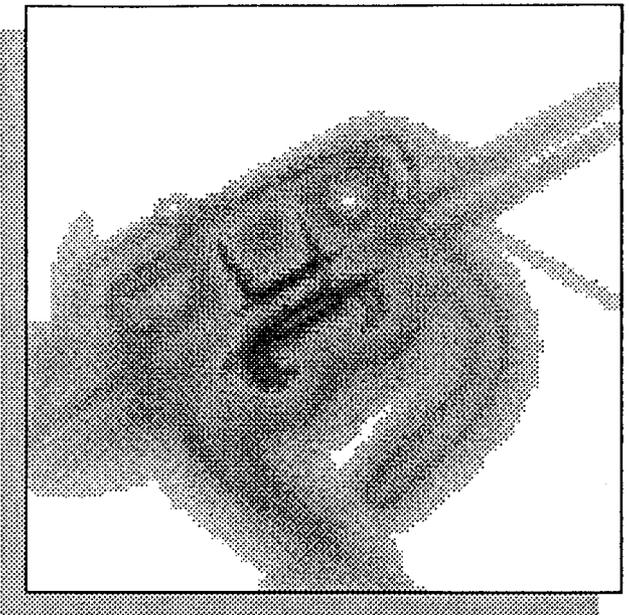
Quasi-Public

Land Use with Aircraft Noise Contours

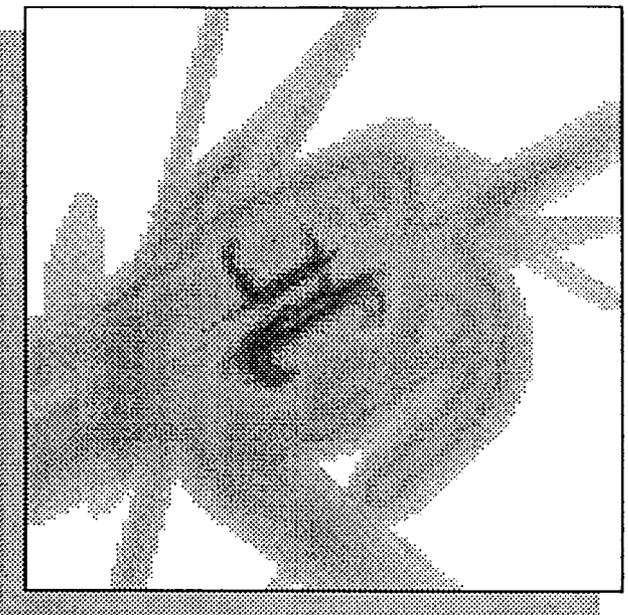
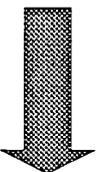


ENVIRONMENTAL IMPACT ASSESSMENTS

- Evaluation of Numerous Alternative Cases to Assess Effectiveness of Mitigation of Noise Impacts
- Comparison of Noise Cases Using Different Aircraft Operations, Flight Tracks, and Procedures
- Impact of Aircraft Noise on Environmentally Sensitive Areas
 - Preserves
 - Endangered Species Habitat
 - Public Assembledge
 - Schools
 - Churches
 - Malls



Baseline Case



Proposed Case



**Noise Comparison
Baseline vs. Proposed Case**

**Noise Comparison (difference)
for Background Noise Levels
> 40 dB**

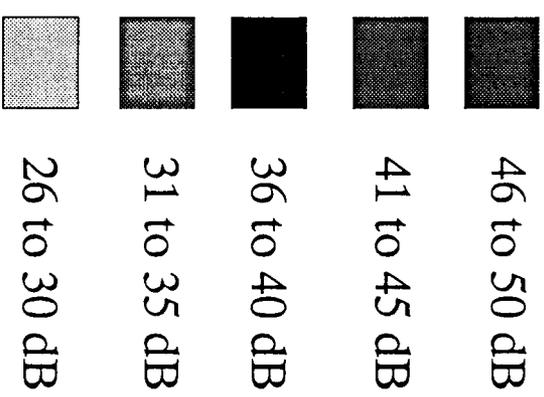
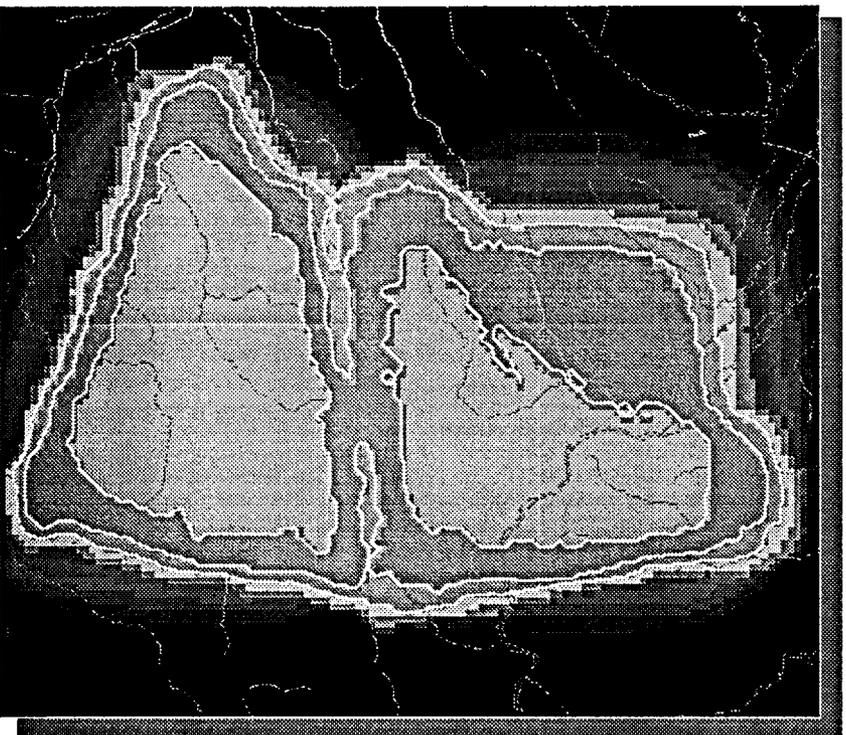
Selected Specific Point Analysis Using Noise Comparison Data



Noise Comparison: indicates increased noise levels in local neighborhood. Specific Point is used by BASEOPS/NOISEMAP to determine (18) top contributors to increased noise levels.

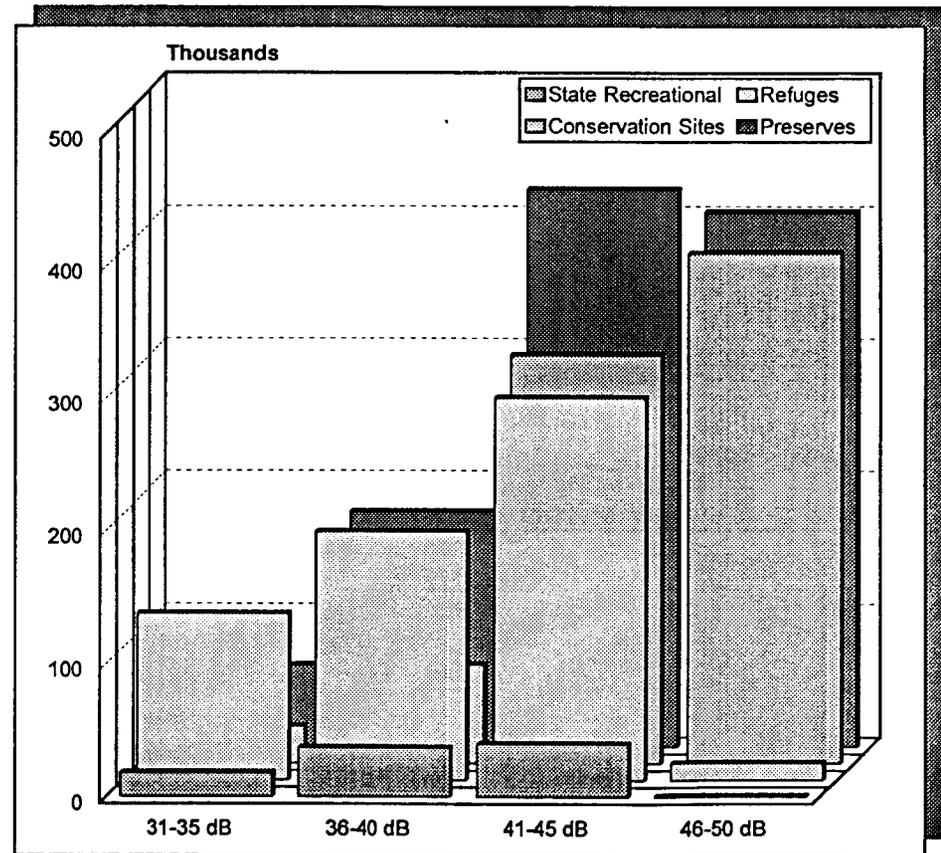
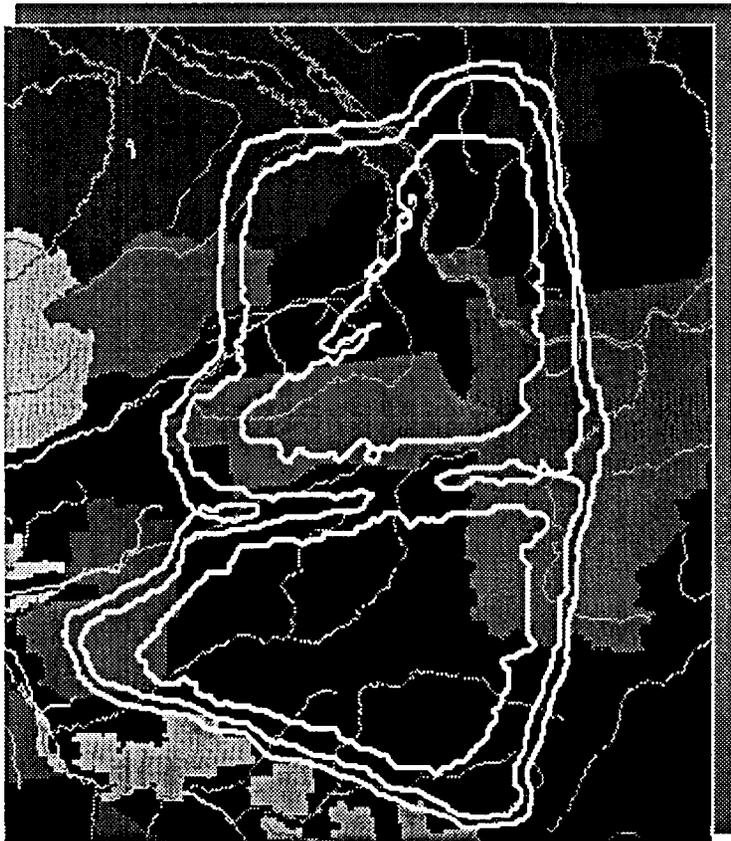
MOAMAP Output

MOA Noise

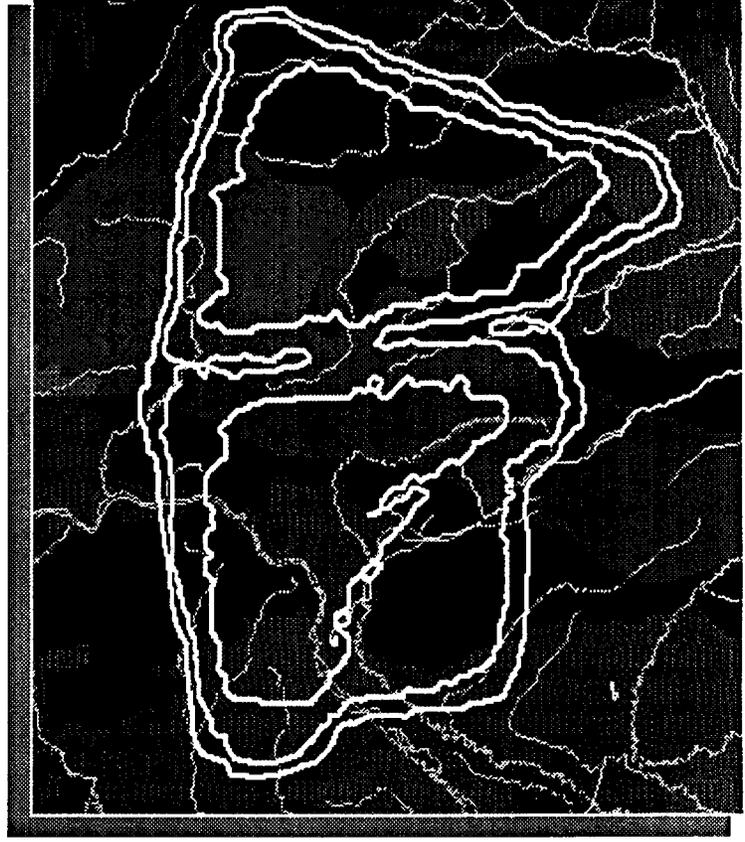
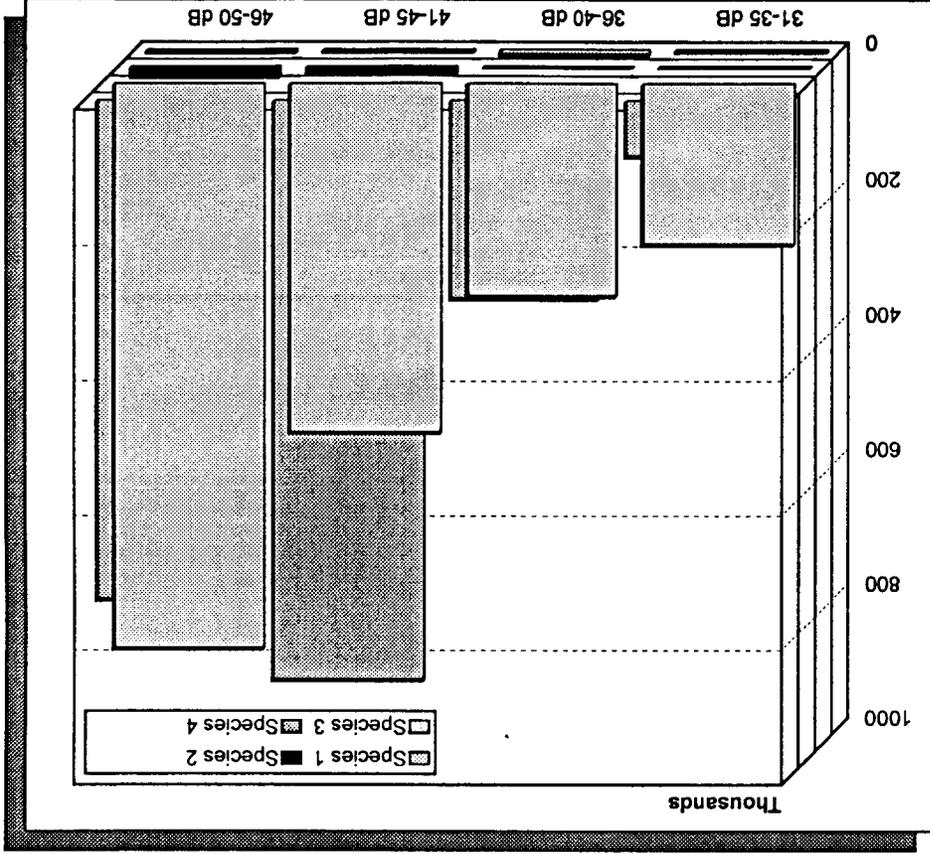


Preserves and Recreational Areas

MOA Noise

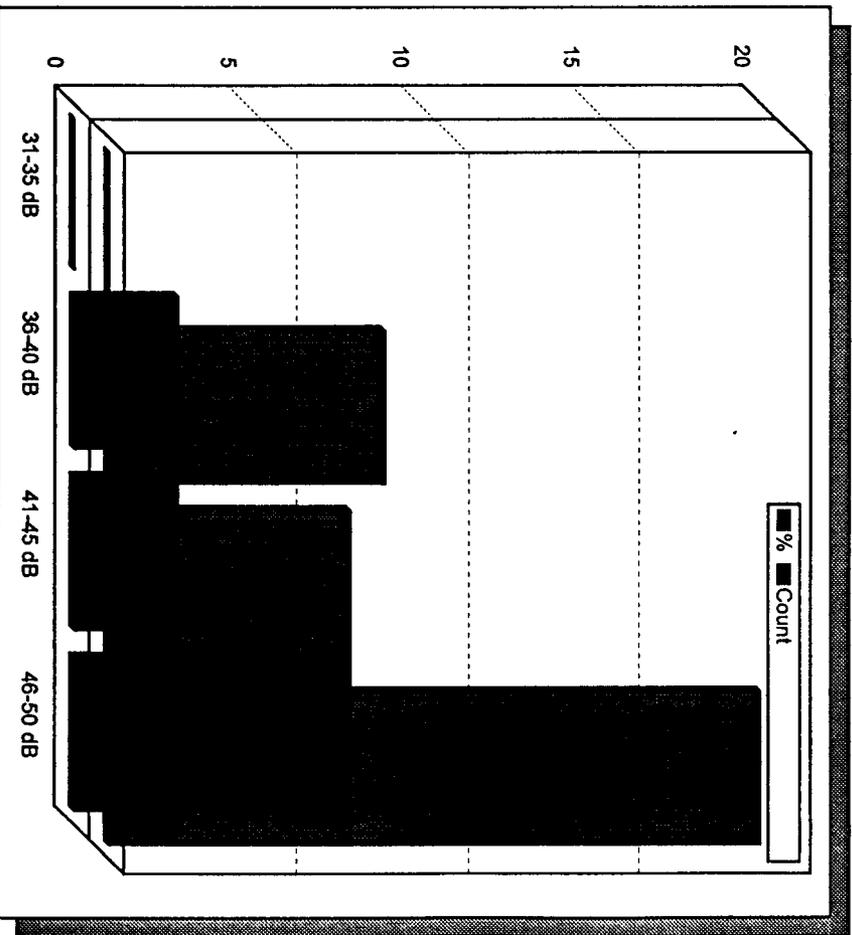
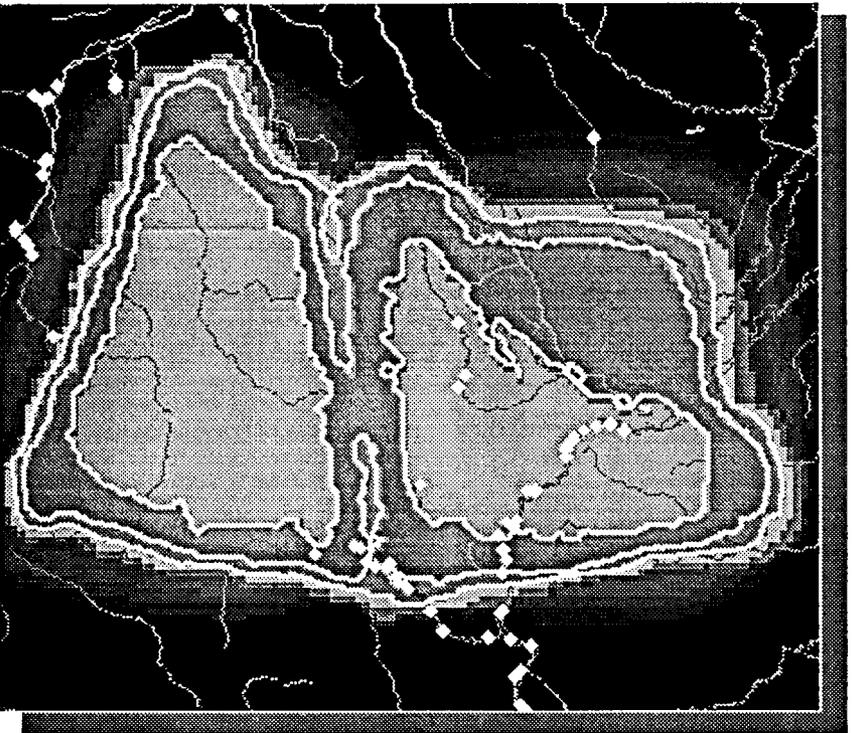


Wildlife Concentration Areas *MOA Noise*



Bird Nesting Sites

MOA Noise



Total Nesting Sites = 200

CONCLUSIONS

- Existing Noise Models Can Be Integrated with GIS
- Enhances Ability to Quantify Impacts of Aircraft Operations on Neighboring Communities and Environment
- Provides Tools to Rapidly Complete Noise Analysis
- Based on Accuracy of Data the Methodology Provides Precise Analysis Which Makes the Results Defensible
- Enables the Accomplishment of Detailed Analysis of Multiple Alternatives in a Minimal Time Period with Enhanced Quality



Document Separator



DEPARTMENT OF THE AIR FORCE
WASHINGTON DC



29 SEP 1994

OFFICE OF THE ASSISTANT SECRETARY

SAF/MII
1660 Air Force Pentagon
Washington, D.C. 20330-1660

Mr. Tom Houston
Staff Director, Defense Base Closure and Realignment Commission
1700 North Moore Street, Suite 1425
Arlington, VA 22209

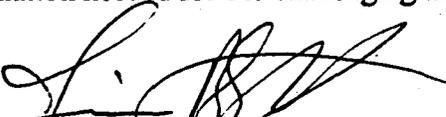
Dear Mr. Houston

Thank you for your July 1, 1994 letter; I particularly appreciate the positive comments about the support you have received from the staff in preparation for the forthcoming base closure analysis.

Regarding your request for information to make available to the commissioners, my staff has talked with the staff group for both the Secretary and Chief and I have assembled the attached speeches and statements that might be helpful. The Joint Posture Statement delivered during Congressional hearings this year is a particularly good summary of today's Air Force. Two recent speeches by the Chief of Staff are included. I have also included my statement filed in Congressional testimony this year. The first nine pages of that statement dwell on reducing the size of the Air Force physical plant and how base closures fit into that process.

General McPeak's November 1991 video, "*Tomorrow's Air Force: Reshaping the Future*," remains a good source of background information for your staff and future commissioners. There is no more recent video that provides a similar update.

I will continue to work with your staff and the Air Force Team, headed by Frank Cirillo, to ensure you have the information needed for the challenging analysis ahead.


JAMES F. BOATRIGHT
Deputy Assistant Secretary of the Air Force
(Installations)

Attachments:

1. A Joint Statement on Air Force Posture
2. CSAF Speech to the City Club of Portland
3. CSAF Speech to the Oregon Air Force Association
4. Deputy Assistant Secretary (Installations) Statement



A Joint Statement on Air Force Posture

**The Honorable Sheila E. Widnall
Secretary of the Air Force**

**General Merrill A. McPeak
Chief of Staff, United States Air Force**

March 1994

**JOINT DEFENSE POSTURE HEARING STATEMENT
OF
SECRETARY WIDNALL AND GEN MCPEAK**

Good morning Mr. Chairman and Members of the Committee. We welcome this opportunity to discuss our continuing plans to size and shape the United States Air Force to meet our nation's new defense strategy.

The *Bottom-Up Review* defines the strategy, force structure, modernization programs, industrial base and infrastructure needed to meet new dangers and seize new opportunities. It also determines the combat ready force structure necessary to carry out our national security requirement to fight and win two nearly simultaneous major regional conflicts (MRCs). For the Air Force this two-MRC objective requires a force of 20 fighter wings (13 Active and 7 Reserve) and 100 bombers. Additionally, the *Bottom-Up Review* calls for a strategic nuclear force of 500 Minuteman III missiles and a mix of nuclear capable B-2 and B-52 bombers to provide an effective deterrent.

We fully believe the Air Force is capable of executing our national strategy. As the *Bottom-Up Review* emphasizes, a strong and vital Air Force is the key to prevailing in two major regional conflicts. Air and space forces can bring our nation's power quickly to bear anywhere on the globe, and will provide a decisive element of military might in partnership with the other services and our allies.

In providing these forces, the Air Force has paid particular attention to the needs of the warfighting CINCs. Their concerns provide focus to us as we prepare each annual budget. This support is not limited to the conventional warfighting forces earmarked for major regional conflicts -- our efforts remain equally responsive to the commanders for space, nuclear deterrence forces, and special operations forces. To better support all of the CINCs, we have reorganized and trained our forces to fight as integrated combat units and have placed priority emphasis on readiness. To ensure tomorrow's Air Force is as well equipped as today's, we are sustaining and improving our force through selective modernization. Our acquisition efforts range from buying the C-17 to get joint forces quickly to the fight, to purchasing sophisticated weapons that will provide warfighting leverage and ultimately save ground combatant lives. We are also maintaining our technological edge through investment in research and development. The FY 1995 budget provides the CINCs with the best mix of current readiness and long-term investment to carry out their missions in support of the strategy outlined in the *Bottom-Up Review*.

However, given fiscal constraints and the need to downsize our forces, we also face a certain level of risk, most of which occurs in the near term. This risk lies in the areas of conventional bomber capabilities, precision weapons, spare parts, support equipment, and airlift capacity. If funding remains on track for Air Force programs and for the operational support to sustain our current systems, we will reduce much of this risk by the turn of the century. Between now and 2000, we will complete acquisition of the B-2 and upgrade the early B-2 models to full capability. Additionally, we will upgrade the conventional capability and deployability of our B-1s and B-52s. Conventional enhancements and the procurement of compatible precision weapons will give our bomber force the ability to strike anywhere on the globe, regardless of threat, within hours of orders from our National Command Authorities. In our fighter and airlift forces, we are working hard to overcome spot shortages of vital spare parts, as well as support equipment for specialized programs such as LANTIRN. While our airlift capability will improve as the C-17 fleet increases in number, we will still face an overall airlift shortfall for regional conflicts through the year 2000.

The proposed Air Force FY 1995 budget identifies the resources necessary to maintain readiness while we continue to modernize force structure. We have guarded against a hollow force by accelerating force structure reductions to preserve readiness. By the end of FY 1995, our fighter force will be approximately half the size of our 1988 force; our bomber force will be about one third the size. Our active duty personnel end strength will decline to approximately 400,000, from a high in 1986 of 608,000 -- a reduction of approximately 34%. However, we have cut our force structure as far as we can prudently go and still support the current strategy and operations tempo. Our efforts now must focus on reducing unneeded infrastructure to free vital dollars for more pressing needs, and seeking greater efficiencies through management and acquisition reform in the spirit of the National Performance Review.

ORGANIZATION AND INFRASTRUCTURE

The Base Closure and Realignment Commission (BRAC) has identified 22 CONUS Air Force installations for closure during the FY 1991-1998 timeframe. On our own initiative, we have also reduced our overseas basing -- from a high of 52 installations in 1989 to 29 today. By 1999, the number of overseas bases will drop to just 21. The force structure cuts outlined in the *Bottom-Up Review* require additional cuts in bases and other infrastructure to match our smaller warfighting force. These cuts will be addressed in the 1995 BRAC review. They will not be popular, but they are necessary to eliminate excess infrastructure.

Over the past few years, the Air Force has aggressively reorganized to reflect the needs of the post-Cold War era. We have consolidated thirteen major commands into eight. We have also streamlined our Numbered Air Forces by eliminating unnecessary management and staff functions. At the wing level, we "flattened" our management structure with the objective wing concept. This leaner organization eliminated stovepipe functions and strengthened the chain of command. Additionally, the Air Force has formed composite wings. These composite wings combine various types of aircraft at the same base under one commander to enable crews to train at home like they would fight when deployed -- as an integrated combat unit.

At our five Air Logistics Centers efforts are underway to improve efficiency and reduce costs. We are working hard to implement better business practices. Customers now control their logistics funding for depot-level reparable, aviation fuels, and depot purchased equipment maintenance. By introducing greater visibility and accountability, customers at the wing level participate more in key decisions on maintenance and repair. Our strategy is to focus on core maintenance requirements and to compete to do the work we do best. Greater emphasis on competition will continue to motivate our workforce and provide the best value to our warfighters and the taxpayer.

CURRENT OPERATIONS

Despite the drawdown in forces, the Air Force is more engaged today than during any period of "peace" in recent years. From the high ground of space, where we operate on-orbit assets in support of our world-wide commitments, to our constant vigil along the DMZ in Korea, the Air Force is actively protecting America's national interests.

Today the Air Force is flying armed sorties to enforce the two UN no-fly zones in Iraq. This region is still far from benign. During 1993, our aircrews encountered Iraqi threats both in the air and on the ground. Our involvement in the Gulf is still very significant. The number of sorties flown since Desert Storm is more than *two times* the number of missions flown during the entire Gulf War.

In the former Yugoslavia, we and our NATO allies are acting under UN auspices to deliver vital food and medical supplies for humanitarian relief, to deny the use of aircraft by the combatants, and to provide a visible, armed presence to discourage further escalation of hostilities. To date, our Air Force has delivered more than 52,000 tons of life-sustaining cargo to the region in an operation that has surpassed the Berlin Airlift in duration. On February 28th

our F-16 fighters, under the control of NATO AWACS, downed four aircraft that were flying in a prohibited zone and attacking targets on the ground. This act demonstrated both the resolve and readiness of the United States and our NATO allies to enforce the sanctions placed on the warring factions.

In Somalia, famine relief efforts have saved thousands of lives in a multinational operation built initially on the Air Force's airlift capability, and later joined by forces of the other Services and our allies. During FY 1993, our aircrews delivered over 63,000 tons of food and supplies.

The Air Force has also been involved in a variety of other missions in 1993, ranging from domestic flood relief efforts in the Midwest, to our ongoing counterdrug mission in Central and South America. This high operations tempo directly supports America's new strategy. But, success comes at notable cost in stress on our people and lost opportunities to hone some of their critical combat skills. We are continuing to examine various solutions, but one success has been our increased reliance on the Guard and Reserves.

The Reserve Components of the Air Force are playing an increasingly significant role in all of our domestic and global operations. Individual and unit volunteers from the Reserve Components share the burden of our high operations tempo and provide much needed relief to our active personnel. We will continue to explore new ways to employ our Reserve Components in the Total Air Force mission.

In addition to operations involving our traditional warfighting forces, we also conduct substantial operations with the most omnipresent of our capabilities -- our space force. The Air Force operates the vast majority of our nation's military space assets. At any given time, we provide the National Command Authorities, the various Commanders-in-Chief, and the other services with the navigation, surveillance, weather, and communications support essential to joint military operations. Wherever a crisis erupts requiring U.S. military support, our space assets are already overhead, providing immediate support to our air, sea, and land forces.

PEOPLE FIRST

The key ingredient to success in Desert Storm was the quality of our people. Readiness hinges on our ability to continue to attract and retain the best and brightest. During our current drawdown, we must continue to ensure our military and civilian personnel have the best training, equipment, facilities, and

leadership. Also, we must not neglect the quality of life of our people and their families. To retain the best people, we must take aggressive measures to reduce the stresses of their current challenges and to remove irritants that threaten or detract from their well-being and morale.

The foundation of a quality force is training and education. Our new Air Education and Training Command (AETC) molds our new people into mission ready professionals, whether in the officer or enlisted ranks. In aircrew training, for example, AETC now takes our young aviators from flight screening all the way to mission ready status. This focus on initial training in AETC frees the warfighting commands of the schoolhouse function, allowing them to concentrate on pressing operational requirements. Likewise, in the enlisted force, AETC takes new recruits and trains them to the "apprentice" level. This allows them to graduate to operational units and begin to immediately employ their skills, rather than continue in extended trainee programs. Our world class training goes beyond providing a combat ready force -- Air Force training is a national resource that has "dual use" application. Whether a member stays for a career or exits early to civilian life, the skills and experience gained in the Air Force are as much an asset to the commercial sector as they are to the military.

The move to a smaller, leaner force has required us to divest ourselves of a great deal of talent. Since 1986, the Air Force has reduced one out of three active duty and one out of four civilian positions. Voluntary incentives, authorized by Congress, have given the Air Force the flexibility to continue these reductions over the last few years. These incentives have helped maintain morale while minimizing the turbulence associated with the drawdown. But even with these incentives, we will still have to conduct selective early retirement boards to meet our active duty end strength goals. In FY 1995, the Air Force budget will support an active military end strength of 400,000, requiring the loss of an additional 19,500 members over and above our normal losses. This will be the Air Force's largest single year reduction since 1992. While our people continue to perform to the highest standards, they are concerned about their future.

Separation incentives on the civilian side will also help reduce the need for involuntary separations. However, some civilian reductions in force are inevitable at closing bases and in major programmatic reductions where cuts exceed attrition rates and incentives do not generate enough voluntary losses.

Despite the fact that the majority of personnel cuts have been voluntary so far, military and civilian uneasiness about long term career stability persists. So we must continue to "keep the faith" with the men and women (including retired) who have chosen the Air Force as a way of life. We will continue to emphasize

programs to keep commissaries open, maintain equitable pay raises, provide adequate child care, and continue our level of health care during and after the transition to the national program.

READINESS

To meet our new national strategy with shrinking resources, our forces must be trained and equipped to provide the greatest possible responsiveness and combat effectiveness. Maintaining readiness during this period of change is perhaps the biggest challenge we face.

In the late seventies, the Air Force experienced a decrease in readiness characterized as the so-called "hollow force." Some of our front line aircraft sat on the ramp without engines or other critical parts. Mission capable rates for our combat units were unacceptably low. Flying training and combat skills suffered.

The Air Force is aggressively acting to ensure readiness does not decline. To clearly focus our efforts and give the utmost emphasis to this crucial area, we have designated 1994 as the "Year of Readiness." We are actively studying ways of forecasting problem areas more accurately, keeping a watchful eye on leading indicators to resolve problems before they detract from readiness.

While our readiness posture remains in the green, there are some worrying trends. In Air Combat Command, for example, a small but growing number of F-15s have been without engines as shortages of repair parts at the depots adversely affected the availability of spare engines at every base. With last year's relief for buying parts, we are now on the path to recovery. It will take some time, but we are moving in the right direction. The lower than normal mission capable rate of the F-117 is on the way up after problems experienced during the move to a new beddown location at Holloman AFB. Our careful monitoring of important indicators such as cannibalization of parts and depot backlogs are helping to keep a handle on potential places where supply shortages could begin to impact readiness.

Realistic, intense training is also vital to our continued readiness. Our FY 1995 budget carefully balances the high tempo of peacekeeping and humanitarian operations with the need to keep our forces ready to fight regional conflicts. Our major exercises range from challenging Red Flag missions in the Nevada desert to major joint exercises that will employ the "adaptive joint force packaging" concept. Adaptive joint force packaging tailors forces in training to the needs of each

warfighting commander, giving better service interoperability when deployed. Our composite wings are also engaged in daily joint training. For example, at Pope AFB, the fighter and airlift forces of the 23rd Wing train daily with their counterparts in the XVIII Airborne Corps. This teaming relationship has paid big dividends. When these units fight together in major exercises, such as Air Warrior, their skills at the beginning of the training are on par with the completion proficiency level of traditionally-based units. The result is clear -- organizing and training units smarter in peacetime has produced greater readiness for war.

Another issue that impacts readiness is the availability of training ranges and airspace. In many cases our airspace requirements are growing to accommodate the longer weapon ranges, faster aircraft speeds, and larger composite force training requirements of our modern Air Force. To maximize readiness, we must routinely train in a manner that capitalizes on the strengths of our superior weapon systems and tactics. However, we are committed to striking a balance that will serve our legitimate operational requirements while protecting our precious environment.

We appreciate the support Congress has given us in the area of readiness. Your continued support of Operation and Maintenance funding will help us keep the Air Force ready to fight. The supplemental \$1.2 billion Congress appropriated to DoD is essential to defray the costs of our high level of engagement around the world.

MODERNIZATION

Modernization of our forces is key to ensuring that tomorrow's Air Force remains the world's premier air and space force. Careful attention to our modernization plans will minimize the near term risk to our ability to execute the two-MRC strategy.

As Dr. Perry has stated, we must direct our modernization efforts to ensure sufficient investment in research and development to maintain our future technological superiority. Although readiness must come first, we also need to continue selected acquisition programs such as the F-22 and the C-17 to fulfill our most pressing requirements, while using investment in research and development to maintain our technological edge for future acquisition programs.

The F-22 remains our number one modernization priority. Beyond the turn of the century, the F-22 will replace the aging F-15 air superiority fighter, continuing the dominance in the air combat arena the Air Force has enjoyed since the 1970s. Its combination of increased survivability and lethality will provide a qualitative edge that will ensure a "first-look, first-shot, first-kill" capability while minimizing surface-to-air threat exposure. The F-22 will also possess a ground attack capability with the internally-carried Joint Direct Attack Munition (JDAM). This increased flexibility will allow theater commanders to more effectively employ the F-22's increased firepower in a wide range of air-to-air and air-to-surface scenarios. As currently programmed, the first F-22 squadron will be operational in 2004, 32 years after the first F-15 flight. Keeping the F-22 program on track is our top modernization priority.

Modernization is also crucial to our airlift capability. The C-17 is a major part of our modernization effort and will significantly improve our ability to get forces quickly to the fight. The C-17 will fulfill the airlift customer's need for a flexible, responsive airlifter able to deliver forces and outsized equipment to small, austere airfields, and to airdrop troops and equipment over an objective area. The Air Force will procure six C-17s this year toward a fleet of 40 aircraft as announced by the Secretary of Defense in December 1993. In 1995, we will reevaluate the program's maturity and determine the optimum mix of additional C-17s and non-developmental aircraft to meet our airlift needs as we retire the workhorse C-141.

As the F-16 fleet ages, we will need a replacement multi-role aircraft. Production of programmed numbers of F-22s alone will not sustain the required 20 fighter wings. We will need larger numbers of a moderately priced multi-role replacement for the F-16 that can face the increasing sophistication of air and surface threats. The *Bottom-Up Review* recognized that immediate procurement of an F-16 replacement is not affordable in light of other priorities. After the termination of the A/F-X and Multi-Role Fighter, Congress authorized funding for a Joint Advanced Strike Technology (JAST) program to define requirements for the next generation of Air Force, Marine Corps, and Navy fighter/attack aircraft. The program is headed by an Air Force general officer working for the Assistant Secretary of the Navy for Research, Development, and Acquisition. This arrangement will ensure the interests and needs of all three services are considered at every step of the program. While the JAST program will not directly culminate in the production of follow-on aircraft, the goal is to provide a technology basis for fielding a replacement system around the 2010 timeframe.

To gain maximum leverage from all of our warfighting platforms, enhanced weapons programs are essential. In the air-to-air arena, we will continue joint procurement of the radar-guided AIM-120 Advanced Medium Range Air to Air Missile, or AMRAAM. In the area of heat-seeking missiles, we intend to team with the Navy to develop and procure the AIM-9X, a missile that will provide both increased range and employment envelope over our current version of the Sidewinder missile. In the Theater Air Defense arena, we are pursuing a boost phase intercept capability to counter the ballistic missile threat. The performance of our air-to-ground weapons in Desert Storm was superior, but new applications of technology will result in weapons that provide even greater capability. The new generation of surface attack weapons will provide precision capability to a larger number of platforms in a wider range of conditions. They will include such programs as the Joint Direct Attack Munition (JDAM) for use by both fighters and bombers, and Sensor Fuzed Weapons (SFW) to provide enhanced capability against enemy armor units. The fighter and bomber forces we field in the new century will be smaller than today's, but their improved performance and armament will provide leverage that will be crucial to decisive victory in regional conflicts.

Our space launch vehicles also require modernization. Current systems are derived from 1960's technology, and they are costly and often unresponsive to user needs. Because the U.S. has not improved its capability to provide low-cost, on-schedule launch service to users, our domination of the space launch arena has slipped. This has had negative impacts on our space industrial base, infrastructure, and the costs of military space launches. Our first concern is addressing the needs of the military customer, but due to the magnitude of the issue and the impact on industry, our efforts must also address commercial requirements. The Air Force, at the request of OSD, is spearheading the congressionally-directed study on space launch modernization. Along with NASA and the commercial sector, we must step out smartly to scrub our requirements and to pursue a national launch solution that is robust, reliable, and cost-effective.

The end of the Cold War shifted our focus on early warning systems and Command, Control, Communication, Computers, and Intelligence (C4I) from the strategic level to the theater level. In ballistic missile defense, we recently issued a stop work order on the Follow-On Early Warning System (FEWS) and plan to terminate the program following the appropriate Congressional notification. We examined various options and OSD has decided to go ahead with procurement of DSP 23 and then to begin a new, lower-cost program beginning in FY 1995 for delivery by 2004. The *Bottom-Up Review* examined the Milstar program, and concluded we should proceed with a smaller constellation of Milstar I and Milstar II satellites, then transition to a lower cost, lighter weight advanced extremely

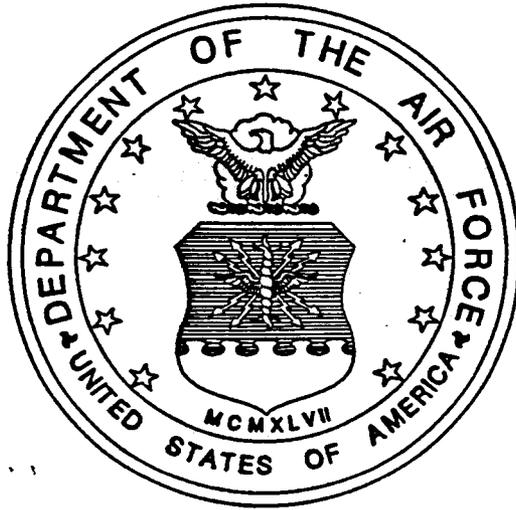
high frequency (EHF) satellite by FY 2006. We are continuing to review requirements and options with the Joint Staff to build a more affordable system that meets the needs of all the Services.

Acquisition reform is crucial to our modernization efforts. As the National Performance Review pointed out, the federal government's procurement system "is an extraordinary example of red tape." In his 9 February 1994 appearance before the House Committee on Armed Services, Dr. Perry highlighted the importance of improving the entire acquisition process when he stated "acquisition reform and the need for a fundamental re-engineering of the acquisition process" was his "number one priority." We support Dr. Perry's assessment of the need for basic acquisition reform. The Air Force is working with OSD to tear down statutory and regulatory barriers to efficient and cost effective contracting. We are also promoting the use of commercial components to satisfy military requirements wherever it makes sense. Reforming acquisition will buy more warfighting capability per dollar, while restoring taxpayer trust in the military as responsible custodians of America's tax dollars.

CONCLUSION

We are committed to building a quality Air Force for today and tomorrow. It will be smaller, but we are reducing our force structure and end strength in a way that will continue to meet the warfighting requirements of the CINCs. Our budget places top priority on readiness while preserving modernization. As a result, the Air Force remains poised to defend the nation and ready to execute its strategy.

Document Separator



City Club of Portland

**General Merrill A. McPeak
Air Force Chief of Staff**

**15 July 1994
Portland, Oregon
(as prepared for delivery)**

**PORTLAND CITY CLUB
GENERAL MERRILL A. McPEAK - 15 JUL 94**

PORTLAND IS SURELY ONE OF THE BEST PLACES TO LIVE IN AMERICA. GREAT CLIMATE, WONDERFUL SCENERY, WORLD-CLASS COLLEGES AND UNIVERSITIES. AND, I THINK PEOPLE REGARD OUR BASKETBALL TEAM - THE *TRAILBLAZERS* - HIGHLY. I LIKE THAT NAME - THE *TRAILBLAZERS* I HOPE YOU WILL FORGIVE ME IF I NOTE THAT THE AIR FORCE TODAY IS MUCH LIKE THOSE EARLY AMERICANS THE TEAM IS NAMED AFTER.

LIKE THEM, THE AIR FORCE HAS BEEN BUSY FORGING NEW PATHS. WITH THE END OF THE COLD WAR, YOU WOULD THINK WE COULD HAVE RELAXED, THROTTLED BACK, PUT IT ON AUTOPILOT. BUT WE HAVE NOT. IN SOME RESPECTS, OUR JOB JAR IS AS FULL AS ANY TIME IN OUR HISTORY. MEANWHILE, BY THE WAY, WE'VE HAD TO REORGANIZE, LITERALLY REINVENT THE AIR FORCE TO PREPARE OURSELVES FOR THE CHALLENGES OF THE POST-COLD WAR ERA. THIS AFTERNOON I'D LIKE TO SHARE WITH YOU WHAT YOUR AIR FORCE HAS BEEN DOING ON BOTH FRONTS - IN OUR OPERATIONS AND IN OUR ORGANIZATION.

PICK ANY HOT SPOT, ANYWHERE IN THE WORLD AND CHANCES ARE WE'RE ACTIVELY ENGAGED. IN IRAQ, FOR INSTANCE, WE'VE FLOWN ALMOST THREE TIMES THE NUMBER OF SORTIES *SINCE* THE END OF DESERT STORM AS WE FLEW *DURING* DESERT STORM. IN THE COURSE OF POLICING IRAQ'S AIRSPACE FOR THE U.N., WE'VE ACTUALLY SHOT DOWN TWO IRAQI FIGHTER AIRCRAFT, ONE UP NORTH AND ONE IN THE SOUTH. REGRETTABLY, WE RECENTLY ALSO SHOT DOWN TWO FRIENDLY HELICOPTERS - A TRAGIC MISTAKE, ONE THAT SERVES TO REMIND US HOW LETHAL, HOW UNFORGIVING OUR BUSINESS CAN BE.

MEANWHILE, IN BOSNIA, WE'RE ENTERING OUR THIRD YEAR OF ACTIVE AIR OPERATIONS. WE'VE FLOWN ALMOST 6,000 SORTIES AND DELIVERED 70,000 TONS OF MEALS AND MEDICINE IN HISTORY'S LONGEST RUNNING HUMANITARIAN AIRLIFT OPERATION - SURPASSING EVEN THE BERLIN AIRLIFT. WE'RE ALSO ENFORCING A NO-FLY ZONE THERE. IN FACT, WE RECENTLY SHOT DOWN FOUR SERBIAN FIGHTER AIRCRAFT, CAUGHT RED-HANDED IN THE ACT OF BOMBING BOSNIA - A MORE UPBEAT INDICATION THAT WE KNOW WHAT WE'RE DOING.

AND, THAT'S NOT ALL WE'VE BEEN BUSY WITH. WE'VE EVACUATED AMERICANS FROM YEMEN, DELIVERED AID TO RWANDA, ASSISTED COUNTERDRUG EFFORTS IN SOUTH AMERICA, SUPPORTED OPERATIONS AROUND HAITI. AS I SPEAK, WE ARE MAINTAINING ABOUT 50 SATELLITES ON ORBIT, LAUNCHING SOMETHING LIKE ONE A MONTH, EACH LAUNCH AND EACH SATELLITE A MARVELOUS TECHNICAL ACHIEVEMENT.

WE'RE ENGAGED ON THE HOME FRONT, AS WELL. OVER THE PAST FEW YEARS, FOR EXAMPLE, WE HELPED WITH HURRICANE RELIEF IN FLORIDA, FLOODS IN THE MID-WEST, TYPHOONS IN THE PACIFIC, WILDFIRES AND EARTHQUAKES IN THE WEST. AND AT THE BEGINNING OF THIS MONTH, AS TROPICAL STORM *ALBERTO* ROARED ACROSS THE GULF COAST, AIR FORCE C-130s FLEW RECONNAISSANCE MISSIONS FOR THE NATIONAL WEATHER SERVICE. WE GATHERED CRITICAL DATA ON THE STORM, ITS SPEED, WIND STRENGTH, LOCATION - ALERTING NORTH FLORIDA INHABITANTS OF THE STORM'S PROGRESS. YOU'VE GOT TO ADMIRE THOSE CREWS. THEY FLY INTO WEATHER THAT SCARES THE DICKENS OUT OF MOST PILOTS.

SO, I THINK YOU CAN SEE HOW BUSY THE AIR FORCE IS - BOTH AT HOME AND OVERSEAS.

WITH ALL THIS ACTIVITY, AIR FORCE PEOPLE ARE ON THE ROAD QUITE A BIT. THE AVERAGE FIGHTER PILOT OR AIRLIFT CREW IS GONE ABOUT ONE MONTH OUT OF THREE. THAT'S A LOT OF TIME AWAY FROM HOME AND THE FAMILY. BUT OUR WORK IS IMPORTANT TO THE NATION, AND IT'S BECOMING EVEN MORE IMPORTANT. INDEED, I'M CONVINCED THE AIR FORCE IS A GOOD BET FOR THE FUTURE - IN MY VIEW, A REAL GROWTH BUSINESS.

UNTIL RECENTLY, STATIONING TROOPS OR SHIPS FORWARD WAS THE BEST, SOMETIMES EVEN THE ONLY WAY TO MONITOR WORLD EVENTS, TO SHOW THE FLAG, TO GUARANTEE A RAPID RESPONSE. THIS FORWARD DEPLOYMENT HELPED DETER AGGRESSION AND PROMOTED OUR NATION'S INTERESTS ABROAD. BUT NOW, OUR FORCES ARE RETURNING HOME. SO, THE QUESTION IS, HOW CAN WE MAINTAIN A PRESENCE ABROAD, TO SHOW COMMITMENT, TO STAY ENGAGED IN SUPPORT OF OUR ENDURING INTERESTS OVERSEAS?

AIR AND SPACE POWER HOLDS OUT THE PROMISE OF A MORE ELEGANT SOLUTION TO THIS PRESENCE REQUIREMENT: WHEN YOU THINK ABOUT IT, THE INTERCONTINENTAL BALLISTIC MISSILE FORCE HAS ALWAYS HAD THE CAPABILITY TO BE "PRESENT" AT THEIR TARGETS IN ABOUT 30 MINUTES. IN FACT, ONE WAY TO DEFINE "DETERRENCE" IS THAT IT IS THE PROSPECT OF QUICK PRESENCE. AND SPACE-BASED FORCES VISIT AND REVISIT ALL PARTS OF THE PLANET MANY TIMES A DAY, PROVIDING A KIND OF CONTINUOUS GLOBAL PRESENCE. FINALLY, WITH AERIAL REFUELING, STATESIDE-BASED COMBAT AIRCRAFT CAN BE PRESENT AT ANY SPOT IN THE WORLD, IN HOURS. ALL THESE FEATURES DESCRIBE A NEW KIND OF PRESENCE MADE POSSIBLE BY THE SPEED AND MANEUVERABILITY OF AIR AND SPACE FORCES.

BELIEVE ME, OUR NATIONAL LEADERS RECOGNIZE AND VALUE THE UNIQUE QUALITIES THE AIR FORCE BRINGS TO THE FIGHT- GLOBAL REACH, GLOBAL POWER - AND, INCREASINGLY, GLOBAL PRESENCE. SO OUR OUTFIT IS RELEVANT, IS BUSIER THAN EVER, AND IS LIKELY TO STAY THAT WAY FOR MANY YEARS TO COME. OUR BUSINESS BASE TRULY SUPPORTS OUR CLAIM TO BE A SUNRISE ENTERPRISE.

HOWEVER, WHILE THE DEMAND FOR OUR SERVICES IS ON THE RISE, THE RESOURCES TO SUSTAIN AND MODERNIZE THE FORCE HAVE BEEN HEADING SOUTH FOR SOME YEARS. OUR BUDGET IS DOWN ABOUT FIFTY PERCENT SINCE ITS PEAK IN THE MID-80s. OUR UNIFORMED RANKS HAVE BEEN CUT BY A THIRD, AN END-STRENGTH OF ABOUT 200,000 AIRMEN LOST. THE COMBAT FIGHTER FORCE IS DOWN TO HALF WHAT IT WAS JUST FIVE YEARS AGO. WE'VE ELIMINATED SCORES OF HARDWARE ACQUISITION PROGRAMS AND REDUCED OUR MODERNIZATION FUNDING BY TWO-THIRDS.

WE HAVE ALSO CUT AWAY A BIG CHUNK OF OUR INFRASTRUCTURE. OVERSEAS, WE'VE GONE FROM OPERATING 38 MAJOR BASES TO 13 - A TWO-THIRDS REDUCTION. AT HOME, WE HAVE CLOSED, OR ARE IN THE PROCESS OF CLOSING, TWENTY-SEVEN MAJOR INSTALLATIONS. WE ARE FULLY AWARE OF THE PAIN THESE ACTIONS CAUSE LOCAL COMMUNITIES - COMMUNITIES THAT HAVE WELCOMED AND NURTURED US FOR MANY YEARS. BUT CLOSURES ARE UNAVOIDABLE, AS WE BRING DOWN THE FORCE TO REFLECT CHANGING BUDGET REALITIES.

SO THE AIR FORCE IS MUCH SMALLER. BUT, BEING SMALLER DOES NOT NEED TO MEAN WE WILL BE LESS CAPABLE. OVER THE PAST THREE-AND-A-HALF YEARS, WE'VE CONDUCTED A TOP-TO-BOTTOM REORGANIZATION TO CREATE A LEANER, SIMPLER, TOUGHER AIR FORCE. THERE IS A SECOND LAW OF BUREAUDYNAMICS THAT SAYS THAT ALL ORGANIZATIONS, LEFT TO THEIR OWN DEVICES, WILL BECOME TOO COMPLICATED, TOO ELABORATE. AND, AS WE ALL KNOW, THE MORE COMPLEX A MECHANISM IS, THE LESS LIKELY IT IS TO WORK UNDER ANYTHING BUT IDEAL CONDITIONS.

TO REMEDY THIS PROBLEM, WE'VE REINVENTED THE AIR FORCE. THE EFFORT STARTED IN 1991, AND IS NOT ESSENTIALLY COMPLETE. OUR GOAL WAS TO STREAMLINE, FLATTEN, DELAYER OUR ORGANIZATIONAL STRUCTURES. IN ORDER TO DO THIS, WE HAD TO ATTACK THE PROBLEM OF CREEPING COMPLEXITY BY STRIPPING OUT UNNECESSARY HEADQUARTERS ELEMENTS, AND AT EVERY LEVEL OF ORGANIZATION, CONSOLIDATING THOSE ACTIVITIES THAT NEEDED INTEGRATION.

IN THIS PROCESS, WE CUT A LOT OF FAT. WE REDUCED THE NUMBER OF OUR BASIC COMBAT AND SUPPORT UNITS - WHAT WE CALL WINGS - FROM OVER 200 IN 1990 TO 88 NOW. WE ELIMINATED AIR DIVISIONS ALTOGETHER - AN ENTIRE MANAGEMENT LEVEL, GONE. WE CUT OUR MAJOR COMMANDS FROM 13 TO 8, 40% OF OUR MAJOR COMMAND HEADQUARTERS, GONE. AND WE'VE REORGANIZED AND STREAMLINED WASHINGTON HEADQUARTERS, SENDING SEVENTEEN GENERAL OFFICERS OUT OF THE PENTAGON AND BACK TO HONEST WORK.

AT THE SAME TIME WE WERE RESTRUCTURING, WE LAUNCHED THE "QUALITY AIR FORCE" EFFORT. OUR QUALITY MOVEMENT STARTED WITH A COMMITMENT BY SENIOR LEADERSHIP TO CONTINUOUS IMPROVEMENT AT ALL LEVELS AND OF ALL AIR FORCE PROCESSES. HOWEVER, THE SECRET OF OUR SUCCESS IS NOT OUR LEADERSHIP, BUT OUR PEOPLE. WE KNOW THAT, SO WE'VE PUSHED POWER DOWN TO THEM. THEY DON'T NEED SOMEONE AT HEADQUARTERS TRYING TO FIX THE PROBLEM WITH A 200 MILE LONG SCREWDRIVER. MEANWHILE, AT THE TOP, WE REPLACED EVERY AIR FORCE REGULATION WITH A NEW TYPE OF DOCUMENT, CALLED "POLICY GUIDANCE," GIVING OUR PEOPLE THE "WHAT AND WHY." WE LEAVE THE "HOW" PART TO THEM BECAUSE THEY KNOW BEST.

SO WHAT PROGRESS CAN I REPORT IN ALL THIS RESTRUCTURING? SOMEONE ONCE ASKED THE CELEBRATED CHINESE FOREIGN MINISTER CHOU EN-LAI, "WHAT WERE THE RESULTS OF THE FRENCH REVOLUTION?" HE SAID, "IT'S TOO SOON TO TELL." THAT'S A WONDERFUL WAY TO SUM UP THE IMPACT OF OUR RESTRUCTURING. IN A WORD, SO FAR, SO GOOD, THE RESULTS HAVE SURPASSED EVERYONE'S EXPECTATIONS. BUT, WE DON'T HAVE THE FINAL TALLY BECAUSE WE WILL BE REAPING THE DIVIDENDS FOREVER.

IN ANY CASE, WHILE WE'VE SEEN A LOT OF CHANGE OVER THE PAST FEW YEARS, IT'S FAR FROM OVER YET. FOR INSTANCE, CONGRESS HAS FORMED AN INDEPENDENT COMMISSION TO EXAMINE THE ROLES AND MISSIONS ASSIGNED TO EACH SERVICE. THIS COMMISSION IS TASKED TO TAKE A COMPREHENSIVE LOOK AT HOW TO DO THE BUSINESS OF NATIONAL DEFENSE BETTER.

ANYONE FOLLOWING DEFENSE ISSUES KNOWS THAT, SINCE THE INVENTION OF THE AIRPLANE, OUR ARMED FORCES HAVE HAD TROUBLE DIVIDING UP THE WORKLOAD. IN PRINCIPLE, THIS SHOULDN'T BE DIFFICULT: THE ARMY WORKS ON LAND, THE NAVY AT SEA, THE AIR FORCE IN AIR AND SPACE. BUT, IN PRACTICE, WE HAVEN'T

DONE A GOOD JOB OF REDUCING OVERLAP AND DUPLICATION, PARTICULARLY IN AVIATION FORCES. WE'RE FORTUNATE, IN THIS REGARD, THAT CONGRESS HAS DIRECTED THE APPOINTMENT OF AN OUTSIDE COMMISSION TO TAKE ANOTHER LOOK AT ROLES AND MISSIONS.

OF COURSE, EACH SERVICE WILL HAVE ITS OWN IDEAS ON THIS HOT TOPIC. EVERY SERVICE WILL BE HEARD. THE AIR FORCE, IN PARTICULAR, WILL BE VERY INTERESTED IN THE OUTCOME BECAUSE THE CENTRAL ISSUES REVOLVE AROUND THE ORGANIZATION AND OPERATION OF AIR AND SPACE FORCES. IF YOU THINK ABOUT IT, WITHOUT AIRPLANES OR SATELLITES, THE ROLES AND MISSIONS DEBATE WOULD BEGIN AND END AT THE SHORELINE.

IN ANY EVENT, TODAY'S FINANCIAL IMPERATIVES ARE CLEAR. WE CANNOT AFFORD TO FUND LAVISHLY REDUNDANT CAPABILITIES IN OUR ARMED FORCES. AS FAR AS THE AIR FORCE IS CONCERNED, ROLES AND MISSIONS REFORM CAN IMPROVE OUR EFFECTIVENESS ON THE BATTLEFIELD ~~AND~~ LEAD TO LARGE DOLLAR SAVINGS.

DESPITE ALL THE CHANGES I'VE JUST DESCRIBED, SOME THINGS REMAIN CONSTANT. TWO COME TO MIND.

FIRST, WE WILL STILL NEED HIGH-QUALITY PEOPLE: IT'S TRUE, WE'VE SHARPLY REDUCED THE NUMBER COMING INTO THE AIR FORCE, BUT THE "HELP WANTED" SIGN IS STILL IN THE WINDOW. THIS YEAR, WE WILL ENLIST OVER 30,000 YOUNG MEN AND WOMEN AND COMMISSION ABOUT 5,000 NEW OFFICERS. WE WILL SIMPLY ALWAYS NEED BRIGHT, ENERGETIC MEN AND WOMEN WHO WANT TO SERVE THE NATION.

THE SECOND CONSTANT WILL BE YOUR SUPPORT, THE SUPPORT OF PORTLAND AND OREGON FOR THOSE ALREADY IN UNIFORM. THAT'S NEVER WAVERED. I'VE SEEN IT ALL ACROSS THE STATE, AND QUITE RECENTLY, IN LINCOLN CITY, AND IN GRANTS PASS, MY HOME TOWN. AT EACH OF THESE PLACES I JUST HELPED DEDICATE MEMORIALS TO THOSE WHO HAVE SERVED IN THE ARMED FORCES, TANGIBLE PROOF OF THE RESPECT AND ABIDING SUPPORT OF PEOPLE HERE IN OREGON FOR THE CONTRIBUTION - SOMETIMES LIFE ITSELF - MADE BY THOSE WHO SERVE OUR NATION IN UNIFORM.

SO, ON BEHALF OF ALL MEN AND WOMEN UNDER ARMS, AND PARTICULARLY THOSE OF US IN BLUE, THANKS FOR THIS SUPPORT. WITH THE AIR FORCE'S ACTIVE AGENDA, YOU CAN SEE WE NEED IT. INDEED WE ARE "TRAIL BLAZERS" IN THE WORLD'S HOT SPOTS AND IN REBUILDING TO MEET THE NATION'S CURRENT AND FUTURE CHALLENGES. AND IN THIS CHANGING WORLD, THE PEOPLE OF THIS WONDERFUL STATE CONTINUE TO BE PILLARS OF STRENGTH FOR US. WE APPRECIATE YOUR SUPPORT.

NOW, DON TOLD ME YOU MAY HAVE SOME QUESTIONS. SO, LET'S OPEN THE FLOOR FOR DISCUSSION.

Document Separator

DEPARTMENT OF THE AIR FORCE

PRESENTATION TO THE COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEE ON MILITARY CONSTRUCTION

UNITED STATES HOUSE OF REPRESENTATIVES

MARCH 1994

**SUBJECT: FISCAL YEAR 1995 ACTIVE AIR FORCE MILITARY
CONSTRUCTION AND FAMILY HOUSING PROGRAMS,
AIR NATIONAL GUARD AND AIR FORCE RESERVE PROGRAMS
AND AIR FORCE BASE CLOSURES**

**STATEMENT OF: MR. JAMES F. BOATRIGHT
DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE
(INSTALLATIONS)**

**NOT FOR PUBLICATION UNTIL RELEASED
BY THE COMMITTEE ON APPROPRIATIONS
UNITED STATES HOUSE OF REPRESENTATIVES**

Biography

United States Air Force

Secretary of the Air Force, Office of Public Affairs, Washington, D.C. 20330-1000



JAMES F. BOATRIGHT

James F. Boatright is deputy assistant secretary of the Air Force for installations, Washington, D.C.

Mr. Boatright was born May 17, 1933, in Colorado Springs, Colo., where he graduated from Colorado Springs High School in 1951. He earned a bachelor of science degree in civil engineering from the University of Colorado in 1956 and attended the Federal Executive Institute in 1976.

A distinguished graduate of the Reserve Officer Training Corps program, he was commissioned as a second lieutenant in the U.S. Army Corps of Engineers in 1956. After completing a two-year tour of duty in the Army in 1958, Mr. Boatright began his professional career as a federal employee. He served with the Bureau of Reclamation, Grand Junction, Colo., as a civil engineer designing earth-fill dams and other hydraulic structures.

In 1959 he became a construction engineer with the U.S. Army Corps of Engineers in the construction management of Atlas missile launch sites in Kansas. As this construction effort neared completion in 1961, Mr. Boatright transferred to the U.S. Army Research and Development Laboratory, Fort Belvoir, Va., where he served as a civil engineer in the development of mobile construction equipment for Army construction units.

He began his career with the Air Force as a civil engineer in the Directorate of Civil Engineering, Headquarters U.S. Air Force, Washington, D.C., in 1966. His first assignment was as project engineer for Air Force construction in the Republic of Vietnam during the military buildup. In 1967 he was promoted to deputy chief, CONUS Construction Branch. He was named special technical adviser on legislative matters to the director of civil engineering in 1969. In 1970 he became deputy chief of the Engineering Division and was promoted to deputy director for construction in 1973.

Mr. Boatright has served in the Office of the Secretary of the Air Force, Air Force headquarters, since June 1976. He became acting deputy assistant secretary for installations in May 1979 and was formally appointed to this position in December 1981. In October 1982 Air Force environmental and safety functions were added to his responsibilities. In his present capacity, he is the senior Air Force manager, spokesman and defender of installations, environment and safety matters.

He is a registered professional engineer (civil/structural) in the District of Columbia and is affiliated with the Society of American Military Engineers. His awards include the Meritorious Civilian Service Award in 1976, Decoration for Exceptional Civilian Service in 1981 and 1988, Presidential Meritorious Executive Rank Award in 1985 and Presidential Distinguished Executive Rank Award in 1987. He also was awarded the Medal of Merit by the California National Guard in August 1986 and the Department of Defense Distinguished Civilian Service Award in 1988.



Mr. Boatright is married to the former Gloria Sellar of Augusta, Maine. They have three children: James Jeffrey, William Sellar and Jennifer Jane.

INTRODUCTION

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, GOOD MORNING. I APPRECIATE THE OPPORTUNITY TO APPEAR BEFORE YOU THIS MORNING TO DISCUSS THE DEPARTMENT OF THE AIR FORCE MILITARY CONSTRUCTION (MILCON), MILITARY FAMILY HOUSING AND THE AIR FORCE PART OF THE DEFENSE BASE CLOSURE AND REALIGNMENT BUDGET REQUEST FOR FISCAL YEAR (FY) 1995. WITH ME TODAY IS MAJOR GENERAL JAMES E. MCCARTHY, THE AIR FORCE CIVIL ENGINEER; BRIGADIER GENERAL JOHN A. BRADLEY, DEPUTY CHIEF OF THE AIR FORCE RESERVE, AND COLONEL PAUL A. WEAVER, JR., DEPUTY DIRECTOR OF THE AIR NATIONAL GUARD.

OVERVIEW

AS YOU KNOW, MR. CHAIRMAN, BECAUSE OF A DECLINING DEFENSE BUDGET AND CHANGES IN THE THREAT, THE AIR FORCE IS NOW UNDERGOING A MAJOR REORGANIZATION, COMBINED WITH SUBSTANTIAL REDUCTIONS IN ITS FORCE STRUCTURE. ENTIRE ROLES AND MISSIONS, AS WELL AS FORCE STRUCTURE LEVELS HAVE BEEN EVALUATED THROUGH THE BOTTOM UP REVIEW. UNPRECEDENTED CHANGES IN OUR SECURITY ENVIRONMENT HAVE FORCED THIS REEVALUATION.

AN ESSENTIAL PART OF OUR STRATEGY FOR DOWNSIZING OUR FORCES IS A CONCURRENT REDUCTION OF THE SIZE OF THE PHYSICAL

PLANT COMMENSURATE WITH A SMALLER AIR FORCE. OUR AIM IS TO REDUCE FACILITIES AND INFRASTRUCTURE TO AN AFFORDABLE LEVEL IN A MANNER THAT IS CONSISTENT WITH THE REQUIREMENTS OF THE AIR FORCE TODAY AND TOMORROW. REDUCING OUR BASING STRUCTURE TO AN AFFORDABLE SIZE IS, PERHAPS, THE SINGLE MOST CHALLENGING TASK GENERAL MCCARTHY AND I FACE TODAY. WITHOUT THESE REDUCTIONS, THE QUALITY OF OUR FACILITIES WILL DETERIORATE AND CONSEQUENTLY, FORCE READINESS WILL BE DEGRADED.

THE DEPARTMENT OF DEFENSE HAS GONE THROUGH THREE DIFFICULT BASE CLOSURE ROUNDS AND IS IN THE PROCESS OF IMPLEMENTING THOSE CLOSURES. AS WE SIT HERE TODAY, THE AIR FORCE IS COLLECTING DATA NECESSARY TO SUPPORT THE ANALYSIS FOR BRAC 1995. HOWEVER, RELYING EXCLUSIVELY ON BASE CLOSURES AS THE SOLUTION TO THE PROBLEM OF REDUCING OUR PHYSICAL PLANT SIZE IS NOT WISE AS IT ELIMINATES TOO MUCH FLEXIBILITY FOR THE FUTURE. ALSO CLOSURES ARE PAINFUL TO THE ADJACENT COMMUNITIES AND ARE EXPENSIVE TO IMPLEMENT. AS THIS COMMITTEE KNOWS, OVER THREE BILLION DOLLARS IN ONE TIME COSTS INCLUDING CONSIDERABLE CAPITAL INVESTMENT TO RELOCATE FORCE STRUCTURE HAVE BEEN REQUIRED THROUGH THE FIRST THREE CLOSURE ROUNDS.

MOST IMPORTANTLY, HOWEVER, IS THAT CLOSURES LIMIT THE BASING FLEXIBILITY OF TOMORROW'S AIR FORCE. IF WE TAKE A MORE COMPREHENSIVE APPROACH TO REDUCE OUR FACILITY INFRASTRUCTURE BY COMBINING BASE CLOSURES WITH OTHER STREAMLINING INITIATIVES AT THE BASES TO BE RETAINED, FEWER BASES WILL NEED TO BE CLOSED

AND EVERYONE WINS. THE AIR FORCE RETAINS ADDITIONAL BASING FLEXIBILITY, INFRASTRUCTURE IS REDUCED TO AN AFFORDABLE SIZE, CLOSURE COSTS ARE REDUCED, AND COMMUNITIES ARE NOT SUBJECTED TO THE PAIN.

CONSEQUENTLY, THE AIR FORCE IS PURSUING A COMPREHENSIVE APPROACH WHICH CONSISTS OF THREE PRINCIPAL METHODS IN ORDER TO ACHIEVE THE NECESSARY REDUCTIONS. BASE CLOSURES AND OVERSEAS WITHDRAWALS REMAIN THE PRIMARY MEANS. HOWEVER, CONSOLIDATION OF FACILITIES ON EXISTING BASES AND DOWNSIZING OF LARGE INDUSTRIAL TYPE OPERATIONS SUCH AS DEPOT MAINTENANCE ACTIVITIES ARE ALSO BEING PURSUED. THESE COMPLEMENTARY APPROACHES ARE NOT FREE. CONSIDERABLE INVESTMENT UP FRONT IS ALSO REQUIRED, BUT, NOT TO THE EXTENT EXPERIENCED WITH COMPLETE CLOSURES.

AS I INDICATED, THE PRINCIPAL MEANS FOR REDUCING OUR FACILITY INFRASTRUCTURE IS THROUGH BASE CLOSURES IN THE CONTINENTAL UNITED STATES AND WITHDRAWALS FROM OVERSEAS INSTALLATIONS. SIGNIFICANT REDUCTIONS HAVE BEEN MADE SINCE THE FIRST BASE CLOSURE ROUND IN 1988: APPROXIMATELY, 17 PERCENT OF OUR PLANT VALUE HAS BEEN IDENTIFIED FOR CLOSURE. THE FIRST THREE ROUNDS OF BASE CLOSURES HAVE IDENTIFIED 26 DOMESTIC BASES FOR CLOSURE OR MAJOR REALIGNMENT. DURING THE SAME PERIOD, 24 MAJOR INSTALLATIONS IN EUROPE AND FOUR IN THE PACIFIC THEATER HAVE BEEN RETURNED TO THE CONTROL OF THE HOST NATION REPRESENTING A 60 PERCENT REDUCTION OF OUR OVERSEAS FACILITIES.

ONLY SIX MAIN OPERATING BASES IN EUROPE WILL REMAIN TO ACCOMMODATE THE AIR FORCE COMPONENT OF THE CAP OF 100,000 ACTIVE MILITARY PERSONNEL IN EUROPE.

AS WITH OTHER FACILITIES, WE ARE IN THE PROCESS OF DOWNSIZING OUR INVENTORY OF FAMILY HOUSING COMMENSURATE WITH THE REDUCED REQUIREMENT. A REDUCTION OF OVER 20,000 OWNED AND LEASED UNITS IN THE AIR FORCE HOUSING INVENTORY IS ALREADY IN PROGRESS THROUGH THE APPROVED CLOSURES. IN ADDITION, WE WILL IDENTIFY SURPLUS INVENTORY AT REMAINING BASES TO ENSURE WE KEEP ONLY THOSE HOUSING UNITS WE NEED.

ALTHOUGH SUBSTANTIAL PROGRESS HAS BEEN MADE IN THE FIRST THREE BASE CLOSURES ROUNDS, WE WILL NEED TO IDENTIFY A SUBSTANTIAL NUMBER OF ADDITIONAL CLOSURES/REALIGNMENTS IN THE 1995 ROUND. THIS FORTHCOMING BASE CLOSURE ROUND WILL PROVIDE OUR LAST OPPORTUNITY UNDER THE CURRENT BASE CLOSURE LEGISLATION TO CLOSE INSTALLATIONS IN THE UNITED STATES.

THE AIR FORCE HAS BEEN SUCCESSFUL IN CLOSING OPERATIONAL BASES CONSISTENT WITH THE DRAWDOWN OF OUR FORCE STRUCTURE. HOWEVER, WE HAVE NOT BEEN NEARLY AS SUCCESSFUL IN DRAWING DOWN OUR SUPPORT BASE STRUCTURE ESPECIALLY IN THE AREAS OF DEPOTS, RESEARCH AND DEVELOPMENT FACILITIES, AND TEST AND EVALUATION CENTERS. IT IS IMPERATIVE THAT WE ACHIEVE THE NECESSARY REDUCTIONS IN THIS PART OF OUR BASE STRUCTURE IN THE 1995 ROUND. WE ARE WORKING DILIGENTLY WITH THE OFFICE OF THE

SECRETARY OF DEFENSE AND THE OTHER MILITARY DEPARTMENTS TO ACHIEVE A JOINT ANALYSIS OF ALL COMMON SUPPORT CATEGORIES. IT WILL BE A DIFFICULT PROCESS BUT THE COMMON SUPPORT BASE STRUCTURE MUST BE OPTIMIZED ACROSS THE DOD. THE AIR FORCE IS DEDICATED TO THE SUCCESS OF THIS PROCESS.

REDUCTIONS IN THE ACTIVE BASE STRUCTURE CONTRAST WITH THE RESERVE COMPONENTS WHERE THE AIR NATIONAL GUARD HAS EXPERIENCED A 30 PERCENT INCREASE IN FACILITIES THROUGH SUPPORT FOR AIRCRAFT CONVERSIONS AND MODERNIZATION, A ONE PERCENT DECREASE IN PERSONNEL, AND A 25 PERCENT DECREASE IN ASSIGNED AIRCRAFT. THE AIR FORCE RESERVE HAS INCREASED FACILITIES BY 40 PERCENT, DECREASED PERSONNEL BY 2.6 PERCENT AND DECREASED ASSIGNED AIRCRAFT BY 15 PERCENT. THESE CONFLICTING STATISTICS ARE LARGELY DUE TO THE TURNOVER OF SEVERAL FORMER ACTIVE DUTY BASES AND MISSIONS TO THE RESERVE COMPONENTS WITH NO APPRECIABLE REDUCTION OF EXISTING GUARD OR RESERVE BASES. SOME OF OUR REMAINING ACTIVE BASES WILL EXPERIENCE INCREASES IN PERSONNEL AND AIRCRAFT AS WE CONSOLIDATE MISSIONS WHILE OTHERS WILL EXPERIENCE REDUCTIONS. WE WILL BE TAKING A HARD LOOK AT THE AIR RESERVE COMPONENT BASE STRUCTURE IN THE 1995 BRAC PROCESS

THE SECOND MAJOR MEANS OF REDUCING OUR FACILITY INFRASTRUCTURE IS THROUGH CONSOLIDATION OF FACILITIES ON EXISTING BASES. THE AIR FORCE HAS AN AGGRESSIVE PROGRAM TO CONSOLIDATE ITS ACTIVITIES INTO FEWER, MORE EFFICIENT FACILITIES

AND TO INACTIVATE OR DISPOSE OF EXCESS, LESS EFFICIENT FACILITIES. EACH INSTALLATION IS DEVELOPING ITS OWN CONSOLIDATION AND FACILITY INACTIVATION/DISPOSAL PLAN. SIMILAR TO BASE CLOSURES HOWEVER, ACHIEVING LONG TERM SAVINGS THROUGH CONSOLIDATION REQUIRES AN INITIAL INVESTMENT. THE DEPARTMENT IS GOING TO PURSUE A STRATEGY TO ENABLE CAPITAL INVESTMENT FOR CONSOLIDATION PROJECTS. I URGE THE SUPPORT OF THE COMMITTEE FOR THIS APPROACH.

THE THIRD COMPONENT OF OUR COMPREHENSIVE STRATEGY TO REDUCE OUR INFRASTRUCTURE TO AFFORDABLE, SUPPORTABLE LEVELS IS THE ONGOING DOWNSIZING INITIATIVE WITHIN THE INDUSTRIAL PART OF OUR SUPPORT STRUCTURE. THE AIR FORCE MATERIEL COMMAND HAS BEEN AGGRESSIVE IN REDUCING THE SIZE OF THE DEPOT MAINTENANCE INFRASTRUCTURE AS WELL AS OTHER PARTS OF ITS SUPPORT INFRASTRUCTURE AS WORKLOAD IS REDUCED. THIS INITIATIVE WILL PRODUCE A SUBSTANTIAL REDUCTION IN THE PHYSICAL PLANT AND WILL PROVIDE A CONSIDERABLE SUPPLEMENT TO OUR BASE CLOSURE AND REALIGNMENT ACTIONS.

AS I INDICATED EARLIER, OUR TASK IS NOT ONLY TO REDUCE THE SIZE OF THE OF THE FACILITY INFRASTRUCTURE, BUT QUALITY IN OUR FACILITIES MUST ALSO BE MAINTAINED. MAINTAINING QUALITY OF THE FACILITIES IN WHICH AIR FORCE PEOPLE LIVE AND WORK IS ESSENTIAL, BOTH BECAUSE IT IS OUR OBLIGATION AND IT IS A GOOD BUSINESS DECISION. THIS OBLIGATION EXTENDS FROM THE SHOPS AND OPERATIONAL FACILITIES WHERE THEY WORK, TO THE DORMITORIES

AND HOMES WE PROVIDE FOR OUR MEMBERS AND THEIR FAMILIES. PRESERVATION OF OUR EXISTING FACILITIES BY AN ADEQUATELY FUNDED REAL PROPERTY MAINTENANCE PROGRAM IN ADDITION TO MODERNIZATION THROUGH MILCON INVESTMENT IS CRITICAL TO OUR MISSION AND PRESERVING THE QUALITY OF LIFE OF OUR AIR FORCE PEOPLE.

THERE ARE TWO MAJOR PAYOFFS WHICH ACCRUE AS A RESULT OF SUCH PRUDENT REAL PROPERTY MAINTENANCE. FIRST, WE CAN REDUCE CAPITAL INVESTMENT BY EXTENDING THE LIFE OF EXISTING FACILITIES VERSUS CONSTRUCTING NEW ONES. LIKE YOUR OWN HOUSE, AIR FORCE FACILITIES DO NOT MAINTAIN THEMSELVES. THE AVERAGE AGE OF OUR NON-HOUSING FACILITY INVENTORY IS OVER 32 YEARS, AND FOR OUR FAMILY HOUSING, 31 YEARS. IF WE FAIL TO PROVIDE ADEQUATE MAINTENANCE AND REPAIR, BUILDINGS, UTILITIES AND SUPPORTING INFRASTRUCTURE WILL SIMPLY WEAR OUT, RESULTING IN THE REQUIREMENT FOR REPLACEMENT CONSTRUCTION AND, MORE IMPORTANTLY, INADEQUATE SUPPORT FOR MISSIONS AND PEOPLE. THE SECOND MAJOR PAYOFF RESULTS FROM THE QUALITY ENVIRONMENT WE PROVIDE IN THE WORKPLACE AND IN THE HOMES OF OUR PERSONNEL. ADEQUATE WORKING FACILITIES AND HOUSING WHICH MEET SOCIETAL STANDARDS AND EXPECTATIONS CONTRIBUTE MAJOR DIVIDENDS TO THE AIR FORCE THROUGH INCREASED PRODUCTIVITY AND RETENTION OF HIGHLY TRAINED PERSONNEL, THEREBY REDUCING RECRUITING AND TRAINING COSTS.

WE HAVE MAINTAINED OUR COMMITMENT TO QUALITY FACILITIES BECAUSE WE RECOGNIZE THE RESULTING BENEFITS IN READINESS, PRODUCTIVITY AND LIFE-CYCLE COST SAVINGS. A REDUCED BASING STRUCTURE WILL GENERATE THE SAME BENEFITS FOR A SMALLER FORCE AS LONG AS THE QUALITY OF FACILITIES REMAINS HIGH. FOR THIS REASON, WE ARE COMMITTED TO PRESERVING THE QUALITY OF THE FACILITIES, UTILITIES, AND OTHER SUPPORTING INFRASTRUCTURE AT THOSE BASES WE RETAIN.

MR. CHAIRMAN, WE ARE ALSO COGNIZANT THAT THE AIR FORCE COULD NOT MAINTAIN THE QUALITY OF OUR FACILITIES AND THE ADVANTAGES THEY PROVIDE WITHOUT THE INDISPENSABLE AND CONTINUING STRONG SUPPORT WE HAVE ALWAYS RECEIVED FROM THIS COMMITTEE, FOR WHICH WE ARE MOST GRATEFUL.

WITH THIS BACKGROUND, MR. CHAIRMAN, I WOULD LIKE TO PROCEED NOW TO DISCUSS THE MAJOR PROGRAM AREAS OF OUR BUDGET REQUEST. THESE MAJOR PROGRAM AREAS REPRESENT THE HIGHEST PRIORITIES OF THE DEPARTMENT OF THE AIR FORCE. I WILL REVIEW THE ACTIVE FORCE PROGRAM, MILITARY FAMILY HOUSING, AIR NATIONAL GUARD PROGRAM, AIR FORCE RESERVE PROGRAM AND THE AIR FORCE PART OF THE BUDGET REQUEST FOR THE DEFENSE BASE CLOSURE AND REALIGNMENT ACCOUNTS.

ACTIVE AIR FORCE MILITARY CONSTRUCTION PROGRAM

THE AIR FORCE BUDGET IS CONSTRAINED. WE HAVE CONCENTRATED OUR BUDGET EFFORTS FOR FISCAL YEAR 1995 ON THE DEPARTMENT OF DEFENSE PRIORITY INVESTMENT STRATEGY THAT SUPPORTS PROJECTS FOR ENVIRONMENTAL COMPLIANCE, TREATY AND INTERNATIONAL AGREEMENT COMPLIANCE, NEW MISSION BEDDOWN AND REALIGNMENTS, AND QUALITY OF LIFE. WE VIEW THIS APPROACH FOR FISCAL YEAR 1995 AS A PRUDENT MANAGEMENT STRATEGY IN THIS PERIOD OF UNCERTAINTY IN FORCE STRUCTURE LEVELS AND BASING STRUCTURE.

PROGRAM OVERVIEW

THE ACTIVE AIR FORCE MILITARY CONSTRUCTION REQUEST FOR FY 1995 TOTALS \$1.411 BILLION. WHEN THE AIR RESERVE COMPONENTS (ARC) PROGRAM OF \$151 MILLION IS ADDED, THE TOTAL DEPARTMENT OF THE AIR FORCE PROGRAM IS \$1.562 BILLION. INCLUDED IN THE FIGURE FOR THE ACTIVE FORCES IS \$357 MILLION FOR TRADITIONAL MILCON PROJECTS AND \$1.054 BILLION FOR MILITARY FAMILY HOUSING (MFH). THIS COMPARES TO A FY 1994 REQUEST OF \$1.932 BILLION, INCLUDING \$906 MILLION FOR TRADITIONAL MILCON AND \$1.027 BILLION FOR MFH. THE FY 1994 APPROPRIATION APPROVED BY CONGRESS TOTALED \$1.99 BILLION, CONSISTING OF \$1.022 BILLION FOR MILCON AND \$977.9 MILLION FOR MFH.

OUR FY 1995 MILCON REQUEST REFLECTS A 25% DECREASE FROM THE FY 1994 APPROPRIATION WHICH IS CONSISTENT WITH THE PRIORITY INVESTMENT PROGRAM OF THE DEPARTMENT OF DEFENSE.

ENVIRONMENTAL COMPLIANCE PROJECTS

THE ACTIVE AIR FORCE MILCON PROGRAM FOR MANDATORY ENVIRONMENTAL COMPLIANCE REQUIREMENTS CONTINUES TO RECEIVE STRONG EMPHASIS. WE HAVE REQUESTED FOR FY 1995 A TOTAL OF \$105.3 MILLION FOR 42 PROJECTS. OUR PROGRAM FOCUSES ON ENVIRONMENTAL PROJECTS FOR WASTEWATER AND STORMWATER COLLECTION AND TREATMENT SYSTEMS, HYDRANT REFUELING SYSTEMS, FIRE FIGHTER TRAINING FACILITIES, UNDERGROUND STORAGE TANKS AND HAZARDOUS WASTE STORAGE AND TREATMENT FACILITIES.

THESE PROJECTS WERE DEVELOPED TO SATISFY THREE SPECIFIC CATEGORIES OF REQUIREMENTS. THE FIRST CATEGORY RESPONDS TO LEVEL I REQUIREMENTS, REFERRING TO FACILITIES CURRENTLY OUT OF COMPLIANCE WITH ENVIRONMENTAL LAWS OR REGULATIONS INCLUDING THOSE WHICH ARE THE SUBJECT OF A COMPLIANCE AGREEMENT. THE SECOND CATEGORY IS LEVEL II, PROJECTS NECESSARY TO MEET A FUTURE COMPLIANCE DEADLINE, BUT WHERE FY 1996 FUNDING WOULD BE TOO LATE. THE THIRD CATEGORY CONCERNS UNDERGROUND STORAGE TANKS. WE ARE REQUESTING THE FUNDING NECESSARY TO COMPLETE COMPLIANCE REQUIREMENTS WITHIN FIVE YEARS AND BEFORE THE COMPLIANCE DEADLINE OF DECEMBER 1998 AS REQUIRED BY THE RESOURCE CONSERVATION AND RECOVERY ACT.

CRITICAL DIRECT MISSION SUPPORT PROJECTS

THE DEPARTMENT AND THE CONGRESS HAVE COMMITTED TO FORCE MODERNIZATION EVEN AS OVERALL FORCE STRUCTURE LEVELS ARE REDUCED. CONSEQUENTLY, OUR BUDGET REQUEST INCLUDES MODEST INVESTMENT IN THE MOST CRITICAL FACILITIES REQUIRED TO SUPPORT THIS ONGOING MODERNIZATION.

B-2 BOMBER FACILITIES

OUR CONSTRUCTION TO SUPPORT THE B-2 DEPLOYMENT TO WHITEMAN AIR FORCE BASE, MISSOURI, BEGAN WITH THE FY 1988 MILCON PROGRAM AND CONTINUES WITH OUR REQUEST FOR \$23.0 MILLION AT THAT BASE IN FY 1995. THIS REQUEST IS IN LINE WITH THE REVISED B-2 ACQUISITION PROGRAM AND IS BASED ON THE REDUCED CONGRESSIONAL AUTHORIZATION OF TWENTY AIRCRAFT. UNDER THIS CONCEPT, WHITEMAN AIR FORCE BASE WILL BE SOLE OPERATING LOCATION FOR THE B-2. ORIGINALLY IT WAS PLANNED TO PERFORM DEPOT MAINTENANCE AT TINKER AIR FORCE BASE, OKLAHOMA, BUT THE MAINTENANCE CONCEPT IS NOW BEING REEVALUATED AND THEREFORE, NO PROJECTS ARE BEING REQUESTED FOR FY 1995. FUTURE MILCON BUDGET REQUESTS FOR THE B-2 WILL BE ADJUSTED WHEN THE OPERATIONAL AND DEPOT MAINTENANCE CONCEPTS BASED ON AN INVENTORY OF TWENTY AIRCRAFT ARE FINALIZED.

JOINT STARS

WE ARE REQUESTING \$14.3 MILLION FOR FOUR PROJECTS AT ROBINS AIR FORCE BASE, GEORGIA TO PROVIDE THE FACILITIES NEEDED TO SUPPORT BEDDOWN OF THE JOINT STARS AIRCRAFT. ROBINS AIR FORCE BASE IS THE SINGLE MAIN OPERATING BASE FOR 19 PRIMARY ASSIGNED AIRCRAFT. PRIOR YEAR MILCON TO SUPPORT JOINT STARS AT ROBINS AIR FORCE BASE TOTALS \$54.7 MILLION. TWO FORWARD OPERATING LOCATIONS, ONE IN EUROPE AND ONE IN THE PACIFIC HAVE YET TO BE DETERMINED. THESE WILL REQUIRE MINIMAL OPERATIONS, MAINTENANCE AND SUPPORT FACILITIES.

F-22 ADVANCED TACTICAL FIGHTER

THE PROJECT AT EDWARDS AIR FORCE BASE, CALIFORNIA FOR \$4.6 MILLION IS TO ALTER AN ENGINEERING TEST FACILITY TO SUPPORT THE ENGINEERING AND MANUFACTURING DEVELOPMENT (EMD) PHASE OF THE F-22 PROGRAM. THE FIRST F-22 EMD AIRCRAFT IS SCHEDULED FOR DELIVERY IN FY 1996.

COMPOSITE WINGS

THE COMPOSITE WINGS ARE ESTABLISHED AT MT HOME AIR FORCE BASE, IDAHO; MOODY AIR FORCE BASE, GEORGIA; AND POPE AIR FORCE BASE, NORTH CAROLINA. PRIOR YEAR FUNDING AT THE THREE LOCATIONS TOTALS \$65.9 MILLION. FOR FY 1995, WE ARE REQUESTING A TOTAL OF \$17.3 MILLION FOR TWO PROJECTS AT POPE AIR FORCE BASE

AND TWO PROJECTS AT MOODY AIR FORCE BASE.

SPACE LAUNCH INFRASTRUCTURE

THE SPACE LAUNCH INFRASTRUCTURE PROGRAM IS DESIGNED TO CORRECT FACILITY DEFICIENCIES THAT HAVE ADVERSELY AFFECTED SPACE LAUNCH OPERATIONS AND THE RELIABILITY AND MAINTAINABILITY OF SPACE SYSTEMS. IN FY 1995, WE ARE REQUESTING \$6.7 MILLION FOR TWO PROJECTS WHICH COMPRISE THE THIRD PHASE OF A MULTI-YEAR REVITALIZATION PROGRAM. THE FIRST PROJECT IS A \$1.75 MILLION UPGRADE TO THE ELECTRICAL DISTRIBUTION SYSTEM AT CAPE CANAVERAL AFB, FLORIDA. THE OTHER PROJECT IS AT VANDENBERG AFB, CALIFORNIA FOR A \$5.0 MILLION UPGRADE TO THE NATURAL GAS SYSTEM.

OVERSEAS MILITARY CONSTRUCTION

WE ARE REQUESTING \$6.5 MILLION FOR THE FOLLOWING NON-EUROPEAN OVERSEAS PROJECTS: A PROJECT AT THULE AIR BASE, GREENLAND TO CONSTRUCT A \$2.45 MILLION FIRE TRAINING FACILITY AND THREE PROJECTS AT A CLASSIFIED LOCATION TO PROVIDE WAR READINESS MATERIAL MEDICAL AND OPEN STORAGE FOR \$0.65 MILLION AND \$2.1 MILLION RESPECTIVELY AND A MANAGEMENT FACILITY FOR \$1.3 MILLION. THESE PROJECTS ARE NOT A HOST NATION RESPONSIBILITY, ARE NOT NATO ELIGIBLE, AND ARE NOT AFFECTED BY ANY FORCE STRUCTURE REDUCTIONS IN EUROPE.

THE PROJECTS REQUESTED FOR EUROPE ARE LIMITED TO ONLY THOSE MOST CRITICAL REQUIREMENTS TO SUPPORT OPERATIONS AND TO MAINTAINING ADEQUATE WORKING AND LIVING CONDITIONS FOR PERSONNEL STATIONED OVERSEAS. WE HAVE STRICTLY COMPLIED WITH THE GUIDANCE BY THIS COMMITTEE AND THE CONGRESS TO REDUCE OUR OVERSEAS MILCON EXPENDITURE TO THE LOWEST POSSIBLE LEVEL, AND TO SHIFT THE FINANCIAL BURDEN OF SUPPORTING U.S. MILITARY PERSONNEL STATIONED OVERSEAS TO HOST NATIONS WHENEVER POSSIBLE. IN ADDITION, ALL OVERSEAS MILCON PROJECTS WERE RIGOROUSLY SCREENED AGAINST PLANNED FUTURE FORCE REDUCTIONS AND OTHER MISSION CHANGES.

THE \$31.8 MILLION FOR EUROPEAN PROJECTS COVER THREE PROJECTS AT RAF LAKENHEATH FOR A \$3.7 MILLION UPGRADE OF A DORMITORY, \$2.55 MILLION UPGRADE OF STORM DRAINAGE SYSTEM, AND \$0.85 MILLION FOR AN F-15 MUNITIONS MAINTENANCE FACILITY; A LEVEL I COMPLIANCE PROJECT AT LAJES FIELD, PORTUGAL FOR A \$2.85 MILLION REFUSE INCINERATOR; TWO PROJECTS AT SPANGDAHLEM AIR BASE, GERMANY FOR UPGRADES TO STORM WATER AND COLLECTION SYSTEM AT \$7.2 MILLION AND \$2.27 MILLION FOR A CHILD DEVELOPMENT CENTER; AND TWO PROJECTS AT RAMSTEIN AIR BASE, GERMANY FOR UPGRADING THE SEWAGE COLLECTION SYSTEM AT \$11.2 MILLION AND A HAZARDOUS MATERIAL STORAGE FACILITY FOR \$1.15 MILLION.

PLANNING AND DESIGN

OUR REQUEST FOR FY 1995 PLANNING & DESIGN IS \$49.4 MILLION. THESE FUNDS ARE REQUIRED TO COMPLETE DESIGN FOR THE FY 1996 CONSTRUCTION PROGRAM AND TO ACHIEVE 35% DESIGN FOR OUR FY 1997 PROJECTS.

UNSPECIFIED MINOR CONSTRUCTION (P-341 FUNDS)

WE HAVE REQUESTED \$7.0 MILLION IN FY 1995 FOR UNSPECIFIED MINOR CONSTRUCTION FUNDS (P-341), WHICH PROVIDE THE AIR FORCE WITH ITS PRIMARY MEANS OF RESPONDING TO SMALL, UNFORESEEN MILCON REQUIREMENTS -- A CRITICAL NEED IN THE DYNAMICS OF THE AIR FORCE OF TODAY. THIS REQUEST IS IN LINE WITH THE \$7 MILLION APPROPRIATED IN FY 1994 BUT LESS THAN HALF THE AVERAGE APPROPRIATION MADE DURING THE PAST FIVE YEARS. THE RAPID RATE OF CHANGE TAKING PLACE IN THE AIR FORCE IS PUTTING A STRAIN ON THIS ACCOUNT. IN FY 1993, \$8.7 MILLION WAS REPROGRAMMED INTO THE ACCOUNT TO FUND URGENT REQUIREMENTS. WE ANTICIPATE THE NEED TO REPROGRAM FUNDS IN FY 1994 TO KEEP UP WITH REQUIREMENTS. THE FY 1993 AND FY 1994 FUNDS ARE ANTICIPATED TO BE FULLY OBLIGATED BY MARCH 1994. THIS WILL ELIMINATE OUR ABILITY TO RESPOND TO EMERGENCIES DURING THE REMAINING NINE MONTHS OF FY 1994 WITHOUT SUCCESSFUL REPROGRAMMING. WE HAVE VALIDATED REQUIREMENTS TOTALING \$21 MILLION UNDER DESIGN.

MILITARY FAMILY HOUSING

DURING THIS TIME OF GREAT CHANGE AND CONSIDERABLE UNCERTAINTY FOR AIR FORCE PERSONNEL, IT IS VITAL THAT WE MAINTAIN OUR COMMITMENT TO PROVIDE QUALITY HOUSING FOR THEIR FAMILIES AND DEPENDENTS. THUS WE ARE CONTINUING TO EMPHASIZE THE "WHOLE HOUSE IMPROVEMENT PROGRAM" WHICH BRINGS OLDER UNITS UP TO TODAY'S STANDARDS. IN OUR BUDGET REQUEST, WE HAVE ONCE AGAIN REQUESTED FUNDS FOR THIS MOST IMPORTANT PROGRAM, AND WE ASK FOR YOUR CONTINUED STRONG SUPPORT. AS AN INTEGRAL PART OF THE "WHOLE HOUSE IMPROVEMENT PROGRAM", WE ARE REVALIDATING THE REQUIREMENT FOR ALL UNITS BEFORE PROCEEDING WITH EACH PHASE OF THE PROGRAM. WHEN WE FIND THAT WE HAVE TOO MANY UNITS, WE WILL NOT PROGRAM FOR WHOLE HOUSE RENOVATION NOR PERFORM MAJOR REPAIR, BUT WILL PROGRAM FOR DEMOLITION WHEN NO LONGER REQUIRED OR COST EFFECTIVE TO MAINTAIN. AS YOU ARE AWARE, IT IS DOD POLICY TO RELY ON LOCAL COMMUNITIES FIRST TO PROVIDE HOUSING FOR AIR FORCE FAMILIES AT NEARBY BASES, AND THIS POLICY IS BEING FOLLOWED WHEN PERSONNEL FROM CLOSING BASES ARE REASSIGNED TO OTHER INSTALLATIONS.

AS IN YEARS PAST, THE AIR FORCE LEADERSHIP CONSIDERS MILITARY FAMILY HOUSING TO BE ONE OF ITS MOST IMPORTANT DISCRETIONARY FACILITY PROGRAMS. WE ARE CONVINCED THAT NO OTHER FACILITY PROGRAM INFLUENCES THE PERFORMANCE AND COMMITMENT OF OUR PEOPLE AS MUCH AS HAVING A QUALITY HOME FOR THEIR FAMILIES. WE VERY MUCH APPRECIATE THE SUPPORT

CONGRESS HAS GIVEN US FOR OUR FAMILY HOUSING PROGRAM AS WE STRIVE TOGETHER TO SUSTAIN THE QUALITY OF HOMES FOR OUR PEOPLE.

MAINTAINING THE QUALITY OF OUR FAMILY HOUSING PROGRAM IS EVEN MORE IMPORTANT IN THIS NEW ERA OF MASSIVE OVERSEAS REDUCTIONS, DOMESTIC BASE CLOSURES, MAJOR FORCE REDUCTIONS AND AN ONGOING REORGANIZATION OF THE AIR FORCE. THESE UNAVOIDABLE ADJUSTMENTS TO OUR FORCES AND FACILITIES ARE A REFLECTION OF THE TIMES WE LIVE IN AND ARE NECESSARY TO DOWNSIZE OUR DEFENSE ESTABLISHMENT. BUT THESE ADJUSTMENTS, HOWEVER DESIRABLE, ALSO ARE DISRUPTIVE TO MILITARY FAMILIES, AND THEREFORE IT IS IMPERATIVE THAT WE PROVIDE THEM THE SECURITY AND QUALITY OF LIFE THEY ARE ENTITLED TO FOR THEIR FAMILY HOMES.

OUR FY 1995 BUDGET REQUEST FOR FAMILY HOUSING INCLUDES REPLACEMENT CONSTRUCTION AND IMPROVEMENTS TO OUR EXISTING HOUSING INVENTORY, AND MAINTAINS AND MANAGES THIS INVENTORY IN THE MOST EFFICIENT MANNER

HOUSING IMPROVEMENTS

A TOP PRIORITY IN THE AIR FORCE HOUSING PROGRAM IS REVITALIZATION OF OUR EXISTING HOUSING INVENTORY THROUGH OUR "WHOLE HOUSE/WHOLE NEIGHBORHOOD" IMPROVEMENT PROGRAM. THIS PROGRAM HAS BEEN EXTREMELY SUCCESSFUL. UNDER THIS CONCEPT,

WORN-OUT BATHROOMS AND KITCHENS ARE UPDATED, OBSOLETE UTILITY AND STRUCTURAL SYSTEMS ARE REPLACED, ADDITIONAL LIVING SPACE IS PROVIDED AS PERMITTED BY LAW, AND OLDER HOMES ARE UPGRADED TO CONTEMPORARY STANDARDS. AT THE SAME TIME, ALL REQUIRED MAINTENANCE AND REPAIR IS ACCOMPLISHED. THE RESULT IS A VERY COST EFFECTIVE INVESTMENT THAT EXTENDS THE LIFE OF THESE HOUSES BY AN ADDITIONAL 25 YEARS. IN ADDITION, THE "WHOLE NEIGHBORHOOD PROGRAM" WILL PROVIDE RECREATION AREAS, LANDSCAPING, PLAYGROUNDS AND UTILITY SUPPORT SYSTEMS SO THAT AIR FORCE PERSONNEL WILL HAVE ATTRACTIVE AND FUNCTIONAL LIVING AREAS.

OUR FY 1995 IMPROVEMENT REQUEST IS FOR \$71 MILLION AND INCLUDES PLANNING AND DESIGN. THIS AMOUNT WILL REVITALIZE 810 HOMES AND PROVIDE FIVE NEIGHBORHOOD IMPROVEMENTS. IT IS IMPORTANT TO EMPHASIZE THAT OUR IMPROVEMENT PROGRAM BUDGET REQUEST INCLUDES FUNDING FOR BOTH REPAIR AND ALTERATIONS. THUS THE AIR FORCE REQUEST FOR IMPROVEMENTS IS HIGHER THAN THOSE OF THE OTHER SERVICES, BUT OUR REQUEST FOR REPAIR FUNDING IS LOWER.

NEW CONSTRUCTION

WE ARE REQUESTING A TOTAL OF \$182 MILLION IN FY 1995 TO CONSTRUCT 1,289 REPLACEMENT HOUSES AT 19 CONUS AIR FORCE BASES; TWO HOUSING SUPPORT FACILITIES AT CONUS BASES; TWO NEW CONSTRUCTION PROJECTS FOR 124 UNITS AT TWO CONUS AIR FORCE

BASES; AND \$30 MILLION FOR PHASE III OF CARDINAL CREEK VILLAGE REPLACEMENT AT SCOTT AIR FORCE BASE, ILLINOIS.

THE 1,289 REPLACEMENT UNITS ARE REPLACEMENTS FOR UNSUITABLE EXISTING HOMES THAT ARE NO LONGER ECONOMICAL TO IMPROVE. THEY WILL REPLACE UNITS AT 19 DIFFERENT LOCATIONS. THE NEW MFH CONSTRUCTION IS AT POPE AIR FORCE BASE, NORTH CAROLINA AND MT HOME AIR FORCE BASE, IDAHO. POPE AIR FORCE BASE CONSTRUCTION FOR 120 UNITS WILL SUPPORT ADDITIONAL REQUIREMENTS GENERATED BY THE COMPOSITE WING BEDDOWN. THE REMAINING FOUR NEW UNITS ARE AT MT HOME AIR FORCE BASE, IDAHO WHERE IT IS NOT PRACTICAL TO IMPROVE EXISTING UNITS TO ADEQUATE SENIOR AND GENERAL OFFICER UNITS. THE EXISTING HOUSES WILL BE USED AS FIELD GRADE OFFICER UNITS.

WE ARE ALSO REQUESTING \$30 MILLION TO COMPLETE THE AIR FORCE'S SHARE OF THE CARDINAL CREEK VILLAGE REPLACEMENT AT SCOTT AIR FORCE BASE, ILLINOIS. THIS IS A JOINT PROJECT WITH ST CLAIR COUNTY, ILLINOIS TO REPLACE UNITS THAT WILL BE DEMOLISHED TO MAKE WAY FOR A JOINT USE RUNWAY.

FINALLY, WE ARE REQUESTING MODEST FUNDING TO REPLACE TWO INADEQUATE, NON-FUNCTIONAL FAMILY HOUSING MANAGEMENT OFFICES. IT IS VERY IMPORTANT TO PROVIDE AN ADEQUATE WORKPLACE WHERE AIR FORCE FAMILIES CAN BE PRODUCTIVELY ASSISTED IN THEIR HOUSING SEARCH BY OUR FAMILY HOUSING PROFESSIONALS.

OPERATIONS, UTILITIES AND MAINTENANCE

OUR FY 1995 REQUEST FOR FAMILY HOUSING OPERATIONS, UTILITIES AND MAINTENANCE IS \$689.0 MILLION. THESE FUNDS ARE NECESSARY TO OPERATE, MAINTAIN AND REPAIR THE NEARLY 119,000 HOMES IN THE AIR FORCE INVENTORY -- REPRESENTING A REPLACEMENT VALUE OF \$17 BILLION. APPROXIMATELY 80% OF THIS O&M FUNDING REPRESENTS OUR OBLIGATION AS HOMEOWNERS FOR ITEMS SUCH AS UTILITIES, REFUSE COLLECTION AND SALARIES. THE REMAINING 20% IS APPLIED TOWARD THE MAJOR CONTRACTS SUCH AS ELECTRICAL DISTRIBUTION, STREET REPAIRS, AND ROOF REPAIRS THAT FIX THE DETERIORATING INFRASTRUCTURE. WE CURRENTLY HAVE A \$922 MILLION BACKLOG OF REPAIR REQUIREMENTS. WHILE OUR WHOLE HOUSE REVITALIZATION PROGRAM WILL REDUCE A SMALL PART OF THIS BACKLOG, A VIGOROUS MAINTENANCE AND REPAIR PROGRAM IS NECESSARY TO PRESERVE THESE UNITS AND MINIMIZE OPERATING COSTS UNTIL THEY CAN BE REVITALIZED.

LEASING

WE HAVE REQUESTED \$112.8 MILLION FOR THE COST OF LEASING BOTH DOMESTIC AND OVERSEAS HOUSING UNITS. WE HAVE TWO OVERSEAS LEASES THAT WERE INCREASED IN FY 94. AT AVIANO AIR BASE, ITALY, WE HAVE AN INCREASED REQUIREMENT TO SUPPORT A MISSION REALIGNMENT. AT INCIRLIK AIR BASE, TURKEY, THE ADDED LEASE UNITS WILL PROVIDE SAFER HOUSING FOR OUR ASSIGNED PERSONNEL. OUR REQUEST FOR A \$20.2 MILLION APPROPRIATION IN FY 94

TO BUY OUT THE BUILD-LEASE PROJECT, WHILE SAVING \$8 MILLION, AT COMISO AIR BASE, ITALY, WAS DENIED BY CONGRESS. ALTHOUGH OUR FY 95 REQUEST DOES NOT INCLUDE THE \$7 MILLION REQUIRED FOR THE ANNUAL LEASE PAYMENT. WE WILL HAVE TO FIND A WAY TO MAKE THIS PAYMENT THROUGH ECONOMIES IN THE FY 95 LEASE PROGRAM. IT STILL MAKES GOOD BUSINESS SENSE TO BUY OUT THE LEASE AND WE WILL MAKE EVERY EFFORT TO FIND A WAY TO DO THIS WITHIN OUR BUDGETED RESOURCES. IF SUCCESSFUL, THIS BUYOUT IN FY 95 WOULD ACHIEVE A SAVINGS OF \$6 MILLION.

OUR FY 1993 FAMILY HOUSING REQUEST REFLECTS OUR COMMITMENT TO SUSTAIN QUALITY HOMES FOR OUR PEOPLE. TOO MANY AIR FORCE FAMILIES STILL LIVE IN UNSUITABLE HOUSING. WE REQUEST THE SUPPORT OF THE COMMITTEE IN APPROVING THE FULL REQUEST FOR OUR MILITARY FAMILY HOUSING PROGRAM.

MILITARY CONSTRUCTION FOR THE AIR NATIONAL GUARD

OVERVIEW

THE AIR NATIONAL GUARD MILCON REQUEST FOR FY 1995 TOTALS \$122.8 MILLION, INCLUDING \$107.3 MILLION FOR MILITARY CONSTRUCTION, \$11.5 MILLION FOR PLANNING AND DESIGN, AND \$4.0 MILLION FOR UNSPECIFIED MINOR CONSTRUCTION. THIS WILL SUPPORT THE READINESS OF AIR GUARD UNITS, CONTINUE THE MODERNIZATION EFFORT OF OUR AIRCRAFT INVENTORY, AND ENSURE COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS, AT 38 LOCATIONS ACROSS

THE UNITED STATES AND TERRITORIES. CONSISTENT WITH THE PRIORITY INVESTMENT STRATEGY, THE PROGRAM, WHICH IS FIFTY PERCENT BELOW WHAT WAS APPROPRIATED FOR FISCAL YEAR 1994, ADDRESSES ONLY OUR MOST URGENT NEEDS.

NEW MISSION

NEW MISSION REQUIREMENTS ACCOUNT FOR \$62 MILLION TO SUPPORT CONVERSION AT SIX LOCATIONS. THE MAJORITY OF THE BUDGET REQUEST SUPPORTS THE B-1 AND KC-135 CONVERSIONS.

UNSPECIFIED MINOR CONSTRUCTION

AS IN THE ACTIVE AIR FORCE, MISSION AND FORCE STRUCTURE CHANGES OFTEN REQUIRE THE FLEXIBILITY ALLOWED BY THE UNSPECIFIED MINOR CONSTRUCTION AUTHORITY. FOR THE AIR NATIONAL GUARD, \$4.0 MILLION IS REQUESTED FOR UNSPECIFIED MINOR CONSTRUCTION. THE RAPID RATE OF CHANGE TAKING PLACE, AND THE REQUIREMENTS FOR TEMPORARY ARRANGEMENTS DURING AIRCRAFT CONVERSIONS REQUIRE THIS AUTHORITY TO MAINTAIN MISSION CAPABILITY IN AN EXIGENT, AFFORDABLE MANNER.

PLANNING AND DESIGN

THE AIR NATIONAL GUARD REQUEST INCLUDES \$11.5 MILLION IN PLANNING AND DESIGN FUNDS WHICH IS BASED ON CONTINUING DESIGN OF THE FISCAL YEAR 1996 AND 1997 MILCON PROGRAMS.

ENVIRONMENTAL COMPLIANCE

ENVIRONMENTAL COMPLIANCE WILL REQUIRE \$47.7 MILLION FOR 45 PROJECTS AT 38 LOCATIONS. THE MAJORITY, 24, OF THESE PROJECTS ARE FOR THE REMOVAL/REPLACEMENT OF UNDERGROUND STORAGE TANKS AS REQUIRED BY THE RESOURCE CONSERVATION AND RECOVERY ACT. FIVE OF THE PROJECTS ARE TO BRING FUEL CELL MAINTENANCE DOCKS INTO COMPLIANCE WITH ENVIRONMENTAL REGULATIONS. THE 16 REMAINING PROJECTS COVER A VARIETY OF AREAS, SUCH AS PROVIDING A DEICING APRON, REGIONAL FIRE TRAINING PITS AND HOLDING PONDS AND DRAINAGE STRUCTURES THAT WILL COMPLY WITH CLEAN AIR AND CLEAN WATER ACT REQUIREMENTS.

CURRENT MISSION

DUE TO THE PRIORITY INVESTMENT STRATEGY OF THE DEPARTMENT, THERE ARE NO CURRENT MISSION PROJECTS IN THE BUDGET REQUEST FOR THE AIR NATIONAL GUARD.

MILITARY CONSTRUCTION FOR THE AIR FORCE RESERVE

OVERVIEW

THE AIR FORCE RESERVE FISCAL YEAR 1995 MILCON BUDGET REQUEST IS \$28.19 MILLION. IT INCLUDES \$21.0 MILLION FOR PROJECTS IN 7 STATES, \$4.018 MILLION FOR UNSPECIFIED MINOR CONSTRUCTION, AND \$3.172 MILLION FOR PLANNING AND DESIGN. THIS INVESTMENT LEVEL

REPRESENTS 38 PERCENT OF THE FISCAL YEAR 1994 APPROPRIATION FOR THE AIR FORCE RESERVE. THE LARGEST DIFFERENCE IN THE AIR FORCE RESERVE BUDGET REQUEST FROM LAST YEAR IS IN CURRENT MISSION MILCON WHICH PROVIDES TRAINING AND WORKING FACILITIES AND ALSO UPGRADES BASE INFRASTRUCTURE. CONSISTENT WITH THE PRIORITY INVESTMENT PROGRAM, THE AIR FORCE RESERVE FISCAL YEAR 1995 CURRENT MISSION MILCON IS 17 PERCENT OF THE FISCAL YEAR 1994 APPROPRIATION FOR CURRENT MISSION. IN ADDITION, THE RESERVE NEW MISSION REQUIREMENTS DECREASED TO 37 PERCENT OF THE PREVIOUS YEAR. HOWEVER, THE INVESTMENT IN ENVIRONMENTAL COMPLIANCE WAS INCREASED 270 PERCENT. THIS YEAR'S REQUEST IS CONSISTENT WITH OUR LONG RANGE FACILITY INVESTMENT STRATEGY TO: BEDDOWN NEW MISSIONS AND REALIGNMENTS; COMPLY WITH ENVIRONMENTAL LAWS AND REGULATIONS; PROVIDE ADEQUATE OPERATIONAL AND TRAINING FACILITIES; AND PROVIDE EFFICIENT, RELIABLE INFRASTRUCTURE.

NEW MISSION

OUR TOP PRIORITY FOR FISCAL YEAR 1995 PROVIDES FOR THE ALTERATION OF EXISTING BASE FACILITIES TO SUPPORT THE INVENTORY CONVERSION OF AIR FORCE RESERVE A-10 AIRCRAFT TO B-52 AIRCRAFT. THIS CONVERSION PROVIDES THE FIRST BOMBERS TO THE AIR FORCE RESERVE FLYING INVENTORY.

ENVIRONMENTAL COMPLIANCE

THE NEXT RESERVE FACILITY PRIORITY IS ENVIRONMENTAL COMPLIANCE. LAST YEAR WE COMPLETED OUR ENVIRONMENTAL COMPLIANCE AND MANAGEMENT PLANS TO IDENTIFY ALL AIR FORCE RESERVE ENVIRONMENTAL COMPLIANCE REQUIREMENTS. THIS YEAR WE MAKE A SIGNIFICANT EFFORT TO COMPLETE THAT WORK. THE FISCAL YEAR 1995 BUDGET REQUEST WILL PROVIDE ENVIRONMENTALLY SAFE FIRE FIGHTER TRAINING FACILITIES, REPLACE UNDERGROUND FUEL STORAGE TANKS, PROVIDE FOR SAFE HAZARDOUS WASTE CONTAINMENT, PROVIDE TREATMENT OF BASE SEWAGE EFFLUENT PRIOR TO FINAL COUNTY INDUSTRIAL WASTEWATER TREATMENT, AND COMPLETE ALL ENVIRONMENTAL COMPLIANCE WORK AT A NEW AIR FORCE RESERVE BASE.

CURRENT MISSION

THE CURRENT MISSION REQUIREMENTS IN OUR FISCAL YEAR 1995 PROGRAM ARE VERY IMPORTANT TO MISSION READINESS. SINCE A SIGNIFICANT PORTION OF THE AIR FORCE RESERVE FORCE IS PART TIME, TRAINING ON WEEKENDS AND TWO WEEK PERIODS THROUGHOUT THE YEAR, READINESS OF OUR FORCE RELIES HEAVILY UPON OUR TRAINING CAPABILITIES. THEREFORE, ADEQUATE TRAINING AND WORKING CONDITIONS ARE CRITICAL FOR THE AIR FORCE RESERVE. DUE TO THE FISCAL YEAR 1995 PRIORITY INVESTMENT PROGRAM, ALL RESERVE TRAINING AND WORKING CONDITION PROJECTS HAVE BEEN DELAYED. HOWEVER, OUR PRIORITY ON EFFICIENT, RELIABLE INFRASTRUCTURE TO

REDUCE OPERATIONS AND MAINTENANCE COSTS REMAINS INTACT. OUR FISCAL YEAR 1995 REQUEST PROVIDES FOR THE REPLACEMENT OF A WORN TAXIWAY AND THE REPLACEMENT OF AN ELECTRICAL SUBSTATION.

UNSPECIFIED MINOR CONSTRUCTION

THE AIR FORCE RESERVE REQUEST FOR UNSPECIFIED MINOR CONSTRUCTION IS \$4.018 MILLION IN FISCAL YEAR 1995. AS IN THE CASE OF THE ACTIVE AIR FORCE AND THE AIR NATIONAL GUARD, THIS APPROPRIATION PROVIDES THE RESERVE WITH ITS PRIMARY MEANS OF RESPONDING TO SMALL UNFORESEEN MILCON REQUIREMENTS. THE RAPID RATE OF CHANGE IN THE AIR FORCE AND THE RAPID RATE OF AIRCRAFT CONVERSIONS PLACES EXTRAORDINARY DEMANDS ON THIS ACCOUNT. TO RESPOND TO THIS CHANGE, WE NEED THE STRONG SUPPORT OF THIS COMMITTEE FOR THIS REQUEST.

PLANNING AND DESIGN

OUR PLANNING AND DESIGN REQUEST FOR FISCAL YEAR 1995 IS \$3.172 MILLION. THESE FUNDS ARE REQUIRED TO COMPLETE DESIGN FOR THE FISCAL YEAR 1996 P-341 AND MILCON PROGRAMS; ACHIEVE 65 PERCENT DESIGN FOR OUR FISCAL YEAR 1997 PROGRAM; ACHIEVE 35 PERCENT DESIGN FOR OUR FISCAL YEAR 1998 PROGRAM; AND FULLY DESIGN ALL LATE TO NEED NEW MISSION MILCON PROJECTS. AS WITH THE ACTIVE FORCE, THE REQUIREMENT WAS CALCULATED USING THE OSD PLANNING AND DESIGN COST TARGET OF NINE PERCENT.

BASE CLOSURE ACCOUNTS

OUR FY 95 FUNDING REQUESTS FOR THE BASE CLOSURE ACCOUNTS ARE DESIGNED TO SUPPORT THE PRESIDENT'S FIVE PART PROGRAM BY CONTINUING TO CLOSE BASES AS QUICKLY AND EFFICIENTLY AS POSSIBLE WHILE MAKING PROPERTIES AVAILABLE TO COMMUNITIES FOR ECONOMIC REINVESTMENT AT THE EARLIEST OPPORTUNITY. OUR REQUEST ALSO REFLECTS A COMPLETE BOTTOM-UP REVIEW OF ALL REMAINING REQUIREMENTS FOR THE 1988 AND 1991 COMMISSION BASES AS WELL AS THOSE FOR THE 1993 COMMISSION BASES. AS A RESULT OF THIS REVIEW PROCESS, WE DETERMINED THAT SUFFICIENT UNOBLIGATED BALANCES WERE AVAILABLE TO FUND OUR FY 95 BRAC 88 AND BRAC 91 REQUIREMENTS AND PART OF OUR BRAC 93 REQUIREMENTS. WE THEREFORE DID NOT ASK FOR ADDITIONAL FUNDS TO BE AUTHORIZED AND APPROPRIATED IN FY 95 FOR BRAC 88 OR BRAC 91 BASES. FOR THE SAME REASON, AVAILABILITY OF UNOBLIGATED FUNDS, WE LIMITED OUR REQUEST FOR BRAC 93 BASES TO \$107.4 MILLION WHICH REPRESENTS THE ENVIRONMENTAL RESTORATION REQUIREMENT THAT WOULD HAVE BEEN FUNDED FOR THESE BASES THROUGH THE DEFENSE ENVIRONMENTAL RESTORATION ACCOUNT. THE AIR FORCE LEADERSHIP DELIBERATELY CHOSE TO MINIMIZE ITS FUNDING REQUEST IN FY 95 BECAUSE THE AVAILABILITY OF UNOBLIGATED FUNDS AND THE STATUTORY FLEXIBILITY IN THE PART II ACCOUNT WOULD HAVE ENABLED THESE FUNDS TO BE USED TO MEET REQUIREMENTS AS THEY OCCUR IN ORDER OF PRIORITY.

THE DEPARTMENT HAS BEEN AND CONTINUES TO BE COMMITTED TO TIMELY, THOROUGH ENVIRONMENTAL RESTORATION AND A SMOOTH TRANSITION OF THE BASES TO CIVILIAN USES AS SOON AS POSSIBLE, CONSISTENT WITH THE PRESIDENT'S FIVE PART PROGRAM. WE NEED THE ASSISTANCE OF THIS COMMITTEE IN ORDER TO CONTINUE TO FULLY SUPPORT THESE OBJECTIVES.

CONCLUSION

IN CONCLUSION, MR. CHAIRMAN, I WANT TO THANK THE COMMITTEE FOR ITS STRONG PAST SUPPORT OF THE TOTAL AIR FORCE MILITARY CONSTRUCTION PROGRAM AND THE BENEFITS THIS HAS PROVIDED TO THE AIR FORCE IN READINESS, RETENTION, RECRUITING, REDUCED TRAINING COSTS AND QUALITY PERFORMANCE OF OUR PERSONNEL.

I OPENED BY INDICATING THAT MY GREATEST CHALLENGE AS DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE (INSTALLATIONS) IS TO REDUCE OUR FACILITY AND BASING INFRASTRUCTURE TO AN AFFORDABLE SIZE CONSISTENT WITH FORCE STRUCTURE LEVELS AND PLANNED MISSIONS. IT MUST BE ACCOMPLISHED WITHOUT COMPROMISING QUALITY. I'VE DISCUSSED THE IMPORTANCE OF MAINTAINING QUALITY AND THE OBLIGATION WE HAVE TO THE MEN AND WOMEN WHO SERVE OUR COUNTRY AS AIR FORCE MEMBERS. THE OBLIGATION TO PROVIDE THEM A WORKING AND LIVING ENVIRONMENT

THAT MEETS EXPECTATIONS AND SOCIETAL NORMS EXTENDS TO THEIR FAMILIES AS WELL.

IT WILL BE DIFFICULT TO MEET THE SOMETIMES COMPETING OBJECTIVES OF REDUCING THE SIZE OF THE PLANT TO AN AFFORDABLE LEVEL WHILE STILL MAINTAINING QUALITY FACILITIES AND, ALSO, REDUCING LONG TERM FACILITY COSTS BY MAKING THE NECESSARY CAPITAL INVESTMENT UP FRONT. I LOOK FORWARD TO WORKING WITH THIS COMMITTEE IN THE REMAINING MONTHS OF MY GOVERNMENT SERVICE ON THESE GOALS.

THANK YOU, MR. CHAIRMAN, AND MEMBERS OF THE COMMITTEE. MY COLLEAGUES AND I WILL BE MOST HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE.

THAT MEETS EXPECTATIONS AND SOCIETAL NORMS EXTENDS TO THEIR FAMILIES AS WELL.

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THANK YOU, MR. CHAIRMAN, AND MEMBERS OF THE COMMITTEE. MY COLLEAGUES AND I WILL BE MOST HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE.

Document Separator



Chief of Staff Address

**Roles and Missions
Oregon Air Force Association
Keynote Address**

**Portland, Oregon
15 Jul 94**

General Merrill A. McPeak

United States Air Force

OREGON AFA CONVENTION

GENERAL MERRILL A. McPEAK - 15 JUL 94

As I travel around Oregon and the rest of the country I meet with many hard working Americans who believe in a strong national defense, but also believe in good value for money. They are concerned that these have become mutually exclusive goals. This skepticism is exactly right for the post-Cold War era. I'm convinced that improving our economy is the number one security challenge because, ultimately, military power springs from wealth -- the riches a country can create. The fate of the former Soviet Union provides contemporary and convincing evidence of what happens when defense spending overreaches the economic base.

As this audience knows well, the Air Force is doing its part to reduce the cost of defense. Our budget is down 44 percent since the peak years of the mid-1980s. We have a third fewer people. The combat fighter force is down to half what it was just five years ago. We canceled many Cold War acquisition programs. On top of all this, we restructured the Air Force. In the past three-and-a-half years, we've cut out organizational layers, consolidated headquarters, reduced staffs. Today's Air Force is simpler, more flexible, tougher. Most important, we're less expensive to operate.

But no one service, acting alone, can do all that's required to guarantee the American taxpayer good value for the security dollar. The Department of Defense made a fine start on the larger problem with its Bottom-Up Review. The Bottom-Up Review -- or "BURR" as it's called in the Pentagon -- was nothing short of a clean break from the Cold War. Instead of global conflict with the Soviet Union, we now plan to counter regional threats, such as we did in Desert Storm. Accordingly, we are further cutting the number of Army divisions, Navy ships, and Air Force wings.

The Bottom-Up Review was an important step in restructuring our military forces, but more must be done. To some degree, we have used a "salami-slice" approach to reducing force structure -- taking a wing here, a division there, decrementing every kind of capability about the same amount. We now need a kind of Inside-Out review to complement the Bottom-Up Review. For this review, however, the target is not threat scenarios, but the outdated allocation of service roles and missions.

Anyone following defense issues knows that, since the invention of the airplane, our armed forces have had trouble dividing up the workload. In theory, this shouldn't be difficult: the Army works on land, the Navy at

sea, the Air Force in air and space. But, in practice, it's been tough to reduce overlap and duplication, principally in aviation forces.

This should not be surprising. All services recognize the critical role air and space forces have on the battlefield. So, they naturally want their own ability to strike deep at the enemy, their own ability to defend their force against aerial attack, and so on. The question is not whether, collectively, we should have such capabilities, but rather how much each of the services should have of their own, how much *independence* the nation can afford for each service. We must find the right mix, the right allocation of capabilities to produce an affordable, combat effective balance between independence and jointness. This will be painful for some because self-sufficiency is a cultural imperative for all good commanders. But, remember, in the final analysis, jointness means depending on one another.

As you know, we got where we are because of decisions made after the Second World War. We were the new guy on the block and money was very tight. This naturally led to a series of fights about who would get to do what, highlighted by the dispute between the Air Force and Navy over responsibility for strategic warfare. When Defense Secretary Forrestal got fed up with the bickering, he did what any modern C.E.O. would do -- he held an off-site, at Key West, Florida. There were some great military figures at the Key West meeting -- men like Tooey Spaatz, Omar Bradley, Admiral Louis Denfield. And, they stitched together a compromise that quieted the Pentagon infighting and allocated roles and missions among the services pretty much as we know them today.

Now, that's an important point. The allocation of roles and missions is basically the same today as it was in 1948 -- despite the vast change in our world position, despite Goldwater-Nichols and all the other movement toward jointness, and, maybe most important, despite the tremendous growth in the size of the defense establishment, the federal budget, and the deficit. About the only changes in the formal allocation of roles and missions since Key West has been to tack on a few new roles as technology has evolved -- technology such as satellites or electronic warfare. And, almost without exception, the Pentagon's approach to adding these new roles and missions has been to give the same new responsibilities to each service. Thus, for example, every department has basically the same tasking in space and, as a consequence, every department has a space command. (Think of it -- three space commands!)

This is not to say that serious people, good people have not tried to rework the roles and missions issue since 1948. They have. The most recent run

at the problem came in 1993 under the direction of the then Chairman of the Joint Chiefs, General Powell. But this and earlier attempts to relook roles and missions have, in my view, yielded little more than cosmetic changes. Meanwhile, there has been a growing sentiment, particularly in Congress, that we can no longer afford the duplication, the overlap that exists among the services.

Thus, the 1994 Defense Authorization Act, signed into law last November, called on the Secretary of Defense to establish an independent commission to recommend changes in the current definition and distribution of roles, missions, and functions of the armed forces. The commission actually formed up late this spring under the chairmanship of Harvard University's Dr. John White. Their report to the Secretary of Defense and the Congress is due next summer.

The commission faces a big challenge. Nothing stimulates the glands as much as a threat to one's rice bowl, and the commission will, if it is serious, threaten many rice bowls. So you will soon hear assertions that the status quo is, after all, not so bad. Our success in Desert Storm will be cited as proof that the system isn't *that* broke, that it doesn't require radical surgery. It will be said that, sure, some consolidation here or a few cuts there may be in order, but nothing dramatic. It's crystal clear, however, that a piecemeal or incremental approach to the allocation of roles and missions will result only in piecemeal, incremental savings, not the very substantial savings that can, and really must, be achieved.

So I, for one, am taking great interest in the work of the roles and missions commission and plan to cooperate fully with them in meeting the ambitious objectives mandated by the Congress. To this end, I'd like to offer a couple of general thoughts on how the commission, and the rest of us, might contemplate the task they face.

First, the law charges the commission to recommend "changes in the current *definition*" of roles, missions, and functions. Whoever crafted that language knew what they were doing. In requiring the commission to focus on definitions, they struck oil.

We cannot hold an idea in the mind, think about it, maintain it unless we can name it, give it a label. So, if people don't agree on labels, it's difficult -- more than that, impossible -- to have a meaningful debate. Right now, there is a real hang-up on definitions: what is a "role;" what is a "mission;" what exactly do we mean when we speak of the "functions" of the armed forces? These terms are used almost interchangeably, even by

professionals. So, the first thing the commission needs to do is to agree what these words mean.

Let me offer my two cents worth. For me, a *mission* is the basic purpose of an organization. If we tell an infantry company to take an objective, then taking the objective is the mission. Mission statements have lots of active verbs. Go. Seize. Occupy. What the President told Norm Schwarzkopf to do was "liberate" Kuwait. That was a mission.

A *role* on the other hand is a core process that must be performed in order to accomplish the mission. To my mind, things like infantry operations, air superiority, peacekeeping, submarine warfare - these are roles. They are processes military organizations perform, alone or in combination with others, needed to accomplish the mission.

Finally, a *function* is a support activity that enables core processes to be accomplished efficiently over time. Here I am thinking about things like communications support, logistics, legal and medical services, transportation.

Let me illustrate the differences among these terms by using a show business analogy. Suppose we were a theater company. A producer wants to stage Shakespeare's *A Midsummer Night's Dream*. To do that, we need actors. Each actor will have a specific role to play. That's what we call these parts: roles. There are other activities - let's call them functions - that also must get done: costuming, set decoration, lighting, ticket sales, all necessary for a successful performance. So, we have a mission: to perform *A Midsummer Night's Dream*; we have roles that are absolutely essential, must be acted for the production to make sense; and we have support functions that will, if performed well, make the play an artistic and financial success. It will be seen from this analogy that combatant commanders have missions. Services really do not. The combat arms of the services have roles. The services do not. As we are now organized, what the services do have is support functions and some very expensive ones at that.

I don't want to belabor the definition problem. But, believe me, it is not trivial. Before we can start assessing the appropriate allocation of roles, missions, and functions, we need to agree on how to think about the problem at hand.

Another task Congress gave to the commission was to consider the "division of responsibility on the battlefield." Again, I have to compliment the drafters of the law because they hit on another key point. The mental

construct you have of the battlefield is directly related to the question of how you divide missions among the possible commanders, roles among the possible players, and support functions among the possible providers.

In my view, modern land warfare can be seen as containing four "battles" – the *rear battle*, which includes all the base and supporting elements, the *close battle*, where the main opposing ground forces engage one another, the *deep battle*, which includes hostile territory well beyond the line of contact, and the *high battle*, the arena of air and space combat.

Today, the overall commander, or "CINC," of a particular theater is responsible for all these battles but he can not personally conduct each one. The job is just too big. Instead, he delegates responsibility for various aspects of the battlefield to subordinate commanders. Aside from picking the right subordinates to put in charge, the CINC's principal challenge is to locate the boundary between each of these battles at the right place so as to maximize the performance of the forces operating within each battle area. How this should be done, it seems to me, is what the law asks the commission to help decide.

Here's my cut at the problem. The rear and close battles should be the responsibility of a ground forces commander, an army or a marine officer. His forces should be capable of relatively autonomous operations. That is, they should be capable of engaging the enemy in the friendly rear and immediately in front of them, without a lot of outside help. True, the ground commander has a deep and abiding interest in what goes on overhead in the high battle or over the horizon in the deep battle and he may even have some capability to get into these fights. But, his forces are not the most effective for the high or deep battle. Instead, it's the air component commander, who should fight these battles. Air assets provide the best, most often the only capability to operate in these parts of the battlefield. This air commander will likely be an Air Force or Navy officer, depending on which service puts most forces in a particular fight.

This approach to dividing battlespace provides a logical starting point for identifying unnecessary overlap and duplication. If you accept the scheme I just laid out, it follows that the commander with responsibility for the close battle does not require systems or capabilities that reach across the boundaries into the deep and high battles. If there are such systems in the field or on the drawing board, they might be good candidates for retirement or transfer to another service. Alternatively, the commander with responsibility for the deep battle does not need forces that are configured for direct support of close combat operations. If there are any, they too could be transferred or cut. Such transfers or cuts

would, of course, be painful. Just remember, there is no painless way to cut the defense budget.

Well, I've probably already said enough to get me in hot water back in Washington. And, I admit this is pretty heavy stuff. So, let me sum up. The roles and missions commission should start with a clean sheet of paper, settle on definitions and basic organizational principles, and identify how our armed forces should operate together for success on the modern battlefield. Once you understand how we intend to fight, then you can decide how best to allocate roles and missions. We want and must have some overlap. But, more is not always better. I'm reminded of the guy who went bungee jumping at a county fair. Right after he jumped, the owner told the fellow's wife not to worry - he had added a little extra cord, just to be safe. Finding the right mix, the right balance is the challenge.

Many will resist major change for all the usual reasons. "We know what we're doing, and you don't." "Let's see hard evidence that there are any savings to be made." Et cetera. You've heard all these arguments before. I call them "management Maginot lines." Just remember our problems and our prospects are all much different than they were nearly a half century ago at Key West. We fight different and therefore we must be different.

We need to get as many ideas on the table as we can. A lively debate will be good for all of us. But, whatever argument is offered, the logic must track back to saving dollars. I take it as a given that U.S. military forces can and will be sized and shaped so as to support the national effort to improve our economic strength relative to our international competitors. As far as the Air Force is concerned, roles and missions reform can improve our effectiveness on the battlefield and lead to large dollar savings. The people of Oregon and the rest of the country should expect nothing less.

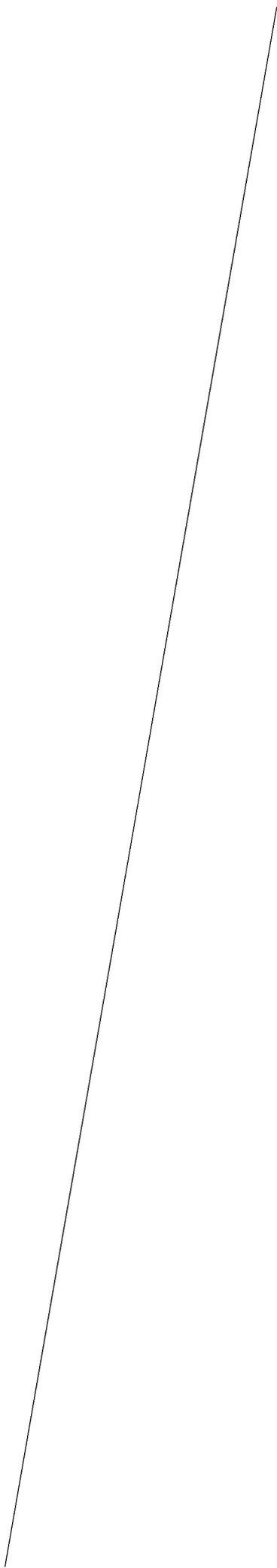
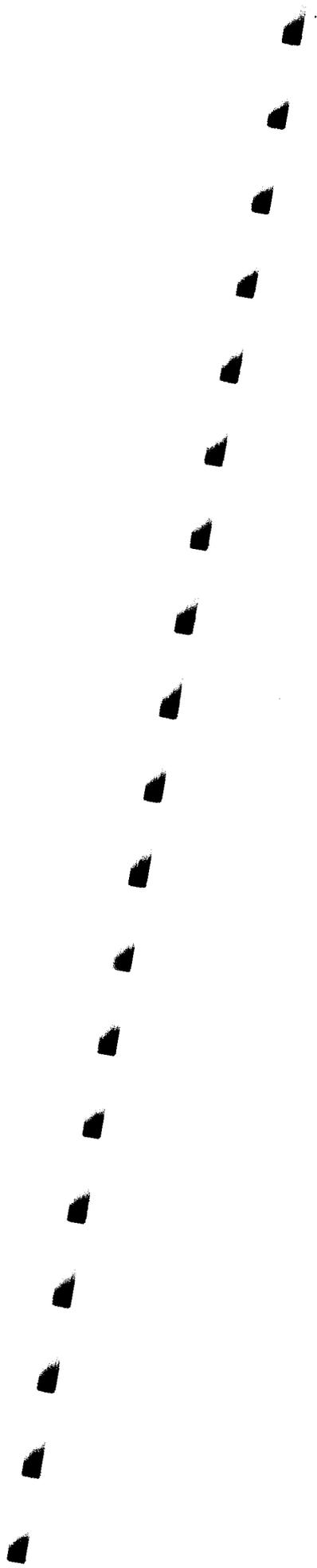
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COLUMBUS

Where The Future Is Flying

**Prepared by
Columbus Air Force Base 2000**

September 29, 1994



COLUMBUS

Where The Future Is Flying

Overview

A field of dreams and a vision for the future -- that's what Columbus area residents offered the United States of America in 1941. Banded together, a group of 100 citizens secured land and a \$100,000 bond, and proposed the establishment of an air base in Lowndes County, Mississippi.

On August 12, 1941, their dreams became reality when the United States announced it would establish a pilot training base in Columbus. That was just the beginning...

Columbus area residents, now 50-plus years later, still have dreams for Columbus Air Force Base and a vision for its future. The citizens have remained "banded together" to support CAFB -- its "dream come true." Today's world is characterized by spiraling changes and a more dramatic need for a quality, peace-time military rather than the quantity required in the cold-war world environment of previous years. Columbus area residents, still banded together, believe their half-century investment at CAFB offers versatile and flexible facilities which make it a viable facility for the Air Force of the future. CAFB has, through the years, demonstrated the adaptability of its physical plant as its missions have changed. Its past, present and future is flying.

Columbus Air Force Base is a vital part of the Greater Golden Triangle community, and the community considers itself a key stakeholder in CAFB. The community takes great pride in the accomplishments and successes attained by CAFB at-large and by its personnel individually. The community's vision for Columbus Air Force Base continues to grow. The community, committed to supporting and sustaining CAFB's mission for half a century, constantly seeks ways to demonstrate this commitment as it strives for continuous improvement in its relationship with CAFB.

Recipient of the 1993 Gen. Frank P. Lahm Award for the best flying safety program in the Air Education and Training Command, CAFB is recognized for its commitment to quality. CAFB is focused on fulfilling the U.S. Air Force's vision: "Air Force people building the world's most respected air and space force...global power and reach for America."

CAFB's mission, "to train the world's best pilots and support national defense objectives," is strongly supported by the community. This support is demonstrated through the active involvement of the community in the Base-Community Council and the partnership of that group in numerous CAFB functions and activities.. Columbus Air Force Base 2000, a group of

volunteers from the Greater Golden Triangle, exemplifies the kind of community support CAFB enjoys. These volunteers are committed to working with the Base Realignment and Closure Commission as it fulfills its goal to reduce the overall Department of Defense domestic base structure by a minimum of 15 percent of DoD-wide plant replacement value while preserving readiness.

What began as a dream in 1941 is now an outstanding military facility, Columbus Air Force Base, and a vital partnership with the Columbus area. Citizens of the Greater Golden Triangle are proud of their "hometown" military facility and all that it represents locally, statewide, nationally and world-wide. The zealous spirit which guided Columbus citizens in securing the base in 1941 is alive and well in the community today.

It is with pride that CAFB 2000, on behalf of citizens in Columbus and the Greater Golden Triangle, shares some of the achievements and notable facts about "Our Base."

■ ■ Military Value ■ ■

CAFB . . .

- is the only UPT base well-suited to support any of the five major Air Force operations: airlift, tanker, bomber, fighter or training.
- has facilities in place to "gear up" in the event the United States should need to do so in this era of force reduction.
- has runway capabilities which allow use by large airlift and bomber aircraft. The 12,000-foot runway has the necessary length to accommodate these aircraft. Since CAFB is a former SAC base, all runways and ramps possess the strength to withstand the extra weight and have secure parking ramps.
- is currently supporting space shuttle movement from Edwards AFB to Kennedy Space Center.
- is a National Emergency Airborne Command Post reception base.
- has a great number and variety of low-level flying routes.
- has an excellent airspace situation, with an absence of scheduling or operational constraints or noise abatement problems.
- has in place the Plastic Media Blast Module for non-toxic paint removal. Aircraft from other bases use this environmentally-approved modern facility.

- has over 550 acres available for future development.
- has appropriate zoning ordinances in place.
- is capable of handling large civil reserve craft, including 747s and the KC-135s of the ANG's 186th Air Refueling Group from Meridian, MS.
- is in close proximity to ground force installations at Fort McClellan, AL, Fort Rucker, AL, and Camp Shelby, MS.
- is located just 40 miles from an air-to-air ground range.
- is in close proximity to ACMI ranges at both Gulfport, MS, and Tyndall AFB, FL.
- has a modernized, upgraded airfield lighting system.
- has four munitions igloos.
- has a large parking ramp for large aircraft with immediate runway access.
- has facilities available for alert aircraft and crews.
- provides NASA astronauts training in the CAFB flight simulator.
- affords student pilots training experience in demanding weather conditions, resulting in CAFB producing the most proficient instrument pilots in the USAF.
- has community commitment to upgrade and modernize the water/sewer system with cost completely assumed by state and local governments.

■ ■ Local Economic & Environmental Impact ■ ■

CAFB. . .

- is the largest employer in a county of 60,000 persons, with an annual economic impact of \$153,000,000.
- creates nearly 1,000 secondary jobs in the local area.
- has a large military retirement community of nearly 3,000 which is vital to the economy and

DEFENSE BASE CLOSURE & REALIGNMENT COMMISSION
1700 NORTH MOORE STREET, SUITE 1425
ARLINGTON, VIRGINIA 22209
(703) 696-0504

MEMORANDUM OF MEETING

DATE: September 29, 1994

TIME: 3:30 p.m.

MEETING WITH: Columbus, Mississippi Delegation

SUBJECT: Columbus AFB

PARTICIPANTS:

Name/Title/Phone Number: 202/371-6277

Allegra Brigham; Team Leader, Public Relations Team CAFB 2000
Bobby Harper; President, National Bank of Commerce
Fred Hayslett; Team Coordinator, CAFB 2000
Mark Leonard; Team Leader, Data Analysis CAFB 2000
Gene Smith; Executive Director, Golden Triangle Regional Airport
Al Bemis; Cong. Montgomery staff
Barry Rhoades; consultant
Tobby Messitt; Consultant

Commission Staff:

Tom Houston; Staff Director
Ben Borden; Director of R&A
Cece Carman; Congressional & Governmental Affairs
Frank Cirillo; Air Force Team Leader
Bob Cook; Interagency Issues Team Leader
Alex Yellin; Navy Team Leader

MEETING PURPOSE: Ms. Brigham and Mr. Hayslett made introductory comments and played video on military value of Columbus AFB. Group mentioned flexibility of base as base has a 12000 ft runway which previously supported B-52s. Also noted that Columbus was a designated stop off for Space Shuttle return flights (piggyback). Noted the occasional bad weather was a good training measure frequently resulting in more instrument training time. Group left brochures which explained military value. fc

COLUMBUS in the Cockpit ...

Stockholders' Report

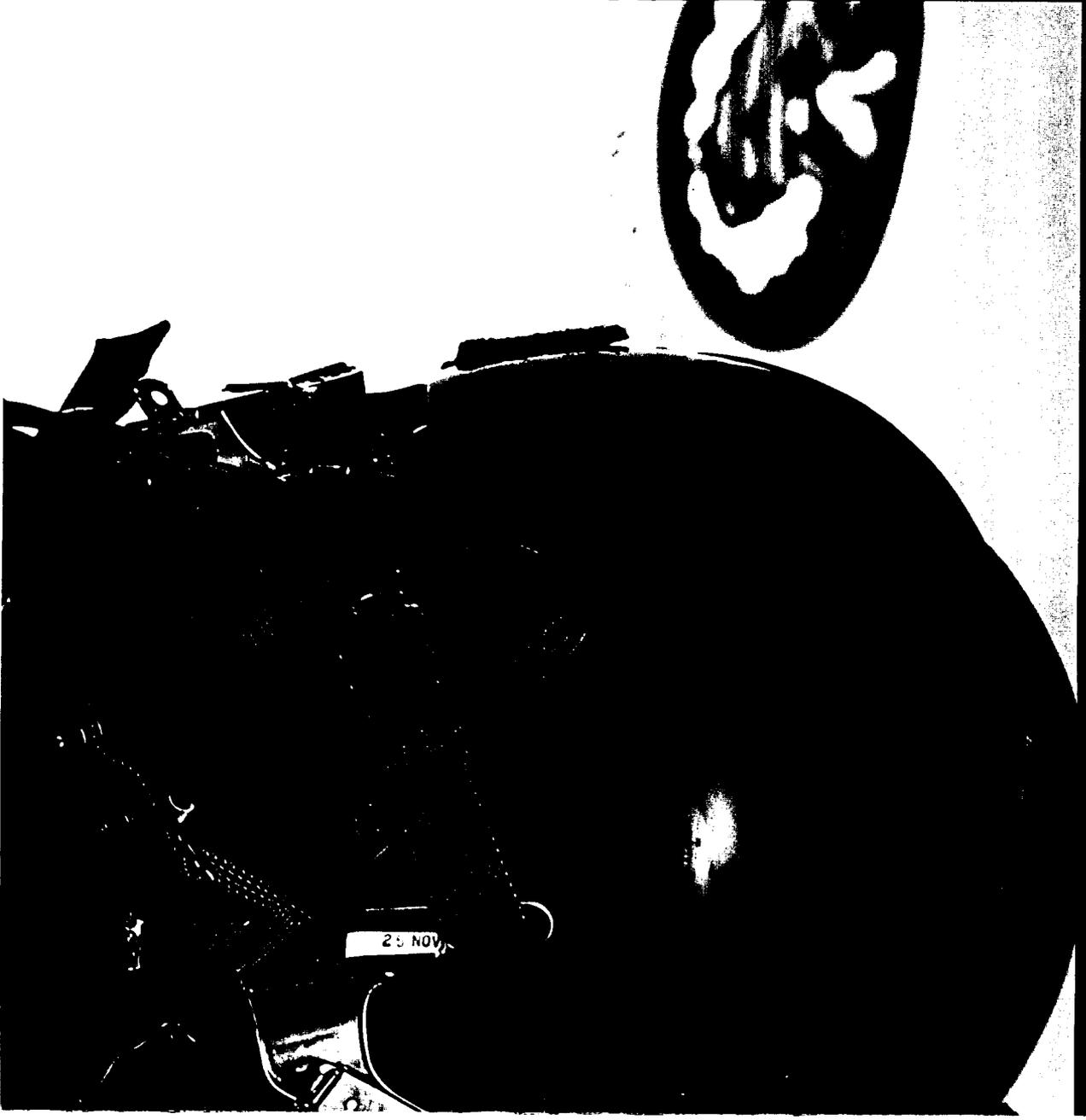


A field of dreams and a vision for the future - - that's what Columbus area residents offered the United States of America in 1941. Banded together, a group of 100 citizens secured land and a \$100,000 bond, and proposed the establishment of an air base in Lowndes County.

On August 12, 1941, their dreams became reality when the United States announced it would establish a pilot training base in Columbus. That was just the beginning . . .

Columbus Air Force Base has, through the years, demonstrated its flexibility as a military facility. Its physical plant allows for easy adaption to a changing world where the future has been, and continues to be, flying.

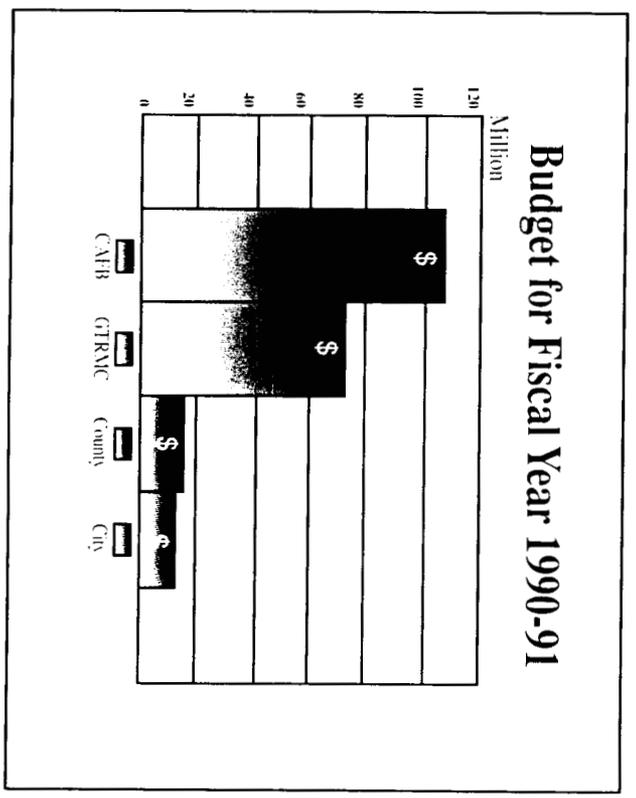
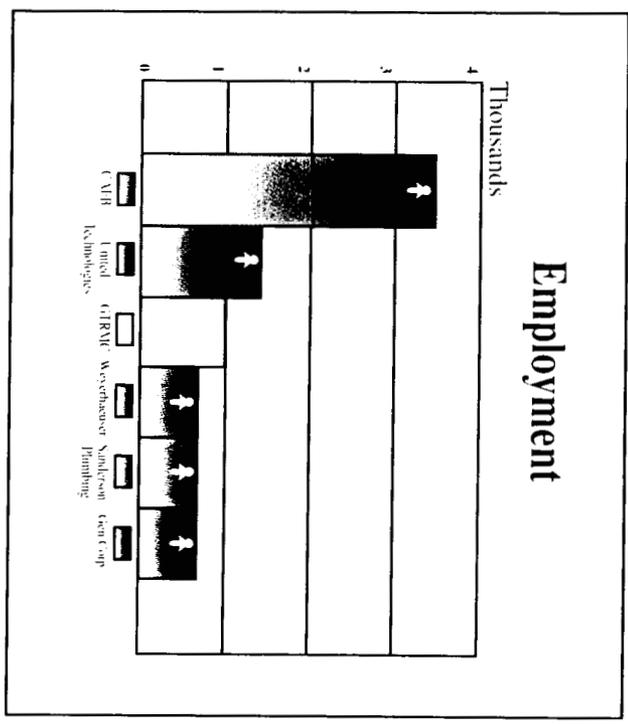
Columbus Air Force Base is a vital part of the Greater Golden Triangle community, and the community is an integral segment of CAFB. The community's vision for Columbus Air Force Base continues to grow.



*Columbus AFB has a significant economic impact on the Greater Golden Triangle community. * Its total annual economic impact is \$129,113,236. CAFB's capital assets are valued at \$133,631,000.*

Military personnel number 1,971 with 4,701 dependents. An additional 489 appropriated fund civilians work at the base as do 1,035 non-appropriated fund and contract civilian employees.

Annual CAFB payroll amounts to \$72,053,234 with payroll expenditures of \$41,123,465 within the economic impact region. Total construction and services expenditures total \$12,338,020. Military retirees residing in the local community number 2,446 and add an additional \$27,908,592 in payroll.

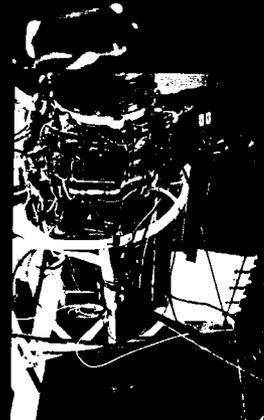


*All figures are based upon CAFB's Economic Resource Impact Statement for FY 1991.

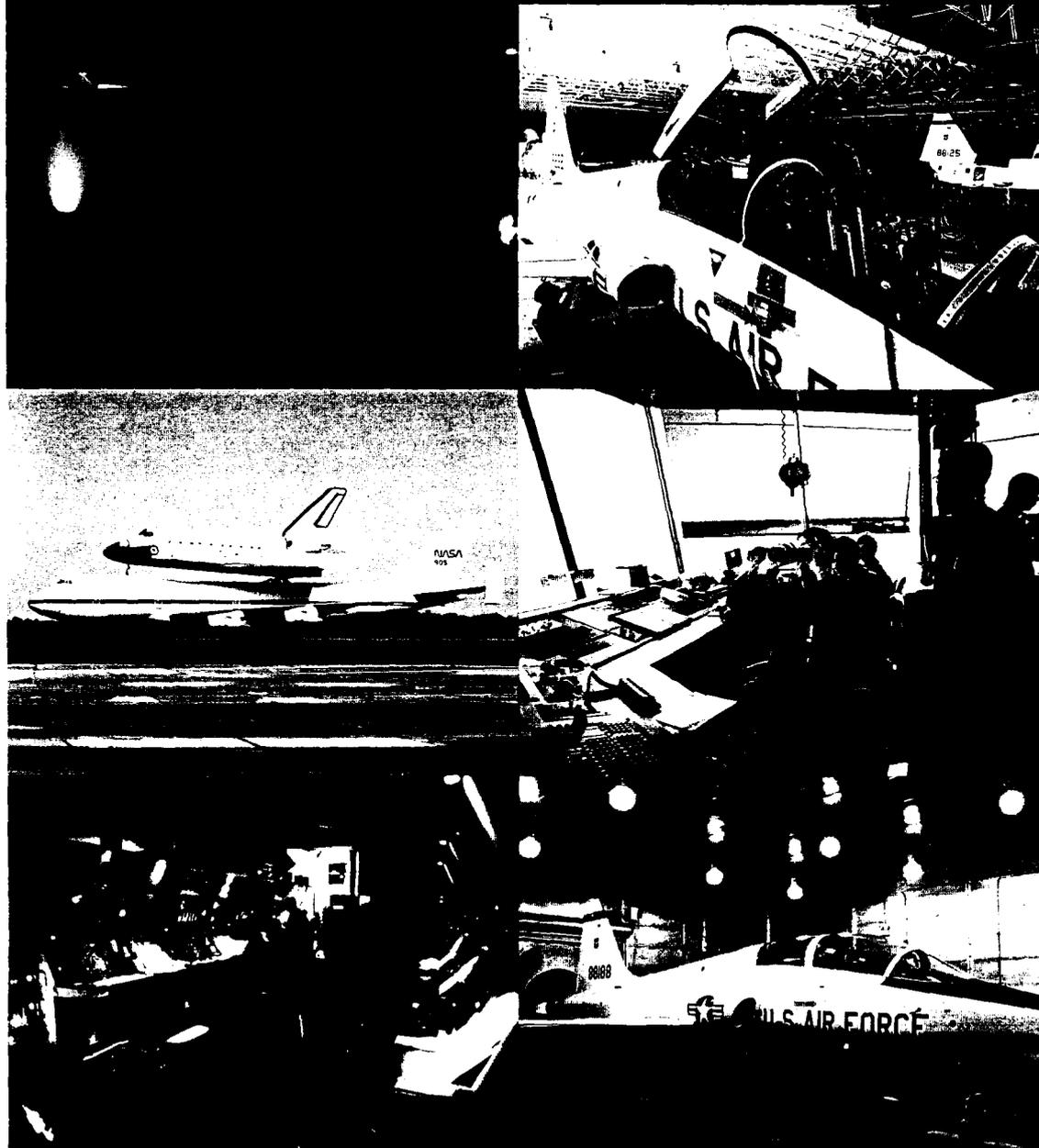
Today, Columbus Air Force Base is an integral part of the local community's vision for the future and the community plays a key role in the base's vision and mission.

Recipient of the 1992 Air Training Command Facilities Excellence Award, CAFB is recognized for its commitment to quality. Its vision is "Team Columbus - professionals dedicated to the quality support and training of pilots for the world's best and most respected Air Force."

CAFB's mission, "to train American and allied officers to fly jet-powered aircraft, to graduate the world's best pilots, and to focus on the continual improvement of our contribution to global power and reach for America," is strongly supported by the community.



WHERE THE FUTURE IS FLYING!



NOTABLE FACTS

Columbus Air Force Base:

- is the largest single employer in Lowndes County and pumps \$2.5 million a week into the local economy.
- creates more than 800 secondary jobs in the community.
- generates significant amounts of revenue through oil and gas leases on base property; half goes to the state and half to the federal government.
- is a reception base for NASA's space shuttle on its return journey from Edwards Air Force Base, California to the Kennedy Space Center in Florida.
- is visited by NASA astronauts to complete their yearly emergency procedures training in the base's flight simulators.
- is a reception base for the National Emergency Airborne Command Post (NEACP), a modern aerial command, control and communications center.
- is home of the first military flying unit to receive a Point of Light Award. The 50th Flying Training Squadron was named the 660th Daily Point of Light in January 1992 for its work with Palmer Home and other local charities.
- covers 5,500 acres with more than 550 suitable for additional development. Wise use of resources, such as the state-of-the-art plastic media blast facility used in the nontoxic removal of aircraft paint, makes CAFB environmentally sound.
- personnel contributed 156 percent of the base's 1992 Combined Federal Campaign goal by raising \$109,652.



OPERATIONAL FACTS

Columbus Air Force Base:

- is one of four U.S. Air Force undergraduate pilot training bases.
- currently uses T-37 primary and T-38 advanced jet trainers.
- will be assigned ATC's newest aircraft, the T-1A Jayhawk in 1996 to train tanker-transport aircraft pilots for Specialized Undergraduate Pilot Training.
- utilizes a 52-week syllabus including 189 flying hours, 450 hours in academic training, and 62 hours in flight simulators and cockpit familiarization trainers.
- graduated 301 pilots in fiscal 1991.
- is responsible for the Air Force helicopter training conducted at the U.S. Army Aviation Center at Ft. Rucker, Alabama.
- handles over a quarter of a million military, commercial and private air operations annually in more than 4,000 square miles of air space through its radar approach control facility.
- has exceptional flying conditions which allow student pilots to reach flight training air space within 5 to 10 minutes.
- has outstanding support capabilities, including its alert facility and two-mile-long center runway, that offer enormous strategic value and versatility.
- has a three parallel runway configuration, complemented by the efficient taxiway and ramp layout, that can support trainer, fighter, bomber, tanker or transport missions.
- has a supportive civilian community that has adopted zoning ordinances suggested by the Air Force's Air Installation Compatible Use Zone report.
- provides a "home away from home" for KC-135's of the Air National Guard's 186th Air Refueling Group from Meridian, Mississippi, during their facility renovation.
- provides aircraft maintenance support for the Naval Test Center at Patuxent River, Maryland.

This publication has been prepared and funded by Columbus Air Force Base 2000, P. O. Box 1111, Columbus, MS 39703, (601) 327-0662.

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White Paper

on

Dyess AFB's BRAC 93 Air Force Ratings

October 27, 1994

A White Paper on Dyess AFB's BRAC 93 Air Force Ratings

During the Defense Base Realignment and Closure (BRAC) 1993 process, the Air Force collected an array of data from the field (bases) and major commands. The Air Force then applied ratings to key information elements using the eight DoD approved criteria. These ratings were in the form of color codings; Green, Yellow, and Red. In keeping the meanings to these color coded ratings simple, "Green" equals retain, "Red" equals candidate for closure and/or realignment, and "Yellow" is somewhere in the middle. Of course, one red rating did not drive a closure recommendations nor did one green rating drive a retention decision. Those overall BRAC decisions were based on overall analysis results and comparisons. Specifically, this paper will address all ratings below Green and will discuss perceived and actual variations in grading. The results of this paper could be used to identify potential historic and BRAC 93 Air Force reported strengths and weaknesses of Dyess AFB.

Note: Source documents for this paper were obtained from the material provided by the DoD to the 1993 Defense Base Realignment and Closure Commission to support the DoD's BRAC 93 recommendations.

A review of all Dyess' BRAC 93 ratings, by criteria and element, that fell below a green rating follows:

Criteria I (Current and future mission requirements and the impact on operational readiness of DoD total force)

Element: Distance to the Strategic Training Range Complex (STRC) **Rated:** Yellow

Rationale: : Dyess was 810 NM from the selected measuring point of the STRC complex, while Ellsworth was 65 NM from that point. Possible ratings: Green rating was 600 NM or less. Yellow rating was greater than 600 NM but less than or equal to 1200 NM. Red was greater than 1200 NM.

Comment: : Partial-concur with rating. However, the importance of the distance to the STRC complex's selected measuring point may be overemphasized. The STRC complex is extensive and numerous training opportunities exists, some are closer and some are further away. Several hundred miles is not a critical training factor for bomber type aircraft as witnessed by the actual Air Force approved rating ranges. The overall STRC capabilities and extensive area suggest that Dyess could very easily have been graded "Green".

Element: Potential for airspace/training area growth **Rated:** Yellow
Rationale: Dyess airspace & areas are expected to remain constant given DFW growth. Possible ratings: Green rating was airspace available for future expansion; supports advanced basing concept. Yellow rating was status quo. Red rating was reductions possible.

Comment: Concur with rating. However, if additional DoD closures and/or major realignments take place nearby, this rating could be upgraded to "green". Dyess' ability to operationally and cost effectively train assigned aircrews has not nor was it projected to be impacted by airspace availability. In fact, Dyess had supported and retained the capacity to support additional assigned aircraft and aircrews without encountering any operational or training problems. The realignment of Carswell AFB to a Reserve Base will not negatively impact training areas, but will enhance joint training opportunities within the local flying areas. In fact, Dyess' surrounding airspace has and will support the advanced basing concepts required by the Fort Worth Reserve Base and the multiple missions assigned to Dyess. Note: No certified information or guidance was found that clarified "supports advanced basing concept".

Element: Refueling events supported within 700 NM **Rated:** Yellow
Rationale: Apparently, Dyess supports between 300 and 750 events. Possible ratings: Green was greater than 750 events. Yellow was 300 to 750 events. Red was less than 300 events.

Comment: Source of answer could not be found. Question was not in the basic certified questionnaire that was to be used to rate and rank bases.

Element: Tanker wartime mission **Rated:** Yellow
Rationale: Unknown. Used classified data.
Comment: Suspect the rating was based on supporting the nuclear response plan.

Criteria II (Availability and conditions of land, facilities, and associated airspace at both the existing and potential receiving locations)

Element: Unique facilities **Rated:** Red
Rationale: Dyess did not identify any unique facilities, e.g., high cost, one-of-a-kind. Possible ratings: Green if unique facilities exists and red if no unique facilities exists.
Comment: Partial-concur with rating. However, the ratings applied to this element were inconsistent. For example, Ellsworth was rated green due to weapons and tactics instructional facilities and a debriefing instructional facility. Other installations have similar facilities that were not considered unique. In fact, Dyess has similar instructional facilities and special simulator facilities, but did not receive unique credit because they reported answers IAW specific guidelines.

Element: Existing local/regional community encroachment (APZ) **Rated:** Yellow
Rationale: Rating based on 7.1% incompatible APZ. Possible ratings: Green was off-base development generally compatible with accident potential zones (APZ). Yellow was off-base development incompatible in some (limited) areas. Red was off-base development incompatible with accident potential zones.
Comment: Non-concur with rating. Rating should have been "green". Specifically, community development is generally compatible with APZs recommendations. Ratings for this element were not consistent. For example, Ellsworth was also rated yellow, even though they were 15% incompatible in APZ 1 and 10% incompatible in APZ 2.

Element: Existing local/regional community encroachment (noise) **Rated:** Yellow
Rationale: Rating based on 6.8% incompatible noise zone. Possible ratings: Green was off-base development generally compatible with Air Installation Compatible Use Zone (AICUZ) noise recommendations. Yellow was off-base development incompatible in some (limited) areas. Red was off-base development incompatible in many areas, or many people exposed to high noise levels.
Comment: Non-concur with rating. Rating should have been "green". Specifically, community development was generally compatible with AICUZ noise recommendations. Ratings for this element were not consistent. For example, Ellsworth was also rated yellow, even though certified data reported nearly 90% incompatibility.

Element: Future local/regional community encroachment (APZ) **Rated:** Yellow
Rationale: Rating was based on current 7.1% incompatible APZ and some unknown reason(s). Possible ratings: Green was future off-base development generally expected to remain compatible with accident potential zones. Yellow was future off-base development may become incompatible in some (limited) areas. Red was future off-base development may become incompatible with accident potential zones.
Comment: Non-concur with rating. Rating should have been "green". Specifically, the base reported via certified data that the community development was generally compatible with APZs recommendations and no significant changes were expected over the next 20 years. Ratings for this element were not consistent. For example, Ellsworth was also rated yellow based on current conditions even though they were 15% incompatible in APZ 1 and 10% incompatible in APZ 2 and the future did not look bright.

Element: Future local/regional community encroachment (noise) **Rated:** Yellow
Rationale: Rating based on current 6.8% incompatible noise zone and some unknown reason(s). Possible ratings: Green was future off-base development generally expected to be compatible with AICUZ noise recommendations. Yellow was future off-base development may become incompatible in some (limited) areas. Red was future off-base development may become incompatible in many areas, or many people exposed to high noise levels.

Comment: Non-concur with rating. Rating should have been "green". Specifically, community development was generally compatible with AICUZ noise recommendations and future projections did not expect any significant changes. Ratings for this element were not consistent. For example, Ellsworth was also rated yellow based on current conditions even though they were about 90% incompatible and the future did not look bright.

Criteria III (Ability to accommodate contingency, mobilization, and future total force requirements at both the existing and potential receiving location)

Element: C-141 MOG

Rated: Red

Rationale: C-141 working MOG is less than three. Possible ratings: Green was five or more. Yellow was three to four. Red was less than three.

Comment: Partial-concur with rating. Dyess, being the home of an airlift mission, could easily support a variety of airlift requirements. However, Dyess personnel used specific guidelines to produce their questionnaire responses, thus the element answer was two. In reality, Dyess could have easily supported a *green* rating requirement.

Element: Geographic location (base located within 150 NM of) rail

Rated: Red

Rationale: Questionnaire stated Dyess did not have rail connections/support within 150 NM, therefore, the element was rated red. Possible ratings were green or red. Green - rail available. Red - rail not available.

Comment: Non-concur with rating. Questionnaire response, which was in error, produced an incorrect rating. Dyess has operational rail service on-base and should have received credit for it via a "green" rating. In fact, Dyess and the railroads maintain and inspect the on-base rails and keep them operational to support fuel and other delivery/deployment requirements.

Element: Geographic location (base located within 150 NM of) port

Rated: Red

Rationale: Questionnaire stated Dyess did not have port facilities within 150 NM, therefore, the element was rated red. Possible ratings were green or red. Green - port available. Red - port not available.

Comment: Concur with rating. However, the port requirement may be overstated.

Element: Future force requirements -- Pilot training mission

Rated: Red

Rationale: Dyess did not have the requirements to support a basic pilot training mission. For example, a pilot training base needs three parallel runways. Possible ratings: Green was meets most requirements of MARCO look. Yellow was meets some requirements of MARCO look. Red was meets few requirements of MARCO look.

Comment: Concur with rating for basic pilot training. However, Dyess was ideally suited for advanced and mission related aircrew training. In fact, advanced and mission training was one of Dyess' primary missions.

Criteria IV (Cost and manpower implications)

Dyess' cost and manpower implications were noteworthy.

- Out of 21 large aircraft bases, Dyess was the second most expensive to close (Travis was the most costly).
- 20 year net present value of closure option would net a \$138 million cost.
- Steady state savings were low.
- Manpower reductions realized were low.

Comment: These facts did not support Dyess as a closure candidate.

Criteria V (Return on investment)

A Dyess closure, as discussed above, would not realize a payback for 41 years--the second longest payback (Travis was the longest.)

Comment: This fact did not support Dyess as a closure candidate.

Criteria VI (Economic impact on communities)

Element: Installation Restoration Programs (IRP)

Rated: Yellow

Rationale: Actual clean-up time was projected to be about five years. Possible ratings: Green was actual clean-up time is estimated to be lengthy (great than five years).

Yellow was actual clean-up time is estimated to be moderate (about five years). Red was actual clean-up time is estimated to be relatively short (less than years).

Comment: Partial-concur with rating. Dyess was considered a model environmental base. It had excellent programs and was basically a clean base. However, this element uses reverse ratings, i.e., less time required to accomplish clean-up actions drives a red rating vice what one would expect should be a green rating.

Criteria VII (Ability of both the existing and potential receiving communities' infrastructure to support forces, missions, and personnel)

Element: Community infrastructure (public transportation) **Rated:** Red

Rationale: Questionnaire stated that Dyess did not have public transportation servicing the base, therefore, this element was rated red. Possible ratings were green or red. Green was the base is served by public transportation. Red was the base is not served by public transportation.

Comment: Non-concur with rating. The questionnaire was in error. The base was served by public transportation, i.e., public bus service was provided between Abilene and the main gate--with numerous daily runs. Element should have been rated "green".

Element: Community infrastructure (off-base recreation) Aquarium **Rated:** Red

Rationale: Aquarium is located more than 2.5 hour driving time from Dyess. Possible ratings: Green was aquarium less than 1.5 hour drive. Yellow was aquarium between 1.5 and 2.5 hour drive. Red was aquarium more than 2.5 hour drive.

Comment: Non-concur with rating. Dyess reported recreation facilities strictly by name only. Abilene has an aquatic adventure center which includes several large aquariums located within the "Abilene Zoo". Apparently, Dyess didn't get credit for its aquariums since they were a part of the greater zoo. Element should have been rated "Green".

Element: Community infrastructure (off-base recreation) Family Park **Rated:** Red

Rationale: Questionnaire states that family park is located more than 2.5 hours driving time from Dyess. Possible ratings: Green was family park less than 1.5 hour drive. Yellow was family park between 1.5 and 2.5 hour drive. Red was family park more than 2.5 hour drive.

Comment: Non-concur with rating. Six Flags over Texas can be reached in just under 2.5 hours driving the posted speed limits. Therefore, the rating should have been "yellow".

Element: Community infrastructure (off-base recreation) Pro Sports **Rated:** Red

Rationale: Questionnaire states that pro sports are located more than 2.5 hours driving time from Dyess. Possible ratings: Green was pro sports less than 1.5 hour drive. Yellow was pro sports between 1.5 and 2.5 hour drive. Red was pro sports more than 2.5 hour drive.

Comment: Non-concur with rating. Arlington Stadium-Rangers (baseball), Texas Stadium-Cowboys (football), and Mavericks (basketball) can be reached in just under 2.5 hours driving the posted speed limits. Therefore, the rating should have been "yellow".

Element: Community infrastructure (off-base recreation) Beaches **Rated:** Red

Rationale: Questionnaire states that beaches (salt water/oceans or gulf) are located more than 2.5 hours driving time from Dyess. Possible ratings: Green was beaches less than 1.5 hour drive. Yellow was beaches between 1.5 and 2.5 hour drive. Red was beaches more than 2.5 hour drive.

Comment: Non-concur with rating. This element was not rated consistently. Some communities received credit for lake-side beaches, while others did not. Dyess does have lake-side beaches within the green rating distances. If the Air Force were consistent, Dyess would and should have been rated "green".

Element: Community infrastructure (off-base recreation) Winter sports **Rated:** Red

Rationale: Questionnaire stated that winter sports (snow skiing related) were located more than 2.5 hours driving time from Dyess. Possible ratings: Green was winter sports less than 1.5 hour drive. Yellow was winter sports between 1.5 and 2.5 hour drive. Red was winter sports more than 2.5 hour drive.

Comment: Non-concur with rating. This element was not rated consistently. Some communities received credit for any winter sport not just snow related, e.g., ice fishing. Dyess does enjoy numerous winter sports within the green rating distances. If the Air Force were consistent, Dyess would and should have been rated "green".

Element: Local area crime rate (violent crime rate) **Rated:** Red

Rationale: Violent crime rates (per 100,000) exceeded yellow ratings requirements. Possible ratings: Green was 600 or below. Yellow was 601 to 899. Red was 900 or above.

Comment: Abilene was and is considered one of the safest cities in Texas. The crime rates reported by Abilene may have been affected by the lack of standardized FBI criteria to identify crimes. Some communities classify crimes as violent, while others classify them as something less. Abilene leans toward the strict enforcement and classification side, therefore, actual crime statistics for Abilene might be *drastically lower* if a nation-wide standardized approach were used. Additionally, the Air Force ratings scales do not identify areas where crime really affects DoD personnel and their families. For example, the majority of the crimes committed in Abilene occur in the northeast part of the city, within a 100 foot radius, *well away from DoD personnel and their families*. Additionally, some other communities have nearly double the crime rates, but receive the same rating, e.g., Ellsworth.

Element: Spousal Employment (% finding work in 3 months) **Rated:** Yellow

Rationale: Questionnaire reported that 62% of the spouses found work within three months. Possible ratings: Green was greater than 75%. Yellow rating was 50-75%. Red was less than 50%.

Comment: Concur with rating. However, Dyess' statistics were based on positions within the community, not on-base employment. Some bases reported and used appropriated and non-appropriated on-base employment statistics in this element.

Element: Spousal Employment (% finding work commensurate) **Rated:** Red

Rationale: Questionnaire reported that 13% of the spouses found work commensurate with their qualifications. Possible ratings: Green was greater than 75%. Yellow rating was 50-75%. Red was less than 50%.

Comment: Concur with rating. However, Dyess' statistics were based on positions obtained within the community, not on-base employment. Some bases reported and used appropriated and non-appropriated on-base employment statistics in this element.

Criteria VIII (The environmental impact)

Element: Environmental Impact (Haz Mat--asbestos) **Rated:** Yellow

Rationale: Rating based on 10-25% facilities with asbestos or survey incomplete. Possible ratings: Green was less than or equal to 10% facilities with asbestos containing materials (ACM). Yellow was 10% to 25% facilities with ACM; survey incomplete, or unable to assess percentages. Red was greater than 25%.

Comment: Concur with rating.

Element: Environmental Impact (cultural resources) **Rated:** Yellow

Rationale: Cultural resources are present, but no constraints exist. Possible ratings: Green was no existing cultural resources. Yellow was cultural resources are present, but do not currently constrain construction/operations, or base survey incomplete. Red was cultural resources are present and constrain current construction/operations.

Comment: Concur with rating.

Element: Environmental Impact (geology/soils--farmlands) **Rated:** Yellow

Rationale: Prime and unique farmlands exist, but resources are compatible with current construction/operations. Possible ratings: Green was no prime or unique farmlands exist. Yellow was prime and unique farmlands exist; resources incompatible with current construction/operations. Red was prime and unique farmlands exist; large areas; resources incompatible with current construction/operations.

Comment: Concur with rating.

Element: Environmental Impact (geology/soils--mineral/energy) **Rated:** Yellow

Rationale: Resources currently exist, but no known constraints on current construction and operations. Possible ratings: Green was no known resources. Yellow was resources currently exist; no known constraint on current construction/operations. Red was resources exist and constrain on current construction/operations.

Comment: Concur with rating.

Element: Environmental Impact (geology/soils--soil contamination) **Rated:** Yellow
Rationale: Soil contaminants present which do not currently constrain construction or operations. Possible ratings: Green was no soil contaminants present. Yellow was soil contaminants present which do not currently constrain construction/operations. Red was soil contaminants present which constrain current construction/operations.
Comment: Concur with rating.

Overall white paper conclusion: The Air Force made several minor rating errors during BRAC 93 with respect to Dyess' individual element ratings, as noted above. However, the resulting overall BRAC 93 analysis and ranking placed Dyess where it belonged--*one of the top four bomber and tanker mission bases within the (14 base) large aircraft category.* In addition to these top bomber and tanker ratings, *Dyess also rated high for numerous other missions, e.g., tactical airlift.* During BRAC 93, *Dyess was rated below green on only a very few elements of the 160+ elements that the Air Force/DoD evaluated, and on those that were rated below green, none were military value primary elements.* In fact, most of the "few" below green ratings were found to be in error, as discussed in this paper, and should have been rated higher. Additionally, Dyess' BRAC 93 overall top group rating was totally consistent with its BRAC 91 overall top group rating. Therefore, given that *Dyess' BRAC 91/93 top group ratings were based primarily on military value,* one would expect similar evaluation results and recommendations during BRAC 95, i.e., a decision to retain *Dyess as an integral part of the DoD's present and future basing infrastructure.*

Document Separator

DYESS AFB & ABILENE, TEXAS



"A TEAM APPROACH"

October 26, 1994

Dyess AFB/Abilene, Texas - A White Paper

The Department of Defense (DoD) and Abilene, Texas have been solid team performers for a long time. This exemplary relationship has made Dyess AFB an installation of unmatched military value within DoD. The military value and support opportunities existing at Dyess and its surrounding areas can not be replicated either in capability or in cost effectiveness.

Dyess enjoys:

- Excellent year-round flying weather
- Uncongested and readily available local training areas
 - Unconstrained and flexible training areas
 - On-base airlift assault landing and cargo drop zones
- Strategic location
 - Close proximity to joint training opportunities (Army, Navy, Marines & other Air Force units)
 - DoD focal point for world-wide operations, especially Caribbean, Latin & South America
- Capacity and/or ability to support any DoD aviation force structure mission
 - Facilities have accommodated or currently house a wide variety of mission aircraft including B-47, B-52, C-130, KC-135 and B-1 aircraft
 - Transit operations C-5, B-747, shuttle piggyback, and shuttle alternate landing
 - Logical choice to become the next B-2 beddown location
- Outstanding on-base operational facilities and capabilities
 - 97+ percent of the on-base facilities are condition code 1 or 2, and, by FY 96 all facilities will be in new equivalent condition
 - Extensive, modern fuel hydrants and B-1 support systems
 - Modern special and conventional weapons storage area
 - Expandable acreage and utility capacities without environmental constraints
 - Unlimited water supply
- Environmental model base
 - Some of the lowest levels of accident potential and noise zones incompatibility within DoD
 - Unconstrained environmentally
 - No air quality permits are required
 - No environmental constraints on additional construction/additions
 - Excellent installation restoration program--environmentally clean base
- Unparalleled community support
 - Acknowledged leader of leaders within Air Combat Command and the Air Force
 - Considered part of the DoD team
- Unmatched quality of life
 - A community and geographic location everyone enjoys
 - Second safest large city in Texas
 - Exceptional medical facilities and care
 - Outstanding educational opportunities

History has proven, that no matter what mission is assigned to Dyess, both the installation and community work together and produce outstanding results.

