



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

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City Officials and Citizens of the Seguin Area

This Air Installation Compatible Use Zone (AICUZ) study is an update of the 1993 Seguin Auxiliary airfield study. This update presents and documents changes to the previous study attributed to anticipated operational changes due to mission restructuring; relocation of joint primary navigator training to the base; conversion from the T-37 aircraft to the Joint Primary Aircraft Training System and its T-6 aircraft; and technical improvements to the noise modeling software used to perform the study.

The basic objective of the AICUZ program is to achieve compatible uses of public and private lands in the vicinity of military airfields. This can be accomplished by controlling incompatible development through local regulatory actions. The AICUZ study provides the information necessary to maximize beneficial use of the land surrounding the Seguin Auxiliary airfield, while minimizing the potential for degradation of the health and safety of the affected public.

The AICUZ study contains a summary description of the affected area around the base. The report outlines the location of runway clear and accident potential zones, and noise contours; and recommends compatible land use for areas in the vicinity of the base. It is our hope that this information will be incorporated into your community comprehensive plans, zoning ordinances, subdivision regulations, building codes, and other related documents.

We greatly value the positive relationship Randolph AFB has experienced with its neighbors in the Seguin Auxiliary airfield area over the years. As a partner in the process, we have attempted to minimize disturbances generated by our aircraft operations in the area. We solicit your cooperation in implementing the recommendations and guidelines presented in this report.

Sincerely

A handwritten signature in black ink, reading "Peter U. Sutton".

PETER U. SUTTON
Brigadier General, USAF
Commander, 12th Flying Training Wing

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ACRONYMS

AETC	Air Education and Training Command
AFB	Air Force Base
AFI	Air Force Instruction
AGL	above ground level
AICUZ	Air Installation Compatible Use Zone
APZ	accident potential zone
ATC	air traffic control
ATCT	air traffic control tower
CUD	compatible use district
CY	calendar year
CZ	clear zone
dB	decibel
DNL	Day-Night Average A-Weighted Sound Level
DoD	Department of Defense
EA	environmental assessment
EPA	US Environmental Protection Agency
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FTS	Flying Training Squadron
FTW	Flying Training Wing
FY	fiscal year
GIS	geographic information system
HUD	US Department of Housing and Urban Development
IFF	Introduction to Fighter Fundamentals
INM	Integrated Noise Model
MSL	mean sea level
NLR	noise level reduction
SLUCM	Standard Land Use Coding Manual
SUPT	Specialized Undergraduate Pilot Training
US	United States

SECTION 1 PURPOSE AND NEED

1.1 Introduction

This study is an update of the 1993 Seguin Auxiliary Airfield (AUX Field) Air Installation Compatible Use Zone (AICUZ) Study. The update presents and documents the changes to the AICUZ resulting from anticipated increases in flying operations at the airfield due to student pilot production increases at Randolph Air Force Base (AFB), Texas; as well as the base's conversion from the T-37 aircraft to the Joint Primary Aircraft Training System (JPATS) and its T-6 aircraft. The Seguin AUX Airfield is a sub-installation of Randolph AFB and is used by the base's T-38 and T-6 aircrews for takeoff and landing practice. The AICUZ Study process reaffirms Air Force policy of promoting public health, safety, and general welfare in areas surrounding Seguin AUX Field. The report documents changes in flight operations since the last study and provides the anticipated noise contours and compatible use guidelines for land areas surrounding the base. This information is provided to assist the local communities and serve as a tool for future planning and zoning activities.

1.2 Purpose and Need

The purpose of the long-standing AICUZ Program is to promote compatible land development in areas subject to aircraft noise and accident potential. Recommendations from this updated AICUZ Study should be included in the Guadalupe County planning process to prevent incompatibility that may compromise Randolph AFB's ability to fulfill its mission requirements. Accident potential and aircraft noise should be major considerations in the 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 (DNL 65-69 dB, DNL 70-74 dB, DNL 75-79 dB, and DNL 80+ dB). 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, US Environmental Protection Agency (EPA), Air Force, state, and local agencies. The guidelines recommend land uses that are compatible with airfield operations while allowing maximum beneficial use of adjacent properties. The Air Force has no desire to recommend land use regulations that render property economically useless. It does, however, have an obligation to the inhabitants of the areas surrounding Seguin Auxiliary Field and to the citizens of the United States to point out ways to protect the people in adjacent areas and 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 Seguin's anticipated flying operations was performed, including types of aircraft, flight patterns utilized, variations in altitude,

power settings, number of operations, and hours of operations. This information was used to develop the noise contours contained in this study. The Department of Defense (DoD) NOISEMAP methodology and the Day-Night Average A-Weighted Sound Level (DNL) metric were used to define the Seguin AUX Field noise zones.

1.3 Process, Procedure, and Noise Metrics

Preparation and presentation of this update to Seguin'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 of providing input on its activities relating to the community. This study is presented in the spirit of mutual cooperation and assistance by Randolph AFB to aid in the local land use planning process for the area surrounding the Seguin AUX Airfield. This study updates information on base flying activities since completion of the 1993 AICUZ. Noise contours portrayed on the AICUZ maps in this study are based on the anticipated aircraft operations associated with maximum student pilot production.

Data collection concerning the aircraft operations associated with the anticipated increases in student pilot production was conducted at Randolph AFB in November. Aircraft operational and maintenance data were obtained to derive average daily operations by runway and type of aircraft. These data were supplemented by flight track information (where we fly), flight profile information (how we fly), and pre-takeoff and aircraft maintenance engine runup information. After verification for accuracy, data was input into the NOISEMAP program (Version 6.5) to produce DNL noise contours. Contours were plotted on an area map and overlaid with the clear zone and accident potential zone areas.

1.4 Computerized Noise Exposure Models

The Air Force adopted the NOISEMAP computer program to describe noise impacts created by aircraft operations. NOISEMAP (Version 6.5) is one of two EPA-approved programs; the other is the Integrated Noise Model (INM) which is used by the Federal Aviation Administration (FAA) for noise analysis at civilian airports. A NOISEMAP file is generated from BASEOPS, a program that serves as a preprocessor of pertinent data. NOISEMAP produces two primary types of output: a textual output file known as the NOISEMAP chronicle, and graphical output consisting of noise contour and flight-track maps. NOISEMAP also produces land area calculations and point analyses for specific sites (e.g. ground runup locations).

SECTION 2 INSTALLATION DESCRIPTION

2.1 Description of Seguin Auxiliary Field

Seguin Auxiliary Field is located one mile east of the City of Seguin, Texas, on U.S. Highway 90A. San Antonio and Randolph AFB are approximately thirty miles west of Seguin, by way of Interstate Highway 10. Austin, the state capital, is located 50 miles to the north via State Highway 123 and Interstate Highway 35. Seguin AUX Field is an Auxiliary Field under Randolph AFB and has one runway, respectively designated as Runway 13/31. Airfield elevation is 525 feet above mean sea level.

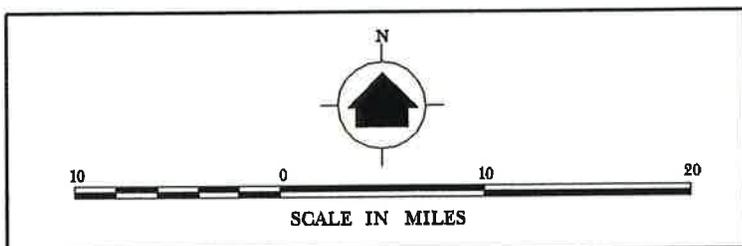
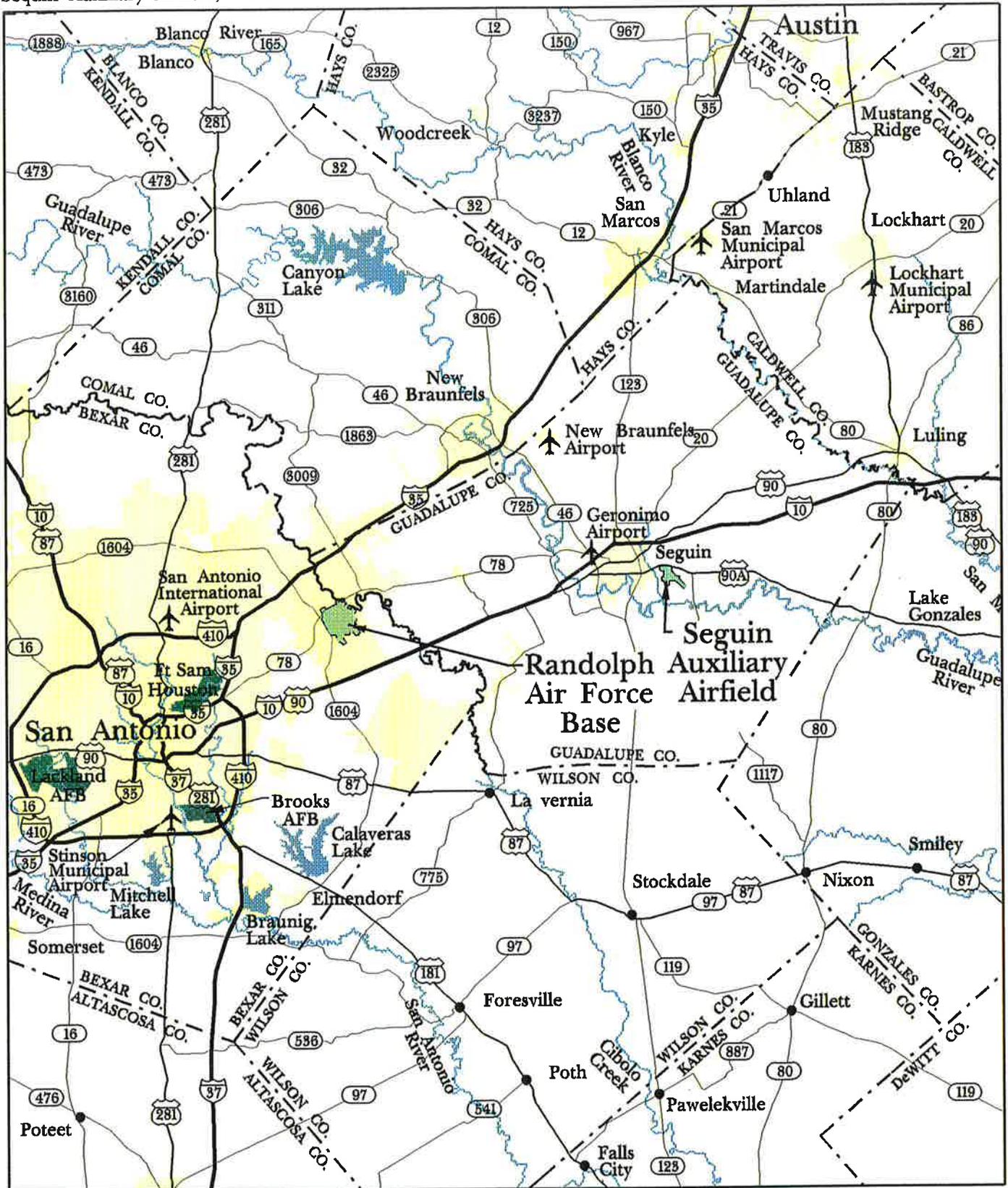


Figure 2.1
Regional Map

2.2 Mission

The 12th Flying Training Wing (12 FTW) is the host unit at Randolph AFB and reports to the Air Education and Training Command (AETC) headquartered at Randolph. The organizational structure of the 12 FTW consists of four groups: operations group, medical group, logistics group, and support group. The 12th Operations Group is home to the wing's five flying training squadrons and one support squadron. The 559th Flying Training Squadron (559 FTS), the 560 FTS, the 99 FTS and the 12th Operations Support Squadron provide flight instructor training to Air Force pilots prior to placement at AETC's four undergraduate pilot training bases. The 562 FTS conducts Joint Undergraduate Navigator Training (JUNT) to train navigators and naval flight officers prior to multi-engine aircraft assignments. The 557 FTS screens academy cadets for entry into pilot training. The 435 FTS teaches the Introduction to Fighter Fundamentals which includes air-to-air basic fighter maneuvers. Additionally, the Marine Aerial Navigation School offers academic, T-45 and T-43 training and the 332nd Airlift Flight, an Air Mobility Command unit, provides air transportation for the nation's key officials and foreign guests.

The 12 FTW utilizes several aircraft types to conduct pilot training:

- Instructor pilot training: T-6 Texan II, Northrop T-38 Talon, Beech T-1 Jayhawk.
- Joint undergraduate navigator training: Boeing T-43 medium-range turbofan jet.

The Wing provides administrative, medical and logistical support for assigned personnel as well as tenant agencies and the Randolph AFB community, including military retirees and their families. The 12 FTW utilizes Seguin AUX Field for instructor pilot training in the T-6 and T-38 aircraft. The T-6 aircraft are temporarily using Seguin AUX Field while the Air Force searches for an auxiliary airfield for the aircraft. The Air Force plans to replace the 45 T-37 aircraft with 33 T-6 aircraft. Table 2.1 reflects the number of currently assigned Randolph AFB aircraft by type. The table represents a snapshot of assigned aircraft; the transition from T-37 to T-6 aircraft is an ongoing process. This AICUZ Study is based on the condition that will exist after the conversion is completed.

Table 2.1: Aircraft Assigned to 12 FTW	
<i>aircraft type</i>	<i>number of aircraft</i>
AT-38	30
C-21	6
T-1	22
T-6	4
T-37	45
T-38	41
T-43	10

Source: 1999 Economic Impact Analysis/12 OSS

2.3

Economic Impact

The San Antonio Metropolitan Statistical Area (MSA), comprised of Bexar, Comal, Guadalupe, and Wilson Counties, had an estimated 1996 population of 1.49 million people. In September 1999, The San Antonio MSA had an estimated labor force of 782,478 and an unemployment rate of 3.3 percent. The economy relied heavily on the services industry, which comprised 33.2 percent of nonagricultural employment, while the government sector made up nearly 19 percent of non-agricultural employment. The 1997 San Antonio MSA per capita personal income was \$22,379. Guadalupe County contained a 1999 labor force of 43,093 and an unemployment rate of 2.6 percent. The county's 1997 population was estimated at 71,875.

Table 2.2: San Antonio MSA Non-farm Employment Estimates by Sector	
<i>sector</i>	<i>1999 estimate</i>
Construction	37,800
Manufacturing	52,400
Trans/Comm/Util	47,600
Trade	169,100
Services	236,000
Government	134,100
Other	34,200
total	711,200

Source: Texas Workforce Commission, Labor Market Information (LMI)

SECTION 3 AIRCRAFT OPERATIONS

To describe the relationship between aircraft operations and land use at and around Seguin AUX Field, it is necessary to fully evaluate the exact nature of flying activities. An inventory of the types of aircraft operations that will occur at Seguin AUX Field was accomplished to include where the aircraft will fly, how high they will fly, how many times they will fly over a given area, and at what time of day they will operate.

Section 3.1 discusses modeled average busy-day flight operations by aircraft type. Section 3.2 discusses runway and flight track utilization for all operations by aircraft type. Section 3.3 describes aircraft maintenance runup operations, and Section 3.4 discusses aircraft flight profiles and noise data.

3.1 Flight Operations by Aircraft Type

The most recent amendment to the Seguin AUX Field AICUZ Study was accomplished in 1993 to reflect the addition of T-1 aircraft operations at the field, variations in flight patterns, and changes in the number of aircraft operations that had occurred since the previous AICUZ Study (1984). Due to operational constraints, T-1 operations were discontinued at the Seguin AUX Field. This section describes the airfield's aircraft operations associated with increased T-38 student pilot production at Randolph AFB and the conversion from the T-37 to the T-6 aircraft.

Since completion of the 1993 AICUZ update, the Air Force increased student production in the T-38 Pilot Instructor Training course at Randolph AFB. Seguin AUX Field is used for practice takeoffs and landings by Randolph AFB T-38 aircrews. Concurrent with the T-38 operations increase, the Air Force initiated the conversion from the T-37 to the JPATS and its T-6 aircraft, which will temporarily use the Seguin AUX Field while the Air Force searches for an auxiliary airfield for the aircraft. An environmental assessment titled *Mission Changes, Randolph AFB, Texas, May 1997*, was completed to evaluate the potential impacts of the aircraft operations changes.

Increased pilot production and aircraft operations at Randolph AFB will have a corresponding increase in aircraft operations at the Seguin AUX Airfield. The 1997 EA states the aircraft operations associated with the increased pilot production reflect the most conservative condition that could occur. Since pilot production can vary from year-to-year, the number of aircraft operations accomplished at the Seguin AUX Airfield actually could be less than that identified in the EA. In keeping with the most conservative condition assessed in the EA, this AICUZ study is based on the aircraft operations anticipated for increased pilot production at Seguin AUX Airfield as identified in the EA.

Table 3.1 summarizes the aircraft operations accomplished by Randolph AFB aircrews at Seguin AUX Airfield for three 12 month periods from May 1, 1997 through April 30, 2000. Normally, no operations are conducted at the airfield by transient aircraft. However, there are occasions when transient use of the airfield may be authorized by special arrangement. An aircraft operation is defined as one takeoff/departure, one approach/landing, or half a closed pattern. A closed pattern consists of both a takeoff portion and a landing portion, i.e., two operations.

Aircraft Operations	
<i>Time Period</i>	<i>Seguin AUX Field Total Operations</i>
May 1, 1997 – April 30, 1998	27,978
May 1, 1998 – April 30, 1999	48,930
May 1, 1999 – April 30, 2000	50,014

The number of assigned, transient, and civil aircraft operations will usually vary from day to day at an installation. NOISEMAP requires input of the specific numbers of daily flight and aircraft maintenance engine runup operations. The Air Force does not follow the Federal Aviation Administration in its use of the “average annual day” in which annual operations are averaged over an entire 365-day year. The Air Force also does not use the “worst-case day” since it typically does not represent the normal noise exposure either. Instead, the Air Force uses the “average busy day” concept, in which annual operations are averaged over the number of flying days per year. Non-flying days (for example, weekends or holidays) are not used in computing the “average busy day” operations. The number of flying days per week for based aircraft types (typically five) are usually different than for transient aircraft types (typically seven). However, based on Randolph AFB’s need for an auxiliary airfield to support the T-38 and T-6 portion of its flying training programs, flying training at the Seguin AUX Airfield is projected at 245 days per year, slightly less than five days per week.

Table 3.2 summarizes the projected average busy-day and annual aircraft operations at Seguin AUX Airfield for increased pilot production as derived from information provided by the 12 FTW. Normal operations will occur during daylight hours (7:00 a.m. to 10:00 p.m.).

Table 3.2: Average Busy-Day Aircraft Operations		
<i>Category</i>	<i>Aircraft Type</i>	<i>Operations</i>
Based		
559 FTS	T-6	512.18
560 FTS	T-38	283.46
Total		795.64
Note: An operation is one takeoff/departure or one arrival/landing.		

Table 3.3 reflects the average busy-day sorties and average operations per sortie at Seguin AUX Field for the T-38 and T-6 aircraft. A typical Seguin AUX Airfield T-38 and T-6 training sortie includes an arrival to either a straight-in approach or an overhead pattern resulting in a touch and go landing followed by multiple closed patterns to touch and go landings, and a final takeoff in which the aircraft departs the airfield.

Table 3.3: Average Busy-Day Sorties and Operations per Sortie at Seguin AUX Field		
<i>aircraft</i>	<i>average busy-day sorties</i>	<i>average operations per sortie</i>
T-6	25.00	20.49
T-38	43.00	6.59

Syllabus requirements are accomplished predominantly through daylight flying training sorties. Night operations do not begin earlier than 30 minutes after official sunset, and extend until the flight schedule for that day is complete. However, a number of night sorties and aircraft operations are required to gain and demonstrate proficiency in aircraft handling during nighttime. Typically, the Seguin AUX Field flying schedule extends from 7:00 a.m. through 10:00 p.m., Monday through Friday. These hours may be modified as necessary.

3.2 Runway and Flight Track Utilization

Seguin AUX Field has a single runway oriented northwest-southeast (130°–310° [13/31]). Traffic patterns are flown primarily to the east of the runway. The runway is 8,300 feet long, and the airfield elevation is 525 feet MSL. Aircraft operations are controlled by runway supervisory units manned by instructor pilots. No radar controlled patterns are flown at the airfield.

Aircraft arrival and departure flight tracks at Seguin AUX Field are influenced by other airports within the area. There are three public use airports in the area surrounding the Seguin AUX Field. Geronimo Field is five miles northwest; New Braunfels Municipal Airport is 11 miles northwest; and the Beicker Airport is seven miles southeast. Additionally, there are five small private airports within an 11-mile radius of the Seguin AUX Field. The location and proximity of these airports relative to Seguin AUX Field require that arriving and departing aircraft be routed to avoid conflict. Likewise, regional aircraft routings are developed, to the maximum extent practicable, to establish common tracks that serve the arrival and departure “flow” for all the airports within the area.

Considering the above limitations, aircraft operating at Seguin AUX Field use the following basic flight patterns:

- straight out departure;
- turn out after takeoff;
- straight-in arrival;
- overhead pattern and landing;
- closed pattern to the inside downwind;
- re-entry VFR patterns.
- emergency landing patterns (ELPs)

Flight patterns specific to Seguin AUX Field result from several considerations, including:

- takeoff patterns routed to avoid overflight of the City of Seguin to the west and other 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; and
- coordination with the FAA to minimize conflict with civilian aircraft operations.

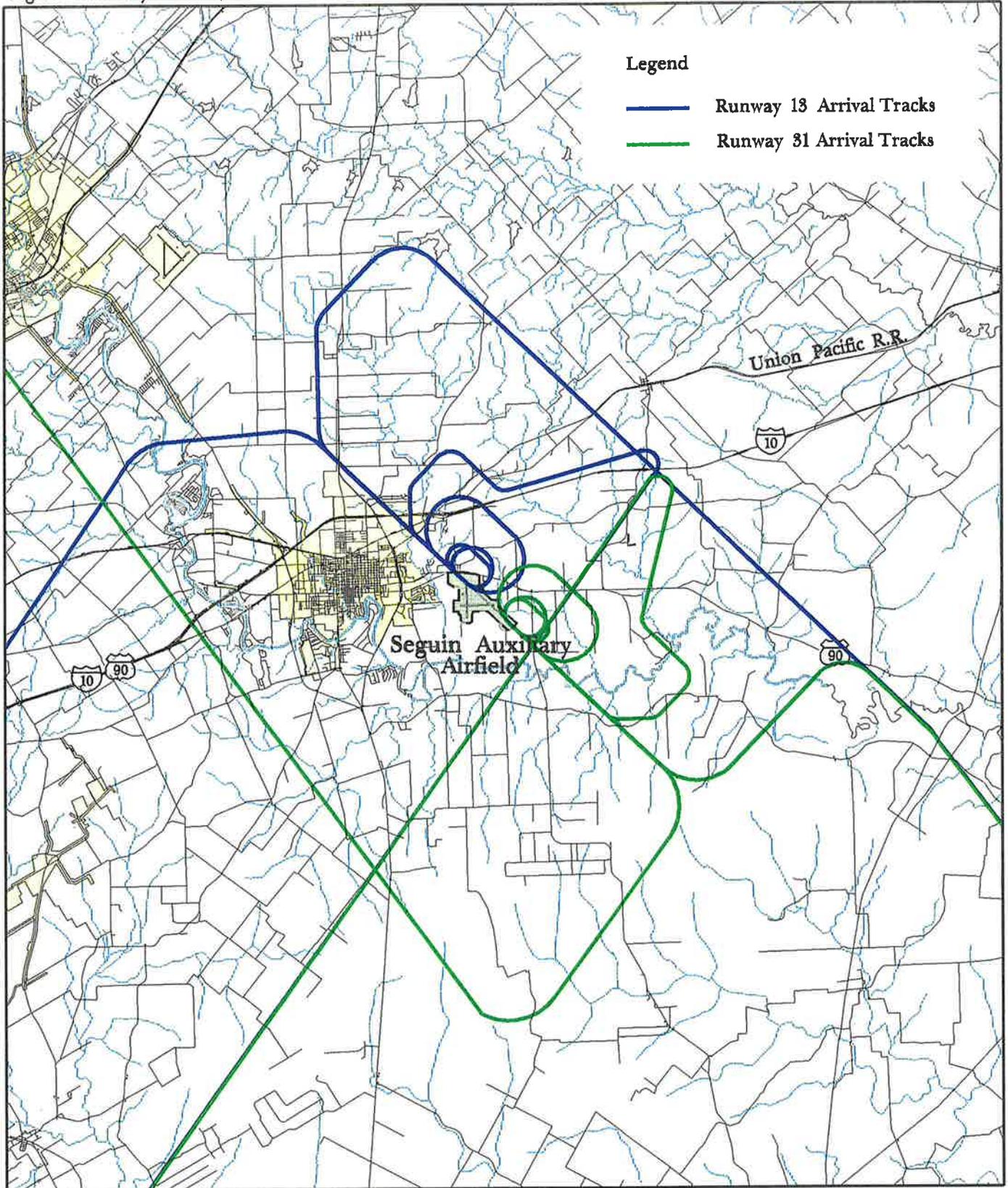
Airfield area of influence planning is concerned with three primary aircraft operational/land use determinants: (1) accident potential to land users; (2) aircraft noise; and (3) hazards to operations from land uses (height obstructions, etc.). Each of these concerns is addressed in conjunction with mission requirements and safe

aircraft operation to determine the optimum flight track for each aircraft type. The flight tracks depicted in Figures 3.1 through 3.3 are the result of such planning and depict the modeled average busy-day flight tracks for the operations listed in Table 3.4. According to ATC personnel, Runway 13 is used about 78 percent of the time. That is, aircraft traffic at the airfield is in a southeasterly “flow” about 78 percent of the time and in a northwesterly flow 22 percent of the time.

**Table 3.4:
Summary of Average Busy-Day Flight Track Operations**

Runway /Aircraft	No. of Tracks	Arrival Track Operations		Departure Track Operations		Closed Pattern Track Operations		Total
		Day	Night	Day	Night	Day	Night	
13								
T-38	8	4.41	0	34.40	0	158.72	0	227.53
T-6	12	9.67	0	19.00	0	351.84	0	390.51
31								
T-38	8	8.59	0	8.60	0	38.74	0	55.93
T-6	11	5.33	0	6.00	0	110.34	0	121.67
Total	39	68.00	0	68.00	0	659.64	0	795.64

Figure 3.1 shows the Seguin AUX Field arrival flight tracks. Arrivals include visual straight-in approaches to Runway 13/31 and other arrivals where the aircraft proceeds straight in for an overhead pattern at traffic pattern altitude (either 1,000 or 1,500 feet AGL).



Legend

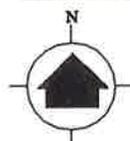
- Runway 13 Arrival Tracks
- Runway 31 Arrival Tracks

Seguin Auxiliary Airfield

Union Pacific R.R.

10 90

10 90



20000 0 20000 40000

SCALE IN FEET

Figure 3.1
Seguin Auxiliary Airfield
Arrival Flight Tracks

Figure 3.2 reflects the flight tracks for Seguin AUX Field.

Figure 3.3 depicts the Seguin AUX Field closed pattern flight tracks. Closed patterns are flown at 1,000 feet AGL (T-6) or 1,500 feet AGL (T-38).

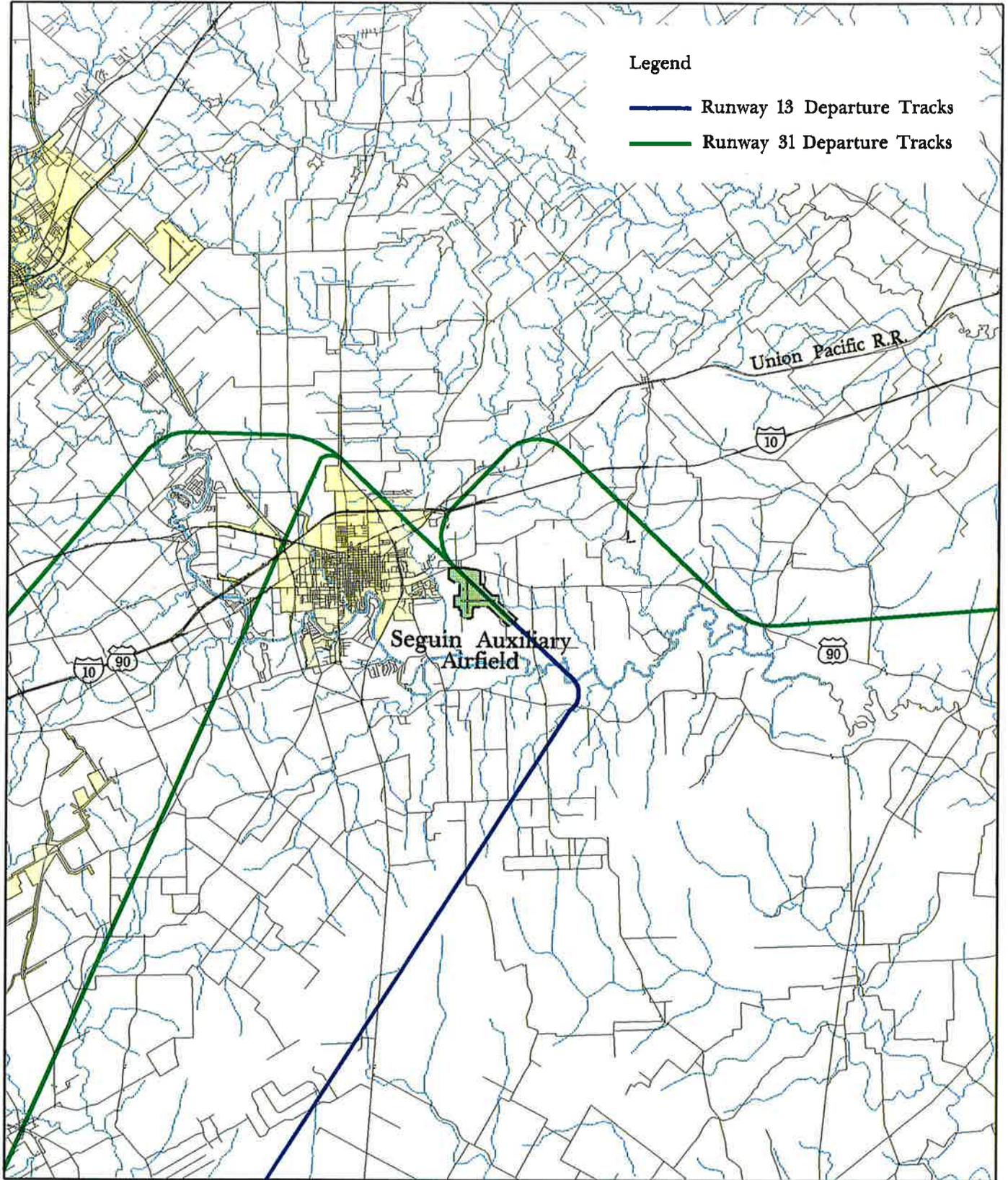


Figure 3.2
Seguin Auxiliary Airfield
Departure Flight Tracks

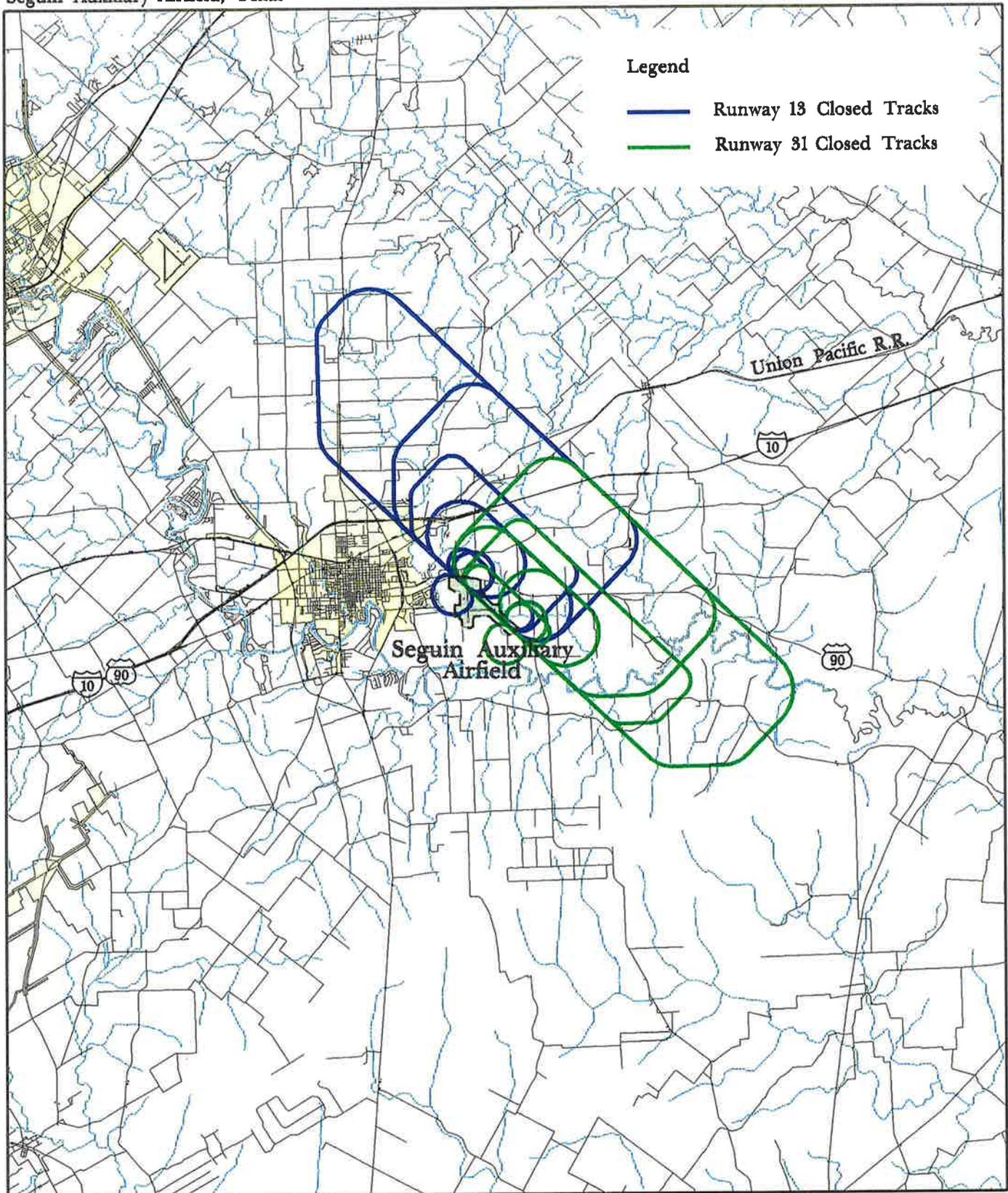


Figure 3.3
Seguin Auxiliary Airfield
Closed Pattern Flight Tracks

3.3 Pre-Takeoff and Aircraft Maintenance Runup Operations

No initial sortie takeoffs or aircraft maintenance activities occur at the Seguin AUX Airfield. Therefore, no pre-takeoff and aircraft maintenance runup operations are conducted at the airfield.

3.4 Aircraft Flight Profiles and Noise Data

For the purposes of this AICUZ Study, aircraft “flight profiles” denote the aircraft power settings, altitudes above runway level, and airspeeds along each flight track. All aircraft flight profiles for based aircraft were obtained from the individual host and tenant organizations. Transient aircraft flight profiles from the BASEOPS database were used to model transient operations for each transient aircraft type. Noise data from the NOISEFILE database was used to model operations for all aircraft types.

Weather, measured by temperature and relative humidity, is an important factor in the propagation of noise. Temperature and relative humidity affect sound absorption. NOISEMAP uses the average daily temperature and relative humidity for each month to determine the appropriate values to represent the given year.

The climate near Seguin AUX Field is characterized by long, warm summers and short, usually mild winters. Historical climatological information in terms of average temperature and average relative humidity for each month was obtained from Randolph AFB and is listed in Table 3.5.

<i>month</i>	<i>average high temperature (°F)</i>	<i>average low temperature (°F)</i>	<i>average dew point(%)</i>	<i>average precipitation (inches)</i>
January	62	39	38	1.7
February	66	43	41	1.9
March	74	50	46	1.6
April	80	58	55	2.6
May	86	66	64	4.2
June	92	72	68	3.6
July	95	74	69	1.9
August	95	74	68	2.5
September	90	69	65	3.2
October	82	59	57	3.2
November	71	48	47	2.1
December	64	42	41	1.7

Source: U.S. National Climatic Data Center

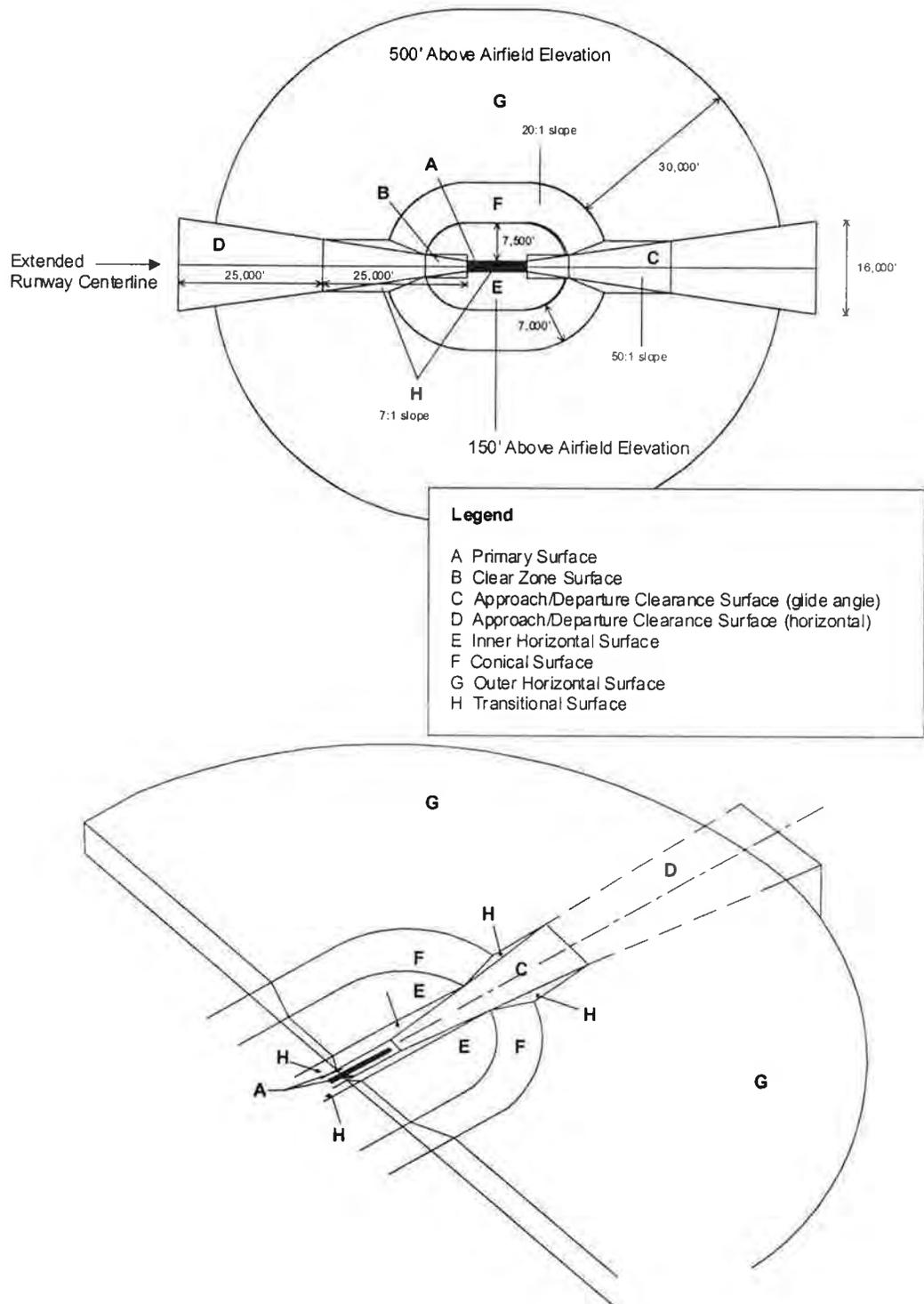
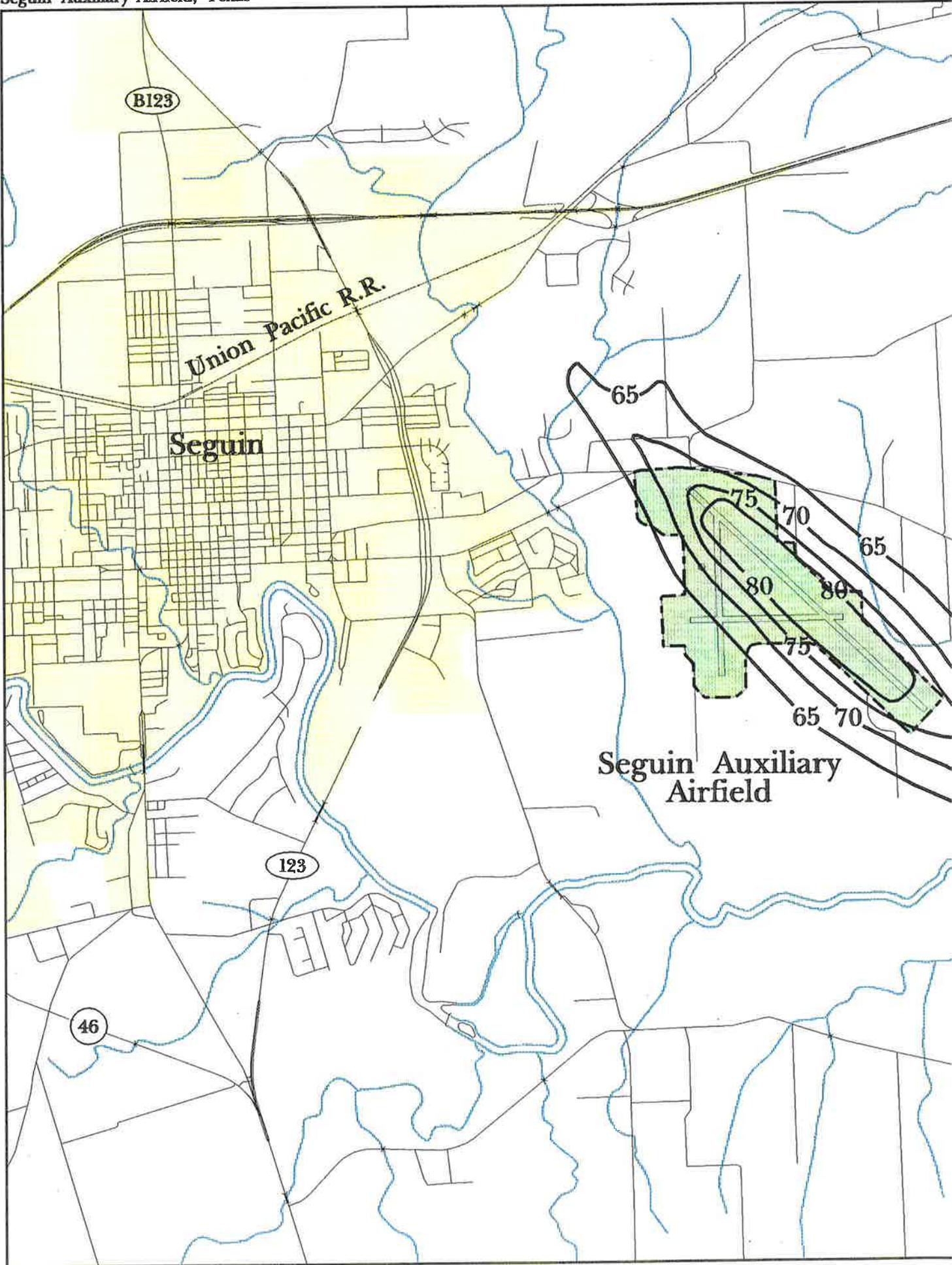


Figure 4.1 Airspace Control Surface Plan

Seguin Auxiliary Airfield, Texas



**Table 4.1:
Areas and Populations Within Noise Zones**

<i>noise zone</i>	<i>acres</i>	<i>Population</i>
65-70	880	46
70-75	369	16
75-80	107	4
>80	4	0
total	1,360	66

369 acres in off-base land area with 16 persons exposed. The DNL 75-79 dB noise zone contains about 107 off-base acres with 4 persons exposed to this noise level. The off-base area exposed to DNL 80+ dB contains about 4 acres and 0 persons.

4.4 Comparison with Previous Aircraft Survey

The 1993 AICUZ contours and the 2000 AICUZ contours associated with increased pilot production (Figure 4.2) have the same general shape. While the maximum pilot production contours are somewhat wider to the east and west of the runways and extend slightly farther south of the base, the contours for this condition do not extend as far from the ends of the runways as in the 1993 AICUZ.

These differences between the 1993 AICUZ contours and maximum pilot production contours are due primarily to the number of operations and changes in flight settings as well as flight track utilization and the version of the noise model. The DNL noise contours from the 1995 study were computed using the version of NOISEMAP in use at the time. NOISEMAP Version 6.5, used for the maximum pilot production study, contains differences in takeoff-roll algorithms and also handles changes in aircraft speeds differently when compared to NOISEMAP Version 6.3 which was used for the 1993 AICUZ. Therefore, NOISEMAP Version 6.5 produces more accurate noise contours.

4.5 Clear Zones and Accident Potential Zones

The purpose of this section is to define the clear zones (CZs) and APZs, and apply them to Seguin AUX Field. Section 4.5.2 presents the CZs and APZs for Seguin, depicted in Figure 4.3.

4.5.1 Definition of Clear Zones and Accident Potential Zones

Areas around airports are exposed to the possibility of aircraft accidents even with well-maintained aircraft and highly trained aircrews. Despite stringent maintenance requirements and countless hours of training, past history makes it clear that accidents are going to occur. Military aircraft accidents differ from commercial air carrier and general aviation accidents because of the variety of aircraft flown, the type of missions, and the number of training flights.

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. Designation of safety zones around the airfield and restriction of incompatible land uses can reduce the public's exposure to safety hazards.

Based on and confirmed by analysis of 834 major Air Force accidents at many Air Force bases during 1968 through 1995 that occurred within 10 miles of the associated base, three planning zones have been established: the CZ, APZ I, and APZ II.

The Air Force standard CZ for each runway starts at the end of the runway and extends outward 3,000 feet and is 3,000 feet wide (1,500 feet to either side of runway centerline). It has the highest accident potential of the three zones because 27 percent of the accidents studied occurred in this region. Per AFMAN 32-1123, CZs are authorized to deviate from the standard with individual service approval. Within the installation boundary, the Seguin AUX Field CZs adhere to the standard 3,000-foot CZ width. As shown in Figure 4.3, the CZs are 2,000 feet wide on property outside of the Seguin AUX Field boundary. All Seguin AUX Field CZs extend 3,000 feet outward from the runway ends. The Air Force has adopted a policy of acquiring property rights through purchase or easement to areas designated as CZs.

APZ I extends outward from the CZ an additional 5,000 feet. It includes an area of reduced accident potential. Ten percent of the accidents studied occurred in this area. APZ I is 3,000 feet wide and 5,000 feet long beginning 3,000 feet from the runway endpoint along and centered on the extended runway centerline.

APZ II extends from the outer end of APZ I an additional 7,000 feet. This is an area of even further reduced accident potential. Five percent of the accidents studied occurred in this area. APZ II is 3,000 feet wide and 7,000 feet long beginning 8,000 feet from the runway endpoint along and centered on the extended runway centerline.

While aircraft accident potential in APZs I and II does not warrant land acquisition

by the Air Force, land use planning and controls are strongly encouraged in these areas for the protection of the public. Of the accidents studied, 15 percent occurred in the APZs I and II. The area extending 1,000 feet out from each side of the runway centerline for the length of the runway accounted for 25 percent of the accidents analyzed. The remaining 33 percent occurred outside APZ II but were dispersed within 10 miles of the associated airfield.

4.5.2 Clear Zones and Accident Potential Zones for Seguin Field

Figure 4.3 presents the Seguin AUX Field CZs and APZs based on the configuration of the runways.

4.6 Land Use Compatibility Guidelines

Section 4.6.1 introduces the AICUZ concept and Section 4.6.2 presents the land use compatibility guidelines applicable to the vicinity of Seguin AUX Field.

4.6.1 Introduction

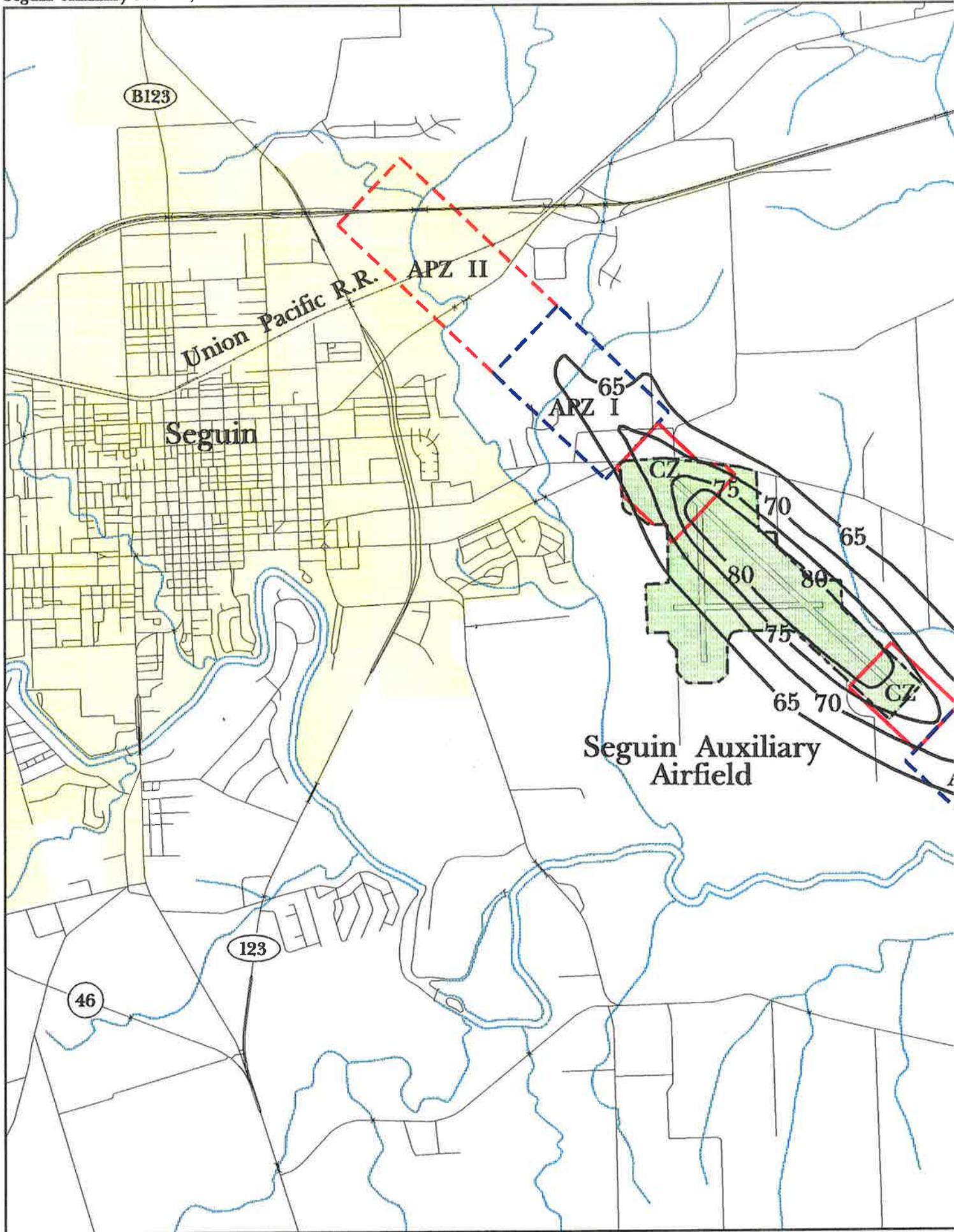
The DoD developed the AICUZ Program for military airfields. Using this program, the DoD works to protect aircraft operational capabilities at its installations and to assist local government officials in protecting and promoting the public health, safety, and quality of life. The goal is to promote compatible 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 the FAA and DoD have identified for height limitations. Air Force obstruction criteria are based upon those contained in FAR Part 77, Subpart C.

The second constraint involves noise zones based on the computerized DNL metric and the DoD NOISEMAP methodology. Using the NOISEMAP program, which is similar to FAA's INM, the DoD produces noise contours showing the noise levels generated by current aircraft operations. The AICUZ Study contains noise contours plotted in increments of DNL 5 dB ranging from DNL 65 to 80 dB. Figure 4.2 shows DNL noise contours based on aircraft operations associated with maximum pilot production. Additional information on noise methodology is contained in Sections 1.3 and 1.4.

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 65-74 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

Seguin Auxiliary Airfield, Texas



an environmental impact statement. The Department of Veterans Affairs also has airfield noise and accident restrictions that apply to its home loan guarantee program. Whenever possible, residential land use should be located below DNL 65 dB according to Air Force land use recommendations.

The third constraint involves accident potential zones based on statistical analysis of past DoD aircraft accidents. DoD analysis has determined the areas immediately beyond the ends of runways and along the approach and departure flight paths have significant potential for aircraft accidents. Clear zones and APZs were discussed in Section 4.5 and are shown in Figure 4.4.

4.6.2 Land Use Compatibility

Each AICUZ Study contains land use guidelines. Table 4.2 lists land uses versus possible combinations of noise exposure and accident potential at Seguin AUX Field, 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 1965 US Department of Transportation publication, *Standard Land Use Coding Manual (SLUCM)*, has been used for identifying and coding land use activities.

**Table 4.2:
Land Use Compatibility Guidelines**

land use		accident potential zones			Noise zones			
SLUCM no.	name	CLEAR ZONE	APZ I	APZ II	DNL 65-69 dB	DNL 70-74 dB	DNL 75-79 dB	DNL >80 dB
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; manuf.	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

Table 4.2 (cont'd): Land Use Compatibility Guidelines								
land use		accident potential zones			Noise zones			
SLUCM no.	name	CLEAR	APZ I	APZ II	DNL	DNL	DNL	DNL >80 dB
		ZONE			65-69 dB	70-74 dB	75-79 dB	
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
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
45	Highway & street right-of-way	N ³	Y	Y	Y	Y ¹²	Y ¹³	Y ¹⁴

**Table 4.2 (cont'd):
Land Use Compatibility Guidelines**

land use		accident potential zones			Noise zones			
SLUCM no.	name	CLEAR ZONE	APZ I	APZ II	DNL 65-69	DNL 70-74	DNL 75-79	DNL >80 dB
					dB	dB	dB	
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
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

land use		accident potential zones			Noise zones			
SLUCM no.	name	CLEAR	APZ I	APZ II	DNL	DNL	DNL	DNL >80 dB
		ZONE			65-69 dB	70-74 dB	75-79 dB	
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}
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, US 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.

A, B, or C - Land use and related structures generally compatible; measures to achieve NLR of A (25 dB), B (30 dB), or C (35 dB) need to be incorporated into the design and construction of structures.

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.
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 AFI 32-7063 and AFI 32-1026 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.
- 11a. Although local conditions may require residential use, it is discouraged in DNL 65-69 dB and strongly discouraged in DNL 70-74 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.
- 11b. Where the community determines the residential uses must be allowed, measures to achieve outdoor to indoor NLR for DNL 65-69 dB and DNL 70-74 dB should be incorporated into building codes and considered in individual approvals.
- 11c. 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 65-69 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 70-74 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 75-79 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 65-69 dB range.
19. Residential buildings require the same NLR required for facilities in the DNL 70-74 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.

4.7 Participation in the Planning Process

As local communities prepare their land use plans, the Air Force must be ready to provide additional input. This section discusses how the base participates in the community planning process. Section 6.2 addresses the role played by the local community in enhancing compatible land use. The Deputy Support Group Commander has been designated as the base liaison with the local community on planning matters.

Airspace obstructions, construction in the APZs, residential development, and the construction of other noise-sensitive uses near Seguin AUX Field is of great concern to Randolph AFB. The Air Force is very interested in minimizing increases in incompatible usage and in encouraging voluntary conversion of incompatible usage to compatible usage. Applying the categories for compatible land use described in Table 4.2, the base liaison's staff can evaluate the impact that aircraft operations have on surrounding properties, and the effect that new development or changes in land use might have on base operational capabilities. Participation in land use planning can take many forms. The simplest of these forms is straightforward, consistent two-way discussion and information sharing with both professionals and neighbors. Copies of the AICUZ Study, including maps at an appropriate scale, will be provided to regional planning departments and zoning administrators. Through this communication process, the base reviews applications for development or changed use of properties within the noise impact and safety areas, as well as other nearby parcels. The base coordinates closely with regional planning departments and zoning administrators on zoning and land use issues. Within the framework of this relationship, the base liaison attends relevant meetings.

In addition to working with other planning professionals, the base liaison's staff and the base Public Affairs Office work to address complaints and concerns expressed by base neighbors. The Public Affairs Office receives and responds to complaints directly and completely.

The base liaison conducts active outreach to the community by meeting with various housing community groups and speaking with individuals as needed. The base

liaison and Public Affairs Office work together providing public meetings and informational workshops, as needed, to disseminate information about base operations, forecasts, plans, and mitigation strategies.

SECTION 5 LAND USE ANALYSIS

5.1 Introduction

Land use planning and control is a dynamic rather than a static 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 concern. The planning process accommodates this fluidity in that decisions are normally not based on boundary lines, but rather on more generalized area designations.

Seguin AUX Field was originally established in a relatively undeveloped area in Guadalupe County, Texas. In recent years, however, development has slowly encroached from the City of Seguin. Additional housing developments have been established to the north of Seguin AUX Field.

Computer technology has enabled Seguin Airfield to more precisely display its flight tracks and noise contours for land use planning purposes. This same technology has revealed the extent of Seguin's region of impact into the area surrounding the base.

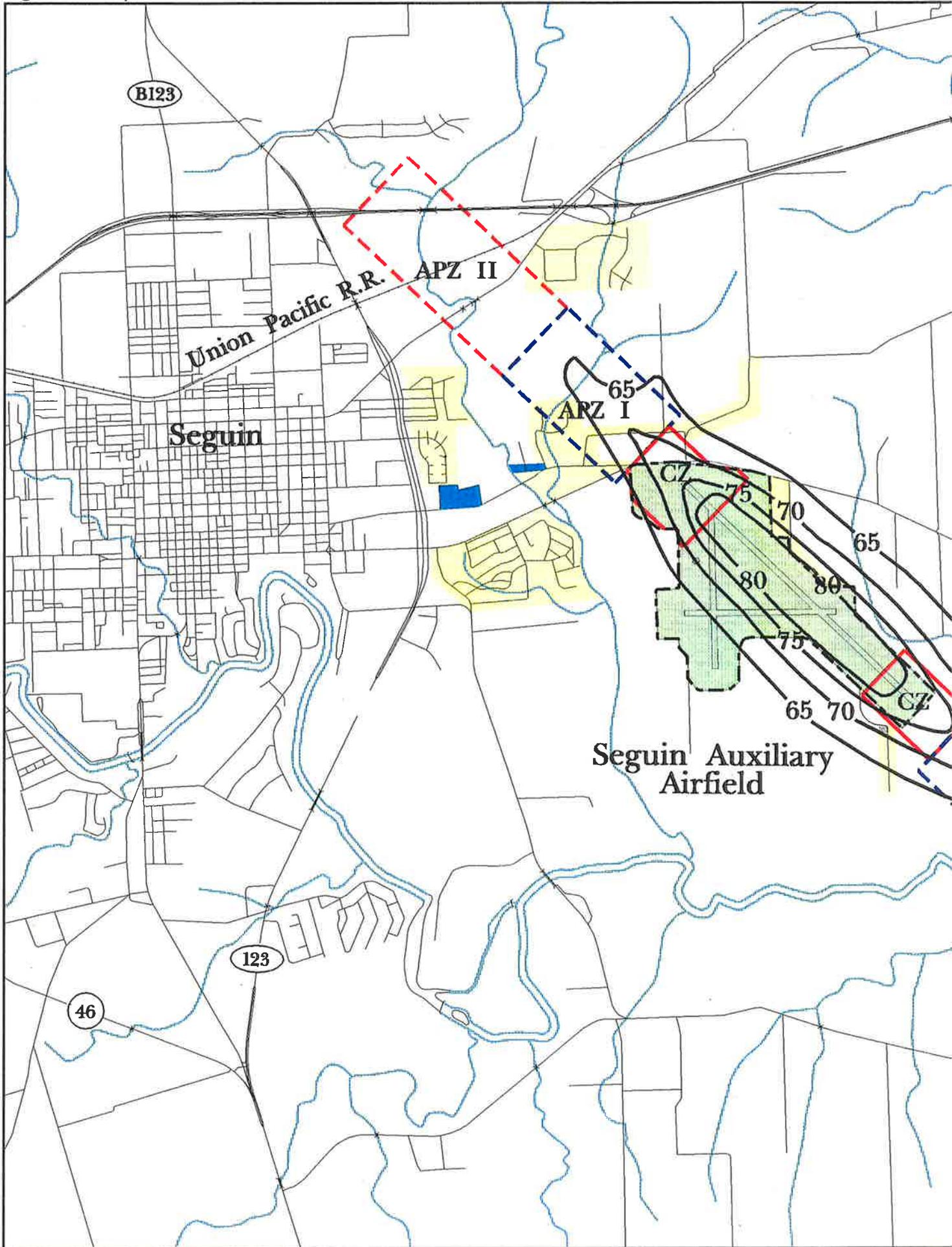
For the purpose of this study, existing land uses have been classified into one of the following six categories:

- Residential: This category includes all types of residential activity such as single and multi-family residences and mobile homes at a density greater than one dwelling unit per acre.
- Commercial: This category includes offices, retail, restaurants and other types of commercial establishments.
- Industrial: This category includes manufacturing, warehousing, and other similar uses.
- Public/Quasi-Public: This category includes publicly owned lands and/or land to which the public has access including military reservations and training grounds, public buildings, schools, churches, cemeteries, and hospitals.
- Recreational: This category includes land areas designated for recreational activity including parks, wilderness areas and reservations, conservation areas, and areas designated for trails, hikes, camping, etc.
- Open/Agricultural/Low Density: This category includes undeveloped land areas, agricultural areas, grazing lands, and areas with residential activity at densities less than or equal to one dwelling unit per acre.

5.2 Existing Land Use

Figure 5.1 depicts generalized existing land use in the vicinity of Seguin AUX Field. As previously described, Seguin AUX Field is located in central Guadalupe County.

Seguin Auxiliary Airfield, Texas



Existing land use within the areas surrounding the airfield is primarily open/agricultural/low density. The majority of the open land is used for rangeland and contains a few isolated single-family homes. A few surrounding areas contain small mobile home developments comprising from two to 10 units.

The area affected by the APZs and noise area of influence primarily conforms with the open/agricultural/low density and residential land use categories.

Table 5.1 reflects the number of acres by land use category (from Figure 5.1) within the DNL 65 dB contour from Figure 4.2. Note that these acreages represent only the area outside the Seguin AUX Field boundary.

Table 5.1: Generalized Existing Land Use within DNL 65 dB Noise Contour	
Category	Acreage
Residential	90
Commercial	0
Industrial	1
Public/quasi-public	0
Open/agriculture/low density	1,264
Total	1,355

Similarly, an overlay of the Figure 4.3 APZs with the existing land use shown in Figure 5.1 reveals the Table 5.2 acreages by land use category within these zones (off-base areas only).

Table 5.2: Generalized Existing Land Use within Accident Potential Zones	
Category	Acreage
Residential	76
Commercial	0
Industrial	0
Public/quasi-public	0
Open/agriculture/low density	1,688
Total	1,764

5.3 Current Zoning

Figure 5.2 depicts the compatible land use zoning in the vicinity of Seguin AUX Field. The City of Seguin implements standard zoning and subdivision ordinances to guide the physical development of the city. Guadalupe County has no zoning or other land use controls.

Seguin Auxiliary Airfield, Texas

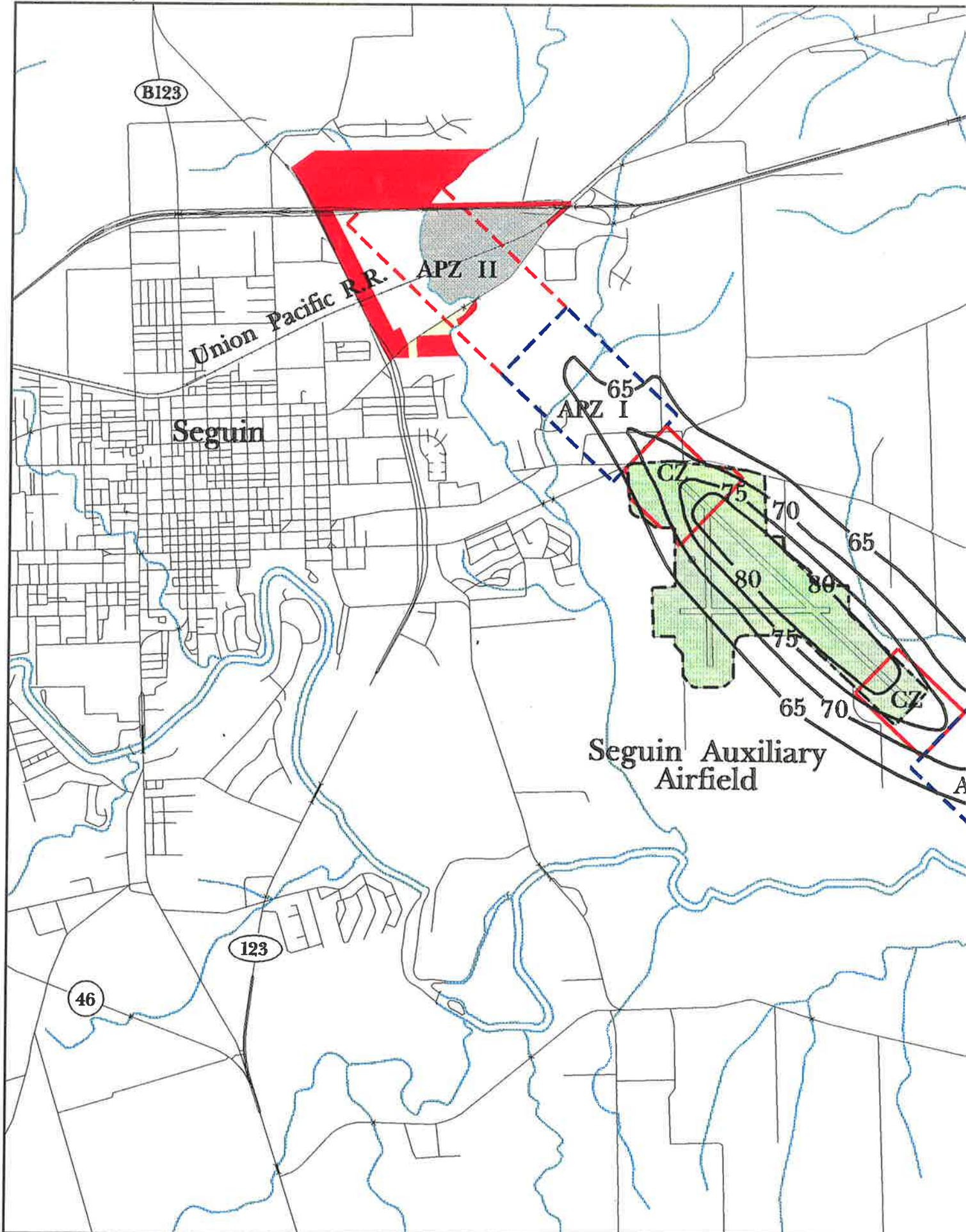


Table 5.3 reflects the acreage by zoning district within the DNL 65 dB contour obtained by overlaying the noise contours from Figure 4.2 with the current zoning depicted in Figure 5.2.

Table 5.3: Current Zoning within DNL 65 dB Noise Contour	
<i>category</i>	<i>Acreage</i>
Unzoned	1,361
total	1,361

Table 5.4 reflects the acreage by zoning district within the CZs and APZs obtained by overlaying the CZs and APZs in Figure 4.3 with the current zoning depicted in Figure 5.2.

Table 5.4: Current Zoning within Clear Zones and Accident Potential Zones	
<i>category</i>	<i>Acreage</i>
Residential	5
Commercial	67
Industrial	154
Public/quasi-public	0
Recreation	0
Open/agriculture	111
total	337

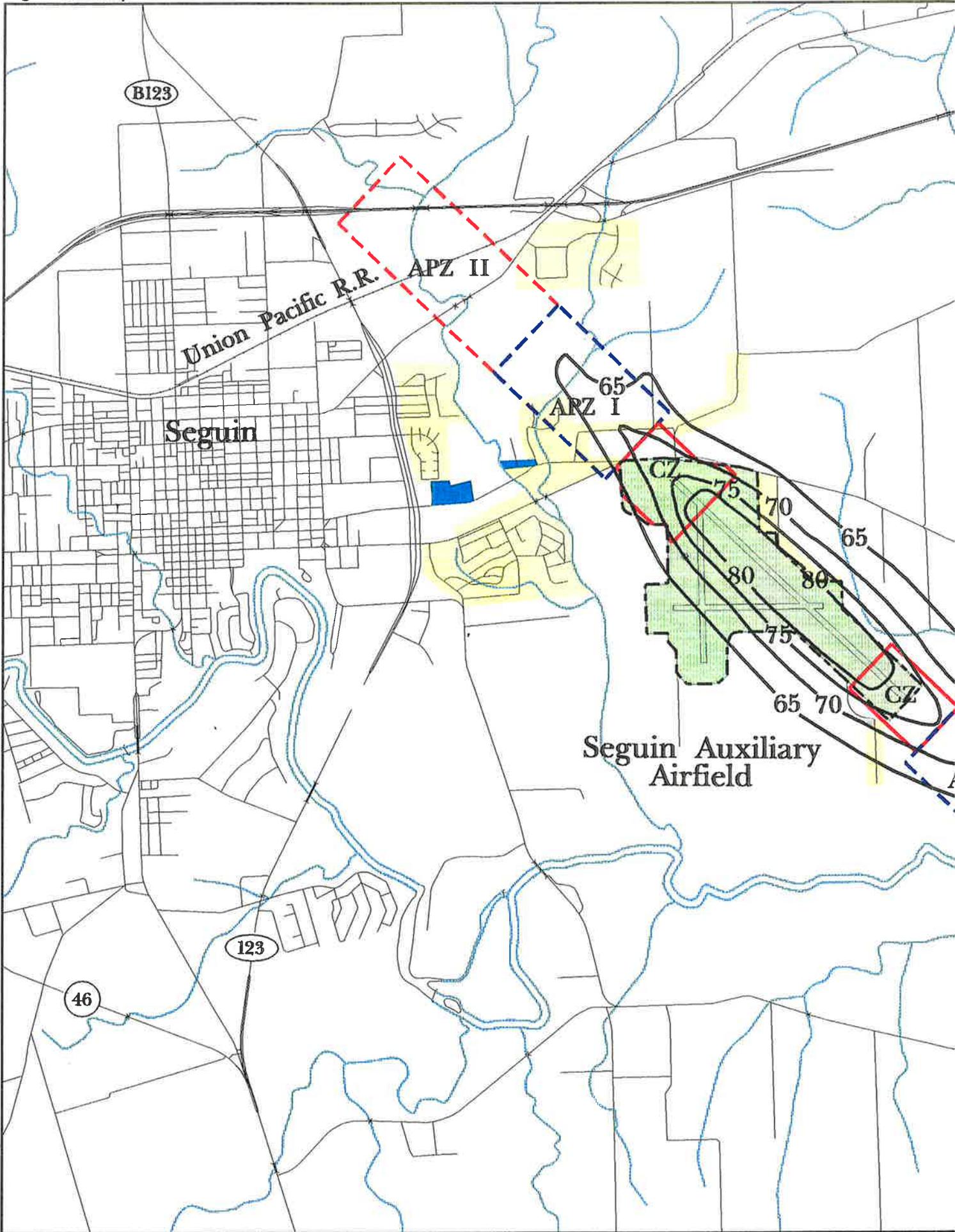
5.4 Future Land Use

Development in the Seguin AUX Field AICUZ area of influence is expected to remain consistent with current patterns. Additional residential development will occur along Geronimo Creek adjacent to U.S. Highway 90A. Future development north, south and east of Seguin AUX Field is expected to be minimal, with sporadic single family residential development following current patterns. Generalized future land uses are depicted in Figure 5.3.

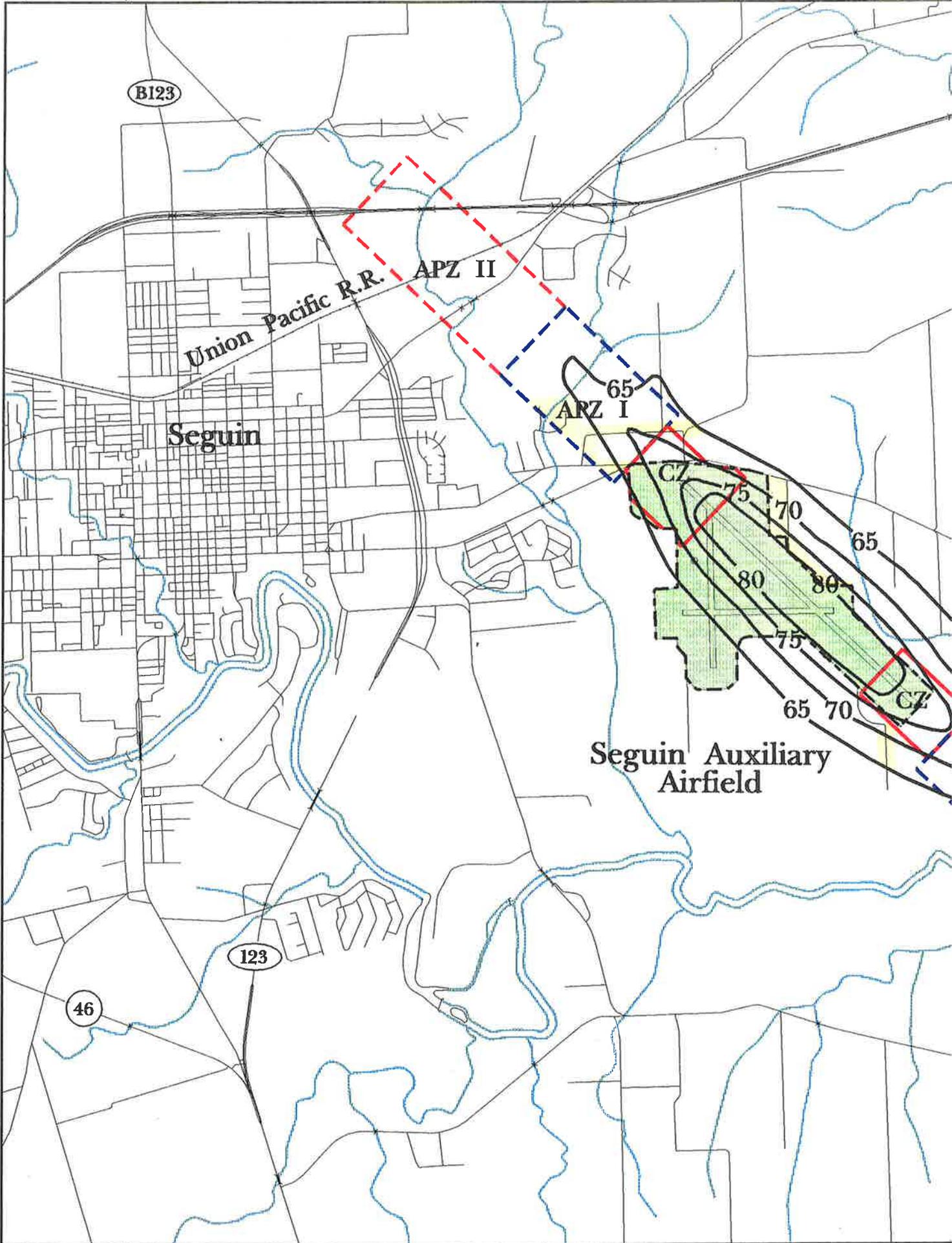
5.5 Incompatible Land Uses

Land use compatibility as applied to AICUZ data is presented in Table 4.2. To determine land use compatibility in the Seguin AUX Field vicinity, this table is combined with the specific existing land use data from Figure 5.1. For a land use area to be considered compatible, it must meet compatibility criteria for its category for both noise and accident potential. The results of this analysis for maximum pilot production aircraft operations are shown in Table 5.5 and Figure 5.4.

Seguin Auxiliary Airfield, Texas



Seguin Auxiliary Airfield, Texas



5.5.1.4 Noise Zones

Sections of the Seguin AUX Field AICUZ noise zones for maximum pilot production aircraft operations which extend off-base contain land use that is considered incompatible by the Air Force. Following the land use compatibility guidelines detailed in Table 4.2, residential use within a DNL 65-74 dB zone is discouraged unless there is a demonstrated community need and no viable alternate locations. Also, Noise Level Reduction of 25-30 dB needs to be incorporated in the design and construction of residences in this area. There is residential development north of U.S. Highway 90 along the eastern boundary of the airfield and to the south of the airfield. Much of this development consists of manufactured housing.

5.6 Planning Considerations

AICUZ noise contours describe the noise characteristics of a specific operational environment and will change if a significant operational change is made. Should a new mission be established at Randolph AFB, the number of aircraft increase, additional model types be added to Randolph's fleet, or aircraft operations occur at a level greater than those analyzed in this study, the AICUZ Study could be amended.

With these thoughts in mind, Randolph AFB has created the 2000 Seguin AUX Field AICUZ Study and has provided flight track, CZ, APZ, and noise contour information in this report reflecting the most accurate picture of aircraft operations for maximum pilot production at the base.

SECTION 6 IMPLEMENTATION

Implementation of the AICUZ Study must be a joint effort between the Air Force and the adjacent communities. The Air Force's role is to minimize the impact on the local communities by Seguin AUX Field operations. The role of the communities is to ensure that development in the area of influence is compatible with accepted planning and developing principles and practices.

6.1 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 aircraft accidents are avoided. Despite the best aircrew training and aircraft maintenance, history clearly shows 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 Instruction, commanders are required to periodically review existing traffic patterns, instrument approaches, weather minimal, 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. Seguin AUX Field noise mitigation practices include routing flight tracks to avoid heavily populated areas, adjusting power settings and climb rates to minimize noise, establishment of quiet hours during which aircraft operations and aircraft maintenance engine runup activities are limited, and restricting night engine maintenance and flight operations to a minimum.

The preparation and presentation of this Seguin AUX Field 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 input.

It also is recognized that the AICUZ Program is an ongoing activity even after compatible development plans are adopted and implemented. Randolph AFB 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, Seguin AUX Field. Randolph AFB personnel will also be available to provide information, criteria, and guidelines to state, regional, and local planning bodies, civic associations, and