AICUZ HANDBOOK

A Guidance Document for Air Installation Compatible Use Zone (AICUZ) Program

VOLUME I
AICUZ Program Manager's Guide

WORKING DRAFT

HQ U.S. Air Force
Pentagon
Washington, D.C. 20330-5130

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VOLUME I

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1. How to Use This Document

This AICUZ Handbook is divided into 3 volumes. The first volume entitled "AICUZ Program Manager's Guide" is aimed at providing specific guidance to the Base Community Planner or AICUZ Program Manager at an Air Force Base concerning the organization, tasks, and procedures of the AICUZ Program. It is written in a "how to" format and is aimed at guiding him through the six phases or steps of developing an AICUZ study. It describes the steps he must take as well as his responsibilities and those of others who will be assisting him. This volume is aimed at directing the base AICUZ Program Manager through the administrative steps and procedures involved in developing an AICUZ study. Volumes II and III support Volume I by providing important resources as the base AICUZ Program Manager passes through the six phases of an AICUZ study.

Volume II is entitled "Data Collection Procedures" and explains how accurate noise contours are prepared to support Phase III (AICUZ Maps Preparation) of the program. The steps in this data collection are summarized in a "how to" format and the procedure for obtaining USAF approved noise contours is reviewed. The duties of on-base and off-base Air Force personnel in assisting the AICUZ Program Manager is summarized as well. Volume II is a key resource to the planner during Phases I - III of the six phase AICUZ Program.

Volume III is entitled "AICUZ Study Guidelines" and provides a brief summary of what each of the sections of the AICUZ report should contain. It also contains a generic AICUZ study, a generic public release document, and generic set of appendices. This Volume III provides examples of the format and actual content of the planner's AICUZ study for his base. The generic set of appendices may be used as part of the planner's AICUZ study. If required, modifications can be made as needed based on site-specifc considerations.

The planner should master the AICUZ methodology in Volume I, using Volumes II and III to support and provide examples as needed.

1.1 Important Changes or Additions from the 1984 AICUZ Handbook

The following list summarizes the main changes in this 1992 AICUZ Handbook from the 1984 AICUZ Handbook. More details are presented in the text for NOISEMAP.

1. A "Generic AICUZ Study" is available through electronic mail from HQ/USAF which can be used as the basis for the text of the AICUZ study at any Air Force Base.

2. The manual noise screening test for preparation of an AICUZ amendment has been superseded by NOISEMAP 6.0 using the criterion of a change of greater than 2 dB in a noise-sensitive area.

3. Zoning maps and existing and future land use maps need to be retained or reintroduced back into the AICUZ document. Although the 1984 AICUZ Handbook required their inclusion, some recent AICUZ reports have omitted them.

4. Property value analysis and operational change analysis are now dropped from the AICUZ report.

5. Aircraft accident data have been updated in detail through July 1990.

6. A two-volume format (main report and appendices) is now encouraged for the AICUZ study along with an AICUZ brochure and an Implementation-Maintenance Plan.

7. Density standards inside accident potential zones are being updated and changes will be available shortly.

8. Reiterated caveat that AICUZ Program Managers need to retain all records regarding AICUZ preparation, release and maintenance.

9. ~~Compatible Use Districts (CUDs) are no longer used.~~ Previously, separate land uses were provided for ~~these~~ 13 districts. Now land-use compatibility is presented only for Accident Potential Zones I and II, the Clear Zone, and noise zones (in 5 dB increments) above DNL = 65 dB. (65, 70, 75 & 80)

10. The BASEOPS code should now be used by base personnel to computerize the basic flight information before sending them to the MAJCOM and AFCESA/DMPO. A new version of NOISEMAP (Version 6.0) is now being used to prepare noise contours. 6.1

11. A new cover letter format has been prepared for final submission of the AICUZ to HQ/USAF and the number of final copies and procedure for notification has been revised.

12. A new and greater emphasis is placed on implementation of AICUZ recommendations including a discussion of JLUS (Joint Land Use Study). This Handbook introduces JLUS, its procedures and application.

13. Improved methods for attaining noise level reductions are presented for various structures (mainly residences) mitigating impacts of high aircraft noise levels (see Volume III).

14. Now there are only 2 types of AICUZ studies, the full complete AICUZ study (original or updated) and the page insert amendment.

2. AICUZ OVERVIEW

2.1 Introduction

The main purpose of this volume is to provide information and guidance for completing the six phases or steps of AICUZ preparation and use. It also summarizes the major aspects of the Air Force's Air Installation Compatible Use Zone (AICUZ) program. This information should provide the reader with a good introduction to the AICUZ program and some of the basic concepts which underlie it. Additional information on the AICUZ program can be found in the following sources: Appendix A of Volume III of this document, AFR 19-9 (Chapter 3), AFR 86-14, AFM 19-10, DODI 4165.57, and the IICEP Handbook (Chapter 4). This document replaces the 1984 AICUZ Handbook.

The Air Installation Compatible Use Zone program (AICUZ) is a Department of Defense (DOD) program to promote compatible land use around military airfields. The military services maintain an AICUZ program for protecting the operational integrity of their airfields. AICUZ is a planning program not a land acquisition or land management program. The purpose of AICUZ is twofold: 1) to prevent incompatible development thus promoting public health and safety in areas of high noise and accident potential through the local adoption of compatible land use controls. The program involves assistance to local, area wide, state, and federal officials in protecting and promoting the public health, safety, and welfare, and 2) to protect the operational capability of the air installation from the effects of incompatible land use.

AICUZ was developed in response to growing incompatible urban development (encroachment) around military airfields. Most Air Force installations were built in the late 1940's and early 1950's in locations 10-15 miles from urban population centers. Since then, several factors have contributed to urban growth out toward the boundaries of many of our installations. Problems result when complaints over the effects of aircraft operations (e.g. noise, low overflight, etc), cause operational changes which negatively impact the flying mission. Encroachment has been a major contributor to the cessation of the flying mission at installations such as Lowry AFB in Colorado, Chanute AFB in Illinois, and Laredo AFB in Texas.

As land becomes more scarce due to population expansion, it is only natural that communities become more interested in the orderly development of the remaining available land. As part of this overall development plan, adequate provisions should be made to protect the Air Force facilities which are an integral part of the community's physical and economic assets.

Most bases in the Air Force inventory were established in relatively remote areas during World War II, before the time of rapid urban growth and development which followed after the war. The problem of encroachment was simply not foreseen in many of these locations. Even if it had been, it is doubtful that funding would have been available to purchase all the lands necessary to prevent encroachment. Furthermore, modern aircraft are much faster and noisier than their World War II counterparts.

In many states, enabling legislation for controlling land use within airport environs is inadequate or non-existent. The Air Force has been successful in encouraging the adoption of enabling legislation for planning around airfields in Arizona, Texas, and Alabama. Other states such as California have adopted legislation after recognizing the need to protect all airfields from encroachment. The Air Force encourages the adoption of state enabling legislation for this purpose, and will cooperate with the appropriate authorities regarding its implementation.

2.2 Program Objectives

The AICUZ program objectives are to: 1) to prevent incompatible development thus promoting public health and safety in areas of high noise and accident potential through the local adoption of compatible land use controls. The program involves assistance to local, area wide, state, and federal officials in protecting and promoting the public health, safety, and welfare, and 2) to protect the operational capability of the air installation from the effects of incompatible land use.

The AICUZ study must be consistent with current land use planning principles and procedures as well as current techniques in noise assessment methodology. The AICUZ study must adequately describe current air operations and procedures, and provide recommendations for compatible land use development based on nationally recognized standards. In some cases, projected air operations may be included in AICUZ if unclassified information on future operations is available and accurate. Also, the inclusion of projected air operations in AICUZ must not involve the premature release of new information to be released through the Environmental Impact Analysis Process (EIAP). If the use of projected air operations information in AICUZ is anticipated, obtain prior clearance from HQ/USAF. The AICUZ must be adapted to state law, enabling legislation, and local economic and political conditions. The AICUZ is not an end in itself but rather one of many land use determinants used by local planners and decision makers. The AICUZ plan must not be arbitrary, but rather reflect the local situation, and have a factual and rational basis.

Air Force AICUZ program policy is to promote land use compatibility between air installations and neighboring civilian communities through participation in local, regional, state and federal land use planning control and coordination processes. Air Force commanders at major commands and installations:

(a) Establish and maintain active AICUZ programs.

(b) Establish a multifunctional AICUZ team which collects and maintains current and accurate AICUZ data.

(c) Prepare and publicly release AICUZ studies and amendments.

(d) Formally evaluate and assess all aircraft operational or maintenance changes through the Environmental Impact Analysis Process in accordance with the procedures of AFRs 19-2, 55-2 and 55-48 and AFM 19-10 prior to implementing proposed changes.

(e) Take all reasonable, economical and practical measures to reduce and/or control aircraft noise including the siting of engine test and runup facilities in remote or lesser populated areas, the use of noise suppression equipment and the modification of operational procedures in accordance with AFR 55-34.

(f) Use the AICUZ noise analysis as an assessment tool in the Environmental Impact Analysis Process for operational or maintenance changes, mission changes and mission beddowns (AFRs 19-2, 55-2, 55-34 and 55-48 and AFM 19-10).

(g) Take formal positions in accordance with the published AICUZ study/amendment on public and private proposals (plans, programs, policies, etc.) affecting land use within the AICUZ area.

(h) Keep all appropriate governmental bodies and citizens fully informed of AICUZ guidelines, recommendations and changes in accordance with specified procedures and schedules for the release of such information.

(i) Ensure that appropriate Air Force agencies are promptly made aware of potential AICUZ land use conflicts and that such information is conveyed to local planning and zoning authorities in a timely manner.

(j) Take an active role in promoting and encouraging local community acceptance and adoption of AICUZ land-use recommendations.

2.3 Regulatory Basis of the AICUZ Program

There are several documents that provide the regulatory basis of the AICUZ program.

1. DOD Instruction 4165.57 establishes the AICUZ program and requires the military departments to develop, implement, and maintain a program to investigate and study all air installations (in necessary order of priority) to develop an AICUZ program for each installation with flying operations. AICUZ studies containing an analysis of land use compatibility problems and potential solutions must be developed and updated as necessary. This DODI also

(a) sets forth Department of Defense policy on achieving compatible use of public and private lands in the vicinity of military airfields,

(b) defines (a) required restrictions on the uses and heights of natural and man-made objects in the vicinity of air installations to provide for safety of flight and to assure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and (b) desirable restrictions on land use to ensure its compatibility with characteristics, including noise, of air installations operations, and

(c) describes the procedures by which Air Installation Compatible Use Zones (AICUZ) may be defined, and

(d) provides policy on the extent of Government interest in real property within these zones which may be retained or acquired to protect the operational capability of active military airfields (subject in each case to the availability of required authorization and appropriations).

2. The General Services Administration (GSA) Federal Management Circular (FMC) 75-2 entitled "Compatible Land Uses at Federal Airfields" requires federal agencies that operate airfields to work with local, regional, state, and other federal officials on compatible land-use planning. It requires other federal agencies to ensure their programs serve and foster compatible land use according to plans (such as AICUZ) developed by the federal agency operating an airfield. It requires HUD, VA, etc. to implement the AICUZ program as they are able under their mandate.

3. AFR 19-9, Chapter 3, "Air Installation Compatible Use Zone (AICUZ)." AFR 19-9 is entitled "Interagency and Intergovernmental Coordination of Land, Facility and Environmental Plans, Programs, and Projects." Chapter 3 of this document sets forth the requirements of the AICUZ program and essentially summarizes the key elements of Volume I of this Handbook. Topics covered include regulatory basis, program objectives, land use compatibility policy, the AICUZ study and updating, joint-use installations, and program requirements and responsibilities. The Base Civil Engineer is office of primary responsibility (OPR) for this regulation.

4. AFR 86-14, "Airfield and Heliport Planning Criteria." This publication provides standardized criteria for all Department of Defense Service components for planning and developing the layout of runways, taxiways, aprons, and related facilities for airfields and heliports. It provides criteria for establishing planes and surfaces of navigational airspace surrounding these airfields and heliports for the purpose of controlling potential obstructions to aircraft operations. The Base Civil Engineer is OPR for this regulation.

5. AFR 55-34, "Reducing Flight Disturbances." This document discusses flight disturbances that create impacts on land and people. It identifies noise-sensitive areas for avoidance and requires installations to develop and maintain an active public information program on airfield and aircraft operations, exercises, and related noise abatement/and airspace restrictions. This regulation sets forth the AICUZ responsibilities of the flying operations organizations at Air Force bases.

2.4 Historical Development/Evolution of the AICUZ Program and its Relationship with the Civilian Sector

"As the public's sensitivity to aircraft noise continues to increase, so does their scrutiny of our noise and environmental programs. It is imperative that we manage our programs and activities in a manner that can effectively respond to the questions and challenges put before us." This quotation is from a speech given by Mr. Gary D. Vest, Deputy Assistant Secretary of the Air Force for Environment, Safety and Occupational Health at the Airport Noise and Land Use Planning Course at Georgia Tech, January 25, 1988.

The military services, particularly the Air Force have been advocates of noise planning for a long time. Many aspects of the noise program presently used for civilian airports have their roots in the Air Force's experience. As early as 1957, the Air Force began establishing procedures for estimating noise exposure and gauging community reaction to aircraft operations. This work was published as a noise guide for base commanders. By 1964, the Air Force was working on the relationship between land use planning and aircraft noise. Even at that early time, the Air Force recognized the need to address noise concerns from a land use planning perspective. The question arises: "Why would the military concern itself with noise impacts, given its defense mission, even before legislation and public awareness required the services to address this issue?" The answer lies in understanding the threat incompatible development poses to the flying mission at an installation.

The late 1960's and early 1970's were a watershed period because the environmental movement was just beginning and there was an emphasis on incorporating environmental concerns into the planning process. During this time, the environmental planning function for the Air Force began as a small task force within Headquarters. Gaining their confidence and commitment was important in getting the program started. A lot of new ground was being plowed in the late 1960's and early 1970's. Notable events included Air Force research on sonic boom exposure in the 1960's, FAA's civilian aircraft certification in 1969, the National Environmental Policy Act in 1970, and the Noise Control Act in 1972. These efforts only served to increase the awareness of the military on noise planning issues and to provide the basis for institutionalizing its programs.

In late 1970, the Air Force was working on the "Greenbelt Concept" which was designed to provide a protective buffer between the air installation and the community at large. This zone was based on a number of inputs such as noise footprint, flight patterns, and locations of past aircraft accidents. The idea was to purchase private properties within the zone and thereby provide a buffer around the base. The primary reason this was never implemented, as one might guess, was the overwhelming cost to gain property interest in these impacted areas.

2.4.1 Noise -- The First Pillar of AICUZ

The year 1973 marked the implementation of the AICUZ program as it is known in the Air Force. The Air Force adopted the NOISEMAP computer program to describe noise impacts created by aircraft operations. NOISEMAP is one of two EPA approved programs, the other being

the Integrated Noise Model (INM) which is used by the FAA for civilian airports. The Air Force continues to use NOISEMAP (Updated) since it more accurately defines the noise environment for the military mission, given the variables input into the program.

The next significant event in the development of the military noise program was the 1974 EPA designation of the noise descriptor "DNL", or day-night average sound level. This occured after a significant contribution from the Air Force which had been using other noise descriptors such as the Composite Noise Rating (CNR) and the Noise Exposure Forecast (NEF). DNL refers to the average sound level exposure, measured in decibels, over a 24-hour period. A 10 decibel penalty is added to sound levels for operations occurring during the hours of 10 PM to 7 AM. This penalty is applied because of the increased annoyance created by noise events which occur at night. DNL is a quantity that can be measured directly at a specific location. In this year 1974, the Administrator of the EPA, under his authority in the Noise Control Act of 1972, recommended to all Federal agencies that they adopt the Day-Night Average Sound Level (DNL) noise descriptor system (otherwise known as the mathematical symbol "L_{dn}"). Within a month, the Air Force and EPA agreed upon an implementation procedure by which all future AICUZ studies would be prepared in DNL.

It is important to note that DNL contours derived from the use of noise prediction models do not necessarily reflect exact noise levels at specific locations. The primary factor in the DNL concept is the percent of those individuals highly annoyed by noise exposure. DNL enables the accurate description of the noise environment in relation to how and when military aircraft fly. DNL represents an energy average of noise over a 24-hour period with a nighttime penalty added. The development of DNL was an important milestone in the AICUZ program in that it provided a single descriptor for noise level. The reduced confusion increased credibility and allowed for comparative research efforts on the effects of noise. More details on the DNL concept are presented in Appendix C of Volume III.

2.4.2 Height Restrictions -- The Second Pillar of AICUZ

Another aspect of the AICUZ program which is paralleled in the civilian community is the height obstruction criteria, where U.S. standard instrument approach and departure procedures (Joint USAF, USN, USA, FAA Criteria Handbook -- AFM 55-9) prescribe flight path area and vertical clearances from terrain and manmade obstructions which must be maintained at airports where flight operations in instrument weather conditions are conducted. The height restrictions limit the height of buildings and other structures in the vicinity of the airfield in order to ensure the safety of pilots and aircraft as well as individuals and facilities on the ground. Appendix D in Volume III provides more details on the height restriction criteria.

2.4.3 Accident Potential -- The Third Pillar of AICUZ

One aspect of the AICUZ program where military application differs from civilian airfields is the designation of accident potential zones. An analysis of aircraft accidents within 10 nautical miles of an airfield for the period of 1968 - 1980 led to defining areas of accident potential known as the clear zone (CZ), Accident Potential Zone I (APZ I), and Accident Potential Zone II (APZ II). The important thing to remember here is that the majority of these accidents (56%) occurred either on or adjacent to the airfield, or in the CZ, while only about 8% occurred in APZ I and 5% in APZ II. It was concluded that the CZ warranted special attention because the high incidence of accident potential severely limited acceptable land uses. The Air Force has spent about $65 million to acquire real property interests within the CZs. The percentages of accidents within the two APZs (APZ I is 3000 ft. x 5000 ft. and APZ II is 3000 ft. x 7000 ft.) were such that while purchase was not necessary, some type of land use control is appropriate. The Air Force's recommendation was to limit the number of people exposed through selective land use planning. Appendix B in Volume III provides more detail on accident potential.

2.4.4 Land Use Compatibility Guidelines Based on Noise and Accident Potential

The Department of Defense developed guidelines for achieving compatible land use in areas of accident potential and high noise (see Table 2.1). These guidelines are used by the Department of Housing and Urban Development and the Veterans Administration for making decisions on applications for mortgage loan assistance.

In spite of the safety issues associated with aircraft accident potential, most complaints concerning airfields are related to noise generated by aircraft operations. At low levels, noise in the area around an airport is normally tolerated with few complaints; however, as exposure to noise increases, it begins to interfere with sleep, conversation, school, business, and recreational activities. At this point, complaints normally start to increase, along with demands for noise reduction. In most cases, noise reduction is accomplished by restricting airfield or aircraft operations.

One of the most important elements of land use planning for the area around airports is the selection of land use compatibility guidelines for noise. The purpose of these guidelines is to encourage the best use of land, consistent with community planning objectives, while preventing exposure of the public to excessive noise levels.

There is adequate data to indicate that noise can be a disturbing influence on people, particularly those exposed to higher sound levels. Various studies and guidelines indicate residential land uses are particularly sensitive to noise.

The AICUZ land use guidelines for noise were originally based on an adaptation of the Bolt, Beranek and Newman (BBN) study entitled, "Noise Exposure Forecasts: Evolution, Extensions and Land Use Interpretations." The BBN standards were further refined using the results of other airport land use studies and Air Force analyses. The services initiated land use compatibility guidance efforts by publishing the tri-service manual on "Planning in the Noise Environment" (AFM 19-10) in 1978. Among other items, this document provides noise level reduction (NLR) guidelines for siting and constructing facilities. The Air Force uses this as the basis for recommendations to local communities for their use in developing building codes and other local construction standards. See Appendix E in Volume III for a reference to updated NLR procedures.

Since that time, the Federal Interagency Committee on Urban Noise published its "Guidelines for Considering Noise in Land Use Planning and Control" in June, 1980. This committee was made up of representatives from five federal departments to include Transportation, Defense, the Environmental Protection Agency, Veterans Administration, and Housing and Urban Development. A consensus was reached on the guidelines for considering noise in land use planning. These guidelines were, to a large extent, based on the guidelines used in the Air Force AICUZ Program. Land-use guideline noise zone intervals publicly released by the Air Force are DNL 65-70, 70-75, 75-80, and "above 80". In cooperation with the State of California, a noise zone interval of DNL 60-65 is added to AICUZ studies for bases located in California. The State of California uses the Community Noise Equivalent Level (CNEL) methodology, and CNEL contours usually appear along with DNL contours for bases in the State of California.

Perhaps the most important element common to both the military and civilian airport noise program was the emphasis placed on working with local government and community planning officials to implement the land use controls necessary to protect the public health, safety and welfare. The Air Force realized that there was not enough money available, nor was there the need to purchase all impacted lands. Sensible land use planning was the answer. Therefore, the Air Force worked with local communities to encourage their adoption of compatible land use controls through local planning and zoning actions. Naturally, the reaction to AICUZ differed from

Table 2.1 Air Force AICUZ Land Use Compatibility with respect to Noise and Accident Potential

LAND USE		ACCIDENT POTENTIAL ZONES			NOISE ZONES			
SLUCM NO.	NAME	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]
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]

LEGEND

SLUCM -Standard Land Use Coding Manual
Y(Yes) - Land use and related structures compatible without restriction
N(No) - Land use and related structures are not compatible and should be prohibited
NLR (Noise Level Reduction) - Noise level reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure (see Appendix E in Volume III for additional NLR information)
Y^X (Yes with Restrictions) - Land use and related structures generally compatible; see notes 1 through 21
Nx (No with exceptions) - See notes 1 through 21
A, B, or C - Land use and related structures generally compatible; measures to achieve NLR for 66-70, 71-75, or 76-80 DNL/CNEL must be incorporated into design and construction of structure.
A*, B*, or 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
Ax, Bx - NLR: See footnotes

Table 2.1 (continued)

LAND USE		ACCIDENT POTENTIAL ZONES			NOISE ZONES			
SLUCM NO	NAME	CLEAR ZONE	APZ I	APZ II	65-70	70-75	75-80	80+
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				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]
46	Automobile parking	N[3]	Y[4]	Y	Y	Y[12]	Y[13]	Y[14]
47	Communication	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 communication 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

Table 2.1 (continued)

LAND USE		ACCIDENT POTENTIAL ZONES			NOISE ZONES			
SLUCM NO.	NAME	CLEAR ZONE	APZ I	APZ II	65-70	70-75	75-80	80+
55	Retail trade—automotive, marine craft, aircraft and accessories	N	Y[2]	Y[2]	Y	A	B	N
56	Retails 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	A	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
65.13	Hospitals, nursing homes	N	N	N	A*	B*	N	N
65.19	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 shells, 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

Table 2.1 (continued)

LAND USE		ACCIDENT POTENTIAL ZONES			NOISE ZONES			
SLUCM NO.	NAME	CLEAR ZONE	APZ I	APZ II	65-70	70-75	75-80	80+
79	Other cultural, entertainment and recreation	N	Y[9]	Y[9]	Y*	Y*	N	N
80	Resource production and extraction							
81	Agriculture (except livestock)	Y	Y	Y	Y[18]	Y[19]	Y[20]	Y[20,21]
81.5	Livestock farming and animal							
81.7	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 resource production and extraction	N	Y[5]	Y	Y	Y	Y	Y

*The designation of these uses as "compatible" in this zone reflects individual Federal agencies, 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.

Table 2.1 (continued)

Notes

1. Suggested maximum density 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 AFR 19-9 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, air pollution.

6. Low-intensity office uses only. Meeting places, auditoriums, etc., not recommended.

7. Excludes chapels.

Table 2.1 (notes continued)

8. Facilities must be low intensity.

9. Clubhouse not recommended.

10. Small areas for people gathering places are not recommended.

11.

a. Although local conditions may require residential use, it is discouraged in DNL/CNEL 65-70 and strongly discouraged in DNL/CNEL 70-75. The absence of viable alternative development options should be determined and an evaluation indicating that a demonstrated community need for residential use would not be met if development were prohibited in these zones should be conducted prior to approvals.

b. Where the community determines that residential uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) for DNL/CNEL 66-70 and DNL/CNEL 71-75 should be incorporated into building codes and be considered in individual approvals. See Appendix E of Volume III for a reference to updated NLR procedures.

c. NLR criteria will not eliminate outdoor noise problems. However, building location and site planning, design and use of berms and barriers can help mitigate outdoor exposure particularly from level sources. Measures that reduce noise at a site should be used whenever practical in preference to measures which only protect interior spaces.

12. Measures to achieve the NLR for 66-70 DNL/CNEL 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 NLR for 71-75 DNL/CNEL 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 NLR for 76-80 DNL/CNEL 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, use is compatible

16. No buildings.

17. Land use compatible provided special sound reinforcement systems are installed.

18. Residential buildings require the NLR for 66-70 DNL/CNEL.

19. Residential buildings require the NLR for 71-75 DNL/CNEL.

20. Residential buildings not permitted.

21. Land use not recommended; built if community decides use is necessary; hearing protection devices should be worn by personnel.

community to community. This was a program that affected real property and introduced a concept new to many communities. It was apparent from the start that the success of a land use compatibility program centered on the voluntary adoption of land use controls by local governments. The need to protect the community, the flying activity, and the economic viability of the installation has to be recognized by a community before there will be movement toward successful implementation of controls. Where these controls were absent, incompatible development occurred in many locations. For the Air Force, bases such as Lowry AFB in Colorado and Chanute AFB in Illinois and Laredo AFB in Texas all experienced encroachment to a point that it contributed to either the cessation or reduction of their flying missions. At other locations, encroachment has been, and continues to be, a factor in the decision to base future flying activities. These considerations also have an impact on a community's economic development.

Table 2.1 presents the official Air Force recommendations on land use compatibility relating to noise and accident potential. Appendix F in Volume III presents guidance for concentrations of persons per acre. The AICUZ recommends local regulation of future growth. The AICUZ does not affect existing incompatible land uses. However, local zoning ordinances should allow no incompatible land use to be changed to another incompatible land use. Local zoning ordinances should also contain the following provisions or equivalent:

> No existing incompatible land use, building, or structure should be expanded, except expansions of single family detached residences, and expansions of schools that would increase the capacity by less than one-third. If any compatible land use, building, or structure is damaged and the damage exceeds 50% of the value of the use, building, or structure, any subsequent land use should be in accordance with these guidelines, except single family detached residences, and schools. Appendix B in Volume III presents information on the accident statistics supporting the designation of the clear zone and accident potential zones.

2.4.5 Noise Reduction Efforts

Military and civilian noise planning efforts have benefited from mutual interest and efforts. One area of mutual interest is research and development. Developing quieter engines for the KC-135, for example, came about through commercial efforts to reduce fuel costs and noise impacts of the Boeing 707. Even today, the specifications on the new C-17 call for quieter engines which are commercially developed. Other efforts have gone into developing engine test facilities, or hush houses, where engines can be run at full power with dramatically limited effects to the surrounding environment. Noise abatement procedures are also practiced in Air Force flight schedules and aircraft operating procedures. Modifications to flight tracks, imposition of quiet hours and use of preferential runways are all techniques used at both military and civilian airfields to reduce noise. Of course, there are unique requirements to consider when employing these techniques. For example, certain military missions require nighttime flying operations to accomplish training and special exercises. Noise abatement procedures are modifications which have to be made to make an undesirable situation tolerable. If adequate consideration is given to incorporating noise and accident potential into the planning processes, the need to adopt these procedures is often reduced. At most bases, Air Force noise reduction efforts have been used to their maximum degree, and land use planning and controls are the answer for further protection of the community.

2.4.6 Conclusion

In summary, the differences between noise concerns for the military and the civilian sector continue to become less and less. The exchange of technical noise information and assistance is needed to address and solve similar problems. The need for both the military and civilian sectors to work together will only increase in the future. Requests from the civilian side to jointly use military airfields are increasing in number throughout the country. The Air Force presently has

several joint use facilities such as Westover AFB, Massachusetts, and Charleston AFB, South Carolina. AF Plant 42 in California and and Scott AFB in Illinois are now being planned for joint use. Air National Guard and Air Force Reserve units operate from several major airports in the country. There are also large-scale joint service operations that include activities at civilian airports. Therefore, both civilian and military airfield operators need to understand each other's mission requirements and their implications with regard to noise and land use planning.

The overall goal of the Air Force continues to be reducing people's exposure to high levels of aircraft noise and accident potential through compatible land use controls adopted by the local communities. To this end, the Air Force developed a new program to assist local communities to implement AICUZ recommendations. This program is called the Joint Land Use Study (JLUS) program and it is now operated out of the Office of the Secretary of Defense/Office of Economic Adjustment. JLUS is described in Chapter 3, starting on page 3-26. Meanwhile, the Air Force must continue to provide the public with information which will assist them in making prudent land use decisions, and mutually work together to resolve the problems of growth and encroachment.

3. The Six AICUZ Phases

3.1 Introduction

This chapter describes in detail the various phases or steps for preparation of an AICUZ study. The six phases of doing an AICUZ study are:

Phase I: Data Collection and Analysis

Phase II: Data Review and Validation

Phase III: AICUZ Map Preparation

Phase IV: AICUZ study/Amendment Preparation

Phase V: AICUZ study or Amendment Public Release

Phase VI: AICUZ Implementation and Maintenance

3.2 Phase I - Data Collection and Analysis

Nearly all Air Force bases have completed and released their initial AICUZ studies (some bases remain exempt because of no or minimal flying operations). Consequently, duties of the typical Base Planner or base AICUZ Program Manager center around preparing and releasing updated AICUZ studies which reflect current base flying operations. In a sense, the 6 step AICUZ preparation process is ongoing or circular and never really ends. The processes of AICUZ data revalidation (assuring the latest AICUZ data are still valid) and/or new data collection start up every two years or sooner if a mission, aircraft or other change is anticipated (i.e. through the EIAP process). The data revalidation process is explained in Volume II of this AICUZ Handbook as are all the steps involved in the AICUZ data collection process.

It is important to note that, while the Base Community Planner is primarily responsible for the AICUZ, this individual requires the full support and participation from other base functions including the Base Commander, Base Legal Office, Public Affairs, Base Operations, the flying wings, Air Traffic Control, Aircraft Maintenance, Safety and other appropriate functional areas. This support must be present for the data collection and analysis phase, and throughout the entire AICUZ process. These shared responsibilities are spelled out in this Handbook as well as in AFR 19-9 Chapter 3, AFR 55-34 and other regulations and manuals.

3.2.1 Procedure for Phase I

3.2.1.1 Tasks for the Land Use Planner/Base Civil Engineer (DE) -- Update of Noise Contours

The installation planner is the coordinator for obtaining flight operation data for the preparation of the noise contours. Volume II of this Handbook describes in detail how this is done and the responsibilities of the appropriate Air Force personnel both at the base level and at higher headquarters.

The installation planner should ensure that the flight operational data obtained for the preparation of the noise contours is a reasonable and accurate description of the flight operations at the airfield. The data should be recorded in the proper format for computer input. The data

collection process covers both military and civilian aircraft. The information needed for military aircraft includes such things as the types and number of aircraft, all flight tracks, flight operations, flight profiles, and ground runups. The information required for civilian aircraft is somewhat different because data on the flight tracks and flight operations are collected in terms of operations and tracks only. Volume II of this Handbook includes step-by-step procedures for collecting and formatting data, including both military and civilian aircraft. Appendix A of Volume II contains the blank data forms to be used to compile the data in accordance with the instructions in this handbook.

Volume II provides detailed guidance concerning the personnel to contact. Throughout the data collection process, numerous individuals must be contacted for information. The Chief, Air Traffic Control Operations (CATCO), flying organizations, base operations, airline schedules, and company logs are among the sources of information on operations of the assigned and transient aircraft. The chief of maintenance has information on ground runups.

The Base Deputy Commander for Operations coordinates all AICUZ matters with the Air Force representative to the Federal Aviation Administration Regional Office, when requested by the major command.

The installation planner reviews AICUZ operational and maintenance data at least once every 24 months or as part of an EIAP evaluation (per AFRs 19-2, 55-2, 55-34, and 55-48) to determine the need for an update should the noise exposure for current operations be changed by 2 dB or more in any noise sensitive area (discussed further below). By 1 July, each MAJCOM must send HQ/USAF and HQ AFCESA/DMPO an AICUZ status update and review schedule for the next 24 months for each installation having an AICUZ requirement. According to the MAJCOM schedule, each Base Civil Engineer (following EPC coordination) must send the MAJCOM DCS/Engineering and Services either updated operational and maintenance data or a statement that the data used for the current published AICUZ study or amendment is still valid. The MAJCOM DCS/Engineering and Services must send HQ AFCESA/DMPO updated operational and maintenance data or notify HQ/USAF that current data is still valid. Completing the biennial AICUZ Status Survey located in Appendix B of this Volume, satisfies HQ/USAF notification requirements. This survey is called by HQ/USAF through the MAJCOMs. Volume II of this document contains general guidance for assessing operational and maintenance data, and for further evaluation and possible rerun of Phase III AICUZ maps.

3.2.2 The Noise Screening Method

The previous edition of this Handbook and Section 3-1.1.2 of AFM 19-10 describe the use of a manual screening test to determine if a significant change in noise exposure at a given location has occurred. According to previous Air Force policy, a change of more than 1 dB was the threshold for AICUZ updating actions. The current recommendation is a noise exposure change of 2 dB or more in any noise sensitive or controversial area (from the last publicly released noise exposure map). This new criteria provides more stability for local land use planning and control and addresses the issue of cumulative small noise increases (not subject to EIAP) over a period of time.

The manual screening method described in AFM 19-10 is no longer needed. NOISEMAP 6.0 is now fully capable of determining if the dB threshold has been exceeded at selected critical locations. Appropriate operations data changes should be prepared by Base personnel in accordance with Volume II of this Handbook and submitted to HQ AFCESA/DMPO, on an annual basis if possible, but at least every two years or as required by EIAP. This information should be forwarded to AFCESA/DMPO for NOISEMAP processing to determine if the 2 dB threshold has been exceeded. In this fashion, considerable time and effort can be saved and more accurate estimates will result from the computer generated noise predictions.

3.2.3 Land Use Issues

The installation planner manages the biennial data updating and analysis. He/she consolidates and sends to the major command updated operations and maintenance data. The planner updates the AICUZ file and historical documentation. It is policy that all AICUZ data and information are retained for long periods because of litigation requirements. AICUZ file retention requirements are described in AFR 19-9, Environmental Planning, Paragraph 3-8 B [2] [C] and AFR 12-50, Records Management, Table 19-2.

The planner also maintains current information on the following descriptions/analyses:

(1) Encroachment in the AICUZ environments.

(2) Existing land use in the AICUZ environments.

(3) Land ownership and value in the AICUZ environments.

(4) Future land use in the AICUZ environments.

(5) Anticipated encroachment evaluation in the AICUZ environments.

These descriptions/analyses are based on an evaluation of all projects affecting land use within the vicinity involving the AICUZ. They contain existing land use, existing and proposed zoning, and planned or anticipated land use plans which identify existing and anticipated compatible land uses. An evaluation should be made of the encroachment factors which affect the existing mission (encroachment could be on airspace or caused by urbanization of the area around the base).

3.2.3.1 Existing Land Use

The installation planner should update the existing land use and existing zoning maps that were used in the previously published AICUZ study/amendment. A sample zoning map appears in Volume III. This is typically done on a 1 inch = 8333.33 ft.map (1:100,000 scale). The planner should identify existing land use maps and reports. (Existing land use is defined as the pattern and type of actual development). In addition, existing zoning information (maps and ordinances) should be obtained. Zoning may not be the same as actual development. It represents what is currently permitted to be developed. It is important to obtain the full zoning ordinance both for evaluation and reference.

The planner should also obtain copies of the local ordinances, subdivision regulations, building codes, Planned Unit Developed Ordinances, etc. Furthermore, background reports or any documents which describe existing conditions within the community, which seem relevant to the broad purposes of AICUZ, such as planning background studies, school surveys, economic reports, etc. should be obtained. In addition, taking a drive around the area (visual survey) should help to orient the planner and identify new activity that may not be in current maps or plans.

Additional maps and reports that may be useful involve (a) soils, (b) topography, (c) flood plain maps, (d) hydrology, (e) surficial geology, (f) physiographic features, (g) other ecological data, and (h) census or demographic data.

For mapping purposes and to facilitate analysis for the AICUZ, the suggested land-use categories appropriate for an AICUZ document are:

(a) Agricultural Uses

This should include only those lands where actual farming operations exist or where the lot sizes, etc., in the zoning ordinance indicate a strong orientation towards farming. Many areas will allow single family housing in agricultural zones. Where the minimum lot size is as low as 15,000 square feet (which is comparable to many suburban areas), these areas are much more likely to be residential than agricultural.

(b) Low Density Residential

In rural areas, these residential areas may be as low as 1-2 dwelling units per acre; in suburban-type areas there may be 4 dwelling units per acre. This definition may be modified according to prevalent local conditions, but the planner should indicate the coding on the map or in the study.

(c) Medium Density Residential

This residential area may range from 5-20 dwelling units per acre, depending on local conditions (indicate the range used).

(d) High Density Residential

This residential area may range from 10 or more dwelling units per area depending on relative local conditions.

(e) Commercial

Many zoning and land use maps will have several types of commercial districts ranging from neighborhood commercial to shopping center districts. For the purposes of the AICUZ evaluation, these can be lumped together, although it is helpful to indicate a major shopping mall by a star or similar symbol.

(f) Industrial

The various types of districts (light, heavy, industrial park, etc.) can be combined.

(g) Open space

This area should only include designated parks, recreation areas, restricted floodplain districts, etc.

(h) Public/Institutional uses

These uses include government centers, schools, hospitals, etc.

(i) Vacant

This category is self explanatory.

In addition to the above designations of land uses, important complexes within the AICUZ should be identified, such as a major hospital, school complex or a coliseum, etc.

Once the above maps have been obtained, an updated narrative summary of existing land use and zoning should be prepared for the AICUZ area. This should be done in coordination with local regulations. This discussion should include, but not be limited to, the following:

(a) The location of major developments, cities, or towns with respect to the base.

(b) A review of the existing land uses by category (i.e. residential, commercial, industrial, public, semi-public, open space, agricultural) and a general description of their location within the AICUZ impact area (is all of the residential land adjacent to the base, etc?).

(c) A review of the zoning map and zoning changes. This review should compare the amount of land zoned for certain land uses versus the actual amount utilized. In addition, significant zoning changes should be discussed. One of the primary purposes for evaluating existing zoning is to determine the attitude towards development regulation at the local level. The degree of flexibility in regulations, the orientation towards performance standards over specification, and the degree of public involvement in the development process will all have a significant impact on the ways in which the resolution of noise conflicts can be accomplished.

When reviewing local ordinances, some of the items to look for are:

(i) Planned Unit Development Ordinances (may also be known as Planned Residential Development, Planned Commercial Districts, or cluster zoning.)

Basically, these are ordinances which look at a development as being a single entity rather than a collection of individual lots. In contrast to standard zoning there are very few requirements for minimum lot dimensions, rear yard size minimums, etc. Requirements are geared more towards the quality of the spaces, how usable yards are rather than how big, and the dedication of open spaces and facilities for community use.

(ii) Site Plan Review Process

In the zoning ordinance, where certain uses are questionable or where the community wishes to exercise greater control over certain uses, a process is established by which each development proposal is looked at quite carefully by the planning staff on the basis of an expanded set of criteria. Rather than set forth a "recipe which is supposed to meet all situations," the Planning Board treats each development as a unique project to be evaluated individually.

(iii) Bonus and Incentives Plans

These are used when a community is trying to raise the quality of development in its area and sets up something of a bartering system with the developers. Density regulations (permitted number of dwelling units per acre) for instance may be relaxed if the developer provides playgrounds.

(iv) Use of performance standards rather than specifications

This can evidence itself in building codes as well as other regulatory ordinances. It would mean for instance that instead of requiring that all interior water pipes be copper and two inches in diameter, the requirement would be that all interior water pipes be capable of handling a specific water pressure, whether they be copper, two inches in diameter, or plastic and 1 1/2 inches in diameter.

(v) Historical trends, of items reviewed above, should be discussed.

(vi) Summary tables should be included.

3.2.3.2 Future Land Use

A map should be prepared updating the future land use map that was used in the previously published AICUZ study/amendment. (see sample in Volume III) This is done on a 1 inch =

8333.33 ft (1:100,000) scale. The main source for most local data is the planning commission or zoning commission. Specialized data should be available from appropriate agencies, i.e., school board, chamber of commerce, water district, etc. At the regional level, Councils of Government or regional planning commissions should be able to provide necessary data. Specialized data for state plans should be obtained from the appropriate state agency. Additional data may be obtained from the following:

(a) Comprehensive plans (local)

Maps and reports are available. The planner should obtain maps which are of sufficient detail and scale to provide useful data. If area-wide maps which are sufficiently detailed are not available, determine whether sub-area plans have been or are being developed.

(b) Comprehensive plans (regional)

Maps and reports are available here as well. In many cases, comprehensive plans are prepared by a multi-jurisdictional regional body such as a council of governments or a regional planning commission. Alternatively, the regional body may prepare the area-wide plans and the local jurisdiction may prepare the sub-area plans.

(c) Other plans (local)

Maps and documents are available. Examples include housing, population, economic base, income and employment studies, water/sewer/utility plans, transportation plans, school and other capital improvement programs, etc. These plans will cover the various elements which comprise the infrastructure necessary for the future community. Because they often contain short-term programs as well as long-range plans, these plans should reflect growth patterns clearly.

(d) Regional/state plans

Maps and documents can be obtained. There are elements of any community which are partially controlled or impacted by the actions of state or regional agencies. The most common example is the highway system, but parks, coastal zone management, water, etc. also have significant impacts. Therefore, the plans for these state or regional agencies, as related to the AICUZ area, should be obtained.

Now that inputs to the map have been obtained, land use categorization for that map can be determined based on the land use categories described above. The updated land-use map can then be completed.

The next step is to create an adjacent area future land use analysis. The planner should now update the previous version of the Adjacent Area Future Land Use Analysis. The analysis should include a summary of the future land use and development plans for the jurisdictions surrounding the base. Local jurisdictions that should be surveyed are: municipalities, counties or parishes, regional councils, EO12372 State Single Point of Contact (SPOC), special districts (schools, sewer, water, fire, flood control, and soil conservation) and utilities companies. State agencies are listed and described in the Directory of State Environmental Planning Agencies (also see Appendix A-4 of Volume II, Interim-Environmental Planning Bulletin 14). Guidance for surveying federal agency plans is found in Volume II, Interim Environmental Planning Bulletin 15. In addition, the Adjacent Area Future Land Use Analysis should discuss the following for each jurisdiction surrounding the base:

(1) An assessment of the realistic expansion of municipal services to undeveloped areas.

(2) An assessment of the geophysical characteristics such as wetlands or flood plains which may influence growth.

(3) A review of general determinants which will influence the area's growth, such as economic development, completion of proposed highways and the area's general marketability.

(4) Plans for designation of open space or recreation areas near the base.

(5) An assessment of the installation's impact on the community's rate of growth.

3.2.3.3 Land Use Compatibility Narrative Analysis

The first step in this evaluation is the preparation of a map. The planner should update the conditionally compatible and incompatible designations on the existing land use map, the existing zoning map, and the future land use map.

The second step is to prepare the Land Use Compatibility Narrative Analysis. The planner should update the previously-developed Land Use Compatibility Narrative Analysis. The AICUZ program is directed at the relationship between aircraft operations and land use. There are four main areas of analysis in airfield vicinity land use planning: the existing operations, the future operations, the existing civil community, and the future civil community. The evaluation and comparison of these four elements is essential in order to reduce noise exposure and propose usable recommendations to communities. Information on existing and future operations and base configurations is available within the Air Force. Land use information must be obtained from civilian sources. AICUZ activities must anticipate and respond to the pressures and thrusts of the civil community. This can only be accomplished by identification and comparison of both existing and future operations and existing and future land use. Using the updated existing land use, existing zoning, land ownership and value, and future land use maps, the degree and nature of existing and future incompatible and conditionally incompatible land uses should be thoroughly discussed. Subjects to be addressed are:

(1) What are the determining land use factors?

(2) What are the future land use alternatives?

(3) How can the future land use be directed or redirected?

(4) Who decides the future land use pattern?

(5) What actions have been taken by the Air Force to reduce conflicts? By the community?

(6) What can the Air Force do?

(7) What recommendations should be made to other government agencies?

3.3 Phase II - Data Review and Validation

The MAJCOM reviews the updated Phase I data package for adequacy. If after reviewing operational and maintenance data, it is determined (from AICUZ Handbook guidelines) that review and possible rerun of an AICUZ Noise Zone (NZ) map is warranted, then the data is sent to HQ AFCESA/DMPO for review and ultimate running of new noise contours.

The Air Installation Compatible Use Zone program, like any successful activity, is dependent on the quality, accuracy and completeness of its data base. Programs like AICUZ require more comprehensive treatment than others because the data may be used for plans that should eventually be translated into local law (ordinances). Phase II will provide the needed quality control.

The purpose of the AICUZ program Phase II is to establish data standards and to provide guidance to major command and base personnel for the review, refinement, analysis and codification of Phase I results. In Phase I, a wide range of data is identified for collection by base personnel. Base submissions will differ from installation to installation. By reviewing and comparing the different responses at major commands, it is possible to identify deficiencies and errors which can then be corrected by base personnel. In some portions of the program, particularly the Land Use Compatibility Narrative Analysis, a significant degree of judgment must be exercised. A submission for one base may be adequate for that installation, while the same level of effort would not be acceptable for another. The measure for such judgments is an appraisal of the local situation. In addition to determining the content and quality of Phase I, Phase II offers the opportunity to identify instances where major command assistance is required. Land use, comprehensive and environmental planning is conducted through a number of phases starting with the acquisition of data and ending with the maintenance of a continuing effort. Errors or omissions in the first phase can easily compromise subsequent phases.

Phase II is organized to correspond with Phase I. It is conducted by major command personnel initially, although installation participation is required to correct errors or add additional information. Installation level Phase II work on flight and maintenance data must be accomplished prior to Phase III while other refinements can be completed prior to Phase IV.

There are five basic parts to Phase II:

(1) Review the base submission to determine if all elements have been completed.

(2) Review the nonoperational data elements in detail (major command option).

(3) Review the flight data and maintenance data elements in detail.

(4) Correct errors and assemble deficient data (base level).

(5) Review results of item (4).

3.3.1 Review of Base Submission to Determine if All Elements have Been Submitted

This review is a simple checklist review which can be performed by administrative or clerical personnel. Figure 3.1 is provided for this purpose. It is designed to serve as the outline for a letter to the base requesting the submission of missing elements or identifying other deficiencies. Submittal of nonoperational or nonmaintenance data is at the major command option.

3.3.2 Detailed Review of Base Submission.

Each element of the submission should be reviewed and evaluated using guidance from Volume II of this Handbook and major command experience.

AICUZ data collection and analysis, spelled out in Phases I and II of the AICUZ process, has resulted in some bases not releasing initial AICUZ studies. In these cases, HQ/USAF exempted the bases from the AICUZ program. Furthermore, some bases which released AICUZ studies in the past have since received waivers from HQ/USAF, enabling these bases to suspend AICUZ activities.

Figure 3.1 AICUZ Phase II Progress Checklist

_____ AIR FORCE BASE

AICUZ Phase I has been reviewed to determine if all required tasks have been performed. A check in the "Yes" column indicates that the element has been received. A check in the "No" column indicates the element has not been received. A check in the "Other" column indicates that the element is incomplete, in error or in need of refinement. Details of additional work are on the appropriate backup sheets.

FUNCTIONAL AREA SUBMISSIONS AND TASKS	YES	NO	OTHER
1. Commander (CC)			
Establish team	_____	_____	_____
2. Base Civil Engineer (DE)			
a. Encroachment	_____	_____	_____
b. Existing land use	_____	_____	_____
c. Land ownership and value	_____	_____	_____
d. Future land use	_____	_____	_____
e. Anticipated encroachment evaluation	_____	_____	_____
3. Deputy Commander for Operations (DO)			
a. Operational data collection	_____	_____	_____
b. Operational change analysis	_____	_____	_____
4. Deputy Commander for Maintenance (LG)			
a. Maintenance data collection	_____	_____	_____
b. Noise reduction evaluation	_____	_____	_____
5. Staff Judge Advocate (JA)			
a. State land use related legislation	_____	_____	_____
b. Local Regulation	_____	_____	_____
c. Legal (court decisions)	_____	_____	_____

The basis for these exemptions and waivers is documentation that flying operations at these bases have fallen to less than 10 jet or 25 propeller aircraft operations on a runway on an average busy day, or if the AICUZ (i.e. noise and accident) boundaries do not extend beyond the installation boundaries.

Having an AICUZ exemption or waiver does not permanently end a base's AICUZ responsibilities. At least every two years (sooner if EIAP actions are involved), the base AICUZ Program Manager is required to reevaluate AICUZ data and, in conjunction with the MAJCOM and HQ/USAF, determines if the exemption/waiver is still valid or if a new AICUZ study needs to be prepared and released.

3.4 Phase III - AICUZ Maps Preparation

After updated operational and maintenance data is received and reviewed, HQ AFCESA/DMPO determines if revised AICUZ maps are to be prepared and gets MAJCOM approval to proceed. HQ AFCESA/DMPO establishes and maintains verification and validation procedures with the MAJCOMs. Completed maps are sent to the MAJCOMs, installations, and HQ/USAF. If required, HQ/USAF forwards specific guidance to the MAJCOM for conducting Phase IV and sends an information copy to HQ AFCESA/DMPO.

At the start of this phase, the major command has already reviewed and approved the operational and maintenance data that the base has provided using the methods described in Volume II of this Handbook. The major command then requests that noise contour maps be prepared by HQ AFCESA/DMPO. In reality, the base request for major command review and a copy of the AICUZ data files is often sent simultaneously to the MAJCOM and AFCESA/DMPO. During the noise contour preparation process, AFCESA/DMPO reports the "screening test" results (i.e. see Volume II) to HQ/USAF, MAJCOM and the installation. Based upon this information, these organizations decide upon continued AICUZ actions. If a new AICUZ is required and after the computerized maps are produced and verified for accuracy, AFCESA/DMPO prepares the graphics for the photography and printing steps. (Map production will be at a 1 inch = 8333.33 ft. (1:100,000)scale - the USGS standard.) The completed and verified maps are forwarded to HQ/USAF, the MAJCOM and the installation. Zoning and land use overlays must be completed by the individual installations, using extra AICUZ maps supplied by AFCESA/DMPO as base maps along with land use and zoning information obtained from local government jurisdictions.

On the average, the timetable for map production is as follows:

Computerized data, develop flight tracks/noise contours	3-4 weeks
Verification by MAJCOM and base, corrections, verification of corrections	6-8 weeks
Graphics	1 week
Map Printing	2 weeks
	13 weeks

The map printing time is 2 weeks only if prescheduled with AFCESA/DMPO. Allow at least 3 weeks for busy times at DMPO.

3.5 Phase IV - AICUZ study/Amendment Preparation

While final AICUZ maps are being prepared by AFCESA, the Base Civil Engineer initiates preparation of the AICUZ study and Implementation and Maintenance Plan (IMP). The Base Civil Engineer coordinates these documents through the Environmental Protection Commitee (EPC) They are processed according to the guidance in this Handbook and any additional specific guidance that HQ/USAF issues after Phase III is completed. These documents are sent to the MAJCOM and, in turn, to HQ/USAF for approval. The Public Affairs Office and the Legal Office assist the Base Civil Engineer in preparing the AICUZ Implementation/Maintenance Plan. Other staff offices such as comptroller, procurement, and special services assist in preparing the study or amendment.

3.5.1 The AICUZ study

Each installation with active runways prepares, publicly releases, and maintains an AICUZ study that projects, defines, and maps aircraft noise levels and accident potential areas around the installation. HQ/USAF considers exemptions where the AICUZ does not extend beyond the installation boundaries or where there are less than 10 jet- or 25 propeller-driven aircraft operations on a runway on an average busy day. All operations, including those on secondary runways, must be evaluated in these operational studies.

Typically, an AICUZ study reflects aircraft operations as currently flown at an installation. Under certain circumstances, in cooperation with local communities and with approval from higher headquarters, projected contours based upon unclassified long range plans for future flying operations, may be included as part of AICUZ studies. However, such projected contours may not be pre-released as part of an AICUZ study, if these contours represent projected flying operations to be released through the EIAP process.

Proposed actions such as major operational or maintenance modifications, mission realignments, or mission basings require review of AICUZ operational and maintenance data to determine whether there will be a significant impact on the AICUZ, necessitating AICUZ updating (see AFR 19-9 paragraphs 3-8b(1), 3-8c, and 3-8d). Operational and maintenance data for any change must be validated and fully analyzed. Alternatives that reduce noise exposure must be considered in the process.

In all cases, each proposed operational and maintenance change, individually and cumulatively, must be thoroughly evaluated for impacts before implementation. The initial evaluation must be conducted through the EIAP according to the procedures and requirements specified in AFR's 19-2, 55-2, 55-34, and 55-48; and AFM 19-10. The EIAP serves as a basic source for determining the need for updating the AICUZ study.

An AICUZ update, if warranted, is initiated at the same time as the environmental assessment (EA) or draft environmental impact statement (DEIS). An AICUZ update is publicly released within 120 days after the public announcement of a final decision to implement a proposed change for which either a finding of no significant impact (FONSI) has been made or a final environmental impact statement (FEIS) has been filed with the Environmental Protection Agency. Sometimes an AICUZ needs updating because of a series of small modifications to the flying mission over a period of years. Often these changes individually are of little consequence so no environmental analysis of noise is conducted. However, the cumulative changes may warrant updating the AICUZ study.

An AICUZ study typically contains specific land-use compatibility recommendations based on an analysis of the relationships between aircraft operational effects and existing land use, existing zoning, and planned or anticipated land use. Existing and future compatible land uses are discussed. The AICUZ study and IMP are prepared according to this AICUZ Handbook and approved by the MAJCOM and HQ/USAF in turn (the MAJCOM review comments must be included in the documents forwarded to HQ/USAF). As a minimum, each AICUZ study contains the following elements:

Volume I

1. Signed and Dated Transmittal Letter
2. General Introduction to the AICUZ Concept, Program and Methodology
3. Description of the Mission and Flying Operations at the Base

4. Brief Description of the Basis for Land Use Compatibility/Incompatibility
    a. Accident Potential
    b. Noise
    c. Height Restrictions
    d. Additional Considerations
5. Analysis of Area Land Uses
    a. Existing Land Use
    b. Future Land Uses
    c. Zoning and Other Ongoing Implementation Actions
    d. Incompatible Development
6. Recommendations/Guidelines for Determining Compatible Land Uses (Tables and Appropriate Narrative)
7. Maps with Appropriate Narrative
    a. Vicinity Map
    b. Flight Tracks Map
    c. Accident Potential Zones Map
    d. Noise Contour Map
    e. Composite AICUZ Map (combination of 7c and 7d)
    f. Existing Land Use Map
    g. Existing Zoning Map
    h. Future Land Use Map
8. Public Release Procedure (Implementation and Maintenance) Responsibilities
9. Points of Contact

Volume II

1. Installation History
2. Economic Impact Study
3. Accident Potential Study
4. Description of the Noise Environment
5. Height and Obstruction Criteria
6. Airfield Area Population Density Recommendations
7. Other Appendices as Needed

The maps identified in item #7 under Volume I should be intermingled with the narrative of sections #4 and 5, also of Volume I. The AICUZ report should include the elements identified above for Volume I and II but not necessarily as separate and distinct sections.

The installation may prepare a brochure that summarizes the AICUZ process in layman's terms, and contains the noise contours and land use compatibility recommendations. Sample formats for the AICUZ study, Appendices, Implementation and Maintenance Plan and the AICUZ brochure are located in Volume III of this Handbook and are available via computerized Electronic Mail from MAJCOMs or HQ/USAF.

3.5.2 AICUZ Amendments

An AICUZ amendment format may be employed if the following conditions are met:

(a) If the current AICUZ study is less than two years old (release date).
(b) If changes are few and minor in nature.
(c) If little explanation is needed.

The AICUZ amendment consists of the following elements:

(a) Transmittal letter
(b) Corrected pages for insertion into the latest AICUZ study.

The AICUZ amendment will be released as follows:

(a) Copies mailed to all of those who received copies of the latest AICUZ study.
(b) Copies to local libraries, agencies, local governments, organizations and individuals known to have an interest.
(c) Two weeks advanced notification to the media that the amendment is being released.

The MAJCOM and HQ/USAF must approve each AICUZ amendment before public release.

3.5.3 Application to Joint-Use Installations

AICUZ requirements also apply to Air Force-owned and operated installations where non-Air Force operations are conducted. Each operation is included in the AICUZ study.

Where the Air Force operates a major installation as part of a joint-use arrangement in which the Air Force does not own or operate the runways, an AICUZ map (including both military and civilian operations) is prepared and submitted to the airfield operator with a request that an AICUZ study be prepared and published jointly. If the airfield operator does not agree, all AICUZ materials are turned over and all land use compatibility matters are referred to the operator. The Air Force assists as required.

If an Air Force unit is located on a non-Air Force owned or operated airfield, the Air Force commanders must inform the airfield operators of the AICUZ program and encourage preparation of a joint AICUZ or modified AICUZ study. If the airfield operator requests an AICUZ study, a HQ/USAF determination is solicited.

A noise zone (NZ) map prepared as part of the EIAP for a proposed operational or maintenance change, mission realignment or mission beddown at a joint-use airfield is given to the airfield operator. If an airport operator has already published a noise map for the airfield, at the request of the airport operator, the noise descriptor methodology may be used for the published noise maps in the EIAP. If an AICUZ study is already published, it must be amended to show the changes.

3.6 Phase V - AICUZ study or Amendment Public Release

Following the incorporation of major command, AFCESA/DMPO and HQ/USAF comments into the AICUZ study/Amendment and AICUZ Implementation and Maintenance Plan, Phase V begins and the Study/Amendment is released to the public and government officials in a public meeting.

Generally, the installation commander releases the AICUZ study or amendment in a public meeting the date of which has been coordinated first with HQ/USAF to ensure proper congressional notification ahead of time. The DE, DO, PA, and JA assist the commander. For unique cases, HQ/USAF may consider waiving the public meeting requirement. In this case, the Base Commander must prepare and submit a waiver request along with full explanation/justification through the MAJCOM to HQ/USAF. If a waiver is approved, all parties who would have been invited to the meeting or who received a previous study or amendment are sent copies of the amendment at the same time. Furthermore, advance notice of the release is placed in the media and copies of the AICUZ study are made available to the public in general (placed at the local library, given upon request, etc). Following the public release, the installation submits copies of the AICUZ study to the affected EO 12372 (Federal Executive Order Covering Interagency/Intergovernmental Coordination for Environmental Planning) state single point of contact (SPOC), or other pertinent state and local review agencies designated under the state process.

Phase V places the AICUZ program into the public forum. It is during this phase that a coordinated team effort is imperative to ensure that misunderstandings are avoided and those who may be affected are brought into the planning process. Chapter VI, Section B.2 and Appendix E-1 IICEP Handbook for Installation Coordination with Civilian Agencies (IEPB 14) should be reviewed at this time and used as guidance.

The Air Force Regional Compliance Offices in Atlanta, Dallas and San Francisco, (AFCEE/ESA, ESD and ESS) coordinate the study or amendment with appropriate Federal regional officials. Regional Compliance Offices were formally called AFRCE-ER,CR,WR.

HQ/USAF coordinates with and distributes the study or amendment to federal agency officials and Congressional officials in Washington, D.C. HQ/USAF conducts Congressional coordination through the Secretary of the Air Force, Office of Legislative Liaison, prior to the public release meeting.

In order to ensure proper coordination with appropriate state and federal agencies and congressional delegations, it is necessary to accomplish the following at least 10 days prior to the public release meeting.

(a) Send seven copies of the AICUZ study and one copy of the AICUZ Implementation and Maintenance Plan to HQ/USAF, via commercial express courier. Notification to HQ/USAF should be made by telephone when the package is shipped.

(b) Send 10 copies of the AICUZ study to HQ/USAF via regular mail for ultimate distribution to appropriate federal agencies.

(c) Send 10 copies of the AICUZ study and one copy of the AICUZ Implementation and Maintenance Plan to AFCEE/ESA, ESD, or ESS as appropriate. (This is for distribution to other federal agency regional offices.)

Coordination should be made with HQ/USAF/CEV and the AFCEE/ESA, ESD, or ESS regarding the actual public release date. Federal agencies normally require at least a 21-day notice of the public release date for their review and scheduling purposes.In addition, notify the Base Commanders of bases in the state/region of the public release date, invite them to attend the meeting and furnish them with a 1 inch = 8333.33 ft. (1:100,000 scale) noise contour map and a copy of the AICUZ study.

Copies of the AICUZ study are provided to the appropriate E012372 state single point of contact (or its state or local designees) by AFCEE/ESA, ESD, or ESS in accordance with state and any applicable local Memoranda of Understanding following general public release.

If warranted, updated AICUZ studies and maps are prepared simultaneously with the Environmental Assessment and/or Draft Environmental Impact Statement. Updated AICUZ studies are publicly released within 120 days of public announcement of a final decision to implement a proposed change for which either a Finding of No Significant Impact (FONSI) has been made or a Final Environmental Impact Statement has been filed with the Environmental Protection Agency.

Following release of the AICUZ study, periodic progress reports are forwarded to HQ/USAF, HQ AFCESA/DMPO, and the AFCEE/ESA, ESD, or ESS. In all cases where there is adverse governmental or public reaction, HQ/USAF, the AFCESA/DMPO, and the AFCEE/ESA, ESD, or ESS are notified and provided with details. Such information allows these offices to achieve necessary coordination with other agencies and respond to questions in a timely manner with minimum disruption of MAJCOM and base activities.

A copy of the AICUZ map is posted and a copy of the AICUZ study is maintained in the base Housing Referral Office so Air Force personnel seeking off-base housing have knowledge of noise and accident potential effects on adjacent land areas.

3.7 Phase VI - AICUZ Implementation and Maintenance

After the AICUZ study is prepared and released, the base is ready to begin the most important aspect of the program - Implementation and Maintenance. The basis for implementing AICUZ guidelines lies in the exercising of police powers by local governments to protect and promote the public health, safety and welfare. Through conveyance of these powers from the state, local governments adopt and enforce zoning regulations and other land use controls, which are the primary tools for protecting Air Force bases from encroachment by incompatible development.

The success of the AICUZ program depends on its voluntary acceptance and use by local governments, private individuals, and other agency officials. To use it, they must know about, understand, and be convinced of the need for AICUZ. This is accomplished through a series of steps taken by the base as well as higher headquarters. This is the process of the base continually informing local governments, agencies, groups and individuals on the need for compatible development. It involves staying abreast of activities within the base AICUZ area, and when necessary, taking a formal position on land use proposals by government agencies. In this phase, the primary emphasis is on developing an effective and sustaining relationship with local communities on land-use planning. The installation fully participates in the local and area wide planning and intergovernmental coordination and public information exchange. AFCEE/ESA, ESD, or ESS works through state legislative coordination processes, and HQ USAF maintains interagency coordination with federal officials in Washington, D.C.

The following sections discuss specific methods, strategies and actions for the Air Force to use in promoting implementation of AICUZ recommendations. Included is a discussion of the Joint Land Use Study (JLUS) program, a method for promoting local community implementation of the Air Force's AICUZ program.

3.7.1 AICUZ Implementation Strategies

3.7.1.1 Informing Agency Decision-makers and the Public (Step 1)

AICUZ is primarily implemented by the voluntary action of local government officials and the policies of federal agencies (e.g., Department of Housing and Urban Development, Veterans Administration and Farmers Home Administration). They must know what the AICUZ recommendations are before they can consider acting on them. The process of providing information to the general public should continue after the formal release of the AICUZ study. The process of providing general AICUZ information to local planning agencies, however, can begin before the release of the final AICUZ study. Local planning officials should be brought into the process at an early stage in order to improve the prospects for acceptance of the AICUZ recommendations.

Information can be exchanged on a government to government basis where local planning officials are given an opportunity to review the AICUZ information and identify potential problems and solutions. Bringing the local planning officials into the process early is a means to gain support for the AICUZ study process. However, draft AICUZ contour maps must not be released to local agencies or the general public without the prior approval of HQ/USAF. Agency personnel responsible for making land use decisions may change. Where this happens, replacements should be briefed.

Table 3.1 contains a checklist of agencies and organizations that may need to receive information about AICUZ. Although it may not be necessary to contact all of these organizations, the installation program manager should determine which of the local governmental agencies and special interest groups should be briefed on the program. The installation program manager should determine which agencies are considering actions which potentially impact the installation. This can be done by:

1. Establishing both a formal and informal network of contacts to routinely exchange planning information. Installations may develop MOUs with appropriate local planning and community development agencies to establish a formal exchange of information on land use proposals. In addition to local agencies, coordination is especially important with federal agencies which directly subsidize housing, such as the U.S. Department of Housing and Urban Development, the Veterans Administration and the Farmers Home Administration. Under Federal Management Circular 75-2, these federal agencies are required to help protect Air Force bases from encroachment, through their various housing support programs. However, these agencies require Air Force assistance. The Regional Environmental Offices provide copies of newly released AICUZ studies. However, day to day coordination on issues relating to a specific base must be managed by the base AICUZ Program Manager. The installation should maintain an up-to-date list of contacts, addresses and telephone numbers of each relevant agency and organization.

2. Installation personnel should prepare a formal presentation of the AICUZ program. It can be shown individually or collectively to local planning commissions, city councils, county legislatures, county planning commissions, councils of government and other interested agencies. This presentation should inform the general public on AICUZ issues, installation economic impact and the need for responsible land use planning. This may be given to organizations (Chamber of Commerce, Board of Realtors, etc.) and at town meetings. Elected officials are ultimately responsible for compatible land use development. However, they typically receive land use recommendations from a planning commission (made up of appointed local citizens) who are advised by a planning department. The biggest impact on the elected officials, however, comes from the concerns of the general public as well as vested interests.

Table 3.1 AICUZ Agency Coordination List

Agency	
FEDERAL GOVERNMENT	
Dept. of Agriculture	X
U.S. Forest Service	
Soil Conservation Service	
Department of Interior	X
Bureau of Land Management	X
Fish and Wildlife Service	X
National Park Service	X
Advisory Council on Historic Preservation	
Health & Human Services	
Dept. of Transportation	X
Federal Aviation Admin.	X
Federal Highway Admin.	X
Dept. of Housing and Urban Development	X
Dept. of Education	X
Dept. of Commerce	
Census Bureau	
Dept. of Labor	
Veterans Administration	X
Environmental Protection Agency	
Department of Energy	
Navy/Marines	
Army (COE)	
Coast Guard	
STATE GOVERNMENT	
Senators (local and key committees)	
Representatives (local and key committee)	
Planning department	X
Economic department	X
Employment department	
Highway department	X
Recreation department	X
Natural resources	X
Fish and wildlife	X
Land department	X
Water resources	
Air quality	
Agriculture	X
Emergency response agency	
Transportation	X
E.O. 12372 SPOC	X
County agent	X
Aeronautics department	
State Historic preservation Office	
Conservation Department	
Coastal agency	
Solid waste department	
Environmental agency	
Health agency	
LOCAL GOVERNMENT	
Municipal	X
County	X
Councils of Government	X
Planning/zoning boards	X
E.O. 12372 designated agencies	X
School districts	X
Sewer districts	X
Fire districts	
Emergency Response Agency	
Water districts	
Soil conservation districts.	
Flood control districts	
Solid waste authority	
Redevelopment agencies	X
KEY LANDOWNERS/DEVELOPERS	X
INTEREST GROUPS	
Air Force Association	
American Legion	
VFW	
Chamber of Commerce	X
Board of Realtors	X
Real Estate Brokers Association	X
Homebuilders Association	X
Homeowners Association	X
Unions	
Retiree Organizations	
Environmental Groups	X
Base Community Councils	X
Local chapters of professional organizations (e.g., AIA, ASCE, APA)	X
Bar Association	X
Newspapers	X
Television stations	X
Radio stations	X
Industrial Councils	X
Council of Churches	
Lending institutions	X
Other (e.g., farm, livestock associations)	X

"X" Indicates agency coordination most frequently occurring under this Air Force Program. However, coordination with other agencies, some of which are listed above, may be appropriate depending on local circumstances.

3. Working with the public is an acquired skill, developed by experience. There are, however, documents available to help with this task. Installation personnel should consult information documents, such as FAA's Community Involvement Manual (FAA-EE-90-03, August 1990, USDOT FAA, Office of Environment and Energy, Washington, D.C. 20591 NTIS #ADA 081465), and Public Participation in Resource Planning (U.S. Forest Service, Selected Literature Abstracts, April 1982), regarding techniques for dealing with the public. These manuals provide valuable information and describe techniques for working with the public (meetings, hot-lines, brochures, exhibits, open houses, etc.). Procedures for conducting informal public meetings can also be found in AFR 19-2, Attachment 5.

3.7.1.2 Identifying Incompatible Land Uses (Step 2)

To successfully monitor and evaluate off-base land use development plans, installation personnel must establish and maintain contact with planning and other officials at appropriate municipal and county offices where land use issues are handled. Lines of communication should be opened with other applicable government agencies (councils of governments, airport authorities, other military installations, utility districts, etc.) as well as appropriate federal and state agencies (State Airport Board, State Real Estate Commission, Office of Economic Planning and Development, HUD, VA, FMHA, FAA, etc.). These are all agencies that may influence proposed developments near the air installation.

The Base Community Planner should attend and participate at appropriate zoning commission, city council, county board, and other meetings and hearings, accompanied by other base experts if possible. In addition to zoning and planning meetings, efforts should be made to attend and participate at meetings of local airport authorities, councils of governments, utility districts, realtor's associations, home builder's associations, etc., in order to obtain further information on future development plans affecting the base. The Air Force base is a land owner and like any other land owner, has a right to express concern in planning and zoning issues. Do not expect local officials to look out for Air Force interests - their primary concern is with the interests of their city/county, council of government, etc. The Base Community Planner should get prior clearance from Public Affairs Office and inform them of plans before stating any official or unofficial position or making a presentation at a public meeting.

Local changes in land use cannot be monitored solely from the desk. Installation personnel should make regular field visits outside the installation to look for signs of development (surveyor's stakes, "For Sale" signs, proposed zoning change notices, development signs, digging, etc) which could affect AICUZ. Installation personnel may identify development proposals from several sources:

- State/local single point of contact.
- Local, regional and state plans (e.g., county comprehensive plans, regional transportation plans, etc.).
- Planning or zoning board agendas.
- Articles and notices in local newspapers.
- Agency newsletters.
- Advisory committee meetings of county and regional planning agencies.
- Informal discussions with local planners, transportation planners, utility companies, bankers, realtors and developers.

In addition, the Air Force Regional Environmental Offices obtain information from federal regional offices about the plans, programs and projects for which a federal agency has direct or indirect responsibility.

Installations should take positive action to develop support in the community for the AICUZ study and for the Air Force mission. The installation should make clear that the AICUZ recommendations to the community are only recommendations. Installations should participate in the local planning process through pertinent organizations. Full information concerning AICUZ requirements should be made available to local governments, civic associations and other concerned groups. Appropriate groups or individuals may be invited to the installation for meetings to make them familiar with the installation operations and mission. Membership representation on speaker bureaus and membership in community organizations are additional opportunities to present the Air Force position in non-adversarial circumstances.

Proposals that may result in encroachment may take many forms:

- Request to a planning board for rezoning or a variance to permit an incompatible use, a higher density or removal of a height restriction.
- Proposal for a major thoroughfare change or expressway development.
- Proposal for a major extension of water, electric, or sewage lines.
- Request for major flood control improvement or infrastructure construction.
- Request to a planning board for approval of a subdivision.
- Selection of a site for a community facility (e.g., school or hospital).
- Request to town engineer to approve a street map.
- Request to a utility or sewer district for a new hook-up.
- Request to a state or regional agency for a coastal or wetlands permit.
- Request to a state or federal agency for financial assistance.
- Proposal to complete a comprehensive land use plan.

After identifying a potentially significant incompatible land use proposal, the installation should inform the appropriate agency of the reasons why the proposal is considered to be incompatible. A multidisciplinary team approach will be most effective in this endeavor. The installation should use its own expertise to help with encroachment issues. The Base Community Planner identifies an initial encroachment issue, integrates the views of the installation commander, the staff judge advocate, the public affairs officer and flight operations officer and helps prepare the installation's position to be presented to the decision-making agency. (The support of an "aviation expert" or pilot from Base Ops, the flying wing(s), etc. could also be enlisted) The Base Community Planner then prepares an internal report which briefly describes the proposed changes in land use and community/installation interaction. This report would provide a written record of the AICUZ program implementation while informing key installation personnel as well as the major command, Air Force Regional Environmental Office and Air Staff of ongoing developments. Complete records of all AICUZ actions should be maintained. Do not dispose of "old" files as they may be required for litigation. (Consult AFM 12-50, Volume II for disposition instructions.)

3.7.1.3 Opposing Incompatible Land Use Proposals (Step 3)

Once the installation has determined that a land use proposal is incompatible with the AICUZ guidelines, it must assess the impact and then inform appropriate agencies of its concerns. It may be desirable for the installation to conduct discussions directly with the applicant to see if the

proposal can be modified to avoid impacting the installation's operations. If a public hearing is held, a representative of the installation should attend the hearing and voice his concerns. If an MOU is implemented as described in para. 4-24c, it should be utilized to provide opportunities for comments. If the decision-making body is a board or commission, such as a local planning board, its staff should be briefed prior to the hearing. Some boards hold executive sessions prior to a public hearing and the installation should take proper steps to ensure that its views are presented. The installation should provide information to the news media explaining the reason for opposition to the proposal.

The installation's effort should be a team effort involving the installation commander, the public affairs officer, the staff judge advocate and the airspace manager as well as the Base Community Planner. The team should decide who should speak, what information should be released and to whom it should be distributed. If the decision-making body is a federal regional or state agency, the installation should request assistance from the Air Force Regional Environmental Office environmental planning division through the major command. The installation should negotiate with the decision-making body to achieve a result that protects the vital interests of the installation. (A flow diagram summarizing the strategy for opposing incompatible land use is provided in Figure 3.2)

3.7.1.4 Promoting Long-Term Solutions (Step 4)

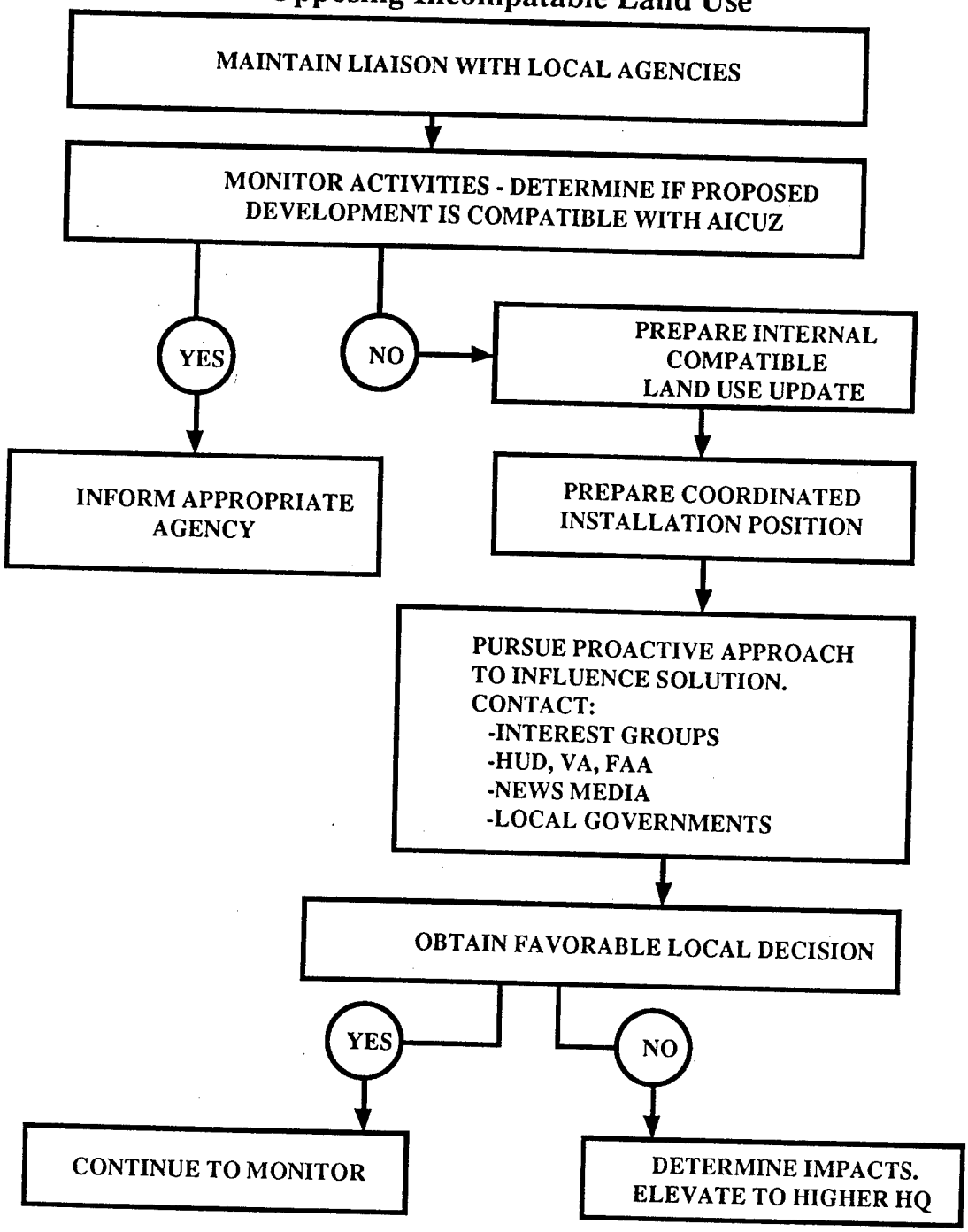
The installation should seek long-term solutions to achieve land use compatibility rather than just dealing with problems on a case-by-case basis. In a case-by-case approach, some proposals may succeed for reasons other than the merits of the issue. A long-term solution may be easier to enforce, once adopted. Throughout the AICUZ process, an important point to make to local officials is that AICUZ inputs are just one of several planning determinants a community considers in developing a comprehensive plan (or evaluating a plan amendment). The AICUZ land use guidelines describe land use compatibility based on aircraft operations only. Final land use plans and implementing ordinances should address other land use determinants such as physiographic features, vegetation, soil characteristics, existing land use, and economic and social demands to name a few. The general categories of long-term solutions are listed below:

- Plans and Programs.
- Acquisitions.
- Capital Improvements.
- Land Development Controls.
- Financing Restrictions.
- State Legislation.
- Land Swaps.
- Building Codes.
- Fair Disclosure.

These solutions are discussed in more detail in Volume III of the AICUZ student Guide. A checklist for implementing these solutions is in Table 3.2. The installation should prepare a document entitled Long-Term Land Use Compatibility Trends that (1) describes the land use development situation, (2) proposes a strategy for compatible development and (3) gives recommendations for implementation. This strategy paper should be presented to the key installation personnel. The paper should be evaluated by the group, modified where necessary and adopted as official installation policy. This policy will help the installation avoid conflicting statements when different spokespersons discuss development issues with the local communities.

Figure 3.2

AICUZ Coordination - Strategy for Opposing Incompatable Land Use



NOTE: CHART REFERS TO INSTALLATION ACTION UNLESS OTHERWISE NOTED.

In consultation with the staff judge advocate, the installation should determine whether there is a legislative basis for implementing land use controls consistent with AICUZ. If not, the installation could propose authorizing legislation at the state or local level. The installation should request assistance from its own Judge Advocate's Office as well as from the Air Force Regional Environmental Office environmental planning division through the major command, in coordinating state legislative proposals. (see Appendix A in this Volume for more details)

As part of its long-term strategy, the installation should evaluate its own adherence to AICUZ policy and make every effort to eliminate and avoid incompatible land uses on the installation. Siting new facilities in violation of noise and accident potential guidelines can drastically reduce installation credibility in the eyes of the nearby communities. At the same time, new projects should be planned to eliminate existing noise and airfield waivers. New on-base facility sitings and land use designations must be consistent with the published AICUZ land use compatibility guidelines for that installation. (see AFM 19-10, Fig. 4-5)

AICUZ briefs should be presented to the Facilities Board (FB), the Environmental Protection Committee (EPC) and Air Traffic Control Board (ATCB). Briefs are also necessary when changes occur in installation leadership. The Air Division, Wing and Installation commanders as well as the Public Affairs Officer, Judge Advocate, Airfield Manager and Base Housing Officer also need to be briefed. The Base Housing Officer is included in this group because of his/her unique position. He/she often advises installation personnel on the off-installation housing market. Most personnel want to live close to the installation and developers are willing to accommodate their needs. The Base Housing Officer can ensure that these personnel are aware of AICUZ guidelines. A copy of the AICUZ map is posted and a copy of the AICUZ report is maintained in the Housing Referral Office (AFR 19-9, para. 3-8f(4)).

During the AICUZ implementation phase, the Base Community Planner should continue to represent the base in local community affairs. The Base Community Planner should work one-on-one with local planners, keeping them informed about the AICUZ program (generally during on-base meetings). At the same time, he/she will also meet with local planning officials to discuss future developments, zoning changes, and master plans. It is important that the Base Community Planner be accepted by the local planners as one of their own who just happens to work for the air base.

Involvement with professional organizations, such as the American Planning Association (APA), will increase the planner's credibility, especially if he/she belongs to the American Institute of Certified Planners (AICP). Becoming active in the state chapter, and conveying the Air Force's commitment to responsible planning through AICUZ helps sell the program.

In a few cases, developers or communities have requested that noise monitoring be performed at installations. At the individual bases, AICUZ studies are based on "predicted" noise levels rather than noise monitoring. These requests should be transmitted through the MAJCOMs to HQ/USAF for review.

The IICEP Handbook for Installation Coordination with Civilian Agencies (IEPB 14) contains Phase VI procedures and guidance (Chapter VI.B.3 and 4). Section C of Chapter VI discusses techniques for implementing AICUZ recommendations. Example Phase VI presentation formats are found in IEPB 14 Appendix F.

Table 3.2 Air Installation Compatible Use Zone (AICUZ) Long-Term Solutions Checklist

Guidelines

The following checklist is based on the Appendix to this handbook. Attach a short explanation for each entry describing what has happened and in the case of plans, ordinances, etc., attach a copy of the document.

1. Public Information

a. Positive Community Reaction and Support	Yes_____	No_____
b. Notice to Purchasers and Renters of Noise and Airport Hazard	Yes_____	No_____

2. Coordination

a. General - Cooperative and Effective	Yes_____	No_____
b. E.O. 12372 Process - Is it working*	Yes_____	No_____
c. Environmental Impact Statements	Yes_____	No_____

3. Plans and Programs

a. Plans

(1) AICUZ Totally Included in Comprehensive Plan	Yes_____	No_____
(2) AICUZ Partly Included in Comprehensive Plan	Yes_____	No_____
(3) AICUZ Included in Other Air Force Plans	Yes_____	No_____
(4) AICUZ Included in Non-Air Force Plans	Yes_____	No_____

b. Environmental Management Program

(1) AICUZ Included in Coastal Zone Management Program	Yes_____	No_____

4. Land Acquisition by Civilian Agencies

For AICUZ	Yes_____	No_____

* Executive order covering interagency/intergovernmental coordination for environmental planning.

Table 3.2 (Continued)

5. Capital Improvements

Used For AICUZ	Yes_____	No_____

6. Land Development Controls

a. Zoning

(1) AICUZ Totally Implemented in Zoning Ordinance	Yes_____	No_____
(2) AICUZ Partly Implemented in Zoning Ordinance	Yes_____	No_____
(3) Height and Obstruction Ordinance	Yes_____	No_____
b. Subdivision Regulations used for AICUZ	Yes_____	No_____
c. Special Use Designations Used for AICUZ	Yes_____	No_____
d. Special Permits Used for AICUZ	Yes_____	No_____
e. Building Code Incorporates Noise Level Reduction	Yes_____	No_____
f. Official Map Used for AICUZ	Yes_____	No_____

7. Financing Restrictions Used for AICUZ	Yes_____	No_____
8. State Legislation for Airport/Airfield Planning	Yes_____	No_____

9. Other

a. Have Incompatible Development Proposals Been Denied?	Yes_____	No_____
b. Have Developers Voluntarily Modified Proposals for AICUZ?	Yes_____	No_____
c. Are Any Actions Pending?	Yes_____	No_____
d. Is Encroachment Taking Place on Land Zoned for AICUZ?	Yes_____	No_____

3.7.1.5 Clear Zone Issues

The only real property interests to be acquired are those necessary to prevent incompatible land use in the clear zone (except at certain joint-use installations that are exempt from the clear zone acquisition program). Clear zones are safety areas typically 3000 ft by 3000 ft located immediately off the ends of active runways. Much of the clear zone acreage is off base. HQ/USAF Real Property Office is responsible for acquiring real property interests within the off-base portions of the clear zone. A real property interest must be acquired over all property within the clear zone. HQ/USAF Real Property Office determines exceptions to the clear zone boundaries and the real property interest to be acquired on a case-by-case basis. All real property interests are acquired per AFR 87-1 guidance.

The Federal Aviation Administration provides funds for the soundproofing of homes within the DNL 65 and 75 noise contours, and the purchase of homes with DNL noise levels above 75 dB near civilian airports. The U.S. Air Force has no equivalent program, so the Air Force emphasis is on land use compatibility planning.

3.7.1.5.1 Land Use in the Clear Zone (CZ)

Existing Air Force facilities and land uses may continue in the CZ; however, replacement facilities will be programmed as part of the normal planning and programming process and must be sited outside the CZ. People-intensive facilities and facilities for other than flight operations should be relocated outside the clear zone where possible. Exceptions to this would be navigational aids and essential operational requirements which because of their function, need to be sited in the CZ for optimum performance. MAJCOM DCS/Engineering and Services must approve alterations, minor additions, or improvements of facilities in the CZ. The width of clear zones may be based on highest accident potential area for specific runway and acquisition constraints. A 3,000 feet wide clear zone should be observed for new construction of proposed Air Force facilities regardless of the established clear zone dimensions. The installation must fully justify, and the MAJCOM must approve any deviation to this restriction.

The Air Force (or others under Air Force permit) must not plan, locate, or construct a new use or facility within the boundaries of the CZ except for:

(a) Agriculture.

(b) Livestock grazing (excluding feed and dairy lots).

(c) Permanent open space.

(d) Existing or new water areas provided they do not create bird strike hazards.

(e) Rights-of-way for single track railroads and fenced, two-lane highways without sidewalks or bicycle trails provided they do not violate obstacle clearance criteria.

(f) Rights-of-way for communications and utilities provided all facilities are at grade level or underground.

(g) Essential navigation aids and operational facilities, provided there are no feasible alternatives (MAJCOM DCS/Engineering and Services approval is required).

The following uses are specifically prohibited within the CZ (Ref AFR 86-14 and AFR 19-9).

(a) A use that releases any substance into the air that would impair visibility or otherwise interfere with operating aircraft, such as, but not limited to, steam, dust, and smoke.

(b) A use that produces electrical emissions which would interfere with aircraft and Air Force communications or navigational aid systems, or aircraft navigation equipment.

(c) A use that would unnecessarily attract birds or waterfowl such as, but not limited to, operation of sanitary landfills, maintenance of feeding stations, or growing certain types of crops or vegetation.

(d) Explosives must be excluded from the CZ as described in AFR 127-100.

Buildings on newly acquired fee land within the CZ must be demolished or relocated outside the CZ and rubble must be removed. Easement acquisitions must conform to the estate acquired. Through programming avenues, the command is responsible for any further relocation of above-ground utilities, fencing, and any grading or seeding. In addition, the MAJCOM determines what should be done with roads and sidewalks that terminate in the acquired area.

3.7.2 Joint Land Use Study (JLUS) Program

Several installations have sought to resolve incompatible land use problems by using the concept of joint land use studies. Joint land use studies involve a cooperative effort between the installation and nearby local governments to develop a land use plan and accompanying land use control recommendations that will hopefully be adopted by the local governments. The Department of Defense Office of Economic Adjustment (OSD/OEA) has provided matching grants for preparation of this type of study. The joint land use planning committee is composed of representatives of local governments and of the military installations in the region, often a council of governments. The agency preparing the study may be a regional planning agency, the council of governments staff, a local planning office or contractor. The advantage of a joint land use study, in addition to OSD/OEA funding, is that local governments have more incentive to adopt and adhere to the plan since they actively participate in the development of the plan. Before initiating a request for a joint land use study, an evaluation should be made by the installation to determine the advantages and disadvantages of such a study and the level of interest and commitment of local communities.

The overall purpose of JLUS is to protect local citizens and the Air Force bases from the negative effects of incompatible development with the flying mission in mind. The aim of the JLUS is to

(a) direct incompatible development away from high noise and accident potential areas, and

(b) protect Air Force flying operations.

It is an effective means of bridging the gap between Air Force AICUZ recommendations and their implementation. Improved AICUZ implementation means better protection of the health, safety, and welfare of citizens near Air Force bases as well as improved protection of bases from encroachment.

The Air Force initiated the JLUS concept in 1985 in order to enhance acceptance of AICUZ recommendations through local land use planning and zoning actions. Participation in the JLUS program is voluntary. Wing Commanders who believe that there is a shared sense of concern within the community regarding encroachment may submit a request through their MAJCOM to HQ Air Force for JLUS consideration. Selection depends on OEA budget and other competing projects. Once a base is selected, community leaders are approached and efforts are undertaken to develop a community consensus regarding JLUS participation. Formal application for grant

assistance is made by the communities once they reach consensus. After OEA approves the application, negotiation begins on the cost sharing arrangements. The Joint Land Use Study is then prepared and adopted. Then, hopefully, JLUS recommendations are implemented.

JLUS's studies have been completed for communities surrounding 8 bases: Sacramento, California (McClellan, Mather and Beale AFBs), Merced, California (Castle AFB), and Phoenix, Arizona (Luke and Williams AFBs) areas, as well as the area around Travis AFB, CA and Pope AFB, NC.

Studies are underway at several other bases: March AFB (California), Hill AFB (Utah), Westover AFB (Massachusetts), Plant 42 (California), McChord AFB (Washington), Andrews AFB (Maryland) and Edwards AFB (California). Studies are being initiated at: Dover AFB (Delaware), McGuire AFB (New Jersey), Shaw AFB (South Carolina), Ellsworth AFB (South Dakota), Tinker AFB (Oklahoma) and Fairchild AFB (Washington). The objective of the Air Force is to nominate an average of 4 bases each year.

The real success of JLUS is that communities have been stepping forward to take positive action to control incompatible development which could adversely impact the flying mission. The following are several examples:

* Compatible land use plans have been modified by local/regional agencies in the Sacramento, California area in support of Mather, McClellan and Beale's flying missions.

* Sacramento County has modified its zoning ordinance to improve protection for local Air Force bases.

* The City of Marysville, California has required a noise disclosure mechanism for home buyers in a new retirement subdivision impacted by Beale's noise contours.

* Compatible land use plans have been adopted in Maricopa County, Arizona which promote compatible development in the vicinity of Luke and Williams AFBs.

* The cities of Glendale, Mesa and Goodyear, Arizona have adopted avigation easements and overlay zones to protect local Air Force Bases.

* General plans for Merced County, California have been amended to accommodate Castle AFB.

* A zoning ordinance has been enacted by Hoke county, N.C. near Pope AFB.

3.7.2.1 The Air Force Procedures for JLUS Support

The Air Force and OEA have agreed on the following procedures to be used to provide grants, cooperative agreements, and assistance in developing joint land use studies:

a. An annual call letter is sent to the MAJCOMs from the AFCEE/ESA, ESD, and ESS each summer to solicit applicants for the JLUS program. The MAJCOMs, the AFCEE/ESA, ESD, and ESS and HQ/USAF/CEV narrow the field of applicants from which HQ/USAF nominates bases (and associated communities) through the Deputy Assistant Secretary of the Air Force, Environment, Safety and Occupational Health (SAF/MIQ) to OSD/OEA.

b. The Air Force will nominate installations based on an analysis of:

1. The extent and pattern of development around the base.

2. The potential for future encroachment.

3. Base-community relationships and prior history of cooperation on land use issues.

4. Existing, pending or potential for state enabling legislation which allows land use planning and zoning that takes military airfield use into account. This may be either the general zoning enabling act if it is interpreted appropriately with respect to airfields, or special legislation relating to all airfields or to military airfields.

5. Written assurances of base support in updating AICUZ studies and participating in JLUS activities

c. A prioritized list of candidate bases will be provided by SAF/MIQ (Deputy Assistant Secretary of the Air Force, Environment, Safety and Occupational Health) to OEA by the end of the fourth quarter of the preceding fiscal year. OEA approval is commonly obtained in January about 6 months from the original call.

d. SAF/MIQ consults with OEA to determine the number of installations to be nominated for a given fiscal year.

e. Headquarters, U.S. Air Force, Directorate of Engineering and Services, will coordinate appropriate command support and require full base participation as the base is the primary DOD representative in the joint DOD-community planning and zoning effort.

3.7.2.2 OEA procedures concerning JLUS

OEA procedures relating to JLUS are as follows:

a. Provide for grants or cooperative agreements to local communities on a cost share basis to conduct joint land use studies.

b. Coordinate with SAF/MIQ on the selection of candidate bases, and HQ/USAF on all other matters pertaining to the development of joint studies including the selection of candidate bases, time frames for initiating studies, Statements of Work, schedules for completion of work, and the anticipated methodology for accomplishing the studies.

c. In conjunction with the Air Force Regional Compliance Offices (AFCEE/ESA, ESD, and ESS) and the affected bases, OEA will work with the communities to structure a joint DOD-community planning effort.

d. Provide assistance as necessary to the Air Force and the local community for the period of time each study is conducted. This assistance may include community visits and review of study products.

e. Emphasize to local communities that the objective of the study is implementation through land use mechanisms that protect the public's health, safety, and welfare, and the Air Force installation's mission. An implementation strategy is to be included as part of all studies.

f. Work with the federal member agencies of the President's Economic Adjustment Committee (EAC) in implementing the recommendations of the approved joint land use study, to the extent that the plan is consistent with Air Force policy.

g. It is mutually agreed that correspondence from any element of OSD (FM&P) going to the community (or communities) involved in a joint study, will be coordinated with the Wing Commander of the appropriate installation or his designee.

3.7.2.3 Role of the HQ/USAF Regional Compliance Offices

The Air Staff role in JLUS is one of policy guidance and liaison with SAF/MIQ and OSD/OEA. There are several elements of the JLUS program which correlate well with the Regional Compliance Offices' responsibilities in intergovernmental coordination and AICUZ. For example, their knowledge of state and regional planning agencies and their regional perspective on encroachment issues definitely benefits the program.

Specific responsibilities of the three Regional Compliance Offices are as follows:

(1) At the beginning of each fiscal year (FY), The Regional Compliance Offices request the MAJCOMs to survey their installations for candidate bases to be nominated through the Office of Economic Adjustment (OEA) for JLUS support. The survey should indicate that base leadership supports the base's participation.

(2) Upon receiving the nominees from MAJCOMs, the Regional Compliance Office will prioritize the nominees on the basis of potential for encroachment, ability of the installation to work with local governments, the existence of state legislation which would facilitate planning around air installations, written assurances of base support in updating AICUZ studies and participating in JLUS activities and any other criteria that would assist in determining the need for a JLUS.

(3) By 15 November of each fiscal year, the Regional Compliance Offices will inform HQ/USAF of the top two installations in their respective region to be nominated for a JLUS (along with a brief statement of justification). HQ/USAF will then forward its selections to SAF/MIQ for official nomination to OEA.

(4) In conjunction with OEA, the Regional Compliance Offices will conduct the initial meeting between the selected bases and local community representatives (after meeting with base officials to verify support of the JLUS effort). The Regional Compliance Offices will also conduct any additional meetings which might be needed to initiate or complete the JLUS process.

(5) The Regional Compliance Offices will review Statements of Work (SOW), schedules, deliverables, and other documents prepared in the JLUS effort for consistency with Air Force policy. Comments will be provided to the HQ/USAF and appropriate MAJCOM as necessary.

(6) Where appropriate, the Regional Compliance Offices will participate as a member of any technical advisory committee (along with the base representative) which may be created as part of the JLUS effort. This will usually occur when two or more bases representing different commands are involved in regional JLUS efforts.

(7) The Regional Compliance Offices will notify the Air Staff and appropriate MAJCOM of problem situations and ensure coordination with all key participants on appropriate elements of the study.

3.7.2.4 Importance of Active Base Participation in JLUS

It is important to the success of any JLUS that the base personnel be committed partners to the study. There are general requirements expected of the base once they are approved for a JLUS. For a successful JLUS, a commitment of increased support from wing commanders at participating bases is needed. The base's supporting staff needs to fully participate in all the steps which

culminate with implementing the study. This includes updating the AICUZ study, if necessary, to accurately reflect the current noise impacts on the local communities. Specific requirements for bases wishing to be considered for a JLUS are as follows:

(a) In response to the annual call letter from the Regional Environmental Offices, the Wing Commander should submit a written request to the MAJCOM/DE, asking to be considered for a JLUS. The letter must provide rationale to support selection (i.e., potential for future encroachment, local community interest, etc.) and must indicate a willingness to fully support the effort through a commitment of staff involvement and actions. This letter must accompany each nomination sent by a MAJCOM through the Regional Environmental Offices to HQ/USAF.

(b) It is important that the AICUZ information provided by the base in support of the JLUS be accurate and timely. The Base's AICUZ study must accurately reflect noise from current operations. If the noise contours are inaccurate, then an AICUZ update must be initiated and accomplished. Validating or updating the AICUZ study prior to inviting community participation in a JLUS is preferred; however, when this is not possible, the base is obliged to expeditiously update the AICUZ study as part of the JLUS effort.

(c) The base must also provide the necessary staff resources to support full participation in the JLUS process including attendance at JLUS meetings and provision of requested input.

The tangible gains of the JLUS program far outweigh the commitments that the bases must make to the program. Installation commanders should understand the obligations and benefits attached to the JLUS nomination.

3.7.2.5 Updating AICUZ studies, Once Active JLUS Programs Are In Place

If a JLUS has been completed and approved by the JLUS committee, and JLUS implementation actions are ongoing, a participating Air Force base should not complete or release a new AICUZ without first consulting with the other JLUS participants.

Initial AICUZ update information should first be provided to the local jurisdictions involved in the JLUS for their analysis in relation to their planning process. After thorough discussion, a mutually agreed upon decision should be made on the level of further public involvement. Appropriate federal agency coordination (i.e. HUD, VA, FMHA) should also be continued. Any AICUZ release must be coordinated with HQ/USAF before distribution.

4. Overall Duties and Responsibilities of Key Personnel in the AICUZ Process

Table 4.1 summarizes the responsibilities of Air Force organizations for carrying out the AICUZ program. HQ USAF is responsible for overall AICUZ policy direction and approval of AICUZ activities. Major commands review data collected by installations including verification of flight tracks, and keep HQ USAF informed of significant AICUZ program events. Air Force Regional Offices keep informed of plans and programs at the state and federal regional level that may affect the Air Force mission. In general, the primary responsibility for the AICUZ program both on and off base, lies with the installation leadership and staff.

4.1 Overall Responsibilities of Air Force Team Members in the AICUZ Program

The Base Community Planner or AICUZ Program Manager (residing inf the Base Civil Engineer's Office) is the key member of the base AICUZ team. To successfully manage the program and achieve compatible land use controls around an installation, Base Community Planners have a defined role and guidelines described above from which to model their individual program. Associated with the need to define the base planner's role is the need to review and define the roles of other key Air Force participants to ensure that the end result will be the implementation and maintenance of an effective AICUZ program. The duties and responsibilities of the key Air Force participants are spelled out below.

4.1.1 Roles and Responsibilities of AICUZ Team Members

Installation Commanders (and support staff)

(a) Responsible for the implementation of the AICUZ program. Implementation is accomplished by using staff personnel to promote compatible land uses in the areas surrounding the base, while at the same time maintaining the integrity of the flying operations on base.

(b) Acts as a spokesman and participant in local governmental land use planning meetings (Planning Boards, Commissions, Councils). The Base Community Planner, Judge Advocate, Public Affairs Officer, and any other person whom the Installation Commander deems necessary, may also participate in these meetings.

(c) Informs local public officials of the AICUZ program and provide information in writing or through testimony as required. Conduct all public AICUZ matters either in person or through designated representatives such as the Base Community Planner and Judge Advocate.

(d) Serves as a team member of the Land Use and Airspace Management Team. Establish a land use and airspace management team composed of individuals representing the following organizations: JA, DE, DO, PA, ATC and others as appropriate. Team will serve as a focal point for reviewing, implementing, and maintaining the installation AICUZ program.

Table 4.1
Air Installation Compatible Use Zone (AICUZ) Responsibilities

FUNCTION	HQ/USAF	AFCEE/ESA, ESD, and ESS	MAJCOM	INSTALLATION
Policy	Prepare, coordinate and implement federal directives on AICUZ and encroachment issues. Provide policy interpretations to AFRCEs, MAJCOMs and installations.	Inform state and federal regional agencies of AF policies on encroachment issues. Notify HQ/USAF of unique situations.	Inform installations of AF policies. Develop supplemental policy if necessary.	Maintain current file of applicable policies.
Procedure	Establish and maintain procedures for implementing policy directives. OPR for AICUZ Handbook.	Assist installation in developing procedures for implementing and maintaining the AICUZ program including supporting the Joint Land Use Study (JLUS) Program.	Establish procedures for reviewing and coordinating installation AICUZ/Land Use Compatibility activities.	Establish installation procedures for an effective AICUZ/Land Use Compatibility program implementation and for assessing the impact of incompatible development proposals.
Approval	Review and approve for publication and public release AICUZ studies and other encroachment documents.	Review the plans, programs and projects of state and federal regional agencies potentially affecting AICUZ. Notify HQ/USAF of unique situations.	Review and approve installation AICUZ studies. Forward to HQ/USAF for review and approval.	Forward draft documents to MAJCOM for review and approval. Review and update AICUZ data as required by HQ/USAF policy.
Study Development	Implement Air Force technical support agreement for AICUZ. review and approve implementation and maintenance plans for AICUZ.	Not Applicable	Conduct Phase II data review and validation for AICUZ. Inform HQ/USAF of results of the review and AFESC of the requirements for support. Review and approve Phase VI Implementation and Maintenance Plans and forward to HQ/USAF for approval.	Conduct Phase I data collection, Phase IV preparation, and Phase V public release efforts for AICUZ program. Prepare Phase VI Implementation and Maintenance plans.
Distribution	Distribute AICUZ studies to appropriate federal HQ agencies and Congressional offices.	Distribute AICUZ studies to the state single point of contact and appropriate federal regional agencies.	Not Applicable	Distribute AICUZ studies to local agencies and groups and attend public meetings.
Public Meetings	Not Applicable	Upon request, assist installations in conducting AICUZ public meetings and releases. Attend these meetings and provide a report to HQ/USAF.	Keep HQ/USAF informed of significant issues arising from public release meetings on AICUZ and other encroachment issues.	Conduct public meetings in accordance with AF policy. Coordinate with PA, JA, DE, DO on the installation AICUZ presentation. Keep MAJCOM informed of significant events.
General Liaison	OPR for HQ level inquiries on AICUZ and encroachment related issues. Notify HQ HUD, VA, FmHA of decisions affecting AICUZ.	Brief federal agencies (HUD, VA, FmHA) and state agencies on the AICUZ program and provide updated information, as necessary. Take formal positions, as required.	Keep HQ/USAF informed of all significant AICUZ/Land Use compatibility activities.	Establish effective communications for coordination on AICUZ encroachment issues. Develop a cooperative agreement with local planning agencies and other groups.
Coordination	Coordinate on the policies, plans and programs of other federal agencies which may affect the AICUZ program. Inform them of AICUZ policy and procedures.	Assist installations in contacting and working with state and federal regional agencies to obtain support on AICUZ and specific encroachment issues.	Assist installations in developing strategies to oppose incompatible development.	Identify interested local agencies, organizations and elected officials and brief officials on the AICUZ program. Develop installation position and provide testimony when needed.
Participation	Participate in federal HQ level meetings on land use issues potentially affecting AICUZ.	Actively participate in state and federal regional agency meetings on land use issues potentially affecting AICUZ/Land Use Compatibility programs. Provide expert legal testimony, as required.	Participate in local meetings with installations, as pertinent, particularly for land use compatibility studies including JLUS.	Actively participate in local and regional meetings on land use issues potentially affecting the installation.
Program Monitoring	Monitor AICUZ/Land Use Compatibility activities Air Force-wide.	Monitor state and federal regional activities with regard to encroachment.	Monitor AICUZ/Land Use Compatibility activities at the installations. Inform HQ/USAF of unique situations.	Monitor local land development and planning activities affecting the installation. Work with local officials regarding Air Force concerns. Inform MAJCOM of significant issues.
Field Support	Manage and resolve conflicts and controversies.	Upon request, provide planning solutions to installations and MAJCOMS that have current or potential encroachment problem.	Assist installations in reviewing land use proposals potentially impacting the installation and developing an appropriate position.	Provide an installation position to appropriate officials on encroachment issues and development proposals.

(e) Ensure that all AICUZ presentations and appearances by Air Force personnel are conducted in accordance with policy and guidance provided by HQ/USAF. The base legal and public affairs offices must be advised of all proposed AICUZ presentations and appearances, and the expertise of these officers with regard to such matters should be fully utilized. Approval from HQ/USAF/JACL for such presentations and appearances (per AFR 110-24) is not required.

(f) Monitors land development plans, programs, and projects that may affect land use within the AICUZ, informs local and regional officials and the public of AICUZ considerations and takes formal positions (in writing and through testimony at meetings or hearings) as required.

(g) Participates in local government land use planning and control meetings (boards, commissions, and councils) (see paragraphs 1-2b through d and 3-4g and h (AFR 19-9)).

(h) Notifies the MAJCOM within 1 workday of any off-base proposal or action that would result in incompatible land use according to the AICUZ study or amendment.

(i) Reviews AICUZ data as part of EIAP evaluations or once every two years.

(j) Conducts all public AICUZ matters according to AFR 190-1.

(k) Ensures that all AICUZ presentations and appearances by Air Force personnel are conducted according to HQ/USAF policy and guidance. (Approval from HQ/USAF/JACL for such presentations and appearances (per AFR 110-24) is not required. The base legal and public affairs offices must be advised of all proposed AICUZ presentations and appearances.)

(l) Keeps the MAJCOM and Air Force Regional Offices informed of all significant AICUZ events, including planned off-base developments within the AICUZ area (above DNL 65 contour and within the APZs).

(m) Advises the base Judge Advocate (per AFR 110-24) if an AICUZ study or amendment is, or may become, the subject of a court suit.

(n) Ensures complete AICUZ files are kept according to AFM 12-50.

(o) Ensures that AICUZ activities are managed and maintained on a continuing basis and in a timely manner with emphasis on monitoring aircraft operational and maintenance proposals and actions; monitoring off-base land development proposals and actions; and updating AICUZ studies to provide currentness, correctness and validity.

(p) Provides advance notice to local jurisdictions of potential changes to the AICUZ study and the affected areas.

(q) Identifies and publicly discusses potential land use conflicts with the local community; and provides effective inputs to local authorities, private developers, and the public in their land-use deliberations and approval processes.

The Base Civil Engineer

The Base Civil Engineer, supervisor of the base community planner, supports the planner (mainly as part of Step 1 of the AICUZ process) in managing the data updating and analysis. He/she works with the planner to consolidate and send the MAJCOM updated operational and maintenance data. He/she also updates the AICUZ file and historical documentation. Because of litigation requirements, retaining AICUZ files for long periods is necessary (AFM 12-50 applies).

The Base Civil Engineer also updates the following land-use descriptions or analyses that supports the AICUZ document:

1. Existing land use
2. Future land use
3. Existing zoning
4. Planned developments
5. Incompatible conditions

Base Community Planner

(a) Serves as the Installation Commander's AICUZ Program Manager, implementing all phases of the AICUZ program.

(b) Monitors land development plans, programs, projects and trends in areas around the base which are within the AICUZ sphere of influence.

(c) Notifies the major command of any land development proposals or approvals which will result in incompatible land use according to AICUZ guidelines.

(d) Keeps the Major Commands and the appropriate Air Force Regional Environmental Offices informed of all significant AICUZ events.

(e) Acts as spokesperson for the AICUZ program when designated by the Installation Commander.

Base Judge Advocate

(a) Assists the Installation Commander and the Base Community Planner in implementing the AICUZ program.

(b) Acts as a spokesman and participant in local governmental land use planning and control meetings (Planning Boards, Commissions, Councils) as required.

(c) Provides legal advice to Installation Commander and all persons involved with AICUZ implementation, including state legislation and local regulations.

(d) Advises HQ/USAF/JACL, pursuant to AFR 110-24, if an AICUZ study Amendment is or may become the subject of litigation.

The Deputy Commander for Operations (Phase I)

(a) Updates operational data and provides the data to the base planner, in accordance with AFR 55-34 and this Handbook,

(b) Updates the operational change analysis according to AFR 55-34, this AICUZ Handbook, and AFM 19-10. He/she coordinates the analysis through the EPC.

(c) Per MAJCOM request, he coordinates all AICUZ matters affecting airspace use with the Air Force representative (AFREP) to the Federal Aviation Administration Regional Office.

(d) Evaluates all proposed operational changes through the EIAP according to the procedures and requirements of AFRs 19-2, 55-2, 55-34, and 55-48; and AFM 19-10. He/she coordinates the evaluation through the EPC and the AICUZ Program Manager.

The Deputy Commander for Maintenance (Phase I)

(a) Updates the maintenance data according to this Handbook, Vol. II, and provides it to the base community planner.

(b) Updates the noise reduction evaluation according to this AICUZ Handbook and AFM 19-10. Coordinates the evaluation through the EPC and the AICUZ Program Manager.

(c) Evaluates all proposed maintenance changes through the EIAP according to the procedures and requirements of AFR 19-2 and AFM 19-10. Coordinates the evaluation through the EPC and the AICUZ Program Manager.

The Safety Office (Phase I)

Identifies to the Deputy Commander for Operations and the Base Civil Engineer, all safety considerations regarding proposed operational changes.

The Bioenvironmental Engineer (Phase I)

As required, assists in evaluating specific noise events.

The Weather Office (Phase I)

Provides meteorological data to the Deputy Commander for Operations and the Base Civil Engineer.

Public Affairs Office

(a) Assists the Installation Commander in implementing the AICUZ program.

(b) Serves as focal point for working with local media and handling media inquiries.

(c) Acts as spokesman for the AICUZ program when designated by the Installation Commander.

(d) Monitors local land use issues in the media and at public meetings.

Major Commands

(a) Assist installations as appropriate and keep HQ/USAF, HQ AFESC/DEM and the Air Force Regional Offices informed of all significant AICUZ program events.

(b) Ensure that Inspector General (IG) checklist contains an inspection item which require that AICUZ data be reviewed and the information be current.

Air Force Regional Compliance Offices (AFCEE/ESA, ESD, and ESS)

(a) Assists major commands and installations, upon request, in implementing aspects of their AICUZ program pertaining to intergovernmental coordination.

(b) Coordinates the study or amendment with appropriate Federal regional officials.

(c) Monitors the activities, plans, programs, and projects of state legislatures and state and federal regional agencies that may affect land use within the AICUZ; inform these agencies of the AICUZ recommendations; and take formal positions (in writing or through testimony in meetings and hearings) as required, following coordination with AFCESA/DMPO, and HQ/USAF.

(d) Keeps the installation, MAJCOM, AFCESA/DMPO, and the HQ USAF informed of all significant AICUZ program events.

(e) Consults with federal regional agencies to ensure consistency of other agency plans, programs, and policies with approved AICUZ plans.

(f) Attends AICUZ releases representing HQ USAF, and answers questions regarding the AICUZ program as necessary.

(g) Works with state legislatures and regional officials in developing legislation relevant to noise and land use controls.

(h) Supports the Joint Land Use Study Program which is detailed in Chapter 3 of this Handbook.

HQ USAF

(a) Provides overall direction to the AICUZ Program, develops and interprets policy, and resolves conflicts and controversy. It also monitors policies, plans, programs, and projects of other federal agencies at headquarters level that may affect the AICUZ policies and procedures; and takes formal positions as required.

(b) Monitors the AICUZ program and provides overall program management.

(b) Provides policy direction and interpretation.

(d) Manages conflict and controversy resolution.

(e) Monitors policies, plans, programs and projects of other federal agencies at headquarters level which may affect the AICUZ programs, informs them of AICUZ policies and procedures and takes formal positions as required.

(f) Coordinates with and distributes the study or amendment to Federal agency officials and Congressional officials in Washington DC. HQ/USAF conducts Congressional coordination through the Secretary of the Air Force, Office of Legislative Liaison.

HQ AFCESA/DMPQ

Monitors the AICUZ program, and provides AICUZ data, noise contours and related technical assistance to HQ USAF/CEV, Air Force Regional Compliance Offices, MAJCOMs, and installations, on request.

SAF/MIQ (Phase VI)

Establishes overall AICUZ policy and oversees its implementation.

Because the greatest focus of activity for the AICUZ program is at the installation, there is a need for program awareness at all levels on base. Commanders must be briefed on the AICUZ program and significant developments. This will, in turn, make them more effective spokespersons in the community. A team approach needs to be adopted whereby individuals representing key organizations participate in all aspects of the program. There also needs to be an awareness that the AICUZ Program Manager and others must get involved in local community meetings on issues potentially affecting AICUZ. Supervisors must be considerate of the need for flexibility in individual work schedules. The importance of working with, and attending the meetings of local planning officials cannot be over emphasized. This relationship is critical in order to achieve and maintain the desired goal of compatible land use controls around the installation. Local officials and others in the community should be briefed on the status of the program and the need for its continued maintenance. Credibility and acceptance of the program by the local community is paramount to its success. This credibility is enhanced by an open information exchange and involving public officials and agency planners in the AICUZ process to the maximum extent practicable.

The success of the AICUZ program is dependent on the actions of a variety of key Air Force personnel as well as private individuals and other federal, state, and local agency officials. The Air Force provides a plan by which the installation can establish and maintain a presence in the community, and educate other agency officials on the need for sound, compatible land use controls near Air Force installations. These officials must know about and understand the AICUZ program to effectively use it. This is accomplished by a consistent and continuing emphasis on information exchange, and by full participation in the interagency/intergovernmental coordination and planning process at the local, regional, state, federal regional, and federal headquarters levels.

The base community planner, along with the base leaders, must make a commitment to promote AICUZ if this program is to be successful. When appropriate and feasible, the AICUZ Program Managers from other organizational levels within the Air Force should participate to show support for the installation's program and the emphasis the Air Force places on the AICUZ program.

Appendix A

The Staff Judge Advocate and the Promotion of Long-Term Land Use Compatibility Solutions

The Staff Judge Advocate updates the following descriptive analysis:

(a) State land use related legislation.

(b) Local regulations.

(c) Legal (court decisions).

The local Staff Judge Advocate should coordinate all state and legal reviews with all Air Force installations within the state to ensure compatibility and uniformity.

A.1 State Land Use Related Legislation.

AICUZ is implemented by local governments exercising state police powers delegated to them by state governments through enabling legislation. Enabling legislation varies from state to state. Only through obtaining, reviewing and analyzing the enabling acts will suggestions for amendments to enabling acts and ordinances be forthcoming. Base legal personnel must be knowledgeable of such acts to ensure that the local ordinances are proper. In some cases, the local legal officer may be asked to draft or assist in the drafting of the ordinances.

There are several types of enabling acts that must be considered. Most states enable local governments (municipalities, counties, parishes, etc.) to enact comprehensive zoning ordinances to protect and promote the public health, safety or welfare. These acts, for the most part, do not cover the question of airport environs land use as it is affected by flying activities (i.e., noise or aircraft accident hazards to the land user). Arguments against ordinances regulating land use on the basis of such noise or aircraft accident hazard criteria have been successful when the enabling act language omitted such criteria as a basis for the regulatory ordinances.

Most states have airport zoning acts. However, such acts generally do not provide for land use regulation based on the criteria described above. They are directed to the control of hazards to flying, instead of to effects on land use. Caution must be exercised in the use of these acts. There are some states, however, notably Arizona, Ohio, California, Texas and Minnesota, that have airport zoning acts that include the general land use regulation criteria described above.

Other state enabling legislation that should be reviewed concerns building codes, subdivisions, planning, environmental protection, noise and other related subjects. All of these and any other areas related to the AICUZ program should be reviewed for possible application.

The checklist, Figure A-1, should be helpful in accomplishing this review.

A.2 Local Regulations.

The Air Force AICUZ program is implemented by persuading local governments to exercise their police power over land use, zoning and building codes, such power having been delegated to local governments by state enabling legislation. Ordinances passed pursuant to such legislation differ from one local jurisdiction to another and, therefore, must be obtained and evaluated for each

jurisdiction. It is the Air Force's intent to encourage incorporation of AICUZ into the overall local land use planning and control process rather than to create a separate set of land use regulations applicable only to the air base environs. As a result, there must be a thorough knowledge of the existing local ordinances and land use policy.

In some cases, the local Staff Judge Advocate (SJA) may be asked to help draft proposed AICUZ ordinances. In most cases, the local government will prepare them. The SJA must be knowledgeable of the local land use policy and ordinances in order to either write or evaluate proposed changes to local ordinances.

The local regulation review (and state legislation review) will also help identify existing state enabling legislation that is either inadequate or nonexistent for purposes of AICUZ ordinance implementation. Where these conditions exist, investigation into possible legislative action should be initiated by the local base officials through MAJCOMs and Air Force Regional Environmental Offices.

The checklist, Figure A-2, should be helpful in accomplishing this review. It should be accomplished in coordination with the Base Civil Engineer.

A.3 Court Decisions.

Much of today's land use control law is the result of court decisions. The information and guidance available in these decisions is important to the success of AICUZ enabling legislation and implementing ordinances. Such applicable decisions should be obtained and carefully evaluated.

Although local governments will enact AICUZ implementing ordinances, the Air Force must be concerned about their quality and legality. If an ordinance is declared unconstitutional or illegal, the Air Force, as well as the local community, suffers. Court decision analysis can identify potential problem areas.

The scope of this study should include the range of applicable subjects such as airports, aircraft operations versus land use, noise, nuisance, trespass, damage, taking without just compensation, building codes and zoning.

The checklist, Figure A-3, should be helpful in accomplishing this review.

	Act Obtained		Evaluation	
	Yes	No	Yes	No
1. General zoning	___	___	___	___
2. Planning	___	___	___	___
3. Airport zoning	___	___	___	___
4. Building codes	___	___	___	___
5. Subdivisions	___	___	___	___
6. Environmental protection	___	___	___	___
7. Noise	___	___	___	___
8. State aeronautics	___	___	___	___
9. Other	___	___	___	___

Figure A-1 State Legislation Checklist

	Document Obtained		Evaluation	
	Yes	No	Yes	No
1. Local Ordinance by Political Jurisdiction:	___	___	___	___
a. zoning	___	___	___	___
b. Building codes	___	___	___	___
c. Noise	___	___	___	___
d. Other as appropriate	___	___	___	___

Figure A-2 Local Regulation Checklist

		State Court Histories Obtained		Evaluation	
		Yes	No	Yes	No
1.	Airports	___	___	___	___
2.	Aircraft operations versus land use	___	___	___	___
3.	Noise	___	___	___	___
4.	Nuisance	___	___	___	___
5.	Trespass	___	___	___	___
6.	Damage	___	___	___	___
7.	"Taking"	___	___	___	___
8.	Building codes	___	___	___	___
9.	Zoning (as appropriate)	___	___	___	___
10.	Condemnation	___	___	___	___

Figure A-3 Court Decision Checklist

Appendix B

AICUZ Status Survey

B.1 Introduction

This chapter revises the 1984 AICUZ Status Survey format and provides the basis for future AICUZ status surveys. The plan is to accomplish this survey biennially in order to ensure that the fundamental aspects of a base's AICUZ are known by the Base Program Manager. In the future, greater emphasis will be placed on supplying accurate information since inputs are used in evaluating future basing decisions. Copies of these surveys should be routinely distributed to the appropriate RCO (Regional Compliance Office) as the information they contain will be useful with respect to determining priorities for Joint Land Use Study efforts.

B.2 Instructions For Completing the AICUZ Status Survey

1. Indicate name of base, year of this survey, AICUZ Program Manager, manager's DSN telephone number and office symbol.

2. Indicate MAJCOM, MAJCOM AICUZ Program Manager's name, DSN telephone number and office symbol.

3. Indicate the date that the study was initially released (Record all dates in this form in 6 digits, by year, month, and day- i.e. 880119). Check appropriate blank if the AICUZ requirement has been waived (indicate expiration date of waiver).

4. List the dates of all subsequent amendments after the initial release (Space is available for a maximum of 3 dates, separated by a space. Include most recent dates if more than 3 apply).

5. Indicate appropriate Regional Environmental Office , e.g. REO-ER, REO-CR or REO-WR. Check the agencies where your AICUZ is on file. Indicate whether or not it is used in local lending decisions by placing a "Y" or a "N" in the blank.

6. Place a "Y" or "N" in the blank to answer each of these questions. If applicable, indicate the AICUZ update schedule over the next 12 months beginning with 1 January. Indicate either the actual or estimated date each phase was completed or is anticipated to be completed.

7. Provide a status of existing land uses within the current AICUZ. Within each DNL range, list the approximate number of total acres, estimated residential population (do not include on-base population), and the percentage of off-base area occupied by incompatible land uses. Also provide the estimated percentage of land use in the following categories: base, residential, commercial, industrial, agricultural, recreational, and open. Do the same for the clear zones and accident potential zones.

8. Place an "X" in the blank which generally describes the level of conflict between local development, planning and zoning, and your base AICUZ program.

9. Indicate applicability by placing an "X" by the appropriate letter designation. Provide any remarks or explanation.

A. Flight tracks routed to minimize noise impacts on surrounding communities.
B. Engine run-up areas and test cells sited to avoid noise sensitive areas.
C. Hush houses and sound suppressors in use.
D. Preferential runway system in use.
E. "Quiet hours" observed for flying and engine runup activities (Note which hours).
F. Adequate sound attenuation incorporated into the design and construction of on-base facilities.

10. Self Explanatory.

11. Self Explanatory.

12. For each active runway, indicate the runway designation numbers, length of runway, width of runway, dimensions of clear zone (if clear zone is multi-configured [i.e, overlapping for parallel runways], follow with an (M) [i.e, 2000 x 3000(M)]). Indicate Y(Yes) or N(No) if APZs are shown in AICUZ study. If APZ is shown at only one end of runway, indicate the runway end in parenthesis [i.e, Y(22)]. If the APZ is non-standard in shape, indicate Y(NS).

13. Indicate by placing an "X" by the appropriate letter designation, the status of local controls to implement AICUZ. Provide any appropriate remarks or explanation.

A. Height and obstruction ordinance in affect.
B. AICUZ recommendations incorporated into local Comprehensive Plan (Explain to what extent).
C. AICUZ implemented in local zoning ordinances. (Explain to what extent)
D. AICUZ implemented in local building codes (Explain to what extent).
E. State legislation enacted (or pending) for AICUZ. Describe.
F. Other pending actions for compatible planning and land use controls. Describe.
G. Incompatible development proposals within the AICUZ usually denied by local jurisdictions.

Under OTHER, list other positive action, taken or planned by local government(s), which support AICUZ (e.g. noise disclosures to home buyers/renters, resolutions passed by local governments, etc.).

14. Self explanatory.

15. Place an "X" in the appropriate blank(s) to indicate which groups have received a base A1CUZ briefing in the past year:

A) Local government elected officials
B) Local planning officials
C) State or Federal agency representatives
D) Local special interest groups (e.g. local Homebuilders Association, Board of Realtors, etc.) Please specify.
E) Others (Describe)

16. Describe any state/local actions which negatively affect AICUZ, or any other concerns with regard to implementation.

AICUZ SURVEY FORM

1. BASE/YEAR:_____ PROGRAM MANAGER:_____

   AUTOVON:_____ OFFICE SYMBOL:_____

2. MAJCOM:_____ PROGRAM MANAGER:_____

   AUTOVON:_____ OFFICE SYMBOL:_____

3. RELEASE DATE OF INITIAL STUDY: _____ EXEMPTED_____

   WAIVED_____

4. RELEASE DATES OF LAST THREE AMENDMENTS:_____

5. REO:_____ AICUZ REPORT CURRENTLY ON FILE WITH:

   HUD _____ VA_____ FmHA_____

   USED IN LENDING DECISIONS? Y_____ N_____

6. -IS THE PUBLICLY RELEASED AICUZ STILL VALID? _____

   -DOES THE AICUZ INCORPORATE THE CURRENT MISSION? _____

   -HAS DATA BEEN REVALIDATED SINCE LAST RELEASE? _____

   -IS AICUZ CURRENTLY BEING UPDATED? _____

   IF YES, COMPLETE THE FOLLOWING:

PHASE	COMPLETION DATE	
	ACTUAL	ESTIMATED
I		
II		
III		
IV		
V		

7a. LAND USE STATUS FOR NOISE ZONES

DNL	Location	Est Pop	Acres	% Incomp L-U	% OF LAND USE WITHIN THE FOLLOWING CATEGORIES					
					Residential	Commercial	Industrial	Agricultural	Recreational	Open
NOISE SENSITIVE AREAS BETWEEN DNL 60dB AND DNL 65dB										
60-65 *	Off-Base									
	ON-Base									
ROUTINE AICUZ ANALYSIS										
65-70	Off-Base									
	ON-Base									
70-75	Off-Base									
	ON-Base									
75-80	Off-Base									
	ON-Base									
80+	Off-Base									
	ON-Base									
>DNL 80dB AND ABOVE IMPACTS OUTSIDE IMMEDIATE RUNWAY ENVIRONMENT										
80-85 **	Off-Base									
	ON-Base									
85+ **	Off-Base									
	ON-Base									

* In California only, for AICUZ public releases.
**Do not place in AICUZ studies for public release without clearence from HQ USAF. This information is typically for NEPA/EIAP purposes.

7b. LAND USE STATUS FOR ACCIDENT ZONES

	Est Pop	Acres	% Incomp L-U	% OF LAND USE WITHIN THE FOLLOWING CATEGORIES					
				Residential	Commercial	Industrial	Agricultural	Recreational	Open
For Runway (17)									
CZ									
APZ1									
APZ2									
For Runway (35)									
CZ									
APZ1									
APZ2									

8. CONFLICTS BETWEEN OFF-BASE DEVELOPMENT, PLANNING AND ZONING, AND THE BASE AICUZ:

A) NONE/VERY LITTLE _____

B) MODERATE _____

C) SIGNIFICANT _____

9. STATUS OF NOISE ABATEMENT ACTIVITIES/REMARKS:

A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

OTHERS:

10. CLEAR ZONES:

HAS ALL CLEAR ZONE ACQUISITION (FEE AND/OR EASEMENT) BEEN COMPLETED? Y_____ N_____

IF NO, INDICATE RUNWAY END AND NUMBER OF ACRES REMAINING TO BE ACQUIRED, ALONG WITH THE TYPE OF LAND USE CURRENTLY EXISTING ON THE ACREAGE TO BE AQUIRED:

RUNWAY END	ACRES	TYPE OF LAND USE
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

HAVE FACILITIES BEEN SITED ON BASE IN THE PAST TWO YEARS IN VIOLATION OF AICUZ CRITERIA? Y _____ N_____

IF YES, BRIEFLY DESCRIBE:

11. AVIGATION/CLEARANCE EASEMENTS:

DO AVIGATION EASEMENTS EXIST WITHIN THE CZ, APZ I AND/OR APZ II?

Y _____ N _____

DO AVIGATION EASEMENTS EXIST ANYWHERE ELSE AROUND THE BASE?

Y _____ N _____

BRIEFLY DESCRIBE:

12. RUNWAY/CZ/APZ DIMENSIONS:

RUNWAY DESIGNATION	LENGTH	WIDTH	CZ	APZ I	APZ II

13. STATUS ON CONTROLS TO IMPLEMENT AICUZ/REMARKS:

A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

G. _____

H. _____

OTHERS:

14. LOCAL AGENCIES IMPLEMENTING AICUZ:

NAME OF AGENCY POC

15. LOCAL INTERFACE:

AICUZ PROGRAM BEEN BRIEFED IN THE LAST TWO YEARS TO:

A. _____

B. _____

C. _____

D. _____

OTHERS (DESCRIBE):

16. PROBLEMS/CONCERNS: