



*Appendix A*  
**Fact Sheets**

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# DEL RIO JOINT LAND USE STUDY



## FACT SHEET

### What is a Joint Land Use Study?

A Joint Land Use Study (JLUS) is a planning effort that is a joint venture between an active military installation, surrounding cities and counties, state and federal agencies, and other stakeholders that are affected. The JLUS collaboration is funded through the Department of Defense (DoD) Office of Economic Adjustment (OEA).

### What will be addressed in the Del Rio JLUS?

The Del Rio JLUS will be unique in that many of the relationships that the city has with neighboring communities and recreation areas will need to be addressed. Essentially, all the surrounding lands and ownerships surrounding Laughlin Air Force Base (AFB) will be taken into consideration when developing and implementing the JLUS action items. The Laughlin AFB has a strong history with the City of Del Rio, Val Verde County and Kinney County; therefore, integrating these relationships into the JLUS is a priority.

### What are the Objectives of the JLUS?

The primary goal of a JLUS is to reduce the potential conflicts between the military installation and its host community while still accommodating economic development growth, sustaining economic vitality, protecting the general public's health and safety, all without compromising the operation missions of the installation. JLUS programs have three core objectives:

- ⇒ **Understanding.** To increase communication between the military, local jurisdictions, and stakeholders to promote an understanding of the strong economic and physical relationship between the installation and its neighbors.
- ⇒ **Collaboration.** To promote collaborative planning between the military, local jurisdictions, and stakeholders in order to safeguard the mission of the installation from future incompatible development.
- ⇒ **Actions.** To develop and implement strategies for reducing the impacts of incompatible activities on the community and military operations. To devise tools that will support compatibility in the future.

### What are the opportunities for Public Input?

The public can be involved in the development of the JLUS by providing input and guidance to the process by: informing the representatives of the Policy Committee of their issues and recommendations, using the interactive JLUS website, and attending the two public forums.

- ⇒ **Public Forum #1.** This public forum will introduce and define the JLUS project, present initial analysis, and collect additional information, issues and concerns.
- ⇒ **Public Forum #2.** This public forum will present the overall analysis and proposed implementation strategies. It will frame the development of the JLUS Implementation Action Plan.

**DEL RIO JOINT LAND USE STUDY**

**JLUS - HOME**

**What is a Joint Land Use Study?**

A Joint Land Use Study (JLUS) is a collaborative planning effort between active military installations, surrounding counties and cities, and other affected agencies. The JLUS is an inter-jurisdictional partnership that is funded by the Department of Defense Office of Economic Adjustment (OEA).

**Upcoming Events**

**Technical Oversight Committee Meeting #1**

This meeting will take place June 13, 2007 at 5:30 p.m. at the City Council Chambers 109 W. Broadway, Del Rio, Texas.

**JLUS Policy Committee Meeting #1**

This meeting will take place June 14, 2007 at 5:30 p.m. at the City Council Chambers 109 W.

**For More Information  
Please Visit the Project Website**  
[www.westplanning.com/docs/delrio](http://www.westplanning.com/docs/delrio)



### How long will the project take?

A JLUS typically takes one year to complete. The Del Rio JLUS is expected to be completed by May 2008.

### How will the project be undertaken?

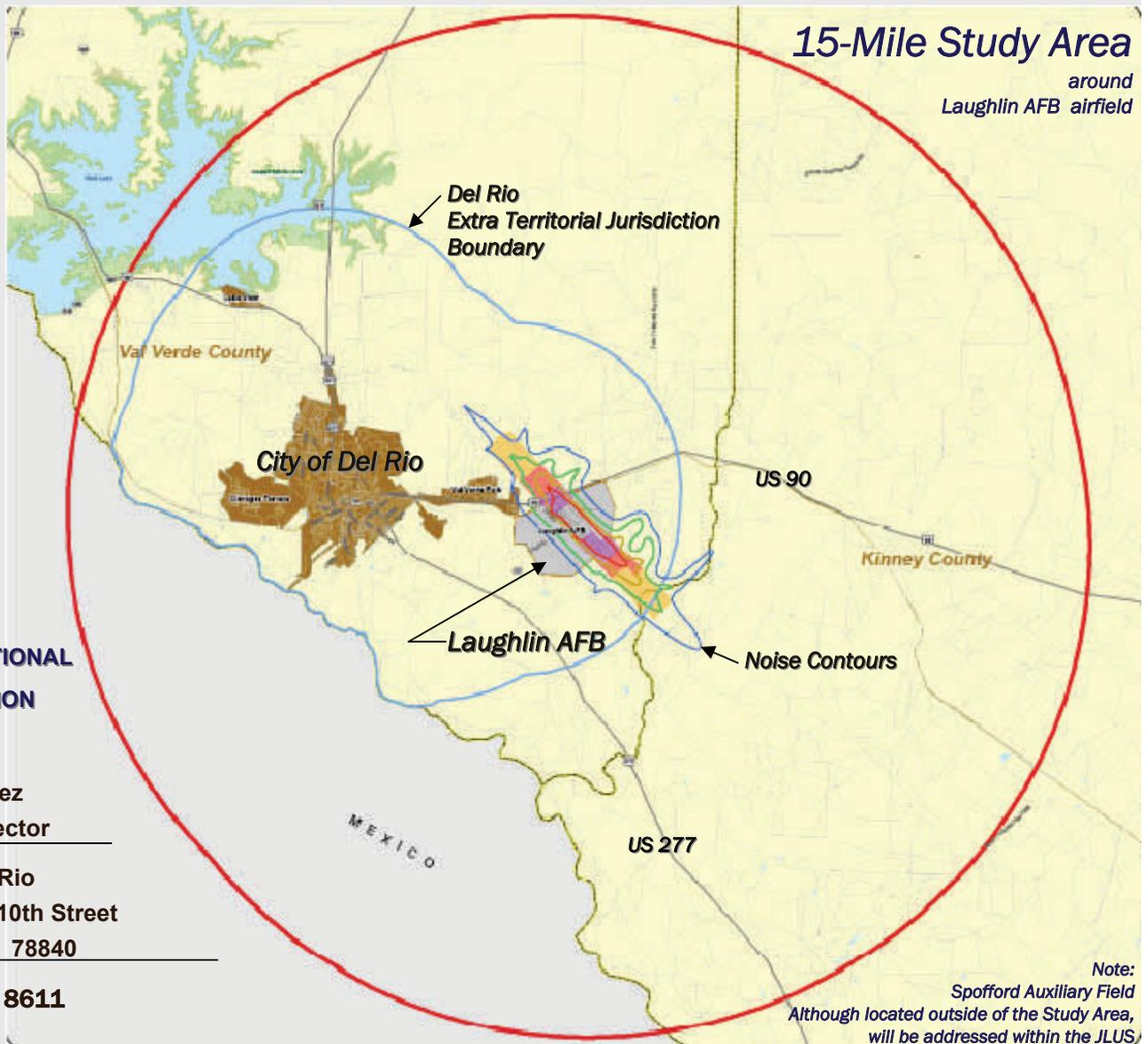
The project will be completed in five phases that are built upon each other:

- Phase 1: Data Collection
- Phase 2: Identification of Compatibility Issues
- Phase 3: Draft Compatibility Tools Strategies
- Phase 4: Implementation Action Plan
- Phase 5: Final Report

### Who will guide the development of the JLUS?

Two committees, comprised of city, county, Air Force, and other stakeholders will guide the development of the JLUS. These committees include:

- ⇒ **Policy Committee (PC)**. This committee is responsible for leading the direction of the JLUS, and monitoring the implementation and adopted policies and strategies.
- ⇒ **Technical Oversight Committee (TOC)**. This committee is made up of representatives from different agencies and the development community. The TOC identifies and addresses technical issues, provides feedback on report development, and assists in the development and evaluation of implementation strategies and tools.





# Del Rio Joint Land Use Study

## Fact Sheet #2

### What is a JLUS?

A Joint Land Use Study (JLUS) is a collaborative study that builds a team relationship with city, county and federal officials; residents; business and land owners; and the military to identify compatible land uses and growth management guidelines near military installations. A JLUS is implemented, essentially, to protect the residents' quality of life, the property owners' rights, and the mission of the base. Although primarily funded by the DOD Office of Economic Adjustment (OEA), a JLUS is produced by and for local communities. The primary objectives of the JLUS program are as follows:

#### Community

- Protect the health, safety, and welfare of residents and maintain quality of life
- Manage development in the vicinity of military installations that would interfere with the continued operations of these facilities
- Provide for sustainable growth in an economically, environmentally, and socially sustainable manner
- Maintain the economic vitality of the community

#### Military

- Promote the health, safety, and welfare of the military and civilian personnel living and working at or near the military installation
- Ensure the ability of the installation to achieve its mission, maintain military readiness, and support national defense
- Preserve the ability of the installation to expand or adapt its mission

### Del Rio JLUS—Implementation Actions

The Del Rio JLUS is designed to address all lands near Laughlin AFB that meet the following criteria.

- Land areas that have resources, activities, or land uses (existing or future) that may impact current or future military operations
- Land areas upon which military operations associated with the base may have an impact on resources, activities, or land uses (existing or future)

The result of a collaborative planning process, the recommendations within the draft Del Rio JLUS represent a true consensus plan; a realistic and coordinated approach to compatibility planning developed with the support of the stakeholders involved. The recommended strategies presented were developed to resolve the identified compatibility issues. In describing strategies, the Responsibility/Partners information identifies what agency or organization is responsible for implementing the strategy (Primary Responsibility) and which agencies and organizations are considered to be Partners in the strategy. The following strategies are recommended within the draft JLUS.

#### 1 Define and Establish an MIA for Laughlin AFB and Spofford Field

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County, Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years, Ongoing

**Partners:** Laughlin AFB

- Create a Military Influence Area for Laughlin AFB and Spofford Field that reflect the types and intensity of compatible land uses

#### 2 Identify Priority Locations for Acquisition

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County, Laughlin AFB

**Primary Responsibility Timeline:** 0-2 Years, Ongoing

**Partners:** Land Trust Organizations, DOD

- Laughlin AFB to work with local jurisdictions to identify locations requiring additional protections
- Identify locations that provide protections to sustaining the mission of the installation and also provide habitat values that can be used to identify properties acceptable under DOD Conservation Partnering opportunities
- Work with State congressional delegation to obtain necessary appropriations in the DOD budget for the purchase of critical parcels and conservation easements that protect current and future missions at Laughlin AFB

#### 3 Establish a Voluntary Acquisition Program / Purchase of Development Rights

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County

**Primary Responsibility Timeline:** 3-5 Years, Ongoing

**Partners:** Laughlin AFB, Land Trust Organizations, DOD

- Program should include provision of fee simple acquisition or acquisition of development rights
- Program should include transfer of property to a trust of property or conservation easement limiting future uses of the land
- Program should provide brochures that define the Voluntary Acquisition Program
- Program should investigate the use of a transfer development right (TDR) program
- Program should include development of an agricultural / ranching overlay district

Additional information, including the Del Rio JLUS document can be found online at [www.westplanning.com/docs/delrio](http://www.westplanning.com/docs/delrio).

**4 Develop and Implement a Conservation Easement Education Program**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County  
Val Verde County

**Primary Responsibility Timeline:** 3-5 years, Ongoing

**Partners:** Laughlin AFB, Land Trust Organizations

- The program should identify areas for potential inclusion
- The program should focus on the possible conservation partnering possibilities where easements would benefit the base, and protect the right of the landowner
- Pamphlets should be created with pertinent information and distributed to local landowners

**5 Leverage the DOD Encroachment Partnering Program**

**Primary Responsibility:** Laughlin AFB, DOD

**Primary Responsibility Timeline:** 0-2 Years, Ongoing

**Partners:** City of Del Rio, Kinney County, Maverick County, Val Verde County, Land Trust Organizations

- Pursue conservation opportunities near the base utilizing the DOD's Readiness and Environmental Protection Initiative (REPI) to identify priority locations for acquisition programs (property purchase, land deed transfer, or easement purchase). This should be done in addition to working with State Congressional delegation to obtain necessary appropriations in the DOD budget for the purchase of critical parcels and conservation easements to protect current and future missions at Laughlin AFB

**6 Implement AICUZ Recommendations**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County, Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years, Ongoing

**Partners:** Laughlin AFB

- Incorporate AICUZ policies and guidelines into City of Del Rio Comprehensive Plan and the proposed JAZB Joint Comprehensive Plan
- Amend the Laughlin AFB Compatible Land Use and Hazard Zoning Ordinance to include the recommendations from the updated Laughlin AFB AICUZ Studies
- Ensure height and obstruction ordinances reflect current Air Force and Federal Aviation Administration (FAA) Part 77 requirements
- Amend the JAZB's Laughlin AFB Airport Zoning Ordinance to reflect any changes within the updated AICUZ
- Modify building codes to ensure that new construction within the AICUZ area has the recommended noise level reductions incorporated into its design and construction
- Continue to coordinate with Laughlin AFB for planning and zoning actions that have the potential of affecting base operations. Develop a working group representing city planners and base planners to meet periodically, as needed, to discuss AICUZ concerns and major development proposals that could affect airfield operations

**7 Develop and Distribute BASH Educational Materials**

**Primary Responsibility:** Laughlin AFB

**Primary Responsibility Timeline:** 0-2 Years, Ongoing

**Partners:** City of Del Rio, Kinney County, Maverick County, Val Verde County, Joint Airport Zoning Board, US Fish and Wildlife

- Provide educational information program on reducing the potential for bird and wildlife attractions that may impede safe air operations to local jurisdictions and agencies in the region. The program should include a hotline to help the community identify key habitat areas

**8 Control Bird and Wildlife Attractions Near Laughlin AFB**

**Primary Responsibility:** Laughlin AFB

**Primary Responsibility Timeline:** Ongoing

**Partners:** City of Del Rio, Kinney County, Maverick County, Val Verde County, Joint Airport Zoning Board, US Department of Agriculture,  
US Fish and Wildlife

- Work directly with local jurisdictions and other appropriate agencies to explore various methods to control bird and wildlife attractions in the immediate vicinity of the base. Potential programs/actions may include the following:
  - Coordination with wildlife specialist to develop research programs to identify characteristics of bird and wildlife species and develop safe and effective methods of deterrence from the known information
  - Development of a Points of Contact list for the installation and local entities for BASH coordination
  - Development of MOUs or other agreements to allow Air Force personnel, such as an USDA BASH person, onto private property under designated conditions and agreed procedures to perform BASH actions (i.e. use of "bird busters")
  - Purchase a Bird Radar in joint efforts with Del Rio International Airport and Laughlin AFB

**9 Update Appropriate CIP and Master Infrastructure Plans**

**Primary Responsibility:** City of Del Rio, Texas Department of Transportation,  
School Districts

**Primary Responsibility Timeline:** Ongoing

**Partners:** Kinney County, Maverick County, Val Verde County, Laughlin AFB, Edwards Aquifer Authority, Texas Water Development Board

- Incorporate land use compatibility planning concepts into CIPs for infrastructure extensions and improvements
- Insert language to the CIP to notify the installation of any proposed new or expanding infrastructure plans
- Identify sources of funding for local road maintenance as development and population grows
- A Loop Road Corridor Study should be conducted to determine which area along the loop road would be compatible for development
- If public utilities are extended to a parcel in the unincorporated portion of the county, a deed restriction will be filed prior to connection that states service is only provided to the original parcel for one dwelling unit
- Prior to approval, the CIP should be reviewed for compatibility by Laughlin AFB

**27 Develop General MOU to Implement JLUS Process**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County, Laughlin AFB, Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years

**Partners:** Del Rio Chamber of Commerce

- Member jurisdictions and agencies of the JLUS Coordinating Committee should develop a general MOU to be executed at the beginning stages of implementation of the recommendations adopted by each jurisdiction. This MOU will detail the expectations for coordination and agreement to establish and maintain the JLUS Coordinating Committee

**28 Develop Specific MOUs to Implement JLUS Recommendations**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County, Laughlin AFB, Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years

**Partners:** US Border Patrol, Union Pacific Railroad

- Sign specific MOUs between individual jurisdictions and Laughlin AFB as tools are adopted. Examples include:
  - Official agreement between Union Pacific and Laughlin AFB to avoid unnecessary train stops along the boundary of Laughlin AFB
  - Develop a general MOU between Laughlin AFB and the US Border Patrol that implements the recommendations outlined in the JLUS in regards to frequency interference and air-to-air conflicts associated with border patrol operations

**29 Require Properties to Receive Full Disclosure at the Time of Advertisement**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County  
Val Verde County

**Primary Responsibility Timeline:** 0-2 Years, Ongoing

**Partners:** Laughlin AFB, Kinney County Tax Assessor, Maverick County Tax Assessor, Val Verde County Tax Assessor, State Real Estate Board, Title Companies

- Require that all purchasable property City-wide and within the MIA receive full real estate disclosures on the potential affects of noise, vibration, lighting, and other operational impacts by the base on the property at the time of advertisement to avoid any misunderstandings or conflicts. Work with local entities to incorporate these requirements into local codes and ordinances

**30 Modify Subdivision Regulations to Require Appropriate Real Estate Disclosures**

**Primary Responsibility:** City of Del Rio, Kinney County, Val Verde County,  
Joint Airport Zoning Board

**Primary Responsibility Timeline:** Ongoing

**Partners:** Laughlin AFB, Val Verde Tax Assessor

- Modify subdivision regulations to require a real estate disclosure is recorded as part of a property's deed upon sale of land and included as a Plat Note. Disclosure shall notify purchasing party of Laughlin AFB operations and potential compatibility issues

**31 Amend the Laughlin AFB Compatible Land Use and Hazard Zoning Ordinance and Zoning Map**

**Primary Responsibility:** Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years

**Partners:** Laughlin AFB

- Codify the MIAs established in Strategy #1
- Include the additional land use compatibility provisions recommended for MIA I into the regulations for the established Airport Noise Zones and Airport Hazard Abatement Zones
- Regulations shall include the unincorporated and incorporated areas located in the MIAs as defined in Strategy #1
- Develop a zoning map for the MIAs that support the MIAs Joint Comprehensive Plan

**32 Require Sound Attenuation for Buildings and Retrofit Existing Buildings**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County, Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years

**Partners:** None Identified

- Require sound attenuation for occupied buildings in or near the noise contours and the retrofitting of existing structures. The level of sound protection should be based on level of noise exposure and the type of land use

**33 Update or Develop Light and Glare Regulations**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County, Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years

**Primary Partners:** Laughlin AFB

- Develop light and glare controls to protect the operational environment near Laughlin AFB. These controls should be designed to reduce the amount of light that spills into surrounding areas and impacts regional ambient illumination

**34 Ensure Part 77 Compliance**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County, Joint Airport Zoning Board

**Primary Responsibility Timeline:** Ongoing

**Partners:** Laughlin AFB

- For all structures, ensure compliance with FAA Part 77 requirements when establishing height regulations or restrictions. Review the City of Del Rio subdivision and zoning ordinances and county subdivision ordinances to ensure compliance. Ensure regulations remind applicants of the FAA requirement to prepare an Obstacle Evaluation (OE)

**35 Mitigate Frequency Spectrum Impedance and Interference Issues Associated with Development**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County,  
Val Verde County, Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years

**Partners:** Laughlin AFB, FAA, FCC

- Work with the City of Del Rio, Kinney County, Maverick County, and Val Verde County to establish procedures to identify proposed projects that may potentially involve a source of frequency emissions (including WiFi)

**36 Develop and Adopt a Height Restrictions Ordinance**

**Primary Responsibility:** City of Del Rio, Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years

**Partners:** Laughlin AFB

- Develop a Height Restrictions Ordinance that establishes guidelines for all structures including alternative energy generating facilities (wind generators, solar energy, etc.). Restrictions should be particularly stringent in critical military operations areas

**37 Require a Water, Utility and Environmental Resources Study for Large Developments**

**Primary Responsibility:** City of Del Rio, Kinney County, Maverick County  
Val Verde County, Joint Airport Zoning Board

**Primary Responsibility Timeline:** 3-5 Years, Ongoing

**Partners:** None Identified

- For 10 acre or larger development projects, require a study of the quality and availability of wells and other utility resources be conducted, including an assessment of environmental and economic impacts in the pre-application process

**38 Promote Compatible Land Uses Along the Del Rio Relief Route**

**Primary Responsibility:** City of Del Rio, Val Verde County,  
Joint Airport Zoning Board

**Primary Responsibility Timeline:** 0-2 Years

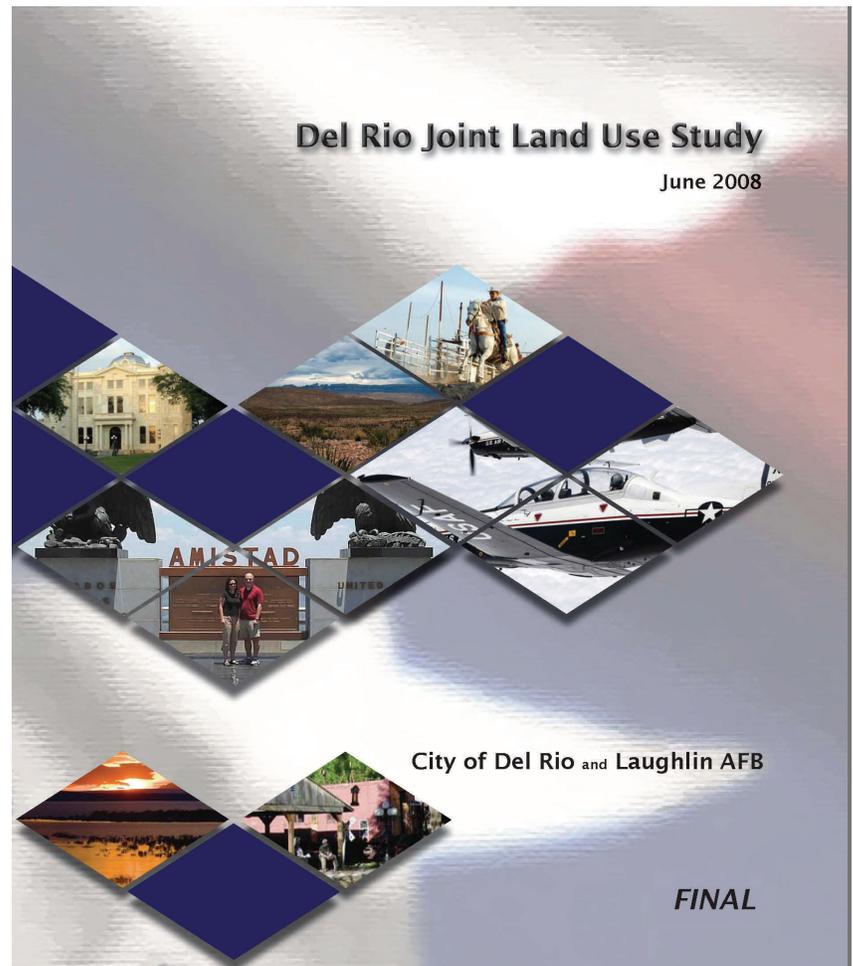
**Partners:** Laughlin AFB

- The City of Del Rio and Val Verde County shall work with Laughlin AFB and the local development community to promote a compatible pattern of land use along the Del Rio Relief Route. Development within this area shall adhere to the established guidelines developed for MIA I and II as proposed in Strategy #1

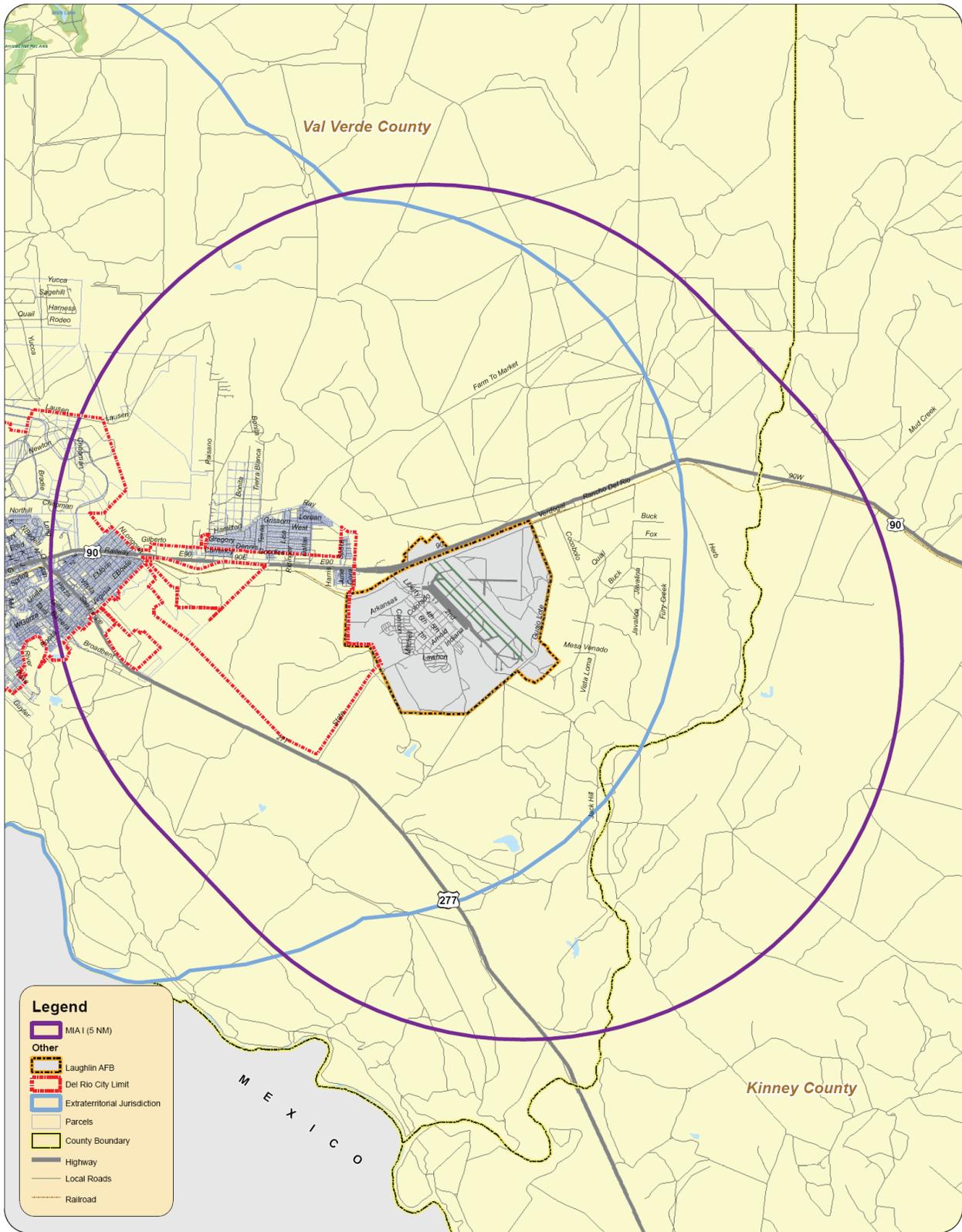
**Additional Information**

A complete copy of the draft JLUS can be found on the project internet website at the following address:

[www.westplanning.com/docs/delrio](http://www.westplanning.com/docs/delrio)



Proposed Laughlin AFB Military Influence Area I



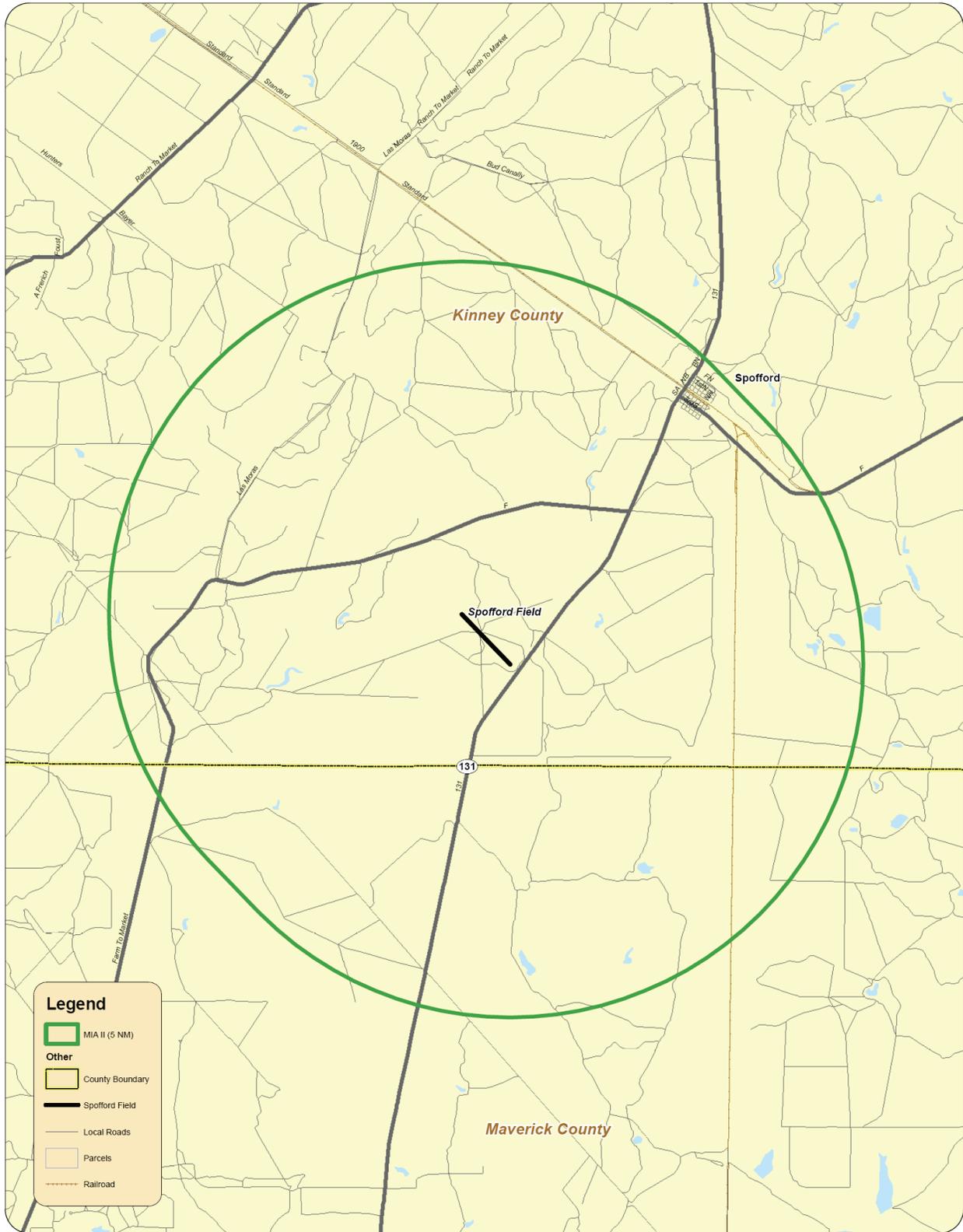
**Legend**

- MIA I (5 NM)
- Other
  - Laughlin AFB
  - Del Rio City Limit
  - Extraterritorial Jurisdiction
  - Parcels
  - County Boundary
  - Highway
  - Local Roads
  - Railroad

Miles  
0 0.8 1.6

**Laughlin AFB  
Military Influence Area I  
Del Rio Joint Land Use Study**

Proposed Spofford Field Military Influence Area II



0 1 2 Miles

**Spofford Field  
Military Influence Area II  
Del Rio Joint Land Use Study**

## Del Rio JLUS Compatibility Issues

Compatibility Issue	Compatibility Category	Map Index #	Encroachment Issue	Detailed Encroachment Issue Information
Man Made	Compatible Land Use	01A	Existing and proposed landfills	The existing City landfill attracts birds which pose a hazard to Laughlin's aviation training mission. This issue is defined as Bird Air Strike Hazard (BASH). In addition to the existing landfill, the City is currently investigating potential sites for a new landfill. The new landfill should be sited outside the area of Laughlin's primary aviation flight operations in order to decrease future BASH issues.
Man Made	Compatible Land Use	01B	Future development adjacent to Del Rio Loop Road	Incompatible land uses are a concern for future development within the vicinity of the new Loop Road. In addition to incompatible development issues, there is a concern that future development in this area may increase trespassing onto the Base. The increase of light and glare generated from new development in this area will also have a negative impact on Laughlin's mission.
Man Made	Compatible Land Use	01C	Laughlin mission impacts associated with the proposed wastewater treatment plant within the vicinity of the new Loop Road	The proposed wastewater treatment plant within the vicinity of the new Loop Road will impact Laughlin's mission. The City has requested a public hearing from Texas Commission of Environmental Quality (TCEQ) for the proposed treatment plant by the property owner to address the mission issues. The meeting will address the effects of the plant on the surrounding community and the base. Specifically, the Bird Aircraft Strike Hazard (BASH), potential for incompatible development, and the flow of 990,000 gallons of water per day to the treatment plant.
Man Made	Compatible Land Use	01D	Contamination of ground water supply from existing and future development	Existing development within the southeast area of Del Rio are dependent on septic tanks and wells which are located on sulfur contaminated soil posing a threat of and/or currently contaminating the regions ground water supply. There is a concern that as lot splits continue and future development occurs in this area the threat of the groundwater being contaminated will increase.
Man Made	Compatible Land Use	01E	Potential airport growth (in and surrounding Spring Lakes)	(ISSUE DELETED FROM FINAL LIST AND DOES NOT APPEAR ON CORRESPONDING MAP)
Man Made	Compatible Land Use	01F	Aircraft noise within the JAP Low Estates area	Aircraft noise is currently an issue within the JAP Low Estates area. The JAP Low Estates area is directly in line with the 65 dBA noise contour. Currently, Laughlin has received little to no noise complaints from this area. Many of the existing residents in this area are long time residents who have and continue to support Laughlin AFB. As residential development growth occurs in this area, the concern that new residents will not be as exceptive to aircraft noise.
Man Made	Compatible Land Use	01Fa	Aircraft noise within the Gateway Apartments area	Aircraft noise is an issue within the Gateway Apartments area. The apartments are located within the AICUZ noise contour area and located close to APZ1.
Man Made	Compatible Land Use	01G	Potential construction of towers and other high structures in the areas located within the Laughlin approach and departure corridors for both the south and north end of Laughlin's runways	Any construction of towers or high structures located in Laughlin's approach and departure corridors will impact Laughlin's air operations mission.
Man Made	Vertical Obstruction	03A	Existing phone towers near Laughlin's West Entry Gate	Existing phone towers near Laughlin's West Entry Gate poses problems for air and base operations from both a vertical obstruction as well as frequency interference.
Man Made	Local Housing Authority	04A	Assess the adequacy of housing-availability (rent vs. buy), price ranges, type of housing (size, capacity, etc.)	(ISSUE DELETED FROM FINAL LIST AND DOES NOT APPEAR ON CORRESPONDING MAP)
Man Made	Infrastructure Extensions	05A	Widening of Highway 90	A portion of Highway 90 that is planned for widening is located within Laughlin's Clear Zone adjacent to the runway approach lighting. The widening of 90 in this area can only occur within the existing easement on Laughlin AFB side of the road or on the opposite side of Laughlin AFB due to the impact to the runway approach lighting. The Texas Department of Transportation (TxDOT) is researching the options associated with widening the road within the existing easement.
Man Made	Infrastructure Extensions	05B	Future extension of utility lines	With future infrastructure extensions, Laughlin AFB's waterline from the springs to the base will need to be protected and preserved.
Man Made	Infrastructure Extensions	05Ba	Potential extension of City water service to Escondido Estates	In order for the City to provide water service to Escondido Estates in Val Verde County, the location of the water utility line extension would be in close proximity to Laughlin AFB. Historically, new development and growth usually occurs within the area adjacent to where the extension of utilities and other infrastructure is sited. New development in this increases the probability of incompatible land uses which would impact the mission of Laughlin AFB.
Man Made	AT/FP	06A	Trespassing on Laughlin AFB	Frequently, individuals who are illegally riding the trains, jump the train and trespass onto Laughlin AFB. As an interim solution, Laughlin AFB and Union Pacific have an informal agreement that Union Pacific trains will avoid stops along the Laughlin AFB boundary.

## Del Rio JLUS Compatibility Issues

Compatibility Issue	Compatibility Category	Map Index #	Encroachment Issue	Detailed Encroachment Issue Information
Man Made	Dust	09A	Dust from the Land Fill	(ISSUE DELETED FROM FINAL LIST AND DOES NOT APPEAR ON CORRESPONDING MAP)
Man Made	Alternative Energy Development	11A	Future development of alternative energy methods	Nationally, there is an increase in alternative energy development. Several types of alternative energy plants that have already impacted military missions. Air operation missions are impacted from both a vertical obstruction issue (height of turbine towers) and a frequency interference issue (frequencies generated from wind turbines) generated from Wind Energy plants. Air operation missions are also impacted from a glare issue (glare from solar mirror panels) and in some cases vertical obstruction issue where the solar mirror panels are mounted on high towers. Both wind and solar energy development poses danger to aircraft pilots and civilians within the communities which they fly over.
Man Made	Frequency Spectrum Impedance and Interference	13A	Frequency transmissions are being crossed between Mexico and the Base	(ISSUE DELETED FROM FINAL LIST AND DOES NOT APPEAR ON CORRESPONDING MAP)
Man Made	Public Trespassing	14A	People trespass onto or near the base from Mexico by hopping the fence or getting off of the train next to the Base	(ISSUE DELETED FROM FINAL LIST AND DOES NOT APPEAR ON CORRESPONDING MAP)
Man Made	Cultural Sites	15A	Archaeological sites	As development occurs within and around Laughlin, it is important to continue to protect and preserve archaeological sites.
Man Made	Interagency Coordination	17A	Competition for airspace due to aircraft flight operation conflicts between Laughlin and Border Patrol Agency	Aircraft flight operation conflicts between Laughlin's and the Border Patrol's aircraft is a current issue.
Natural	Water Quality / Quantity	01A	Sulfur contamination in ground water supply	Laughlin AFB and Escondido Estates' groundwater has a high percentage of sulfur present. The high sulfur count is possibly generated from the fault lines located in the area. The potential for the contaminated water supply in these areas may contaminate the good water supply through percolation generated naturally or from development in the area.
Natural	Water Quality / Quantity	01B	Decrease in groundwater supply in and around the JAP Low Estates area due to low water recharge	Issuance of water needs for existing and future residents in and around the JAP Low Estates area needs to be addressed. Long-term water supply for the entire area may be impacted if JAP Low Estates and other areas are dependent on sharing the ground water within the region.
Competition	Scarce Resources	01A	Impact on Laughlin's mission due to incompatible future growth within the area	If incompatible future growth occurs within the area, Laughlin will need to possibly investigate the options for changing their flight training routes to accommodate the growth. To avoid air to air conflict, the base will need to coordinate closely with the local airport.
Competition	Scarce Resources	01B	Impact on Laughlin's mission due to incompatible future growth within the area	If incompatible future growth occurs within the area, Laughlin will need to possibly investigate the options for changing their flight training routes to accommodate the growth. To avoid air to air conflict, the base will need to coordinate closely with the local airport.
Competition	Land, Air, and Sea Spaces	02B	Informal communication between agencies	As development growth continues within the region, the need to formalize existing informal agency agreements to prevent encroachment to Laughlin's mission.
Competition	Land, Air, and Sea Spaces	02C	Aircraft flight operation conflicts between Laughlin and Del Rio International Airport	As operations at Del Rio International Airport increase, the potential for aircraft flight operation conflicts with Laughlin AFB may occur.
Competition	Frequency Spectrum Capacity	03A	Frequency interference between Laughlin and Mexico frequencies	Frequencies from Mexico frequently bleed / interfere with Laughlin's frequencies impacting the air operation mission.
Competition	Frequency Spectrum Capacity	03B	Frequency interference on Laughlin's mission due to Border Patrol UAV operations	Frequencies from Border Patrol Unmanned Aerial Vehicle (UAV) interferes with Laughlin's frequencies impacting their air operation mission.
Competition	Ground Transportation Capacity	04A	Peak hour traffic congestion with in the surrounding community impacts the quick response time required for Laughlin personnel to travel to the base during emergency response events.	In emergency situations on the base, it is difficult for Military personnel who live in the local community to respond in a timely manner due to heavily congested zones, especially near the main and west gate.

## Air Force Land Use Compatibility Guidelines in Noise Zones

Land Use		Accident Potential Zones			Noise Zones			
SLUCM NO	Land Use Name	Clear Zone	APZ I	APZ II	DNL 65-69 dB	DNL 70-74 dB	DNL 75-79 dB	DNL 80+ dB
<b>10</b>	<b>Residential</b>							
11	Household Units	N	N	Y <sup>1</sup>	A <sup>11</sup>	B <sup>11</sup>	N	N
11.11	Single Units: detached	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.12	Single Units: semi-detached	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.13	Single Units: attached row	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.21	Two Units: side by side	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.22	Two Units: one above the other	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.31	Apartments: walk up	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.32	Apartment: elevator	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
12	Group Quarters	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
13	Residential Hotels	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
14	Mobile Home Parks or Courts	N	N	N	N	N	N	N
15	Transient Lodgings	N	N	N	A <sup>11</sup>	B <sup>11</sup>	C <sup>11</sup>	N
16	Other Residential	N	N	N <sup>1</sup>	A <sup>11</sup>	B <sup>11</sup>	N	N
<b>20</b>	<b>Manufacturing</b>							
21	Food & kindred products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
22	Textile mill products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
23	Apparel and other finished products; made from fabrics, leather, and similar materials; manufacturing	N	N	N <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
24	Lumber and wood products (except furniture); manufacturing	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
25	Furniture and fixtures; manufacturing	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
26	Paper and allied products; manufacturing	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
27	Printing, publishing, and allied industries	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
28	Chemicals and allied products; manufacturing	N	N	N <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
29	Petroleum refining and related industries	N	N	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
<b>30</b>	<b>Manufacturing (continued)</b>							
31	Rubber and misc. plastic products; manufacturing	N	N <sup>2</sup>	N <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
32	Stone, clay and glass products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
33	Primary metal products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
34	Fabricated metal products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
35	Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks	N	N	N <sup>2</sup>	Y	A	B	N
39	Miscellaneous manufacturing	N	Y <sup>2</sup>	Y <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>

## Air Force Land Use Compatibility Guidelines in Noise Zones

Land Use		Accident Potential Zones			Noise Zones			
SLUCM NO	Land Use Name	Clear Zone	APZ I	APZ II	DNL 65-69 dB	DNL 70-74 dB	DNL 75-79 dB	DNL 80+ dB
<b>40</b>	<b>Transportation, Communication and Utilities</b>							
41	Railroad, rapid rail transit, and street railway transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
42	Motor vehicle transportation	N <sup>3</sup>	Y	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
43	Aircraft transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
44	Marine craft transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
45	Highway and street right-of-way	N <sup>3</sup>	Y	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
46	Automobile parking	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
47	Communication	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	A <sup>15</sup>	B <sup>15</sup>	N
48	Utilities	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>
49	Other transportation, communication and utilities	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	A <sup>15</sup>	B <sup>15</sup>	N
<b>50</b>	<b>Trade</b>							
51	Wholesale trade	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
52	Retail trade-building materials, hardware, and farm equipment	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
53	Retail trade-shopping centers	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
54	Retail trade-food	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
55	Retail trade-automotive, marine craft, aircraft and accessories	N	Y <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
56	Retail trade-apparel and accessories	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
57	Retail trade-furniture, home, furnishings and equipment	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
58	Retail trade-eating and drinking establishments	N	N	N <sup>2</sup>	Y	A	B	N
59	Other retail trade	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
<b>60</b>	<b>Services</b>							
61	Finance, insurance and real estate services	N	N	Y <sup>6</sup>	Y	A	B	N
62	Personal services	N	N	Y <sup>6</sup>	Y	A	B	N
62.4	Cemeteries	N	Y <sup>7</sup>	Y <sup>7</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14,21</sup>
63	Business services	N	Y <sup>8</sup>	Y <sup>8</sup>	Y	A	B	N
64	Repair Services	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
65	Professional Services	N	N	Y <sup>6</sup>	Y	A	B	N
65.1	Hospitals, nursing homes	N	N	N	A <sup>+</sup>	B <sup>+</sup>	N	N
65.1	Other medical facilities	N	N	N	Y	A	B	N
66	Contract construction services	N	Y <sup>6</sup>	Y	Y	A	B	N
67	Government services	N	N	Y <sup>6</sup>	Y <sup>6</sup>	A <sup>+</sup>	B <sup>+</sup>	N
68	Educational services	N	N	N	A <sup>+</sup>	B <sup>+</sup>	N	N
69	Miscellaneous	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N

## Air Force Land Use Compatibility Guidelines in Noise Zones

Land Use		Accident Potential Zones			Noise Zones			
SLUCM NO	Land Use Name	Clear Zone	APZ I	APZ II	DNL 65-69 dB	DNL 70-74 dB	DNL 75-79 dB	DNL 80+ dB
<b>70</b>	<b>Cultural, Entertainment, and Recreational</b>							
71	Cultural activities (including churches)	N	N	N <sup>2</sup>	A <sup>*</sup>	B <sup>*</sup>	N	N
71.2	Nature exhibits	N	Y <sup>2</sup>	Y	Y <sup>*</sup>	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
72.1.1	Outdoor music shells, amphitheaters	N	N	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	N	N	N	Y <sup>17</sup>	Y <sup>17</sup>	N	N
73	Amusements	N	N	Y <sup>8</sup>	Y	Y	N	N
74	Recreational activities (include golf courses, riding stables, water recreation)	N	Y <sup>8,9, 10</sup>	Y	Y <sup>*</sup>	A <sup>*</sup>	B <sup>*</sup>	N
75	Resorts and group camps	N	N	N	Y <sup>*</sup>	Y <sup>*</sup>	N	N
76	Parks	N	Y <sup>8</sup>	Y <sup>8</sup>	Y <sup>*</sup>	Y <sup>*</sup>	N	N
79	Other cultural, entertainment and recreation	N	Y <sup>9</sup>	Y <sup>9</sup>	Y <sup>*</sup>	Y <sup>*</sup>	N	N
<b>80</b>	<b>Resource Production and Extraction</b>							
81	Agriculture (except live stock)	Y <sup>16</sup>	Y	Y	Y <sup>18</sup>	Y <sup>19</sup>	Y <sup>20</sup>	Y <sup>20, 21</sup>
81.5 to 81.7	Livestock farming and animal breeding	N	Y	Y	Y <sup>18</sup>	Y <sup>19</sup>	Y <sup>20</sup>	Y <sup>20, 21</sup>
82	Agricultural related activities	N	Y <sup>5</sup>	Y	Y <sup>18</sup>	Y <sup>19</sup>	N	N
83	Forestry Activities	N <sup>5</sup>	Y	Y	Y <sup>18</sup>	Y <sup>19</sup>	Y <sup>20</sup>	Y <sup>20, 21</sup>
84	Fishing Activities	N <sup>5</sup>	Y <sup>5</sup>	Y	Y	Y	Y	Y
85	Mining Activities	N	Y <sup>5</sup>	Y	Y	Y	Y	Y
89	Other resource production or extraction	N	Y <sup>5</sup>	Y	Y	Y	Y	Y

**Key to Air Force Land Use Compatibility Guidelines in Noise Zones**

SLUCM	Standard Land Use Coding Manual, U.S. Department of Transportation
Y (Yes)	Land Use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
Y <sup>x</sup> (Yes with Restrictions)	The land use and related structures are generally compatible. See notes 1-21.
N <sup>x</sup> (No with exceptions)	The land use and related structures are generally incompatible. See notes 1-21.
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.
A, B, or C	Land use and related structures generally compatible; measures to achieve NLR of A (25 dB), B (30 dB), or C (35 dB) need to be incorporated into the design and construction of structures.
A*, B*, 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. See appropriate footnotes.
*	The designation of these uses as “compatible” in this zone reflects individual federal agency and program consideration of general cost and feasibility factors, as well as past community experiences and program objectives. Localities, when evaluating the application of these guidelines to specific situations, may have different concerns or goals to consider.

**Notes for Air Force Land Use Compatibility Guidelines in Noise Zones**

1. Suggested maximum density of 1-2 dwelling units per acre possibly increased under a Planned Unit Development (PUD) where maximum lot coverage is less than 20 percent.
2. Within each land use category, uses exist where further definition may be needed due to the variation of densities in people and structures.
3. The placing of structures, buildings, or above ground utility lines in the clear zone is subject to severe restrictions. In a majority of the clear zones, these items are prohibited. See AFI 32-7063 and AFI 32-1026 for specific guidance.
4. No passenger terminals and no major above ground transmission lines in APZ I.
5. Factors to be considered: labor intensity, structural coverage, explosive characteristics, and air pollution.
6. Low-intensity office uses only. Meeting places, auditoriums, etc., are not recommended.
7. Excludes chapels.
8. Facilities must be low intensity.
9. Clubhouse not recommended.
10. Areas for gatherings of people are not recommended.
- 11a. Although local conditions may require residential use, it is discouraged in DNL 65-69 dB and strongly discouraged in DNL 70-74 dB. An evaluation should be conducted prior to approvals, indicating that a demonstrated community need for residential use would not be met if development were prohibited in these zones, and that there are no viable alternative locations.
- 11b. Where the community determines the residential uses must be allowed, measures to achieve outdoor to indoor NLR for DNL 65-69 dB and DNL 70-74 dB should be incorporated into building codes and considered in individual approvals.
- 11c. NLR criteria will not eliminate outdoor noise problems. However, building location and site planning, and design and use of berms and barriers can help mitigate outdoor exposure, particularly from near ground level sources. Measures that reduce outdoor noise should be used whenever practical in preference to measures which only protect interior spaces.
12. Measures to achieve the same NLR as required for facilities in the DNL 65-69 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
13. Measures to achieve the same NLR as required for facilities in the DNL 70-74 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
14. Measures to achieve the same NLR as required for facilities in the DNL 75-79 dB range must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.

15. If noise sensitive, use indicated NLR; if not, the use is compatible.
16. No buildings.
17. Land use is compatible provided special sound reinforcement systems are installed.
18. Residential buildings require the same NLR required for facilities in the DNL 65-69 dB range.
19. Residential buildings require the same NLR required for facilities in the DNL 70-74 dB range.
20. Residential buildings are not permitted.
21. Land use is not recommended. If the community decides the use is necessary, hearing protection devices should be worn by personnel.

## Air Force Land Use in Accident Potential Zones

SLUCM NO	Land Use Name	Clear Zone Recommendation	APZ I Recommendation	APZ II Recommendation	Density Recommendation
<b>10</b>	<b>Residential</b>				
11	Household Units				
11.11	Single Units: detached	N	N	Y <sup>2</sup>	Maximum density of 1-2 Du/Ac
11.12	Single Units: semi-detached	N	N	N	
11.13	Single Units: attached row	N	N	N	
11.21	Two Units: side by side	N	N	N	
11.22	Two Units: one above the other	N	N	N	
11.31	Apartments: walk up	N	N	N	
11.32	Apartment: elevator	N	N	N	
12	Group Quarters	N	N	N	
13	Residential Hotels	N	N	N	
14	Mobile Home Parks or Courts	N	N	N	
15	Transient Lodgings	N	N	N	
16	Other Residential	N	N	N	
<b>20</b>	<b>Manufacturing</b>				
21	Food & kindred products; manufacturing	N	N	Y	Maximum FAR 0.56
22	Textile mill products; manufacturing	N	N	Y	Same as above
23	Apparel and other finished products; made from fabrics, leather, and similar materials; manufacturing	N	N	N	
24	Lumber and wood products (except furniture); manufacturing	N	Y	Y	Maximum FAR of 0.28 in APZ I & 0.56 in APZ II
25	Furniture and fixtures; manufacturing	N	Y	Y	Same as above
26	Paper and allied products; manufacturing	N	Y	Y	Same as above
27	Printing, publishing, and allied industries	N	Y	Y	Same as above
28	Chemicals and allied products; manufacturing	N	N	N	
29	Petroleum refining and related industries	N	N	N	
<b>30</b>	<b>Manufacturing (continued)</b>				
31	Rubber and misc. plastic products; manufacturing	N	N	N	
32	Stone, clay and glass products; manufacturing	N	N	Y	Maximum FAR 0.56
33	Primary metal products; manufacturing	N	N	Y	Same as above
34	Fabricated metal products; manufacturing	N	N	Y	Same as above

## Air Force Land Use in Accident Potential Zones

SLUCM NO	Land Use Name	Clear Zone Recommendation	APZ I Recommendation	APZ II Recommendation	Density Recommendation
35	Professional scientific, and controlling instruments; photographic and optical goods; watches and clocks	N	N	N	
39	Miscellaneous manufacturing	N	Y	Y	Maximum FAR of 0.28 in APZ I & 0.56 in APZ II
<b>40</b>	<b>Transportation, Communication and Utilities</b>				See Note 3 below
41	Railroad, rapid rail transit, and street railway transportation	N	Y <sup>5</sup>	Y	Same as above
42	Motor vehicle transportation	N	Y <sup>5</sup>	Y	Same as above
43	Aircraft transportation	N	Y <sup>5</sup>	Y	Same as above
44	Marine craft transportation	N	Y <sup>5</sup>	Y	Same as above
45	Highway and street right-of-way	N	Y <sup>5</sup>	Y	Same as above
46	Automobile parking	N	Y <sup>5</sup>	Y	Same as above
47	Communication	N	Y <sup>5</sup>	Y	Same as above
48	Utilities	N	Y <sup>5</sup>	Y	Same as above
485	Solid waste disposal (landfills, incineration, etc.)	N	N	N	
49	Other transportation, communication and utilities	N	Y <sup>5</sup>	Y	See Note 3 below
<b>50</b>	<b>Trade</b>				
51	Wholesale trade	N	Y	Y	Maximum FAR of 0.28 in APZ I & 0.56 in APZ II
52	Retail trade-building materials, hardware, and farm equipment	N	Y	Y	Maximum FAR of 0.14 in APZ I & 0.28 in APZ II
53	Retail trade-shopping centers	N	N	Y	Maximum FAR of 0.22
54	Retail trade-food	N	N	Y	Maximum FAR of 0.24
55	Retail trade-automotive, marine craft, aircraft and accessories	N	Y	Y	Maximum FAR of 0.14 in APZ I & 0.28 in APZ II
56	Retail trade-apparel and accessories	N	N	Y	Maximum FAR 0.28
57	Retail trade-furniture, home, furnishings and equipment	N	N	Y	Same as above
58	Retail trade-eating and drinking establishments	N	N	N	
59	Other retail trade	N	N	Y	Maximum FAR of 0.22
<b>60</b>	<b>Services</b>				
61	Finance, insurance and real estate services	N	N	Y	Maximum FAR of 0.22 for "General Office/Office Park"
62	Personal services	N	N	Y	Office uses only. Maximum FAR of 0.22
62.4	Cemeteries	N	Y <sup>7</sup>	Y <sup>7</sup>	

## Air Force Land Use in Accident Potential Zones

SLUCM NO	Land Use Name	Clear Zone Recommendation	APZ I Recommendation	APZ II Recommendation	Density Recommendation
63	Business services (credit reporting; mail, stenographic, reproduction; advertising)	N	N	Y	Maximum FAR of 0.22 in APZ II
63.7	Warehousing and storage	N	Y	Y	Maximum FAR 1.0 in APZ I & 2.0 in APZ II
64	Repair Services	N	Y	Y	Maximum FAR of 0.11 APZ I & 0.22 in APZ II
65	Professional Services	N	N	Y	Maximum FAR of 0.22
65.1	Hospitals, other nursing homes	N	N	N	
65.1	Other medical facilities	N	N	N	
66	Contract construction services	N	Y	Y	Maximum FAR of 0.11 APZ I & 0.22 in APZ II
67	Government services	N	N	Y	Maximum FAR of 0.24
68	Educational services	N	N	N	
69	Miscellaneous	N	N	Y	Maximum FAR of 0.22
<b>70</b>	<b>Cultural, Entertainment, and Recreational</b>				
71	Cultural activities	N	N	N	
71.2	Nature exhibits	N	Y <sup>8</sup>	Y <sup>8</sup>	
72	Public assembly	N	N	N	
72.1	Auditoriums, concert halls	N	N	N	
72.11	Outdoor music shells, amphitheaters	N	N	N	
72.2	Outdoor sports arenas, spectator sports	N	N	N	
73	Amusements – fairgrounds, miniature golf, driving ranges; amusement parks, etc	N	N	Y	
74	Recreational activities (include golf courses, riding stables, water recreation)	N	Y <sup>8</sup>	Y <sup>8</sup>	Maximum FAR of 0.11 APZ I & 0.22 in APZ II
75	Resorts and group camps	N	N	N	
76	Parks	N	Y <sup>8</sup>	Y <sup>8</sup>	Same as 74
79	Other cultural, entertainment and recreation	N	Y <sup>8</sup>	Y <sup>8</sup>	Same as 74
<b>80</b>	<b>Resource Production and Extraction</b>				
81	Agriculture (except live stock)	Y <sup>4</sup>	Y <sup>9</sup>	Y <sup>9</sup>	
81.5, 81.7	Livestock farming and breeding	N	Y <sup>9, 10</sup>	Y <sup>9, 10</sup>	
82	Agricultural related activities	N	Y <sup>9</sup>	Y <sup>9</sup>	Maximum FAR of 0.28 in APZ I; 0.56 in APZ II no activity which produces smoke, glare, or involves explosives

**Air Force Land Use in Accident Potential Zones**

SLUCM NO	Land Use Name	Clear Zone Recommendation	APZ I Recommendation	APZ II Recommendation	Density Recommendation
83	Forestry Activities 11	N	Y	Y	Same as above
84	Fishing Activities 12	N <sup>12</sup>	Y	Y	Same as above
85	Mining Activities	N	Y	Y	Same as above
89	Other resource production or extraction	N	Y	Y	Same as above
<b>90</b>	<b>Other</b>				
91	Undeveloped Land	Y	Y	Y	
93	Water Areas	N <sup>13</sup>	N <sup>13</sup>	N <sup>13</sup>	

**Key to Air Force Land Use in Accident Potential Zones**

SLUCM	Standard Land Use Coding Manual, U.S. Department of Transportation
Y (Yes)	Land Use and related structures compatible without restrictions.
N (No)	Land Use and related structures are not compatible and should be prohibited.
Y <sup>x</sup> (Yes with Restrictions)	The land use and related structures are generally compatible. However, see note(s) indicated by the superscript.
N <sup>x</sup> (No with exceptions)	The land use and related structures are generally incompatible. However, see notes indicated by the superscript.
FAR-Floor Area Ratio	A floor area ratio is the ratio between the square feet of floor area of the building and the site area. It is customarily used to measure non-residential intensities.
Du/Ac-Dwelling Units per Acre	This metric is customarily used to measure residential densities.

**Notes for Air Force Land Use in Accident Potential Zones**

1. A "Yes" or a "No" designation for compatible land use is to be used only for general comparison. Within each, uses exist where further evaluation may be needed in each category as to whether it is clearly compatible, normally compatible, or not compatible due to the variation of densities of people and structures. In order to assist installations and local governments, general suggestions as to floor/area ratios are provided as a guide to density in some categories. In general, land use restrictions which limit commercial, services, or industrial buildings or structure occupants to 25 per acre in APZ I, and 50 per acre in APZ II are the range of occupancy levels considered to be low density. Outside events should normally be limited to assemblies of not more than 25 people per acre in APZ I, and maximum assemblies of 50 people per acre in APZ II.
2. The suggested maximum density for detached single-family housing is one to two Du/Ac. In a Planned Unit Development (PUD) of single family detached units where clustered housing development results in large open areas, this density could possibly be increased provided the amount of surface area covered by structures does not exceed 20 percent of the PUD total area. PUD encourages clustered development that leaves large open areas.
3. Other factors to be considered: Labor intensity, structural coverage, explosive characteristics, air-pollution, electronic interference with aircraft, height of structures, and potential glare to pilots.
4. No structures (except airfield lighting), buildings or aboveground utility/ communications lines should normally be located in Clear Zone areas on or off the installation. The Clear Zone is subject to severe restrictions. See NAVFAC P-80.3 or Tri-Service Manual AFM 32-1123(I); TM 5-803-7, NAVFAC P-971 "Airfield and Heliport Planning & Design" dated 1 May 99 for specific design details.
5. No passenger terminals and no major above ground transmission lines in APZ I.
6. Low intensity office uses only. Accessory uses such as meeting places, auditoriums, etc. are not recommended.

7. No Chapels are allowed within APZ I or APZ II.
8. Facilities must be low intensity, and provide no tot lots, etc. Facilities such as clubhouses, meeting places, auditoriums, large classes, etc. are not recommended.
9. Includes livestock grazing, but excludes feedlots and intensive animal husbandry. Activities that attract concentrations of birds creating a hazard to aircraft operations should be excluded.
10. Includes feedlots and intensive animal husbandry.
11. Lumber and timber products removed due to establishment, expansion, or maintenance of Clear Zones will be disposed of in accordance with appropriate DOD Natural Resources Instructions.
12. Controlled hunting and fishing may be permitted for the purpose of wildlife management.
13. Naturally occurring water features (e.g., rivers, lakes, streams, wetlands) are compatible.

Prepared by:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**AVIGATION EASEMENT**

THIS GRANT OF AN AVIGATION EASEMENT made this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between \_\_\_\_\_, whose mailing address is \_\_\_\_\_ ("Grantor," which term shall include the singular and plural, masculine and feminine), and Escambia County, a political subdivision of the State of Florida, acting by and through its duly authorized Board of County Commissioners, whose mailing address is 223 Palafox Place, Pensacola, Florida 32502 ("Grantee").

**WITNESSETH**

WHEREAS Grantor is the owner of certain real property located in Escambia County, Florida; and

WHEREAS, Grantee requires, as a condition precedent to the development or use of the property, conveyance from Grantor of an Avigation Easement; and

WHEREAS Grantor has agreed to grant an Avigation Easement to Grantee in and over Grantor's property under the terms and conditions set forth in this instrument;

NOW, THEREFORE, Grantor, for good and valuable consideration the receipt and sufficiency of which is acknowledged, does grant to Grantee and Grantee's heirs, assigns, successors, and legal representatives, a perpetual Avigation Easement in and over the following described property (Property):

See legal description attached as Exhibit A

This Avigation Easement is granted with the following express terms and conditions:

1. Grantor grants, bargains, sells, and conveys to Grantee, its successors and assigns, for the use and benefit of Grantee and any civilian or military airfields that may be located in Escambia County and any operators, owners, or users of civilian or military Aircraft that may operate in the airspace in and above Escambia County, a perpetual Avigation Easement for the free and unobstructed flight of Aircraft ("Aircraft" being defined for the purpose of this instrument as any contrivance now known or hereafter invented, used, or designed for flight in and through the air) in and through the airspace above, over, and across the surface of the Property, together with the right to create or cause in the airspace such noise, vibrations, odors, vapors, exhaust, smoke, dust

or other effects that may be inherent in the operation of Aircraft, and for the use of the airspace by Aircraft for launching from, maneuvering about, and landing at local civilian or military airfields.

2. Nothing in this instrument shall operate to preclude claims by Grantor, his heirs, assigns, successors, and legal representatives, for any physical injuries or damages caused by Aircraft crashing into or otherwise coming into direct physical contact with the Property or persons located thereon.

3. Grantor, for himself, his heirs, assigns, successors, and legal representatives, expressly releases and forever discharges Grantee, its elected or appointed officials, representatives, agents, employees, and any operators, owners, or users of civilian or military Aircraft or airfields, from any and all liability whatsoever, including any and all suits, claims, debts, obligations, costs, expenses, actions, or demands, vested or contingent, known or unknown, whether for injuries to persons or damages to property, which Grantor may own, hold, or assert by reason of noise, vibrations, odors, vapors, exhaust, smoke, dust or other effects that may be inherent in the operation of Aircraft, caused or created by the flight or passage of Aircraft in or through the airspace subject to the easement described in this instrument. Additionally, Grantor, for himself, his heirs, assigns, successors, and legal representatives, waives any and all right to sue Grantee, its elected or appointed officials, representatives, agents, or employees, and any operators, owners, or users of civilian or military Aircraft or airfields, and agrees to dismiss any and all such suits that may be now or subsequently asserted against Grantee, its elected or appointed officials, representatives, agents, or employees, and any operators, owners, or users of civilian or military Aircraft or airfields, for injuries to persons or damage to property arising from noise, vibrations, odors, vapors, exhaust, smoke, dust or other effects that may be inherent in the operation of Aircraft, caused or created by the flight or passage of Aircraft in or through the airspace subject to the easement described in this instrument. Grantor acknowledges that the above-stated consideration is all that Grantor will receive for this easement and no promise for any other or further consideration has been made by anyone. Grantor further acknowledges that Grantor is executing this instrument solely in reliance upon his own knowledge, belief, and judgment and not upon any representations made by any party released or others in their behalf.

4. Grantor shall not build, construct, cause or permit to be built or constructed, or permit to remain on the Property any building or structure that would interfere with the rights conveyed by this instrument or that would violate any local, state, or federal law or regulation regarding the operation of Aircraft or airfields.

5. Grantor shall not use or permit the use of the Property in such a manner as to create electrical, electronic, or other interference with radio, radar, microwave, or other similar means of Aircraft communications, or to make it difficult for pilots to distinguish between airfield navigation lights and visual aids and other lights, or to result in glare or other condition that would impair the vision of pilots, or to otherwise endanger the operation of Aircraft.

6. In the event of any violation of the rights and restrictions contained in this instrument, Grantee shall have the right, at its sole option after giving five (5) days prior notice to Grantor, to use any and all means to remedy the violation. Additionally, Grantee shall have a perpetual

easement for ingress to and egress from the Property for the purpose of inspecting or removing any instrumentality that may be causing or contributing to a violation of the rights and restrictions conveyed by this instrument.

7. Grantor acknowledges that the Property is located in an area impacted by Aircraft noise and that present and future Aircraft noise may interfere with the unrestricted use and enjoyment of the Property. Grantor further acknowledge that Aircraft noise may change over time by virtue of greater numbers of Aircraft, louder Aircraft, variations in airfield operations, and changes in airfield and air traffic control procedures.

8. This Avigation Easement and all of the terms and conditions described in this instrument shall run with the land in perpetuity and shall be binding upon Grantor and his heirs, assigns, successors and legal representatives.

9. In the event that one or more of the provisions contained in this instrument or any part thereof or any application thereof shall be held invalid, illegal, or unenforceable in any respect by a court of competent jurisdiction, the validity, legality and enforceability of the remaining provisions shall not be affected or impaired and shall remain in full force and effect.

10. In the event that any civilian or military airfield adjacent to the Property ceases to operate, or if such other circumstances subsequently arise that would obviate the purpose underlying this instrument, then Grantor, his heirs, assigns, successors, and legal representatives, may petition the Board of County Commissioners of Escambia County to terminate this Avigation Easement. If the Board of County Commissioners approves the termination of this Avigation Easement, then it shall promptly execute and record in the public records an appropriate document reflecting the termination.

11. Grantor, for himself and his heirs, assigns, successors, and legal representatives, covenants with Grantee, its successors and assigns, that Grantor is lawfully seized and possessed of the Property in fee simple, has a good right and full power to grant, bargain, sell and convey this Avigation Easement over the Property.

IN WITNESS WHEREOF Grantor has executed this instrument on the date first above written.

**GRANTOR:**

Witness \_\_\_\_\_  
Print Name \_\_\_\_\_

By: \_\_\_\_\_  
(name of corporation/other business entity)

Print Name \_\_\_\_\_

Witness \_\_\_\_\_  
Print Name \_\_\_\_\_

STATE OF FLORIDA  
COUNTY OF ESCAMBIA

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by \_\_\_\_\_. He/She is ( ) personally known to me, ( ) produced current \_\_\_\_\_ as identification.

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Printed Name of Notary Public

(Notary Seal)

**GRANTOR:**

Witness \_\_\_\_\_  
Print Name \_\_\_\_\_

By: \_\_\_\_\_  
(name of corporation/other business entity)

Print Name \_\_\_\_\_

Witness \_\_\_\_\_  
Print Name \_\_\_\_\_

STATE OF FLORIDA  
COUNTY OF ESCAMBIA

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_. He/She is ( ) personally known to me, ( ) produced current \_\_\_\_\_ as identification.

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Printed Name of Notary Public

(Notary Seal)

**ACCEPTANCE**

This Avigation Easement accepted by Escambia County, Florida on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, as authorized by the Board of County Commissioners of Escambia County, Florida at its meeting held on the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

**BOARD OF COUNTY COMMISSIONERS  
ESCAMBIA COUNTY, FLORIDA**

\_\_\_\_\_  
Chairman

ATTEST: Ernie Lee Magaha  
Clerk of the Circuit Court

\_\_\_\_\_  
Deputy Clerk

(Seal)

\*\*\*\*\*

This Avigation Easement utilizes the form provided by Escambia County in accordance with Section 3, Ordinance No. 2004-52. Therefore, acceptance is executed by the Planning and Zoning Director on behalf of the County, without further action required by the Board.

Accepted on behalf of Escambia County,  
Florida, on the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_ by

\_\_\_\_\_  
Planning and Zoning Director

STATE OF FLORIDA  
COUNTY OF ESCAMBIA

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by \_\_\_\_\_. He/She is ( ) personally known to me, ( ) produced current \_\_\_\_\_ as identification.

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Printed Name of Notary Public

(Notary Seal)



**Recording Requested By And When Recorded Return To:**

Burbank-Glendale-Pasadena  
Airport Authority  
2627 Hollywood Way  
Burbank, CA 91505  
Attn: Director, Airport Engineering

**EASEMENT DEED AND AGREEMENT**

**(Avigation Rights)**

This EASEMENT DEED AND AGREEMENT ("Avigation Easement Agreement") is executed and delivered as of this \_\_\_\_\_ day of \_\_\_\_\_, 1999, by [COMPANY NAME], a California corporation \_\_\_\_\_, as trustee under the Land Title Agreement dated \_\_\_\_\_, 1999 ("Grantor") and the **BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY**, a public entity formed under a joint exercise of powers agreement among the cities of Burbank, Glendale and Pasadena, California, pursuant to the California Joint Exercise of Powers Act ("Grantee"), with reference to the following facts:

**RECITALS**

- A Grantor is the owner in fee simple of that certain real property (the "Property") located in the City of Burbank, County of Los Angeles, and State of California, legally described in Exhibit "A" attached hereto and incorporated herein by reference.
- B Grantee is the owner and operator of the Burbank-Glendale-Pasadena Airport (the Burbank-Glendale-Pasadena Airport, together with any future expansion thereof or modification thereof being hereinafter referred to as the "Airport") situated in the County of Los Angeles, State of California, which is more particularly described in Exhibit "B" attached hereto and incorporated herein by reference.
- C This Avigation Easement Agreement is made, executed and delivered pursuant to and in accordance with the terms of a Land Title Trust Agreement among the Trustee, Grantee and the City of Burbank, dated August \_\_, 1999 (the "Trust Agreement")

**1. GRANT OF AVIGATION EASEMENT**

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Grantor, for itself and its successors and assigns, does hereby grant to Grantee, its successors and assigns, for the use and benefit of Grantee, the tenants and licensees of Grantee, and all users of the Airport, the following easements, rights and servitudes, which shall be appurtenant to the Airport, as to Grantee, and in gross, as to the tenants and licensees of Grantee and as to all users of the Airport (collectively the "Avigation Easement"):

- 1.1 Passage of Aircraft. A perpetual nonexclusive easement and right of way for the "Passage of Aircraft" (as hereinafter defined) by whomsoever owned and operated in, to, over and through all air space of the Property located above the height of the lowest of the "imaginary surfaces" established in relation to the Airport and to each runway at the Airport in accordance with the applicable provisions of Federal Aviation

Administration regulations set forth in 14 C.F.R. §§77.21-77.29 (as the same may be amended from time to time), to an indefinite height above said imaginary surfaces. As used herein, the term "Aircraft" shall mean any contrivance now known or hereafter invented, used or designed for navigation of or flight in the air, and the term "Passage of Aircraft" shall include, but not be limited to, Aircraft operation, navigation and flight; however, except to the extent constituting "Incidental Effects" as provided in Section 1.2 below, the term "Passage of Aircraft" shall not include Aircraft landing, explosion, crash, falling objects, dumping or spillage of liquid fuel or other occurrence causing direct physical injury to persons or direct physical damage to property.

- 1.2 Incidental Effects. A perpetual nonexclusive easement and right to cause within, and to enter or penetrate into or transmit through, any improved or unimproved portion of the Property, or any air space above the ground surface of the Property, such noise, sounds, vibrations, electronic interference, fumes, dust, fuel vapor particles, and all other similar effects that may result from or be related to the ownership, operation or maintenance of the Airport, the use of the Airport by Aircraft, the flight of Aircraft to, from or over the Airport, or the flight of Aircraft over the Property (at heights above the "imaginary surfaces" described in Section 1.1 above), or the taking-off or landing of Aircraft from or at the Airport (collectively, "Incidental Effects"), including, without limitation, any Incidental Effects that may be objectionable or would otherwise constitute a trespass, a permanent or continuing nuisance, personal injury or taking or damage to the Property due to invasiveness, intermittence, frequency, loudness, intensity, toxicity of Aircraft emissions or fuel, interference, emission, odor, annoyance or otherwise.

## **2. COVENANTS**

- 2.1 Interference With Air Navigation. In furtherance of the easements and rights herein granted, Grantor hereby covenants, for itself and its successors and assigns, at all times hereafter, that it will not take any action, cause or allow any electronic, electromagnetic or light emissions, allow any obstruction to exist, or construct any structure on the Property which would conflict or interfere with or infringe Grantee's rights hereunder, including the full use and enjoyment of the Avigation Easement.
- 2.2 Changes. The rights, easements, benefits, waivers, covenants and agreements granted hereunder, including the Avigation Easement, shall continue notwithstanding any increase or other change in the boundaries, volume of operations, noise, or pattern of air traffic at the Airport. The Avigation Easement and this Avigation Easement Agreement may not be modified, amended, terminated or abandoned except by execution and delivery of an instrument executed and acknowledged by Grantee, and Grantor agrees that, in the absence of such an instrument, no conduct by Grantee or increase, diminution or change in use of the Avigation

Easement shall constitute either an overburdening of the Avigation Easement or a termination or abandonment of the Avigation Easement.

- 2.3 Covenants Binding On and Benefiting Successive Owners and Assigns. The parties intend that all waivers, restrictions, covenants and agreements set forth herein relate to the use, repair, maintenance or improvement of the Property or the Airport, or some part thereof, and shall run with the land of Grantor and Grantee, and any grantee, successor or assign of Grantor who acquires any estate or interest in or right to use the Property shall be bound hereby for the benefit of the Airport and for the benefit of any grantee, successor or assign of Grantee, including, without, limitation, the tenants and licensees of Grantee, and all users of the Airport.

### **3. GENERAL PROVISIONS**

- 3.1 Attorneys' Fees. Should Grantor or Grantee or any of their respective successors or assigns retain counsel to enforce any of the provisions herein or protect their interests in any matter arising under this Avigation Easement Agreement, or to recover damages by reason of any alleged breach of any provision of this Avigation Easement Agreement, the losing party in any action pursued in a court of competent jurisdiction shall pay to the prevailing party all costs, damages, and expenses incurred by the prevailing party, including, but not limited to, attorneys' fees and costs incurred in connection therewith.
- 3.2 Interpretation. No provision of this Avigation Easement Agreement is to be interpreted for or against any party because that party or that party's legal representative drafted such provision.
- 3.3 Waiver. No violation or breach of any provision of this Avigation Easement Agreement may be waived unless in writing. Waiver of any one breach of any provision of this Avigation Easement Agreement shall not be deemed to be a waiver of any other breach of the same or any other provision of this Avigation Easement Agreement.
- 3.4 Severability. In the event that any one or more covenant, condition, right or other provision contained in this Avigation Easement Agreement is held to be invalid, void or illegal by any court of competent jurisdiction, the same shall be deemed severable from the remainder of this Avigation Easement Agreement and shall in no way affect, impair or invalidate any other covenant, condition, right or other provision contained in this Avigation Easement Agreement.
- 3.5 Additional Documents. In addition to the documents and instruments to be delivered as provided in this Avigation Easement Agreement, Grantor or its successors and assigns, as the case may be, shall, from time to time at the request of Grantee, execute and deliver to Grantee such other documents and shall take such other action as may be reasonably required to carry out more effectively the terms of this Avigation Easement Agreement.

- 3.6 Governing Law. This Avigation Easement Agreement has been negotiated and entered into in the State of California, and shall be governed by, construed and enforced in accordance with the statutory, administrative and judicial laws of the State of California.
- 3.7 Integration. This Avigation Easement Agreement, including the exhibits, constitutes the final, complete and exclusive statement of the parties relative to the subject matter hereof and there are no oral or parol agreements existing between Grantor and Grantee relative to the subject matter hereof which are not expressly set forth herein and covered hereby. This is an integrated agreement.
- 3.8 Prior Rights. The rights, easements, benefits, waivers, covenants and agreements in favor of Grantee, its successors and assigns, the tenants and licensees of Grantee, and all users of the Airport under this Avigation Easement Agreement are subject and subordinate to, and do not terminate, modify, restrict, or impair in any manner the rights, easements, benefits, waivers, covenants and agreements in favor of the City of Burbank, a municipal corporation ("City"), its grantees, successors and assigns, under that certain document pertaining to the Property entitled Grant of Easements, Declaration of Use Restrictions and Agreement for Trust Property executed as of \_\_\_\_\_, 1999, by the Authority, the City, and the Trustee, and recorded on \_\_\_\_\_, 1999 as Document Number \_\_\_\_ at Book \_\_\_\_\_, Page \_\_\_\_\_ of Official Records, County of Los Angeles, State of California (the "Trust Property Easement"). Nothing in this Avigation Easement Agreement is intended to, nor shall be interpreted in any manner to (i) terminate, modify, restrict, or impair in any manner the rights of the City under that certain Grant of Easements, Declaration of Use Restrictions and Agreement for Adjacent Property executed by the Authority and the City as of \_\_\_\_\_, 1999, and recorded on \_\_\_\_\_, 1999 as Document Number \_\_\_\_ at Book \_\_\_\_\_, Page \_\_\_\_\_ of Official Records, County of Los Angeles, State of California; (ii) permit or require use of the Property for purposes of expanding or enlarging the Airport under California Public Utilities Code Section 21661.6 ("PUC Section 21661.6"), or (iii) create rights that will result in the preemption of or otherwise affect adversely the applicability, validity and enforceability of PUC Section 21661.6 or local land use laws, including, but not limited to the City of Burbank's Zoning Ordinance and General Plan, or the Burbank Redevelopment Agency's Golden State Redevelopment Plan.

IN WITNESS WHEREOF, the parties have executed and delivered this Avigation Easement Agreement as of the date first set forth above.

"GRANTOR"

**SECURITY TRUST COMPANY,**

a California corporation,

\_\_\_\_\_ ,

as trustee under Land Title Trust  
Agreement dated August \_\_\_\_\_ ,  
1999

By: \_\_\_\_\_

Title: \_\_\_\_\_

"GRANTEE"

**BURBANK-GLENDALE-PASADENA  
AIRPORT AUTHORITY**

By: \_\_\_\_\_

Its: President

STATE  
OF  
CALIFORNIA

)  
) ss

COUNTY OF LOS ANGELES )

On \_\_\_\_\_, \_\_\_\_\_, before me, \_\_\_\_\_ [INSERT NAME], a Notary Public,  
personally appeared \_\_\_\_\_, personally known to me (or proved to me on the  
basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument  
and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and  
that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the  
person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature \_\_\_\_\_ (SEAL)

STATE  
OF  
CALIFORNIA

)  
) ss

COUNTY OF LOS ANGELES )

On \_\_\_\_\_, \_\_\_\_\_, before me, \_\_\_\_\_ [INSERT NAME], a Notary Public, personally appeared \_\_\_\_\_, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature \_\_\_\_\_ (SEAL)

**CERTIFICATE OF ACCEPTANCE**

This is to certify that the interest in real property conveyed by the attached Easement Deed and Agreement (Aviation Rights) dated as of \_\_\_\_\_, \_\_\_\_\_, FROM \_\_\_\_\_, as a trustee under Land Title Trust Agreement dated \_\_\_\_\_, 1999, to the Burbank-Glendale-Pasadena Airport Authority, a public entity formed under a joint exercise of powers agreement among the cities of Burbank, Glendale and Pasadena, California, pursuant to the California Joint Exercise of Powers Act, is hereby accepted by the undersigned on behalf of the Burbank-Glendale-Pasadena Airport Authority pursuant to authority granted by motion at a meeting held on \_\_\_\_\_, \_\_\_\_\_, and Grantee consents to the recordation thereof by its duly authorized officer.

Dated: As of \_\_\_\_\_, \_\_\_\_\_

**BURBANK-GLENDALE-PASADENA**

**AIRPORT AUTHORITY**

By: \_\_\_\_\_

Its: President

**AIRPORT ENVIRONS  
REAL ESTATE SALE/LEASE DISCLOSURE**

Pursuant to Section 58-2(d) of the Escambia County Code of Ordinances, any owner of real property who sells or leases that real property within the established Airfield Influence Planning Districts (AIPDs) or noise zones surrounding local military installations or within the established Real Estate Disclosure Area surrounding Pensacola Regional Airport, as described in Article 11 of the Land Development Code, is required to disclose to any buyer or lessee that the property is subject to varying degrees of accident potential and/or noise from aircraft. For properties within the AIPDs or military noise zones, Article Eleven requires that the notice be proved in all advertising materials and/or brochures concerning the sale or lease of the property, but no later than the signing of a contract for sale or lease. For properties within the Real Estate Disclosure Area surrounding the Pensacola Regional Airport, Article 11 requires that the notice be given as soon as practicable, but no later than the signing of a contract for sale or lease.

To: \_\_\_\_\_  
(Buyer or Lessee)

The Property at: \_\_\_\_\_  
(Street Address & Zip Code)

\*\*\*\*\*

**(Following to be completed by Seller or Landlord)**

**Is located within an AIPD for the following Airfield:**

- \_\_\_\_\_ NAS Pensacola
- \_\_\_\_\_ NOLF Saufley
- \_\_\_\_\_ NOLF Site 8

**Is located within the following Noise Zone:**

Military Noise Zone

- \_\_\_\_\_ Noise Level 1 [65 – 70dB Day-Night Average Sound Level (Ldn)]
- \_\_\_\_\_ Noise Level 2 (70 – 75dB Ldn)
- \_\_\_\_\_ Noise Level 3 (Greater than 75db Ldn)

**Is located adjacent to the following Airport:**

- \_\_\_\_\_ Pensacola Regional Airport

Pensacola Regional Airport Noise Zone

- \_\_\_\_\_ Noise Level A [65-70dB Day-Night Average Sound Level (Ldn)]
- \_\_\_\_\_ Noise Level B (70 – 75db Ldn)
- \_\_\_\_\_ Noise Level C (Greater than 75dB Ldn)

**Is located within the following AIPD Zone:**

- \_\_\_\_\_ AIPD-1 (AICUZ Accident Potential Zones)
- \_\_\_\_\_ AIPD-1 – Area "A"
- \_\_\_\_\_ AIPD-1 – Area "B"
- \_\_\_\_\_ AIPD-2

\*\*\*\*\*

**CERTIFICATION:**

**AS TO SELLER/LANDLORD:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**AS TO BUYER/LESSEE:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## REAL ESTATE DISCLOSURE FORM INSTRUCTIONS AND REMITTAL ADDRESSES

- (1) Written notice that real property to be sold or leased is within an established Airfield Influence Planning District and/or noise zone shall be disclosed to the purchaser/lessee as soon as possible after the start of the transaction. Inclusion of the Airfield Influence Planning District and/or Accident Potential Zone and Noise Zone, together with the name of the applicable base, should be included in the advertisements for the property. However, disclosure of this information is required in writing no later than at the signing of the contract for sale or lease.

As proof of compliance with this disclosure requirement, the owner and the buyer or lessee shall execute the attached disclosure form. However, a "blanket disclosure," i.e., a copy of the lessor's original execution of the form, may be used in subsequent lease transactions so long as each subsequent lessee signs a disclosure form.

- (2) The determination as to whether the real property lies within an Airfield Influence Planning District, Accident Potential Zone and/or Noise Zone shall be made by the Planning and Zoning Department upon the written request of the property owner or agent and shall be provided within five business days. The request must include the street address as to the leased property and both the street address and the legal description contained in the deed for such real property in the event of a sale.

Alternatively, the information may be obtained by accessing the Escambia County Web Page ([www.myescambia.com](http://www.myescambia.com)). Open the drop-down "Quick Links" menu at the top of the page. Click the link "Access GIS Maps" and follow the instructions. (If you experience problems navigating the site, please contact the GIS Department at (850) 595-3598.)

- (3) After the closing of a sale, a copy of the fully executed disclosure form shall be filed with the deed in the official records of Escambia County, Florida. For both a sale and a lease, a copy of the executed disclosure shall be sent to either:

For Naval Air Station Pensacola Real Estate Disclosure Area:

Naval Air Station Pensacola  
Attention: AICUZ Officer  
c/o Commanding Officer  
190 Radford Blvd.  
Pensacola, Florida 32508-5217

Or, for NOLF Saufley and NOLF Site 8 Real Estate Disclosure Area:

Aviation/Community Planner  
JPATS Coordinator  
Operations Code 31  
Naval Air Station Whiting Field  
7077 USS Lexington Court  
Milton, FL 32570-6016

Or, for Pensacola Regional Airport Real Estate Disclosure Area:

Airport Director  
Pensacola Regional Airport  
2430 Airport Blvd., Suite 225  
Pensacola, FL 32504

**REAL ESTATE TRANSFER DISCLOSURE FOR PROPERTIES LOCATED IN A LOCALITY  
IN WHICH A MILITARY AIR INSTALLATION IS LOCATED**

**[If the real property is not located in a Noise Zone and/or Accident Potential Zone (APZ),  
the use of this form is not required.]**

1. As of the date of this Disclosure, the undersigned property owner(s) represent that the real property described below is located in a Noise Zone and/or Accident Potential Zone (APZ), as shown or referenced on the Official Zoning Map designated by the locality in which the property is located.
2. The following are representations made by the property owner(s), as required by Section 55-519.1 of the Code of Virginia:

A. As of the date of this Disclosure the real property located at (Street Address, Locality and Zip Code) \_\_\_\_\_, \_\_\_\_\_, Virginia is located within the following Noise Zone and/or Accident Potential Zone (APZ), as shown or referenced on the Official Zoning Map of (Name of Locality) \_\_\_\_\_:

Noise Zone – (Initial One)

\_\_\_\_/\_\_\_\_ <65 dB DNL    \_\_\_\_/\_\_\_\_ 65-70 dB DNL    \_\_\_\_/\_\_\_\_ 70-75 dB DNL    \_\_\_\_/\_\_\_\_ >75 dB DNL

Accident Potential Zone (APZ) – (Initial One)

\_\_\_\_/\_\_\_\_ Clear Zone    \_\_\_\_/\_\_\_\_ APZ-1    \_\_\_\_/\_\_\_\_ APZ-2    \_\_\_\_/\_\_\_\_ None (outside APZs)

B. The abbreviation “DNL” refers to a day-night average sound level. The frequency of actual single noise events may vary over time depending on the operational needs of the military. **Single noise events may result in significantly higher noise levels than the average level(s) in any of the Noise Zones listed above.**

C. Noise Zones and Accident Potential Zones are subject to change. For this reason, it should not be assumed that the property will remain in the same Noise Zone and/or Accident Potential Zone.

Additional information may be obtained from the locality.

In the event the owner fails to provide the disclosure required by § 55-519.1, or the owner misrepresents, willfully or otherwise, the information required in such disclosure, except as result of information provided by an officer or employee of the locality in which the property is located, the purchaser may maintain an action to recover his actual damages suffered as the result of such violation. Notwithstanding the provisions of this disclosure, no purchaser of residential real property located in a noise zone designated on the official zoning map of the locality as having a day-night average sound level of less than 65 decibels shall have a right to maintain an action for damages pursuant to this section.

The owner(s) state that they reasonably believe the information contained herein is true and accurate and further acknowledge that they have been informed of their rights and obligations under the Virginia Residential Property Disclosure Act.

Owner \_\_\_\_\_ Date \_\_\_\_\_

Owner \_\_\_\_\_ Date \_\_\_\_\_

Purchaser(s) acknowledge receipt of a copy of this disclosure statement and further acknowledge that they have been informed of their rights and obligations under the Virginia Residential Property Disclosure Act.

Purchaser \_\_\_\_\_ Date \_\_\_\_\_

Purchaser \_\_\_\_\_ Date \_\_\_\_\_

7/1/07

R\* Date/Time MAR-31-2008(MON) 15:57  
03/31/2008 15:43 83077567968307756796  
JAYNE DOUGLASP. 001  
PAGE 01**ORDINANCE NO. O: 2008-009****AN ORDINANCE VALIDATING THE CREATION OF THE CITY OF DEL RIO - VAL VERDE COUNTY JOINT AIRPORT ZONING BOARD AND REAFFIRMING THE APPOINTMENT OF MEMBERS TO THAT BOARD.**

**WHEREAS**, by Ordinance Number O: 91-32 dated October 22, 1991 of the City of Del Rio, Texas (the "City") and Order No. 91-387 dated November 12, 1991 of the Commissioners Court of Val Verde County, Texas (the "County"), the Del Rio - Val Verde County Joint Airport Zoning Board (the "Joint Board") was created pursuant to the Airport Zoning Act, Texas Local Government Code, Chapter 241 (the "Act"); and

**WHEREAS**, the Joint Board was properly constituted with two members having been appointed by the City and two members by the County, the majority of which members properly elected a chairman; and

**WHEREAS**, the Joint Board undertook various actions in accordance with the Act including, but not limited to, the adoption of (i) the Del Rio International Airport Hazard Zoning Ordinance No. JAZB O:92-01 on October 15, 1992 (the "Del Rio International Ordinance"), and (ii) the Laughlin Air Force Base Compatible Land Use and Hazard Zoning Ordinance (the "LAFB Zoning Regulation") on March 3, 1993; and

**WHEREAS**, by County Order No. 02-005 dated January 7, 2002 and City Ordinance Numbers O: 2002-1 and O: 2002-2 dated January 8, 2002, the County and City appeared to re-create the Joint Board, each appointing new members thereto to replace the original members who were no longer able to serve; and

**WHEREAS**, the majority of the 2002 Joint Board members properly elected a chairman and undertook various actions in accordance with the Act including, but not limited to, actions leading to the replacement of the Del Rio International Ordinance by the Del Rio International Airport Hazard Zoning Regulations (the "Del Rio International Regulation") on March 5, 2002, said regulation being codified in the City Code of the City by Ordinance No. 2002-46 dated October 8, 2002; and

**WHEREAS**, due to the resignation of the members appointed to the Joint Board by the City in 2002, the City appointed two replacement members in City Resolution Number R: 2007-183 dated November 27, 2007; and

**WHEREAS**, the City and County desire to clarify the intent of City Ordinance Numbers O: 2002-1 and O: 2002-2 and County Order No. 02-005 and validate the creation of the Joint Board in 1991 and its continued existence since that time; and

**WHEREAS**, the City finds that the meeting at which this Ordinance was adopted was open to the public, and public notice of the time, place and purpose of said meeting was given, all as required by Chapter 551, Texas Government Code;

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**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DEL RIO, TEXAS:**

- Section 1. VALIDATING THE CREATION OF THE JOINT BOARD.** The City finds that: (i) the Joint Board was created pursuant to Section 241.014 the Act on November 12, 1991 through the combined actions of the adoption by the City of Ordinance Number O: 91-32 and adoption by the County of Order No. 91-387; (ii) the Joint Board has continued in existence since its creation in 1991; and (iii) actions taken by the City in Ordinance Numbers O: 2002-1 and O: 2002-2 had the effect of reappointing members to the Joint Board by the City.
- Section 2. REAFFIRMING THE APPOINTMENT OF MEMBERS TO THE JOINT BOARD.** The City reaffirms the appointment of Robert Kusenberger, Sr. and Michaelanna Hunter as the City's appointed members to the Joint Board.
- Section 3. CONFIRMING ACTIONS TAKEN BY THE JOINT BOARD.** The City confirms all actions taken by the Joint Board in accordance with the Act including, but not limited to, the adoption of the LAFB Zoning Regulation and the Del Rio International Regulation, each of which continues in full force and effect.
- Section 4. INCORPORATION OF RECITALS.** The City hereby finds that the statements set forth in the recitals of this Ordinance are true and correct, and the City hereby incorporates such recitals as a part of this Ordinance.
- Section 5. SEVERABILITY.** If any provision of this Ordinance or the application thereof to any circumstance shall be held to be invalid, the remainder of this Ordinance and the application thereof to other circumstances shall nevertheless be valid, as if such invalid provision had never appeared herein, and the City hereby declares that this Ordinance would have been enacted without such invalid provision.

**PASSED AND APPROVED this 26 day of February, 2008.**

*Efrain V. Valdez*  
 \_\_\_\_\_  
 EFRAIN V. VALDEZ  
 Mayor

**ATTEST**

*Linda M. Weaver*  
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 LINDA M. WEAVER  
 City Secretary

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**REVIEWED FOR ADMINISTRATION: REVIEWED AS TO FORM AND LEGALITY:**



**FRANCES F. RODRIGUEZ**  
City Manager

**DAVID V. SOROLA**  
City Attorney

*Please see next page.*

**LOCAL GOVERNMENT CODE**  
**SUBTITLE C. REGULATORY AUTHORITY APPLYING TO MORE THAN ONE**  
**TYPE OF LOCAL GOVERNMENT**  
**CHAPTER 241. MUNICIPAL AND COUNTY ZONING AUTHORITY AROUND**  
**AIRPORTS**

**SUBCHAPTER A. GENERAL PROVISIONS**

Sec. 241.001. **SHORT TITLE.** This chapter may be cited as the Airport Zoning Act.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.002. LEGISLATIVE FINDINGS.** The legislature finds that:

- (1) An airport hazard endangers the lives and property of users of the airport and of occupants of land in the vicinity of the airport;
- (2) An airport hazard that is an obstruction reduces the size of the area available for the landing, taking off, and maneuvering of aircraft, tending to destroy or impair the utility of the airport and the public investment in the airport;
- (3) The creation of an airport hazard is a public nuisance and an injury to the community served by the airport affected by the hazard;
- (4) It is necessary in the interest of the public health, public safety, and general welfare to prevent the creation of an airport hazard;
- (5) The creation of an airport hazard should be prevented, to the extent legally possible, by the exercise of the police power without compensation; and
- (6) The prevention of the creation of an airport hazard and the elimination, the removal, the alteration, the mitigation, or the marking and lighting of an airport hazard are public purposes for which a political subdivision may raise and spend public funds and acquire land or interests in land.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.003. DEFINITIONS.** In this chapter:

- (1) "Airport" means an area of land or water, publicly or privately owned, designed and set aside for the landing and taking off of aircraft and used or to be used in the interest of the public for that purpose. The term includes an area with installations relating to flights, including installations, facilities, and bases of operations for tracking flights or acquiring data concerning flights.
- (2) "Airport hazard" means a structure or object of natural growth that obstructs the air space required for the taking off, landing, and flight of aircraft or that interferes with visual, radar, radio, or other systems for tracking, acquiring data relating to, monitoring, or controlling aircraft.
- (3) "Airport hazard area" means an area of land or water on which an airport hazard could exist.
- (4) "Airport zoning regulation" means an airport hazard area zoning regulation and an airport compatible land use zoning regulation adopted under this chapter.
- (5) "Centerline" means a line extending through the midpoint of each end of a runway.
- (6) "Compatible land use" means a use of land adjacent to an airport that does not endanger the

health, safety, or welfare of the owners, occupants, or users of the land because of levels of noise or vibrations or the risk of personal injury or property damage created by the operations of the airport, including the taking off and landing of aircraft.

- (7) "Controlled compatible land use area" means an area of land located outside airport boundaries and within a rectangle bounded by lines located no farther than 1-1/2 statute miles from the centerline of an instrument or primary runway and lines located no farther than five statute miles from each end of the paved surface of an instrument or primary runway.
- (8) "Instrument runway" means an existing or planned runway of at least 3,200 feet for which an instrument landing procedure published by a defense agency of the federal government or the Federal Aviation Administration exists or is planned.
- (9) "Obstruction" means a structure, growth, or other object, including a mobile object, that exceeds a limiting height established by federal regulations or by an airport hazard area zoning regulation.
- (10) "Political subdivision" means a municipality or county.
- (11) "Primary runway" means an existing or planned paved runway, as shown in the official airport layout plan (ALP) of the airport, of at least 3,200 feet on which a majority of the approaches to and departures from the airport occur.
- (12) "Runway" means a defined area of an airport prepared for the landing and taking off of aircraft along its length.
- (13) "Structure" means an object constructed or installed by one or more persons and includes a building, tower, smokestack, and overhead transmission line.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.004. AIRPORT USED IN INTEREST OF PUBLIC.** For the purposes of this chapter, an airport is used in the interest of the public if:

- (1) The owner of the airport, by contract, license, or otherwise, permits the airport to be used by the public to an extent that the airport fulfills an essential community purpose; or
- (2) The airport is used by the state or an agency of the state or by the United States for national defense purposes or for any federal program relating to flight.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.005. ADOPTION OF REGULATION INCLUDES AMENDMENT OR OTHER CHANGE.** A reference in this chapter to the adoption of an airport zoning regulation includes the amendment, repeal, or other change of a regulation. A reference to the adoption of an airport zoning regulation also includes the amendment of an airport zoning regulation existing on the date the law codified by this chapter took effect, which was September 5, 1947.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

## **SUBCHAPTER B. ADOPTION OF AIRPORT ZONING REGULATIONS**

### **Sec. 241.011. AIRPORT HAZARD AREA ZONING REGULATIONS.**

- (a) To prevent the creation of an airport hazard, a political subdivision in which an airport hazard area is located may adopt, administer, and enforce, under its police power, airport hazard area zoning regulations for the airport hazard area.
- (b) The airport hazard area zoning regulations may divide an airport hazard area into zones and for each zone:

- (1) Specify the land uses permitted;
- (2) Regulate the type of structures; and
- (3) Restrict the height of structures and objects of natural growth to prevent the creation of an obstruction to flight operations or air navigation.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.012. AIRPORT COMPATIBLE LAND USE ZONING REGULATIONS.**

- (a) A political subdivision may adopt, administer, and enforce, under its police power, airport compatible land use zoning regulations for the part of a controlled compatible land use area located within the political subdivision if the airport is:
  - (1) Used in the interest of the public to the benefit of the political subdivision; or
  - (2) Located within the political subdivision and owned or operated by a federal defense agency or by the state.
- (b) The political subdivision by ordinance or resolution may implement, in connection with airport compatible land use zoning regulations, any federal law or rules controlling the use of land located adjacent to or in the immediate vicinity of the airport.
- (c) The airport compatible land use zoning regulations must include a statement that the airport fulfills an essential community purpose.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.013. EXTRATERRITORIAL ZONING IN POLITICAL SUBDIVISIONS WITH POPULATION OF MORE THAN 45,000.**

- (a) A political subdivision with a population of more than 45,000 in which an airport used in the interest of the public to the benefit of the political subdivision is located may adopt, administer, and enforce:
  - (1) airport hazard area zoning regulations applicable to an airport hazard area relating to the airport and located outside the political subdivision; and
  - (2) airport compatible land use zoning regulations applicable to a controlled compatible land use area relating to the airport and located outside the political subdivision.
- (b) The political subdivision has the same power to adopt, administer, and enforce airport hazard area zoning regulations or airport compatible land use zoning regulations under this section as that given a political subdivision by Sections 241.011 and 241.012.
- (c) The airport hazard area zoning regulations or airport compatible land use zoning regulations must include a statement that the airport fulfills an essential community purpose.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987. Amended by Acts 1991, 72nd Leg., ch. 98, Sec. 1, 2, eff. Aug. 26, 1991.*

**Sec. 241.014. JOINT AIRPORT ZONING BOARD.**

- (a) A political subdivision to whose benefit an airport is used in the interest of the public or in which an airport owned or operated by a defense agency of the federal government or the state is located may create a joint airport zoning board with another political subdivision in which an airport hazard area or a controlled compatible land use area relating to the airport is located. The political subdivisions must act by resolution or ordinance in creating the joint board.
- (b) The joint airport zoning board has the same power to adopt, administer, and enforce airport

hazard area zoning regulations or airport compatible land use zoning regulations under this section as that given a political subdivision by Sections 241.011 and 241.012.

(c) The joint airport zoning board must consist of two members appointed by each of the political subdivisions creating the board and, in addition, a chairman elected by a majority of the appointed members.

(d) If an agency of the state owns and operates an airport located within an airport hazard area or controlled compatible land use area governed by a joint airport zoning board, the agency is entitled to have two members on the board.

(e) The joint airport zoning board for an airport that is owned or operated by a defense agency of the federal government and that is closed by the federal government may provide that zoning regulations adopted by the board continue in effect until the fourth anniversary of the date the airport is closed.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987. Amended by Acts 1997, 75th Leg., ch. 352, Sec. 1, eff. May 27, 1997; Acts 1999, 76th Leg., ch. 1176, Sec. 1, eff. June 18, 1999.*

**Sec. 241.015. INCORPORATION OF AIRPORT ZONING REGULATION INTO COMPREHENSIVE ZONING ORDINANCE.** A political subdivision may incorporate an airport zoning regulation in a comprehensive zoning ordinance and administer and enforce it in connection with the administration and enforcement of the comprehensive zoning ordinance if:

- (1) The two zoning regulations apply, in whole or in part, to the same area; and
- (2) The comprehensive zoning ordinance includes, among other matters, a regulation on the height of buildings.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.016. AIRPORT ZONING COMMISSION.**

(a) Before an airport zoning regulation may be adopted, a political subdivision acting unilaterally under Section 241.013 must appoint an airport zoning commission. If the political subdivision has a planning commission or comprehensive zoning commission, that commission may be designated as the airport zoning commission.

(b) The commission shall recommend the boundaries of the zones to be established and the regulations for these zones.

(c) The commission shall make a preliminary report and hold public hearings on the report before submitting a final report.

(d) Before the 15th day before the date of a hearing under Subsection (c), notice of the hearing shall be published in an official newspaper or a newspaper of general circulation in each political subdivision in which the airport hazard area or controlled compatible land use area to be zoned is located.

(e) A joint airport zoning board created under Section 241.014 is not required to appoint a commission under this section.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987. Amended by Acts 1995, 74th Leg., ch. 697, Sec. 1, eff. Sept. 1, 1995.*

**Sec. 241.017. PROCEDURAL LIMITATIONS APPLYING TO ADOPTION OF ZONING REGULATIONS.**

(a) The governing body of a political subdivision may not hold a public hearing or take other action concerning an airport zoning regulation until it receives the final report of the airport zoning commission.

(b) An airport zoning regulation may not be adopted except by action of the governing body of the

political subdivision or a joint airport zoning board after the political subdivision or joint airport zoning board holds a public hearing on the matter at which parties in interest and citizens have an opportunity to be heard.

(c) Before the 15th day before the date of a hearing under Subsection (b), notice of the hearing must be published in an official newspaper or a newspaper of general circulation in each political subdivision in which the area to be zoned is located.

(d) A procedural requirement adopted or applied by a political subdivision, including any requirement in the charter of a home-rule municipality, that imposes a waiting period before the adoption of a zoning regulation or requires the submission of a zoning regulation to a binding referendum election does not apply to this chapter.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987. Amended by Acts 1995, 74th Leg., ch. 697, Sec. 2, eff. Sept. 1, 1995.*

*Amended by:*

*Acts 2007, 80th Leg., R.S., Ch. 190, Sec. 2, eff. May 23, 2007.*

#### Sec. 241.018. REASONABLENESS OF AIRPORT ZONING REGULATIONS.

(a) An airport zoning regulation must be reasonable and may impose a requirement or restriction only if the requirement or restriction is reasonably necessary to achieve the purposes of this chapter.

(b) In determining which airport zoning regulations to adopt, the governing body of a political subdivision or a joint airport zoning board shall consider, among other things:

- (1) The character of the flying operations expected to be conducted at the airport;
- (2) The nature of the terrain within the airport hazard area;
- (3) The character of the neighborhood; and
- (4) The current and possible uses of the property to be zoned.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.019. NONCONFORMING USES AND STRUCTURES.** Except as provided by Section 241.035, airport zoning regulations may not require:

- (1) Changes in nonconforming land use existing on the date of the adoption of the regulations;
- (2) The removal, lowering, or other change of a structure that does not conform to the regulations on the date of their adoption, including all phases or elements of a multiphase structure, regardless of whether actual construction has commenced, that received a determination of no hazard by the Federal Aviation Administration under 14 C.F.R., Part 77, before the regulations were adopted;
- (3) The removal, lowering, or other change of an object of natural growth that does not conform to the regulations on the date of their adoption; or
- (4) Any other interference in the continuation of a use that does not conform to the regulations on the date of their adoption.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

#### Sec. 241.020. PERMITS.

(a) Airport zoning regulations may require that a permit be obtained before:

- (1) A new structure is constructed;
- (2) An existing structure is substantially changed or repaired;

- (3) A new use is established; or
  - (4) An existing use is substantially changed.
- (b) Airport zoning regulations must provide that a permit be obtained from the administrative agency authorized to administer and enforce the regulations before:
- (1) A nonconforming structure may be replaced, rebuilt, or substantially changed or repaired; or
  - (2) A nonconforming object of natural growth may be replaced, substantially changed, allowed to grow higher, or replanted.
- (c) A permit may not allow:
- (1) The establishment of an airport hazard;
  - (2) A nonconforming use to be made;
  - (3) A nonconforming structure or object of natural growth to become higher than it was at the time of the adoption of the airport zoning regulations relating to the structure or object of natural growth or at the time of the application for the permit; or
  - (4) A nonconforming structure, object of natural growth, or use to become a greater hazard to air navigation than it was at the time of the adoption of the airport zoning regulations relating to the structure, object of natural growth, or use or at the time of the application for the permit.
- (d) Except as provided by Subsection (c), an application for a permit shall be granted.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

## **SUBCHAPTER C. ADMINISTRATIVE AGENCY AND BOARD OF ADJUSTMENT**

### **Sec. 241.031. ADMINISTRATIVE AGENCY.**

- (a) Airport zoning regulations must provide for the administration and enforcement of the regulations by an administrative agency. The administrative agency may be:
- (1) An agency created by the regulations;
  - (2) An existing official, board, or agency of the political subdivision adopting the regulations; or
  - (3) An existing official, board, or other agency of a political subdivision that participated in the creation of a joint airport zoning board adopting the regulations, if satisfactory to that political subdivision.
- (b) The administrative agency may not be the board of adjustment or include any member of the board.
- (c) The administrative agency shall hear and decide all applications for permits under Section 241.020.
- (d) The agency may not exercise any of the powers delegated to the board of adjustment.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

### **Sec. 241.032. BOARD OF ADJUSTMENT.**

- (a) Airport zoning regulations must provide for a board of adjustment.
- (b) If a zoning board of appeals or adjustment exists, it may be designated as the board of adjustment under this chapter.

- (c) If a zoning board of appeals or adjustment does not exist or is not designated as the board of adjustment under this chapter, a board of adjustment must be appointed. The board must consist of five members to be appointed for terms of two years. The appointing authority may remove a board member for cause on a written charge after a public hearing. A vacancy on the board shall be filled for the unexpired term.
- (d) The concurring vote of four members of the board is necessary to:
- (1) Reverse an order, requirement, decision, or determination of the administrative agency;
  - (2) Decide in favor of an applicant on a matter on which the board is required to pass under an airport zoning regulation; or
  - (3) Make a variation in an airport zoning regulation.
- (e) The board shall adopt rules in accordance with the ordinance or resolution that created it.
- (f) Meetings of the board are held at the call of the chairman and at other times as determined by the board. The chairman or acting chairman may administer oaths and compel the attendance of witnesses. All hearings of the board shall be open to the public.
- (g) The board shall keep minutes of its proceedings that indicate the vote of each member on each question or the fact that a member is absent or fails to vote. The board shall keep records of its examinations and other official actions. The minutes and records shall be filed immediately in the board's office and are public records.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.033. AUTHORITY OF BOARD.** The board of adjustment shall:

- (1) Hear and decide an appeal, as provided by Section 241.036, from an order, requirement, decision, or determination made by the administrative agency in the enforcement of an airport zoning regulation;
- (2) Hear and decide special exceptions to the terms of an airport zoning regulation when the regulation requires the board to do so; and
- (3) Hear and decide specific variances under Section 241.034.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.034. VARIANCES.**

- (a) A person who desires to erect or increase the height of a structure, permit the growth of an object of natural growth, or otherwise use property in violation of an airport zoning regulation, may apply to the board of adjustment for a variance from the regulation.
- (b) The board shall allow a variance from an airport zoning regulation if:
- (1) a literal application or enforcement of the regulation would result in practical difficulty or unnecessary hardship; and
  - (2) the granting of the relief would:
    - (A) Result in substantial justice being done;
    - (B) Not be contrary to the public interest; and
    - (C) Be in accordance with the spirit of the regulation and this chapter.
- (c) The board may impose any reasonable conditions on the variance that it considers necessary to

accomplish the purposes of this chapter.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.035. HAZARD MARKING AND LIGHTING.** If the administrative agency or board of adjustment considers it reasonable in the circumstances and advisable to accomplish the purposes of this chapter, the agency or board may require in a permit or a variance granted under this chapter that the owner of a structure or object of natural growth allow the political subdivision, at its own expense, to install, operate, and maintain on the structure or object of natural growth any markers and lights necessary to indicate to flyers the presence of an airport hazard.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.036. APPEAL TO BOARD.**

(a) A decision of the administrative agency made in its administration of an airport zoning regulation may be appealed to the board of adjustment by:

- (1) A person who is aggrieved by the decision;
- (2) A taxpayer who is affected by the decision; or
- (3) The governing body of a political subdivision or a joint airport zoning board that believes the decision is an improper application of the airport zoning regulation.

(b) The appellant must file with the board and the administrative agency a notice of appeal specifying the grounds for the appeal. The appeal must be filed within a reasonable time as determined by the rules of the board. On receiving the notice, the administrative agency shall immediately transmit to the board all the papers constituting the record of the action that is appealed.

(c) An appeal stays all proceedings in furtherance of the action that is appealed unless the administrative agency certifies in writing to the board facts supporting the agency's opinion that a stay would cause imminent peril to life or property. In that case, the proceedings may be stayed only by an order of the board, after notice to the administrative agency, if due cause is shown.

(d) The board shall set a reasonable time for the appeal hearing and shall give public notice of the hearing and due notice to the parties in interest. A party may appear at the appeal hearing in person or by agent or attorney. The board shall decide the appeal within a reasonable time.

(e) The board may reverse or affirm, in whole or in part, or modify the administrative agency's order, requirement, decision, or determination from which an appeal is taken and make the correct order, requirement, decision, or determination, and for that purpose the board has the same authority as the administrative agency.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**SUBCHAPTER D. JUDICIAL REVIEW AND OTHER REMEDIES**

**Sec. 241.041. JUDICIAL REVIEW OF BOARD DECISION.**

(a) A person who is aggrieved or a taxpayer who is affected by a decision of a board of adjustment, or the governing body of a political subdivision or a joint airport zoning board that believes a decision of a board of adjustment is illegal, may present to a court of record a verified petition stating that the decision of the board of adjustment is illegal in whole or in part and specifying the grounds of the illegality. The petition must be presented within 10 days after the date the decision is filed in the board's office.

(b) On the presentation of the petition, the court may grant a writ of certiorari directed to the board

of adjustment to review the board's decision. Granting of the writ does not stay the proceedings on the decision under appeal, but on application and after notice to the board the court may grant a restraining order if due cause is shown.

(c) The board's return must be verified and must concisely state any pertinent and material facts that show the grounds of the decision that is appealed. The board is not required to return the original documents on which the board acted but may return certified or sworn copies of the documents or parts of the documents as provided by the writ.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.042. TRIAL BY COURT.**

(a) The court, in an appeal from a decision of a board of adjustment as provided by Section 241.041, shall try and determine the case de novo on the basis of the facts adduced in the trial of the case in the court. The court shall independently rule on the facts and the law as in an ordinary civil suit.

(b) The court has exclusive jurisdiction to reverse or affirm, in whole or in part, or modify the decision that is appealed and, if necessary, may order further proceedings by the board.

(c) Costs may not be assessed against the board unless the court determines that the board acted with gross negligence, in bad faith, or with malice in making its decision.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.043. EFFECT OF HOLDING OF THE COURT.** If the court holds that an airport zoning regulation, although generally reasonable, interferes with the use or enjoyment of a particular structure or parcel of land to such an extent that, or is so onerous in its application to a particular structure or parcel of land that, the application of the regulation constitutes a taking or deprivation of property in violation of the state or federal constitution, the holding does not affect the application of the regulation to any other structure or parcel of land.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.044. ADDITIONAL REMEDIES.**

(a) A political subdivision or joint airport zoning board adopting airport zoning regulations may bring an action in a court of competent jurisdiction to prevent, restrain, correct, or abate a violation of:

- (1) this chapter;
- (2) an airport zoning regulation adopted by the political subdivision or board; or
- (3) an order or ruling made in connection with the administration or enforcement of an airport zoning regulation adopted by the political subdivision or board.

(b) The court shall grant any relief, including an injunction which may be mandatory, as may be proper under all the facts and circumstances of the case to accomplish the purposes of this chapter and the regulations adopted and orders and rulings made under it.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**SUBCHAPTER Z. MISCELLANEOUS PROVISIONS**

**Sec. 241.901. CONFLICT OF AN AIRPORT HAZARD AREA ZONING REGULATION WITH ANOTHER REGULATION.**

(a) If an airport hazard area zoning regulation conflicts with any other regulation applicable to the same area, the more stringent limitation or requirement controls.

(b) Subsection (a) applies to any conflict with respect to the height of a structure or object of natural growth or any other matter.

(c) Subsection (a) applies to any regulation that conflicts with an airport hazard area zoning regulation whether the regulation was adopted by the political subdivision that adopted the airport zoning regulation or by another political subdivision.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.902. CONFLICT OF AN AIRPORT COMPATIBLE LAND USE ZONING REGULATION WITH ANOTHER REGULATION.**

(a) If an airport compatible land use zoning regulation conflicts with any other regulation applicable to the same area, the airport compatible land use zoning regulation controls.

(b) Subsection (a) applies to any conflict with respect to the use of land or any other matter.

(c) Subsection (a) applies to any regulation that conflicts with an airport compatible land use zoning regulation, whether the regulation was adopted by the political subdivision that adopted the airport compatible land use zoning regulation or by another political subdivision.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*

**Sec. 241.903. ACQUISITION OF AIR RIGHTS OR OTHER PROPERTY.**

(a) A political subdivision may acquire from a person or other political subdivision an air right, aviation easement, or other estate or interest in property or in a nonconforming structure or use if:

- (1) The acquisition is necessary to accomplish the purposes of this chapter;
- (2) The property or nonconforming structure or use is located within the political subdivision, the political subdivision owns the airport, or the political subdivision is served by the airport; and
- (3)
  - (A) The political subdivision desires to remove, lower, or terminate the nonconforming structure or use;
  - (B) Airport zoning regulations are not sufficient to provide necessary approach protection because of constitutional limitations; or
  - (C) The acquisition of a property right is more advisable than an airport zoning regulation in providing necessary approach protection.

(b) An acquisition under this section may be by purchase, grant, or condemnation in the manner provided by Subchapter B, Chapter 21, Property Code.

*Acts 1987, 70th Leg., ch. 149, Sec. 1, eff. Sept. 1, 1987.*



**BEXAR COUNTY COMMISSIONERS COURT**

**BEXAR COUNTY COURTHOUSE**

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SAN ANTONIO, TEXAS 78205

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COUNTY JUDGE

SERGIO "CHICO" RODRIGUEZ  
COMMISSIONER, PCT. 1

PAUL ELIZONDO  
COMMISSIONER, PCT. 2

LYLE LARSON  
COMMISSIONER, PCT. 3

TOMMY ADKISSON  
COMMISSIONER, PCT. 4

August 15, 2007

The Honorable Frank Corte, Jr.  
Chairman, House Defense Affairs and State-Federal Relations Committee  
P.O. Box 2910  
Austin, TX 78768

Re: Request for interim study regarding military base encroachment

Dear Chairman Corte:

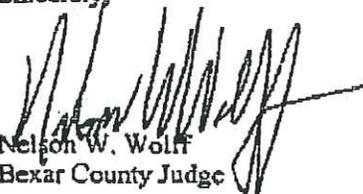
Thanks to your efforts, Texas counties are now able to support the armed forces and protect military investments in our communities. During the 80<sup>th</sup> Session you authored and passed a bill allowing counties to regulate lighting adjacent to military installations. With this tool we can address exurban growth that endangers critical missions such as nighttime and flight training.

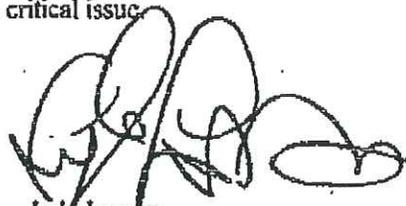
Please consider conducting interim hearings and making findings regarding the threat of encroachment upon military bases, and potential solutions. Time is of the essence, because the upcoming BRAC relocations which will bring billions of dollars of investment and tens of thousands of new workers -depend upon Texas' offering the appropriate facilities. Here in Bexar County, the continued utility of Camp Bullis is critical to the armed forces' long-range strategy for combat medic training.

Our state is growing and changing, as are the military's needs. We must remain a helpful partner in the armed force's efforts to train and deploy warfighters. Additional tools, such as overlay districts and perhaps limited zoning or additional development regulatory authority, will ensure that residential and commercial encroachment does not interfere with core functions of our military installations.

Thank you for your continued attention to this critical issue.

Sincerely,

  
Nelson W. Wolff  
Bexar County Judge

  
Lyle Larson  
Bexar County Commissioner, Precinct 3  
Chairman, Military Missions Task Force

Cc: The Honorable Tom Craddick, Speaker, Texas House of Representatives

*Please see next page.*

By: Corte (Senate Sponsor - Van de Putte) H.B. No. 1852

*(In the Senate - Received from the House April 10, 2007; April 11, 2007, read first time and referred to Committee on Veteran Affairs and Military Installations; April 27, 2007, reported adversely, with favorable Committee Substitute by the following vote: Yeas 4, Nays 0; April 27, 2007, sent to printer.)*

COMMITTEE SUBSTITUTE FOR H.B. No. 1852

By: Van de Putte

## **A BILL TO BE ENTITLED AN ACT**

relating to the authority of a county to regulate the installation and use of lighting in certain areas.

### **BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:**

**SECTION 1.** Section 240.031, Local Government Code, is amended by adding Subdivision (4) to read as follows:

(4) "Agricultural use" has the meaning assigned by Section 23.51, Tax Code.

**SECTION 2.** The heading to Subchapter B, Chapter 240, Local Government Code, is amended to read as follows:

#### **SUBCHAPTER B. OUTDOOR LIGHTING NEAR OBSERVATORIES AND MILITARY INSTALLATIONS**

**SECTION 3.** Section 240.032, Local Government Code, is amended by adding Subsection (b-1) and amending Subsections (c) and (d) to read as follows:

(b-1) On the request of a United States military installation, base, or camp commanding officer, the commissioners court of a county, any part of which is located immediately adjacent to the installation, base, or camp, may adopt orders regulating the installation and use of outdoor lighting within five miles of the installation, base, or camp in any unincorporated territory of the county.

(c) The orders must be designed to protect against the use of outdoor lighting in a way that interferes with scientific astronomical research of the observatory or military and training activities of the military installation, base, or camp. In the orders, the commissioners court may:

- (1) require that a permit be obtained from the county before the installation and use of certain types of outdoor lighting in a regulated area;
- (2) establish a fee in an amount to cover the costs of administrating the order for the issuance of the permit;
- (3) prohibit the use of a type of outdoor lighting that is incompatible with the effective use of the observatory or military installation, base, or camp;
- (4) establish requirements for the shielding of outdoor lighting; and
- (5) regulate the times during which certain types of outdoor lighting may be used.

(d) The commissioners court may apply more stringent standards for areas in which the use of outdoor lighting has a greater impact on observatory or military installation, base, or camp activities.

**SECTION 4.** Subchapter B, Chapter 240, Local Government Code, is amended by adding Section 240.0325 to read as follows:

Sec. 240.0325. EXCEPTION FOR CERTAIN OUTDOOR LIGHTING. The commissioners court may not adopt an order under Section 240.032 regulating the installation and use of outdoor

lighting that is located within five miles of a military installation, base, or camp located in the unincorporated area of a county and:

- (1) Was installed or used before the effective date of the order and is necessary for the operations of:
  - (A) An electric utility, power generation company, or transmission and distribution utility, as those terms are defined by Section 31.002, Utilities Code;
  - (B) An electric cooperative or a municipally owned utility, as those terms are defined by Section 11.003, Utilities Code;
  - (C) A gas utility, as defined by Section 101.003 or 121.001, Utilities Code;
  - (D) Surface coal mining and reclamation operations, as defined by Section 134.004, Natural Resources Code;
  - (E) A telecommunications provider, as defined by Section 51.002, Utilities Code, or its affiliates; or
  - (F) A manufacturing facility required by Texas Commission on Environmental Quality rule to hold a permit; or
- (2) Is owned or maintained for the purpose of illuminating:
  - (A) A tract of land that is maintained as a single family residence and that is located outside the boundaries of a platted subdivision;
  - (B) A tract of land maintained for agricultural use;
  - (C) An activity that takes place on a tract of land maintained for agricultural use;
  - (D) Structures or related improvements located on a tract of land maintained for agricultural use; or
  - (E) A correctional facility operated by or under a contract with the Texas Department of Criminal Justice.

**SECTION 5.** This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2007.

# **FEDERAL AVIATION REGULATIONS**

## **Part 77 Objections Affecting Navigable Airspace**

This edition replaces the existing loose-leaf  
Part 77 and its changes.

This FAA publication of the basic Part 77, effective May 1, 1965,  
incorporates Amendments 77-1 through 77-11 with preambles.

Published  
March 1993

### **Introductory Note**

Part 77 is codified under Subchapter C, Aircraft, of Title 14 of the Code of Federal Regulations.

This FAA publication of the basic Part 77, effective May 1, 1965, incorporates Amendments 73-1 through 73-11.

Bold brackets [  **]** throughout the regulation indicate the most recent changed or added material for that particular subpart. The amendment number and effective date of new material appear in bold brackets at the end of each affected section.

### **NOTICE TO FAA AND OTHER GOVERNMENT USERS**

Distribution of changes to this part within the Federal Aviation Administration and other U.S. Government agencies will be made automatically by FAA in the same manner as distribution of this basic part.

# Part 77--Objects affecting Navigable Airspace

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**Adoption of Revised Part 77****Adopted: February 3, 1965****Effective: May 1, 1965****(Published in 30 F.R. 1837, February 10, 1965)**

This revision of Part 77 of the Federal Aviation Regulations relaxes and simplifies the requirements for notice to the Agency of certain proposed structures, consolidates obstruction standards for use in the several Agency programs, and streamlines the Agency procedures for determining the effect of proposed structures on air navigation.

The proposed revision was published in the Federal Register (28 F.R. 7788-7795) on July 31, 1963. Extensive comments were received from aeronautical and non aeronautical sources which endorsed generally the changes under consideration. These comments were very constructive in nature and the Agency appreciates the cooperative spirit in which they were submitted. Since the discussion here must necessarily be a limited review and explanation of the principal actions being taken, the Agency is unable to give specific recognition to each comment. However, each person who participated may be assured that full consideration was given to his recommendations.

The first noteworthy departure in this amendment from the revisions originally proposed relates to the statement in Subpart A-General on the lack of application of Subparts B, D, and E to construction work begun before July 15, 1961. This has been deleted as unnecessary and possibly misleading. The extensive amendments made by this revision to all portions of Part 77 will take effect at the effective date provided herein. Notices received after this date will be processed under the provisions of Part 77 as revised. Aeronautical studies begun prior to this effective date will be continued under the new provisions.

Public reaction to the proposed revisions of the notice requirements disclosed a need for several adjustments. The first of these involves the requirement for notice to the Agency of any proposed structure which would pierce an imaginary slope of 100 to 1 extending from the property line of an airport listed in the "Airport Directory" of the Airman's Information Manual. The property line was selected as a point of beginning because of its greater availability to the public. This feature appears to be an inadequate substitute for the most appropriate point of beginning, that is, the nearest point of the runway nearest to the site of the proposed structure. The use of this point also fixes the elevation of the beginning of the pertinent imaginary slope at the elevation of that nearest point. In addition, the scope of the notice requirement has been substantially reduced. The horizontal distance of the 100 to 1 slope has been restricted to 20,000 feet and will now be applied only to airports with the longest runway more than 3,200 feet in length. For airports with the longest runway 3,200 feet or shorter, a 50 to 1 slope is prescribed for a horizontal distance of 10,000 feet. The FAA "Directory" furnishes the length of the longest runway at each airport. The notice requirement for helicopters now has a horizontal slope of 25 to 1 extending for 5,000 feet.

These notice requirements are made applicable for airports which are either listed in the "Directory" or are operated by a Federal military agency. We have determined that military airports need not be included in the "Directory" in view of their listing in military publications and the fact that their presence is generally well known to people living or owning property in their vicinity. In those cases where the boundaries of a runway of an airport, including a seaplane base, are not designated, the notice requirement of section 77.13(a)(2) will, obviously, not be applicable. However, the notice requirement would apply to those airports which have large sod, or other unpaved areas designated for the takeoff and landing of aircraft. Those areas constitute the runways from which the notice slope is computed. Also, the "Directory" will not list those airports constructed after December 31, 1958, which were the subject of a determination by the Agency that their establishment was not acceptable and would • have an adverse effect on the efficient use of airspace and the safety of aircraft.

While this amendment simplifies the current notice requirements, it is recognized that many construction proponents may nevertheless experience difficulty in ascertaining whether they are required to notify the Agency of their proposed structures. The Airspace Utilization Branch in each FAA regional office is staffed with technicians who are available to inform any interested person of the effect of these notice requirements on a specific construction

proposal. These technicians will also describe the airspace assignments and aeronautical operations in the area of the construction site so that the proponent may make an informed decision on the feasibility of the site and the availability of other areas which may serve his purpose equally and without derogation of air safety.

The substantial number of comments on the shielding provision of section 77.15 which excuses certain construction and alteration proposals from the notice requirements indicates a further explanation would be in order. The shielding provision adopted here is more restrictive than the one previously employed. This limitation was found necessary because of the unjustified extension of the earlier provision by certain construction proponents. As adopted, the shielding exemption is applicable only in the congested areas of cities, towns, and settlements, and then only to structures so shielded that they could not possibly derogate the safety of air navigation. It should be emphasized that this provision does not represent the Agency shielding criteria. It only relates to the exception from the notice requirements. Upon receiving the required notice, the Agency conducts an appropriate aeronautical study of the proposed structure and, in the course of that study, determines whether it would be, in fact, shielded.

The provisions describing the Agency acknowledgment of notices of construction proposals have been further simplified. The acknowledgment will advise each construction sponsor on two subjects, the possible application of the Agency marking and lighting standards, and whether the proposed structure may be a hazard to air navigation. On the first, the acknowledgment advises whether the construction proposal would be of a type included under the provisions of the FAA Manual on "Obstruction Marking and Lighting" and, if so, how the structure should be marked and lighted. On the hazard question, the acknowledgment will generally state whether the construction or alteration would exceed any of the obstruction standards of Subpart C and will either include a determination on whether the structure would be a hazard to air navigation or advise that further study is required to resolve the question. In the relatively few cases where the structure would exceed an obstruction standard and, in addition, would be located within a runway clear zone or the part of the primary surface extending beyond the end of a runway, the acknowledgment advises that the structure would be a hazard to air navigation. As indicated by this discussion, we have determined not to substitute the phrase "adverse effect on air navigation" for "hazard to air navigation." The Agency review of this portion of the proposal and the comments received with respect to it have disclosed that the "hazard" terminology is preferable.

The obstruction standards adopted here differ in many respects from those originally proposed. Upon review of the comments, the Agency has determined that the obstruction criteria most appropriate for promulgation at this time for civil airports, including joint-use airports, should be drawn more directly from the existing Technical Standard Order TSO-N18, "Criteria for Determining Obstruction to Air Navigation." In view of the substantial length of time that the TSO-N18 criteria have been employed for civil aviation purposes, the adoption of these criteria as the consolidated Agency criteria for use in the performance of the statutory functions authorized by the Federal Aviation Act and the Federal Airport Act should result in the least possible disruption of the performance of those functions.

The obstruction standards now presented in Subpart C are less stringent than those contained in the notice of Proposed Rule Making. The 200-foot limiting height of section 77.23(a) is now to be applied only within three statute miles of an airport with its longest runway more than 3,200 feet in length, rather than the proposed five statute miles. While there is an additional limiting height, beginning at 100 feet within instrument approach areas within three miles of the end of the runway and increasing to a maximum of 250 feet within ten miles from the runway end, this height is largely duplicative of other limiting heights or surfaces and does not constitute a substantial addition to the standard previously considered. We might note, in explanation of the use of the term "runway" here, that this term is now used, exclusively throughout the Part, and the term "landing strip" has been deleted to eliminate a possible ambiguity.

In sections 77.25 and 77.27, criteria are provided for all civil airports, including those constructed to "VFR Airports" standards. These standards are currently contained in the Advisory Circular 150/ 5300-1, "VFR Airports," and are prescribed for airports constructed to serve only aircraft operating under the Visual Flight Rules. The horizontal and conical airport imaginary surfaces provided in section 77.25 with respect to airport reference points are classified for (1) "VFR Airports," and (2) other airports in accordance with the planned length of the longest runway at each such airport.

The airport imaginary surfaces prescribed in section 77.27 based on runways, except those for "VFR Airports," have been reclassified so that their sizes depend upon whether the runway is equipped with a precision landing aid, such as an instrument Landing System. Runways having instrument approach procedures based upon such facilities as a VOR, ADF, ASR, low frequency range, or TACAN are now provided with the same type surfaces as runways used only for VFR operations, except those on "VFR Airports."

The Department of Defense has forwarded obstruction criteria which differ from those applied here for civil airports. The Department has requested that the criteria be incorporated into Part 77 for application at military airports, except heliports, controlled by components of the Department of Defense, where the longest runway exceeds 5,000 feet. The Department advises that these separate criteria are required at military airports because of

the operating characteristics of certain military aircraft, the necessity for low-altitude maneuvering and formation takeoffs, the more stringent air crew training, and the armament and ordnance-carrying requirements of the military. Accordingly, these criteria are stated herein in section 77.28. The Department is developing criteria for application at military airports with shorter runways than 5,000 feet; and until these criteria are developed, civil airport criteria will apply at such military airports. Also, pending development of these criteria, the military standards for the 2,000-foot width of primary surface will apply only to runways longer than 5,000 feet. The Agency will study the military criteria to determine their potential adaptability to civil airports and their appropriate consolidation with the civil criteria.

The presence of two sets of criteria, applicable to civil and military airports, will not result in inconsistent conclusions in the aeronautical studies on whether a proposed structure would be a hazard to air navigation. These determinations are not controlled by the extent to which such a structure may exceed a civil or military obstruction standard but, rather, upon the possible hazardous effect of the structure on air navigation. A "hazard" or "no hazard" determination is reached after a review of the VFR and IFR operations and procedures involved, both present and prospective. Each study not only includes a review to determine whether the construction proposal might be so altered in location or height that it would not exceed an obstruction standard but, also, a review to ascertain if the structure could be accommodated by adjustment of the aeronautical procedures. Thus, there may be a substantial difference between a construction proposal which would exceed an obstruction standard and one which is determined, as the result of the aeronautical study, to be a hazard to air navigation.

The airport imaginary surfaces proposed for helicopters have been substantially revised for compatibility with the current "Heliport Design Guide." The primary surfaces coincide in size and shape with the takeoff and landing area of each heliport. The designated approach clearance surfaces begin at the edge(s) of the primary surface and extend outward and upward at a slope of 8 to 1. The approach surface is a trapezoid whose inner width is coincident with the width of the primary surface and which extends to the minimum enroute altitude where its width is 500 feet. Transitional surfaces extend outward and upward at a slope of 2 to 1 from the lateral boundaries of each primary surface and approach surface for a horizontal distance of 250 feet from the centerline of these surfaces.

One of the minor revisions of the obstruction standards made here might also be mentioned. The proposed addition of a 17-foot height to a highway prior to the application of the obstruction criteria evoked several protests. The 17-foot clearance was proposed as a compatible measure with current Federal policy for interstate highways. To avoid an unnecessary extension of this policy, the standard here has been adjusted to permit application of the current 15-foot figure to highways which will not be used by the higher vehicles. In addition, we have added a provision which removes the requirement for the addition of any figure, 15 feet or 17 feet, to a traverse way which is under the coordinated traffic control of the airport management or the air traffic control tower.

We might conclude this brief reference to some of the salient features of the obstruction standards of Subpart C by emphasizing this Subpart may be applied with respect to air navigation facilities planned for future installation or alteration and to planned uses of the navigable airspace by aircraft if that application would result in a lower limiting height or surface. This point is of particular significance in regard to an airport since it includes all runway extensions and other improvements which may be contained in the approved airport layout plan.

The revisions in the procedures for the conduct of aeronautical studies, public hearings on the effect of proposed structures on the navigable airspace, and the establishment of antenna farm areas have been adopted substantially

as proposed. Section 77.37 has been broadened to make available a review by the Administrator of each decision by a Regional Director on the effect of a proposed structure on air navigation, including "no hazard" determinations made without notice to any possible interested aeronautical source. While decisions of this type are only made in cases where the available evidence clearly indicates that air safety would not be affected by the construction, this review procedure is nevertheless provided to insure against possible error. The effective period fixed in section 77.39 for a determination of no hazard has been extended in recognition of the time necessary for the processing by the Federal Communications Commission of an application for a construction permit and the issuance of that permit. Appropriate safeguards for the protection of air navigation have been attached to this extension of time.

The comments in response to the Notice of Proposed Rule Making included a number of recommendations for Agency action beyond the authority contained in the Federal Aviation Act of 1958. That Act does not contain a basis for the mandatory marking and lighting of structures to warn pilots of aircraft of those structures. Neither does it contain specific authorization for regulations which would limit the heights of structures. To date, no judicial decision has been issued on the extent to which ground structures may constitute an unlawful interference with the public right of freedom of transit through the navigable airspace recognized in Section 104 of the Act. Until authoritative guidance is received on that point or express legislative authority is conferred, the Agency measures in the field of ground hazards to air navigation will be limited to the areas presently covered in Part 77.

In consideration of the foregoing, Part 77 of Chapter I of Title 14 of the Code of Federal Regulations is revised, effective May 1, 1965, to read as hereinafter set forth.

This amendment is made under the authority of Sections 104, 307, 313, 1001, and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1304, 1348, 1354, 1481, 1501).

### **Amendment 77-1 \***

#### **Miscellaneous Amendments**

**Adopted: May 11, 1965**

**Effective: May 11, 1965**

**(Published in 30 F.R. 6713, May 18, 1965)**

The purpose of this amendment is to make certain minor clarifying amendments to Part 77 of the Federal Aviation Regulations, which became effective on May 1, 1965.

Section 77.19, by reference to section 77.28(b) in the last paragraph, provides for application of the dimensions of clear zones for runways at civil airports to runways at all military airports. This was not intended. As currently written, section 77.28(b)(1) states that the primary surface for military airports is "the same elevation as the centerline of the runway." The section is being revised to make it clear that the primary surface undulates with the underlying surface.

In the interest of timely correction of these discrepancies, in view of the May 1, 1965, effective date of revised Part 77, and since these amendments are clarifying in nature, I find that notice and public procedure are impracticable and contrary to the public interest and that this amendment may therefore be made effective immediately.

In consideration of the foregoing, Part 77 is amended, effective immediately, as follows.

This amendment is made under the authority of Sections 307, 313, and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1348, 1354, and 1510), and Executive Order 10854 (24 F.R. 9565).

## Amendment 77-2

### Form and Time of Notice

**Adopted: July 6, 1966**

**Effective: July 12, 1966**

**(Published in 31 F.R. 9448, July 12, 1966)**

The purpose of this amendment is to establish an Agency policy applicable to proposals filed under section 77.13 of the Federal Aviation Regulations for any construction or alteration in excess of 2,000 feet aboveground. This amendment is a general statement of policy and is procedural in nature. Therefore notice and public procedure hereon are unnecessary and the amendment may be made effective in less than 30 days after publication.

The Federal Aviation Agency has analyzed the recent trend of competitively taller television antenna towers to determine its effect on safety in air navigation. It has long been recognized by this Agency that antenna towers of adequate height are necessary to serve the public interest in a nation-wide broadcasting system. However, there has been a proliferation of antenna towers accompanied by a progressive increase in heights over 1,000 feet above the ground that now presents hazardous conditions to the safety of air navigation. The Agency is of the firm belief that the reasonable interests of the communications industry and the aviation community be accommodated

\* Included in the publication of Part 77.

concurrently. To this end, the Federal Communications Commission recently declared in Public Notice FCC 65-455 that "the public interest in broadcast service, may in some instances call for an antenna tower higher than any particular maximum imposed." However, the FCC was "nevertheless convinced that the public interest requires a specific ceiling to halt the upward trend in antenna tower heights, and that 2,000 feet above ground is both realistic and appropriate."

The Federal Aviation Agency, within the limits of its jurisdiction, has attempted to find a remedy for air safety problems inherent in the conflicting demands for a fair and reasonable sharing of airspace by tall towers and aircraft. Part 77 of the Federal Aviation Regulations established procedures for reporting to the Agency proposed construction that may constitute potential obstructions or hazards to safe air navigation as determined by the application of criteria stated therein. Under these regulations, the FAA advises the construction proponent whether his proposal would constitute a hazard to air navigation. During the time the regulation has been in effect, hundreds of proposed television and radio towers have been considered. Procedures permitting such analysis by the Agency have been of considerable value to the aviation community and to the broadcasting industry in eliminating both geographic and airspace conflicts created by their competing requirements.

In spite of steps already taken to ensure the accommodation of these competing interests, it has been determined that the cumulative effect of heights and locations of towers, both actual and proposed, have created a situation that is hazardous to safe air navigation.

On February 18-19, 1965 the Agency made the following statement to the House Committee on Interstate and Foreign Commerce concerning H.J. Res. 261, which would limit the height of certain radio and television towers:

The FCC has allocated the TV channels of the Nation on the basis of maximum power television broadcasting at a height of 2,000 feet. Whenever a television tower exceeds this 2,000-foot limitation in most areas (it is 1,000 feet for VHF TV stations in the eastern part of the United States) the power must be reduced to compensate for the increased height.

Therefore, there is no compelling need for any tower to be in excess of 2,000 feet. Although there may be a need for 2,000-foot television towers, under some conditions we would be derelict in our duty as the allocator of the airspace if we permitted all towers to be constructed to a height of 2,000 feet wherever the broadcaster desired.

The 2,000-foot tower with its problems of visibility is inherently hazardous to air navigation.

The Agency therefore considers that it is necessary to take steps to minimize the construction of any antenna tower to a height of more than 2,000 feet aboveground unless it is fully justified in accordance with this Part. This action applies equally to any other structure whose height is proposed to exceed 2,000 feet aboveground, even though the most pressing current problem relates to antenna towers. It is expected that this action will encourage proponents of tower or other type construction to formulate realistic plans, thereby avoiding unnecessary and costly proceedings before the Federal Aviation Agency. In addition, the regulation will be flexible enough to accommodate a proposal for a tower or other type construction more than 2,000 feet high in the event the proponent can demonstrate that it would not be a present or reasonably foreseeable hazard to safe air navigation.

It is of course recognized that towers or other structures with heights of less than 2,000 feet above the ground may be hazardous to air navigation, especially where they are located near airports, Federal airways or VFR routes. However, the problems engendered by these situations are totally different from the potential hazards precipitated by the taller towers. Proposed tall towers and other type structures of less than 2,000 feet will continue to be studied carefully on an individual basis to determine whether they present any adverse effects on safe air navigation or cause an inefficient utilization of navigable airspace. The Agency is convinced that from an air safety standpoint the designation of a specific ceiling is needed to halt the upward trend in heights of various type structures. As a general policy, this Agency considered 2,000 feet above the ground to be the maximum height of structures that may be acceptable for maintaining safe navigation. Any structure proposed in excess of 2,000 feet above the ground will be considered to be, inherently, a hazard to air navigation and an inefficient utilization of the airspace. It will be incumbent upon the proponent to overcome this technical assumption by demonstrating to the Agency that such a proposal will not create an inefficient use of airspace or constitute a hazard to air navigation.

In consideration of the foregoing, Part 77 of the Federal Aviation Regulations is amended, effective July 12, 1966.

This amendment is made under the authority of Sections 307, 313, and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1348, 1354, and 1510).

### **Amendment 77-3**

#### **Alteration of Discretionary Review**

**Adopted: May 1, 1967**

**Effective: June 5, 1967**

**(Published in 32 F.R. 6970, May 6, 1967)**

The purpose of this amendment is to exclude determinations of no hazard made under 77.19(c)(1) from the applicability of discretionary review provided in 77.37.

The FAA published a notice of proposed rule making in the Federal Register on August 23, 1966 (31 F.R. 11155), circulated as Notice 66-34, proposing to exclude no hazard determinations relating to those structures for which a notice must be filed under 77.13 but which would not exceed any standard of Subpart C of Part 77, and therefore would be neither an obstruction nor a hazard. Under the FAA's published criteria the proponent of a structure in this category could be given only a no hazard determination. However, under 77.37 the proponent should wait 30 days to allow any interested party the opportunity to petition for a discretionary review that could only result in a substantiation of the no hazard determination.

Comments received in response to the notice indicated a general understanding of the unneeded delay of 30 days preceding finality of the determination and generally endorsed the proposal. Objections were received to the proposal that were directed to procedural delays encountered in disseminating information concerning the proposed structure to airspace users.

The Air Line Pilots Association objected, stating that local authority would not have an opportunity to study a proposed construction with regard to local zoning ordinances, and to assess the "effects" of the proposal on aviation in that location. A proponent must, of course, obtain any necessary approval from local government authorities prior to construction, including zoning approval if any, which would consider the effects on local property interests. Elimination of the provision for discretionary review by the FAA would have no effect on any requirement local authorities may impose on the proponent.

The Department of the Air Force objected, stating that the elimination of a 30-day delay would not permit proper treatment of aviation considerations because of the length of time involved in obtaining and assessing the effect of the proposal. Particularly, the Air Force is concerned with training flights at very low levels for which a structure of moderate height could be a hazard, and which may be erected before the Air Force representatives would be aware of its existence. Part 77 was never intended to provide protection for very low level military training operations. If every structure that may be an obstruction to flights of this nature should be called a hazard, the public would be overburdened, and a hazard determination would be meaningless. The portion of the comment relating to the delay in obtaining information is pertinent, and coincidentally is similar to a comment received from the Department of the Navy in concurring with the proposal. The FAA will review its procedures to insure appropriate coordination and timely dissemination of information to appropriate parties, including military representatives.

Some comments, conceding that a delay of 30 days may be burdensome in particular circumstances, suggested that a provision be promulgated to waive the 30-day period in circumstances of hardship, or that the 30-day period be retained when an interested party specifically requests its retention to permit time for filing a petition for review. One comment suggested eliminating acknowledgments issued under 77.19(c)(1). Retention of the 30-day period under normal circumstances while waiving it in cases of hardship would base the decision for discretionary review upon the circumstances of the proponent rather than the effect upon aeronautical operations. If under the standards of Part 77 a structure could be neither an obstruction nor a hazard, periods of delay and additional reviews could not alter the determination. Moreover, issuing waivers would be time-consuming and administratively inefficient where the necessity of review is nonexistent.

In consideration of the foregoing, 77.37 of the Federal Aviation Regulations is amended, effective June 5, 1967.

This amendment is made under the authority of Secs. 307, 313, and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1348, 1354, and 1501).

### **Amendment 77-4**

#### **Standards for Determining Obstructions**

**Adopted: September 6, 1967**

**Effective: November 12, 1967**

**(Published in 32 F.R. 12997, September 13, 1967)**

The purpose of this amendment is to eliminate the requirement that the FAA must find any structure exceeding the applicable obstruction standard and located within an airport runway clear zone or the portion of a primary surface extending beyond the end of a runway to be a hazard to air navigation, regardless of any mitigating factor.

The FAA published a Notice of Proposed Rule Making in the Federal Register on March 9, 1967 (32 F.R. 3887), circulated as Notice No. 67-7 proposing the elimination of the mandatory finding of hazard, thereby permitting the FAA to study all factors involved and make a finding based on the particular situation. The response to the notice indicated a general endorsement of the proposal. Due consideration was given to all comments received.

The Air Line Pilots Association withheld endorsement because the FAA had not indicated what factors it presently considers before granting an exemption to a proposal for an obstruction in a clear zone. It stated it had difficulty in visualizing any mitigating factor relative to an obstruction within a clear zone, and making it easier to allow an obstruction would undoubtedly increase the number of obstructions and decrease the safety margin.

Under the present regulation, we have granted exemptions in cases, there among other matters, the proposed construction, though in a clear zone, was shielded from aircraft flight paths; or where the structure was of a temporary nature such as construction machinery or rigs used in constructing a public water system and erected for use only during daylight hours under VFR conditions.

With the deletion of 77.19(c)(4), the FAA could subject any construction proposal within a clear zone that exceeded the applicable obstruction standards to an aeronautical study in accordance with 77.19(c)(3). The study, which may be reviewed by all interested persons, would determine whether the proposed construction could be a hazard. Pending such a determination the construction would be presumed to be a hazard as provided in that section.

This amendment will not reduce the protection to runway approach areas presently afforded by 77.19(c)(4), but would retain that protection through the application of 77.19(c)(3). It is not the intent of this amendment to make it easier for obstructions to be based in approach areas or to relax the position of the FAA with regard to such obstructions. This amendment will permit the FAA to exercise its discretionary authority in determining whether the obstruction will in fact be a hazard after reviewing all of the relevant factors. In so doing, the public will be made more aware of the proposed obstruction through circularization and notice, and will be given an opportunity to present relevant comments. Additionally, it will make unnecessary the present practice of granting exemptions from the notice requirements of Part 77 through a procedure recognized as time consuming and inefficient.

In consideration of the foregoing, Part 77 of the Federal Aviation Regulations is amended, effective November 12, 1967.

These amendments are made under the authority of 307, 313, and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1348, 1354, 1501).

## **Amendment 77-5**

### **Miscellaneous Amendments**

**Adopted: March 25, 1968**

**Effective: May 2, 1968**

**(Published in 33 F.R. 5255, April 2, 1968)**

The purpose of these amendments is to make minor substantive changes and editorial corrections to Part 77.

The FAA published a notice of proposed rule making in the Federal Register on July 14, 1967 (32 F.R. 10373). circulated as Notice No. 67-29 which proposed a number of minor substantive amendments and editorial corrections to Part 77 that would clarify the intent or would make the part consistent with the FAA's current practice or organization.

Comments received to the notice indicated a general endorsement of the proposal. A number of comments suggested changes or improvements that have been incorporated herein. Due consideration was given to all comments received.

One comment raised a question on whether this proposal would increase the protection for airports with at least one runway of 3,200 feet. The proposed revision of ~77.13(a)(2) (i) and (ii) would make no change to the current notice requirement criteria. It would merely add the term "actual length" to clarify the intent that the runway length referred to in that section is the actual and not the "corrected" runway length. The actual runway length is selected because this is the measurement provided in the FAA Airport Directory, the Alaska and the Pacific Airman's Guides and Chart Supplements and is the length that the construction sponsor would see on the airport. The general public would have no means of readily determining a corrected runway length, as referred to in the proposed revision of 77.23(a)(8). and which is used by the FAA in applying its standards for determining obstructions.

The notice proposed to revoke 77.13(a)(5) which requires a notice, when requested by FAA, for any construction proposal that would be in an instrument approach area and available information indicates that it may be an

obstruction to air navigation. Information from the FAA's regional offices indicates that this provision has been used in a number of cases to obtain specific data on height and location after general information on the construction became available. This provision is therefore retained but is redesigned as 77.13(a)(4).

A new 77.2, *Definition of terms*, is included to clarify the meaning of certain terms used in this amendment.

Several comments objected to 77.1 3(a)(5)(ii) as redesigned herein, which included a planned or proposed airport within the category of airports for which the notice criteria applies, pointing out that frequently sponsors would have no way of ascertaining the sites of planned airports without an inquiry to the FAA each time, or consulting a currently maintained list of planned or proposed airports. There is merit to these comments and the amendment to that section has been revised to include only those airports under construction. Sponsors will be able to see work in progress on airports near the proposed construction and the benefits of this part will be available to those airports.

Some comments suggested that proposed 77.15(c) should be revised to clarify the phrase "approved by the Administrator" and to list the facilities to which that paragraph applies. The amendment has been revised to reflect the intent that the types of facilities and devices that have been approved by the Administrator are the subject of the reference. "Air Navigation facility" is defined in section 101(8) of the Federal Aviation Act of 1958. Therefore, it is unnecessary to again list those facilities to which the notice requirements do not apply.

The Air Line Pilots Association objected to exempting any object or structure from the notice requirements and obstruction standards. It is recognized that some of the structures exempted from the notice requirement may be obstructions to air navigation. However, these exemptions are based on the need to provide a reasonable notice that can be applied and complied with by a construction proponent. A notice requirement similar to the obstruction criteria of Subpart C of this part would be impracticable in application. The exemption of certain structures, e.g. antenna structures of 20 feet or less in height, and airport or FAA navigational aids, has been found advantageous to both the FAA and industry. Therefore, certain necessary structures, although they may be obstructions, are exempted because of their utility or the relative absence of any hazard associated therewith.

Editorial changes have been made to 77.17 to reflect the current procedure of sending notices of proposed construction to the appropriate area office instead of a regional office. The identity and address of the appropriate FAA area or regional office may be obtained from any FAA facility, therefore a listing of the respective jurisdictions and addresses is omitted.

Editorial changes have been made to 77.17(d) including the redesignation of paragraph (d) as paragraph (e), because of the intervening effectiveness of another amendment subsequent to the circularization of Notice No. 67-29.

Sections 77.11(b)(3) and 77.19 have been amended to refer to the current designation of the FAA advisory circular on "Obstruction Marking and Lighting".

The wording of 77.21(a) has been rearranged for readability without making any substantive change. One comment made the same objection to 77.21(c)(2) as to the notice criteria under ~77.13(a)(5)(ii) that the public would be unable to comply with that section since it could not be aware of airports existing only in the planning stage. This comment is not valid since the standards thereunder are applied by FAA specialists to whom this data would be available.

In consideration of the foregoing, Part 77 is amended, effective May 2, 1968, as hereinafter set forth.

(Secs 307, 313, 1101, Federal Aviation Act of 1958; 49 U.S.C. 1348, 1354, 1501)

## **Amendment 77-6**

## **Objects Interfering With Air Navigation Facilities**

**Adopted: July 25, 1968**

**Effective: August 31, 1968**

**(Published in 33 F.R. 10842, July 31, 1968)**

The purpose of this amendment to Part 77 of the Federal Aviation Regulations is to permit the Administrator to consider the effect a proposed construction or alteration would have upon the operation of an air navigation facility.

The substance of this amendment was published as a Notice of Proposed Rule Making in the Federal Register on December 21, 1967, (32 F.R. 20658) as NPRM 67-54. Many comments were received in response to the Notice. Generally, the comments were favorable and recommended adoption of the amendment as proposed.

Part 77 of the Federal Aviation Regulations establishes standards for determining obstructions in navigable airspace, sets forth the notice requirements of certain proposed construction or alteration, provides for aeronautical studies of obstructions to determine their effect on the safe and efficient use of airspace and provides for public hearings on the hazardous effect of proposed construction or alteration. In accordance with previous interpretations and practice, this part applies to the physical effect of an obstruction on the flight of aircraft through the navigable airspace.

The Federal Aviation Administration is encountering with increasing frequency, situations where construction or alteration has a deleterious effect on the operation of air navigation facilities without being a physical hazard in the flight path of aircraft. These situations have ranged from construction which partially blocked the view from an airport air traffic control tower of runways, taxi, and parking areas, to obstructions which blocked or reflected electromagnetic radiation in the vicinity of navigational aids like radio or radar installations. In some instances, the navigational aid could be moved to an interference-free location. In other situations, however, no interference-free locations were available, or the cost of razing and relocating facilities, because of their size or number, was exorbitant.

It appears desirable that when an aeronautical study is made, the Administrator should include in that study the effect that construction or alteration may have on the operation of air navigation facilities. It would be an unreasonable burden on the public to require a proponent to consider this effect because the public may not be aware of the existence or operational characteristics of an air navigation facility, and any effect thereon may not easily be ascertained by the proponent. Accordingly, the Administrator should have the authority of including in an aeronautical study the physical or electromagnetic effect of proposed construction on air navigation facilities. The study may enable the Administrator to recommend changes in the design, location, or construction material that would eliminate or reduce interference with the operation of the air navigation facility. A reduction or elimination of interference may permit the retention of existing approach minimums, use of existing runways or facility structures or avoid costly relocation expenses to the airport or the FAA.

All of the parties that submitted comments concurred in or endorsed the proposed amendment, except the Airport Operators Council International, the Department of Aviation, City of Atlanta, Georgia, and the Air Transport Association of America.

The Airport Operators Council International stated that it strongly opposed the proposed amendment primarily for the following reasons:

- (1) The FAA already has sufficient authority to minimize critical encroachment upon airport control tower sight lines through its ability to NOTAM and therefore needs no additional authority.
- (2) It is undesirable to use the proposed amendment to protect off-airport nav aids from the deleterious effect on their operation by construction proposals over which the airport has no control.

Regarding the first comment, the FAA's present authority allows it to issue a Notice to Airmen to advise them concerning areas on an airport in which ground control of traffic cannot be maintained due to blocking of line-of-sight from the airport control tower. When such a condition exists, the derogation of air traffic control has already

taken place and a NOTAM merely advises of that condition. The purpose of this rule is to prevent the condition from arising in the first place.

As far as the second comment is concerned, this amendment intends to include consideration of the physical or electromagnetic effect on the operation of air navigation facilities of any construction proposal for which a notice is required under Section 77.13(a), and would exceed any standard of Subpart C, regardless of whether the facilities are located on or off an airport.

The Department of Aviation, City of Atlanta, Georgia, opposed the proposed amendment primarily on the ground that it felt that this amendment would allow the location and functioning of an FAA air navigation facility to control all other airport development prospects. The Department also stated that it felt that the present Federal Aviation Regulations were adequate to handle obstructions to airport control towers and air navigation facilities.

The aeronautical study may enable the FAA to recommend changes in the design, location or construction material that may eliminate or reduce interference with the operation of the air navigation facility. These recommendations would be made to the construction sponsor and not to the airport operator unless the construction proposal was one over which the airport operator exercised control. Proposed construction or alteration subject to an aeronautical study under the proposed amendment would be limited to those proposals for which notice to the Administrator is now required under Section 77.13(a) of Part 77, FAR, and the proposal would exceed any standard of Subpart C. Proposed construction or alteration of airports that would not require notice under Section 77.13(a) would not come within the scope of the proposed amendment even though there may be a possibility that the proposed construction or alteration might adversely affect the operation of a nearby air navigation facility.

It is not the purpose of the proposed amendment to institute control over any aspect of airport development but (1) to consider the physical and electromagnetic effects of any proposed construction or alteration on air navigation facilities, during an aeronautical study; (2) to inform the construction sponsor, if necessary, of possible interference and how to avoid it; and (3) where the construction proposal would have a substantial adverse effect upon the operation of any air navigation facility to issue a determination of hazard. Current Federal Aviation Regulations do not provide the FAA with authority to study proposed construction or alteration for the purpose of determining their physical and electromagnetic effect on the operation of air navigation facilities.

The Air Transport Association (ATA) did not oppose the proposed amendment, but made several suggestions. Among them ATA commented that FAA has published few guidelines for construction facilities on or near airports and such guidelines should be published by FAA prior to amending Part 77 as proposed.

In addition, ATA felt it should be made clear that airport control towers are not air navigation facilities in the sense of the proposed rule. ATA comments are under careful consideration and the FAA at the present time is engaged in a project to develop new criteria to determine whether proposed construction would affect the operation of air navigation facilities. The intent of the amendment to Part 77, however, is not to revise or develop criteria but to provide the authority to consider possible interference with the operation of air navigation facilities during the aeronautical study of construction proposals. At such time as new criteria have been developed a determination will be made as to their adequacy and whether they should be incorporated in the regulation.

In consideration of the foregoing, Part 77 (77.31 and 77.35) of the Federal Aviation Regulations is amended effective August 31, 1968.

This amendment is made under the authority of sections 307, 313, and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1348, 1354, 1501).

### **Amendment 77-7**

## Utility Airports

**Adopted: October 25, 1968**

**Effective: November 30, 1968**

**(Published in 33 F.R. 16056, November 1, 1968)**

The purpose of this amendment is to include in Part 77 of the Federal Aviation Regulations a reference to "Utility Airports," as appropriate, with each reference to "VFR Airports" standards.

Subpart C of Part 77 contains several references to airports constructed to "VFR Airports" standards. The "VFR Airports" standards and the Advisory Circular in which they were contained were canceled and replaced with Advisory Circular 150/5300-4, "Utility Airports--Design Criteria and Dimensional Standards." Since those airports built to VFR Airports standards continue in existence, Subpart C must be revised to refer to both VFR and Utility Airports.

Since this amendment merely includes in Part 77 a reference to publications and standards currently in use, I find that notice and public procedure hereon are unnecessary.

In consideration of the foregoing, Part 77 (77.25 (a)(1) and (b)(1) and 77.27 (a)(1) and (c)(2)(i)) of the Federal Aviation Regulations is amended, effective November 30, 1968.

These amendments are made under the authority of Sections 307, 313, and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1348, 1354, and 1510).

## Amendment 77-8

### Revision of Notice Form

**Adopted: December 11, 1968**

**Effective: February 1, 1969**

**(Published in 33 F.R. 18614, December 17, 1968)**

The purpose of this amendment to Part 77 of the Federal Aviation Regulations is to revise the reference to the form on which notices of proposed construction or alteration are filed to reflect the new form number that has been adopted and to correct an editorial error.

The FAA is adopting Form 7460 1 entitled, "Notice of Proposed Construction or Alteration" to replace Form 177. This form more adequately reflects informational requirements concerning proposed construction or alteration of objects which might effect navigable airspace. Reference is made to FAA Form 117 in several places throughout Subpart B of Part 77. Therefore, an amendment is required to revise the references to this notice form.

Amendment 77-6, effective May 2, 1968, to 77.11 erroneously identified FAA Advisory Circular AC 70/7460-1 as AC 70/7460. Therefore, this section is being changed to reflect the correct advisory circular number.

In consideration of the foregoing, Subpart B of Part 77 ( 77.11(b)(3) and 77.17 (a) and (d)) of the Federal Aviation Regulations is amended, effective February 1, 1969.

This amendment is made under the authority of 307, 313 and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1348, 1354, 1501), and of 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

## Amendment 77-9



that plans would not be based upon heights that are impractical. The FAA considers that the height adjustments prescribed are needed for guidance when applying the notice requirement criteria, and should have limited flexibility. It should be noted that 23 feet is the highest tunnel clearance required for railroads in the United States, and this height would be in consonance with the requirements of the various states.

Several commentators objected to the proposed changes in 77.15(c) that would exclude from the notice requirement of 77.13 any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device, the location and height of which is fixed by its functional purpose, if a type approved by "an appropriate military service." After careful consideration of the objections, the FAA decided that type approval of devices and equipment on civil airports should remain with the Administrator. Therefore, the change to 77.15(c) as proposed, has been modified to exclude from the notice requirement of 77.13 any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device given type approval by an appropriate military service only when such facilities, aids, or devices would be located on a military airport.

Several isolated comments directed attention to the intention of the FAA to use the applicable MOCA instead of the established MEA as the basis for determining obstructions within an en route obstacle clearance area of a Federal airway or approved off-on airway route.

Even though some individuals or groups may consider this concept to be a new one, it is based on the rationale that through use of the MOCA alone and selectively applying the terms obstacle and obstruction to it, the application of the standards of Part 77 will be simplified and will result in bringing the entire system into conformity with intentional standards. In simplified terms, a MOCA is that minimum safe altitude that will permit an aircraft to traverse a designated area of airspace clear of obstacles below. Generally, the height of the highest or controlling obstacle in that airspace segment provides the imaginary obstacle reference line. The appropriate FAA personnel, applying established and specified standards then supply an additional amount of airspace above the obstacle reference line that forms the MOCA altitude level for that segment of flight.

In applying the standards of Part 77 to this airspace formulation, any proposed structure that does not exceed the obstacle reference line will be classified as an obstacle. However, if the proposed structure would penetrate this airspace above the obstacle reference line, it would be classified as an obstruction. Once a proposal is classified as an obstruction, under the procedures provided for in Part 77, it will be studied to determine whether it will or will not constitute a hazard to air navigation.

Accordingly, new ~ 77.23(a)(4) establishes that the MOCA instead of the MEA will be the basis for determining whether any object within any en route obstacle clearance area, including turn and termination areas. of any Federal airway or approved off-airway route will be classified as an obstruction to air navigation.

One comment was received concerning the proposed new 77.21 (b). The new paragraph was added to ensure proper application of the imaginary surfaces outlined in 77.25 at airports that have defined landing and takeoff strips. or pathways that are designated as runways but do not have specially prepared hard surfaces, or have a defined landing and takeoff area with no defined landing and takeoff strips or pathways designated as runways. For the purpose of Part 77, any clearly defined strip, pathway or lane designated by appropriate authority for the landing and takeoff of aircraft is considered to be a runway, even though its surface consists of water, turf, dirt or similar unprepared surface.

The application of new ~ 77.21(b) is based upon the philosophy that, at the thousands of airports having runways of various lateral dimensions without specially prepared hard surfaces, a factor common to each runway and its related primary surface is the centerline. This common factor permits application of the primary surface and the related transitional surfaces because the primary surface is longitudinally centered on the runway and the transitional surfaces extend outward and upward from the sides of the primary surface. Since the width of any primary surface is prescribed in 77.25(c), the width of that portion of any runway over which its primary surface is superimposed is limited by the width of the related primary surface, regardless of the runway width; the length of the primary surface, however, in this case, is the same as the length of the runway. In applying 77.21(b) to those airports, excluding seaplane bases, where the defined landing and takeoff area does not have any defined runways for the landing and

takeoff of aircraft, the agency would, applying the standards of the regulation, make a determination as to which portions of the area were being regularly used by aircraft as runways for landing and take off. The appropriate primary surface prescribed in 77.25(c) will then be centered on each portion of the landing and takeoff area determined to be used as a runway, with each end of the primary surface coinciding with the corresponding end of the determined runway.

Many commentators objected to the proposed amendment of 77.23(a)(2). After careful consideration of all objections to the proposed change, the FAA is convinced that with one exception the proposed revision should not be made. That exception is, that nautical miles will be used in lieu of statute miles in 77.23(a)(2) to conform to the units of horizontal measurement currently used in en route and terminal airspace configurations, and instrument procedures both nationally and internationally. Further study will be given to the need for relating the height of objects to the airport elevation where the terrain on which those objects are located exceeds the surfaces prescribed in ~ 77.25 or the heights prescribed in 77.23(a)(2).

The Notice proposed new 77.23(a) (3) and (4) to replace 77.23(a) (4), (5), (6), and (7). Comments on this proposal were generally favorable. Two commentators requested clarification of an en route obstacle clearance area and suggested that definitions of en route and terminal obstacle clearance be included in the regulation. Since we have already discussed in some detail the en route obstacle clearance area that falls within the scope of 77.23(a)(4), it only remains necessary to provide a brief explanation as to how obstacles and obstructions will relate to the terminal obstacle clearance area portion of the regulation provided for in 77.23(a)(3) of this amendment.

All approved procedures for instrument approach and departure of aircraft to and from airports that are conducted within specified terminal obstacle clearance and departure areas are established in conformity to the applicable criteria set forth either in the United States Standard for Terminal Instrument Procedures (TERPS) or the FAA Handbook 8260.19, Flight Procedures and Airspace. In the establishment of these instrument approach and departure criteria, the involvement of existing obstacles on the type of instrument procedure proposed for adoption, is one of the primary considerations. Accordingly, the standards of Part 77 applicable in any terminal instrument procedure area must also be based on the same obstacle concept that was used to formulate the applicable criteria of TERPS and FAA Handbook 8260.19. A brief explanation of the interrelationship of obstacles and obstructions to this concept should aid materially in understanding the provisions of 77.23(a)(3).

In the development of all types of instrument approach procedures under TERPS and departure procedures under FAA Handbook 8260.19, the method of establishing each such procedure is basically the same. The existing obstacles, including objects that are manmade, the terrain features, and the navigational facilities involving a particular approach or departure area are carefully analyzed, after which a prescribed plane, which is commonly referred to as an obstacle clearance plane, is established for that particular phase of flight. In order to insure maximum safety to all aircraft operators who may use that particular terminal instrument procedure, applicable FAA criteria is then applied to provide an additional layer of airspace above the prescribed obstacle clearance plane.

In applying the standards of Part 77 to this type of airspace structure, any object that does not exceed the obstacle clearance plane will be classified as an obstacle; but any object that penetrates the prescribed obstacle clearance plane will be classified as an obstruction, and subject to aeronautical study to determine whether or not it is a hazard to air transportation or air commerce.

Stated in another but in a more sophisticated way, any object that is located within an obstacle clearance area, including an initial approach segment, a circling approach area, or a departure area, is an obstruction to air navigation under the standards of Part 77, if it is of such height that the vertical distance between any point on it and any minimum instrument flight altitude established for any authorized instrument procedure within that area, is less than the obstacle clearance specified for that instrument procedure.

Several commentators addressed the proposed revision of 77.23. One commentator suggested that runways on air carrier airports be categorized as "air carrier" and provided with equal protection at both ends. The FAA feels that the rationale for the new categorization of runways has been explained adequately previously, therefore, this suggestion was not adopted.

Concern was expressed by some commentators as to the availability of information regarding the category of each approach to each end of each runway of any airport under consideration. The FAA agrees that the success of this concept is dependent upon definite information concerning the category of each approach to each runway end being available to the agency and to the public. This information will be available from FAA regional area offices, and from agency computer readouts.

In response to the suggestion of one commentator, 77.25(c) will be changed to include the words "or planned hard surface" after the words "has specially prepared hard surface." The FAA believes that this addition helps to clarify the intent of the section and does not modify the meaning.

Other minor changes of an editorial and technically clarifying nature have been made to the amendment. A minor change to the addresses under 77.17 has been included.

Interested persons have been afforded an opportunity to participate in the making of these amendments. Due consideration has been given to all matter presented. In other respects, for the reasons stated in the preamble to the notice, the rule is adopted as prescribed herein.

In consideration of the foregoing, Part 77 of the Federal Aviation Regulations is amended, effective May 16, 1971.

Sections 307, 313 and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1348, 1354, and 1501), and Section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

## **Amendment 77-10**

### **Miscellaneous Amendments**

**Adopted: February 28, 1972**

**Effective: March 4, 1972**

**(Published in 37 F.R. 4705, March 4, 1972)**

The purpose of this amendment is to make certain minor editorial changes to Part 77 of the Federal Aviation Regulations.

Section 77.1 I(b) contains a reference to the sale of Advisory Circular 70/7460 1 entitled "Obstruction Marking and Lighting." Effective January 1, 1972, a revised edition of this Advisory Circular has become available free of charge from the Department of Transportation. Section 77.11 (b) is revised to reflect this change.

Throughout Subpart B of Part 77 there are several references to FAA area offices and personnel. Since all area offices were eliminated April 2, 1971, and reference to them is deleted and replaced with reference to the appropriate regional office or personnel.

Section 77.73 provides for the establishment of antenna farm areas under the procedural requirements of Section 4 of the Administrative Procedure Act. This citation is no longer accurate since the recodification of the Act, and appropriate language is substituted therefor.

Since these amendments are minor and editorial in nature and no substantive change is effected, notice and public procedure thereon are not necessary and good cause exists for making them effective on less than 30 days notice.

In consideration of the foregoing, Part 77 of the Federal Aviation Regulations is amended, effective March 4, 1972.

This amendment is issued under the authority of sections 313 and 1101 of the Federal Aviation Act of 1958 (49 U.S.C. 1354, 1501), and section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

## **Amendment 77-11**

### **Organizational Changes and Delegations of Authority**

**Adopted: September 15, 1989**

**Effective: October 25, 1989**

**(Published in 54 F.R. 39288, September 25, 1989)**

**SUMMARY:** This amendment adopts changes to office titles and certain terminology in the regulations that were affected by a recent agency wide reorganization. These changes are being made to reflect delegations of authority that were changed, as well as offices that were renamed or abolished and replaced with new office designations. These changes are necessary to make the regulations consistent with the current agency structure.

**FOR FURTHER INFORMATION CONTACT:** Jean Casciano, Office of Rulemaking (ARM-1), Federal Aviation Administration, 800 Independence Ave., SW., Washington, DC 20591; Telephone (202) 267-9683.

### **SUPPLEMENTARY INFORMATION**

#### **Background**

On July 1, 1988, the FAA underwent a far-reaching reorganization that affected both headquarters and regional offices. The most significant change is that certain Regional Divisions and Offices, which formerly reported to the Regional Director, are now under "straight line" authority, meaning that these units within each Regional Office report to the appropriate Associate Administrator (or Chief Counsel) in charge of the function performed by that unit.

Within Part 11 of the Federal Aviation Regulations (FAR), various elements of the FAA have been delegated rule making authority by the Administrator. These delegations need to be updated. In addition, throughout the Federal Aviation Regulations references are made to offices that have been renamed or are no longer in existence as a result of reorganization.

Title 14 of the Code of Federal Regulations must therefore be amended to reflect the reorganizations and changes that have taken place.

#### **Paperwork Reduction Act**

The paperwork requirements in sections being amended by this document have already been approved. There will be no increase or decrease in paperwork requirements as a result of these amendments, since the changes are completely editorial in nature.

#### **Good Cause Justification for Immediate Adoption**

This amendment is needed to avoid possible confusion about the FAA reorganization and to hasten the effective implementation of the reorganization. In view of the need to expedite these changes, and because the amendment is editorial in nature and would impose no additional burden on the public, I find that notice and opportunity for public comment before adopting this amendment is unnecessary.

#### **Federalism Implications**

The regulations adopted herein will not have substantial direct effects on the states, on the relationship between the National government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

## **Conclusion**

The FAA has determined that this document involves an amendment that imposes no additional burden on any person. Accordingly, it has been determined that: 'The action does not involve a major rule under Executive Order 12291; it is not significant under DOT Regulatory Policies and Procedures

(44 FR. 11034: February 26, 1979); and because it is of editorial nature. no impact is expected(l to result and a full regulatory evaluation is not required. In addition, the FAA certifies that this amendment will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **The Rule**

**In** consideration of the foregoing, the Federal Aviation Administration amends the Federal Aviation Regulations (14 CFR Chapter 1) effective October 25, 1989.

The authority citation for Part 77 is revised to read as follows:

Authority 49 U.S.C. 1304, 1348, 1354, 1421 through 1430, 1431, 1501, 49 U.S.C. 106(g) (Revised Pub. L. 97 449, January 12, 1983), (Revised Pub. L. 100-223, December 30, 1987).

## PART 77--OBJECTS AFFECTING NAVIGABLE AIRSPACE

### Subpart A--General

Source: Docket No. 1882 (30 FR 1839, 2/10/65) effective 5/1/65, for each subpart, unless otherwise noted.

#### 77.1 Scope.

This part:

- (a) Establishes standards for determining obstructions in navigable airspace;
- (b) Sets forth the requirements for notice to the Administrator of certain proposed construction or alteration;
- (c) Provides for aeronautical studies of obstructions to air navigation, to determine their effect on the safe and efficient use of airspace;
- (d) Provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation:  
and
- (e) Provides for establishing antenna farm areas.

#### 77.2 Definition of terms.

For the purpose of this part:

*Airport available for public use* means an airport that is open to the general public with or without a prior request to use the airport.

*A seaplane base* is considered to be an airport only if its sea lanes are outlined by visual markers.

*Nonprecision instrument runway* means a runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in nonprecision instrument approach procedure has been approved, or planned, and for which no precision approach facilities are planned, or indicated on an FAA planning document or military service military airport planning document.

*Precision instrument runway* means a runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

*Utility runway* means a runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.

*Visual runway* means a runway intended solely for the operation of aircraft using visual approach procedures, with no straight-in instrument approach procedure and no instrument designation indicated on an FAA approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

(Amdt. 77-5, Eff. 5/2/68); (Amdt. 77-9, Eff. 5/16/71)

### **77.3 Standards.**

(a) The standards established in this part for determining obstructions to air navigation are used by the Administrator in:

- (1) Administering the Federal-aid Airport Program and the Surplus Airport Program;
- (2) Transferring property of the United States under section 16 of the Federal Airport Act;
- (3) Developing technical standards and guidance in the design and construction of airports; and
- (4) Imposing requirements for public notice of the construction or alteration of any structure where notice will promote air safety.

(b) The standards used by the Administrator in the establishment of flight procedures and aircraft operational limitations are not set forth in this part but are contained in other publications of the Administrator.

(Amdt. 77-9, Eff. 5/16/71)

### **77.5 Kinds of objects affected.**

This part applies to:

(a) Any object of natural growth, terrain, or permanent or temporary construction or alteration including equipment or materials used therein, and apparatus of a permanent or temporary character; and

(b) Alteration of any permanent or temporary existing structure by a change in its height (including appurtenances), or lateral dimensions, including equipment or materials used therein.

## **Subpart B--Notice of Construction or Alteration**

### **77.11 Scope.**

(a) This subpart requires each person proposing any kind of construction or alteration described in 77.13(a) to give adequate notice to the Administrator. It specifies the locations and dimensions of the construction or alteration for which notice is required and prescribes the form and manner of the notice. It also requires supplemental notices 48 hours before the start and upon the completion of certain construction or alteration that was the subject of a notice under 77.13(a).

(b) Notices received under this subpart provide a basis for:

- (1) Evaluating the effect of the construction or alteration on operational procedures and proposed operational procedures;
- (2) Determinations of the possible hazardous effect of the proposed construction or alteration on air navigation;
- (3) Recommendations for identifying the construction or alteration in accordance with the current Federal Aviation Administration Advisory Circular AC 70/7460 1 entitled "Obstruction Marking and Lighting," which is available without charge from the Department of Transportation, Distribution Unit, TAD 484.3, Washington, DC 20590.
- (4) Determining other appropriate measures to be applied for continued safety of air navigation; and
- 5) Charting and other notification to airmen of the construction or alteration.

(Amdt. 77-8, Eff. 2/1/69); (Amdt. 77-10, Eff. 3/ 4/72)

### **77.13 Construction or alteration requiring notice.**

a) Except as provided in 77.15, each sponsor who proposes any of the following construction or alteration shall notify the Administrator in the form and manner prescribed in 77.17:

- (1) Any construction or alteration of more than 200 feet in height above the ground level at its site.
- (2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:
  - (i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with at least one runway more than 3,200 feet in actual length, excluding heliports.
  - (ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.
  - (iii) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (a)(5) of this section.
- (3) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) (1) or (2) of this section.
- (4) When requested by the FAA, any construction or alteration that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed a standard of subpart C of this part.
- (5) Any construction or alteration on any of the following airports (including heliports):
  - (i) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.

(ii) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that the airport will be available for public use.

(iii) An airport that is operated by an armed force of the United States.

(b) Each sponsor who proposes construction or alteration that is the subject of a notice under paragraph (a) of this section and is advised by an FAA regional office that a supplemental notice is required shall submit that notice on a prescribed form to be received by the FAA regional office at least 48 hours before the start of the construction or alteration.

(c) Each sponsor who undertakes construction or alteration that is the subject of a notice under paragraph (a) of this section shall, within S days after that construction or alteration reaches its greatest height, submit a supplemental notice on a prescribed form to the FAA regional office having jurisdiction over the region involved, if--

- (1) The construction or alteration is more than 200 feet above the surface level of its site; or
- (2) An FAA regional office advises him that submission of the form is required.

(Amdt. 77-5, Eff. 5/2/68); (Amdt. 77-9, Eff. 5/16/71); (Amdt. 77-10, Eff. 3/4/72)

### **77.15 Construction or alteration not requiring notice.**

No person is required to notify the Administrator for any of the following construction or alteration:

(a) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation.

(b) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure.

(c) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device, of a type approved by the Administrator, or an appropriate military service on military airports. the location and height of which is fixed by its functional purpose.

(d) Any construction or alteration for which notice is required by any other FAA regulation.

(Amdt. 77-5, Eff. 5/2/68); (Amdt. 77-9, Eff. 5/16/71)

### **77.17 Form and time of notice.**

(a) Each person who is required to notify the Administrator under 77.13(a) shall send one executed form set (four copies) of FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area within which the construction or alteration will be located. Copies of FAA Form 7460-1 may be obtained from the headquarters of the Federal Aviation Administration and the regional offices.

(b) The notice required under 77.13(a) (1) through (4) must be submitted at least 30 days before the earlier of the following dates:

- (1) The date the proposed construction or alteration is to begin.
- (2) The date an application for a construction permit is to be filed.

However, a notice relating to proposed construction alteration that is subject to the licensing requirements of the Federal Communications Act may be sent to FAA at the same time the application for construction is filed with the Federal Communications Commission, or at any time before that filing.

(c) A proposed structure or an alteration to an existing structure that exceeds 2,000 feet in height above the ground will be presumed to be a hazard to air navigation and to result in an inefficient utilization of airspace and the applicant has the burden of overcoming that presumption. Each notice submitted under the pertinent provisions of this part 77 proposing a structure in excess of 2,000 feet above ground, or an alteration that will make an existing

structure exceed that height, must contain a detailed showing, directed to meeting this burden. Only in exceptional cases, where the FAA concludes that a clear and compelling showing has been made that it would not result in an inefficient utilization of the airspace and would not result in a hazard to air navigation, will a determination of no hazard be issued.

(d) In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30-day requirement in paragraph (b) of this section does not apply and the notice may be sent by telephone, telegraph, or other expeditious means, with an executed FAA Form 7460-1 submitted within 5 days thereafter. Outside normal business hours, emergency notices by telephone or telegraph may be submitted to the nearest FAA Flight Service Station.

(e) Each person who is required to notify the Administrator by paragraph (b) or (c) of 77.13, or both, shall send an executed copy of FAA Form 117-1, Notice of Progress of Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area involved.

(Amdt. 77-2, Eff. 7/12/66); (Amdt. 77-5, Eff. 5/2/68); (Amdt. 77-8, Eff. 2/1/69); (Amdt. 77-9, Eff. 5/16/71); (Amdt. 77-10, Eff. 3/4/72); (Amdt. 77-11, Eff. 10/25/89)

### **77.19 Acknowledgment of notice.**

(a) The FAA acknowledges in writing the receipt of each notice submitted under 77.13(a).

(b) If the construction or alteration proposed in a notice is one for which lighting or marking standards are prescribed in the FAA Advisory Circular AC 70/7460-1, entitled "Obstruction Marking and Lighting," the acknowledgment contains a statement to that effect and information on how the structure should be marked and lighted in accordance with the manual.

(c) The acknowledgment states that an aeronautical study of the proposed construction or alteration has resulted in a determination that the construction or alteration:

- (1) Would not exceed any s of subpart C and would not be a hazard to air navigation;
- (2) Would exceed a standard of subpart C but would not be a hazard to air navigation; or
- (3) Would exceed a standard of subpart C and further aeronautical study is necessary to determine whether it would be a hazard to air navigation, that the sponsor may request within 30 days that further study, and that, pending completion of any further study, it is presumed the construction or alteration would be a hazard to air navigation.

(Amdt. 77-1, Eff. 5/11/65); (Amdt. 77-4, Eff. 11/12/67); (Amdt. 77-5, Eff. 5/2/68)

## **Subpart C--Obstruction Standards**

### **77.21 Scope.**

(a) This subpart establishes standards for determining obstructions to air navigation. It applies to existing and proposed manmade objects, objects of natural growth, and terrain. The standards apply to the use of navigable airspace by aircraft and to existing air navigation facilities, such as an air navigation aid, airport, Federal airway, instrument approach or departure procedure, or approved off-airway route. Additionally, they apply to a planned facility or use, or a change in an existing facility or use, if a proposal therefor is on file with the Federal Aviation Administration or an appropriate military service on the date the notice required by 77.13(a) is filed.

(b) At those airports having defined runways with specially prepared hard surfaces, the primary surface for each such runway extends 200 feet beyond each end of the runway. At those airports having defined strips or pathways that are used regularly for the taking off and landing of aircraft and have been designated by appropriate authority as runways, but do not have specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At those airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for the landing and takeoff of aircraft, a determination shall be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those pathways so determined shall be considered runways and an appropriate primary surface as defined in 77.25(c) will be considered as being longitudinally centered on each runway so determined, and each end of that primary surface shall coincide with the corresponding end of that runway.

(c) The standards in this subpart apply to the effect of construction or alteration proposals upon an airport if, at the time of filing of the notice required by 77.13(a), that airport is --

(1) Available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement; or

(2) A planned or proposed airport or an airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that the airport will be available for public use; or,

(3) An airport that is operated by an armed force of the United States.

(Amdt. 77-5, Eff. 5/2/68); (Amdt. 77-9, Eff. 5/16/71)

### **77.23 Standards for determining obstructions.**

(a) An existing object, including a mobile object, is, and a future object would be, an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:

(1) A height of 500 feet above ground level at the site of the object.

(2) A height that is 200 feet above ground level or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport up to a maximum of 500 feet.

(3) A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

(4) A height within an en route obstacle clearance area, including turn and termination areas, of a Federal airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.

(5) The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.25, 77.28, or 77.29. However, no part of the take-off or landing area itself will be considered an obstruction.

(b) Except for traverse ways on or near an airport with an operative ground traffic control service, furnished by an air traffic control tower or by the airport management and coordinated with the air traffic control service, the standards of paragraph (a) of this section apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:

(1) Seventeen feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance.

(2) Fifteen feet for any other public roadway.

(3) Ten feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.

(4) Twenty-three feet for a railroad, and,

(5) For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

(Amdt. 77-5, Eff. 5/2/68); (Amdt. 77-9, Eff. 5/16/71)

### **77.25 Civil airport imaginary surfaces.**

The following civil airport imaginary surfaces are established with relation to the airport and to each runway. The size of each such imaginary surface is based on the category of each runway according to the type of approach available or planned for that runway. The slope and dimensions of the approach surface applied to each end of a runway are determined by the most precise approach existing or planned for that runway end.

(a) Horizontal surface. A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:

(1) 5,000 feet for all runways designated as utility or visual;

(2) 10,000 feet for all other runways. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

(b) Conical surface. A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

(c) Primary surface. A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of a primary surface is:

(1) 250 feet for utility runways having only visual approaches.

(2) 500 feet for utility runways having nonprecision instrument approaches.

(3) For other than utility runways the width is:

(i) 500 feet for visual runways having only visual approaches.

(ii) 500 feet for nonprecision instrument runways having visibility minimums greater than three-fourths statute mile.

(iii) 1,000 feet for a nonprecision instrument runway having a nonprecision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways.

The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.

(d) Approach surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.

(1) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:

(i) 1,250 feet for that end of a utility runway with only visual approaches;

(ii) 1,500 feet for that end of a runway other than a utility runway with only visual approaches;

(iii) 2,000 feet for that end of a utility runway with a nonprecision instrument approach;

(iv) 3,500 feet for that end of a nonprecision instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile;

(v) 4,000 feet for that end of a nonprecision instrument runway, other than utility, having a nonprecision instrument approach with visibility minimums as low as three-fourths statute mile; and

(vi) 16,000 feet for precision instrument runways.

(2) The approach surface extends for a horizontal distance of:

(i) 5,000 feet at a slope of 20 to 1 for all utility and visual runways;

(ii) 10,000 feet at a slope of 34 to 1 for all nonprecision instrument runways other than utility; and,

(iii) 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.

(3) The outer width of an approach surface to an end of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.

(e) *Transitional surface.* These surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.

(Amdt. 77-7, Eff. 11/30/68); (Amdt. 77-9, Eff. 5/16/71 )

**77.27 [Reserved]** (Amdt. 77-5, Eff. 5/2/68); (Amdt. 77-7, Eff. 11/30/68); (Amdt. 77-9, Eff. 5/16/71)

## **77.28 Military airport imaginary surfaces.**

(a) *Related to airport reference points.* These surfaces apply to all military airports. For the purposes of this section a military airport is any airport operated by an armed force of the United States.

(1) *Inner horizontal surface.* A plane is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.

(2) *Conical surface.* A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.

(3) *Outer horizontal surface.* A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.

(b) *Related to runways.* These surfaces apply to all military airports.

(1) *Primary surface.* A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000-foot width may be reduced to the former criteria.

(2) *Clear zone surface.* A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.

(3) *Approach clearance surface.* An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500 feet above the established airport elevation. It then continues horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.

(4) *Transitional surfaces.* These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

(Amdt. 77-1, Eff. 5/11/65); (Amdt. 77-9, Eff. 5/16/71)

**77.29 Airport imaginary surfaces for heliports.**

a) *Helicopter primary surface.* The area of the primary surface coincides in size and shape with the designated take-off and landing area of a heliport. This surface is a horizontal plane at the elevation of the established heliport elevation.

b) *Helicopter approach surface.* The approach surface begins at each end of the heliport primary surface with the same width as the primary surface, and extends outward and upward for a horizontal distance of 4,000 feet where its width is 500 feet. The slope of the approach surface is 8 to 1 for civil heliports and 10 to 1 for military heliports.

c) *Helicopter transitional surface.* These surfaces extend outward and upward from the lateral boundaries of the heliport primary surface and from the approach surfaces at a slope of 2 to 1 for a distance of 250 feet measured horizontally from the centerline of the primary and approach surfaces.

(Amdt. 77-9, Eff. 5/16/71)

## **Subpart D--Aeronautical Studies of Effect of Proposed Construction on Navigable Airspace**

### **77.31 Scope.**

(a) This subpart applies to the conduct of aeronautical studies of the effect of proposed construction or alteration on the use of air navigation facilities or navigable airspace by aircraft. In the aeronautical studies, present and future IFR and VFR aeronautical operations and procedures are reviewed and any possible changes in those operations and procedures and in the construction proposal that would eliminate or alleviate the conflicting demands are ascertained.

(b) The conclusion of a study made under this subpart is normally a determination as to whether the specific proposal studied would be a hazard to air navigation.

(Amdt. 77-6, Eff. 8/31/68)

### **77.33 Initiation of studies.**

(a) An aeronautical study is conducted by the FAA:

(1) Upon the request of the sponsor or any construction or alteration for which a notice is submitted under subpart B of this part, unless that construction or alteration would be located within an antenna farm area established under subpart F of this part; or

(2) Whenever the FAA determines it appropriate.

(Amdt. 77-4, Eff. 11/12/67)

### **77.35 Aeronautical studies.**

(a) The Regional Manager, Air Traffic Division of the region in which the proposed construction or alteration would be located, or his designee, conducts the aeronautical study of the effect of the proposal upon the operation of air navigation facilities and the safe and efficient utilization of the navigable airspace. This study may include the physical and electromagnetic radiation effect the proposal may have on the operation of an air navigation facility.

(b) To the extent considered necessary, the Regional Manager, Air Traffic Division or his designee:

(1) Solicits comments from all interested persons;

(2) Explores objections to the proposal and attempts to develop recommendations for adjustment of aviation requirements that would accommodate the proposed construction or alteration;

(3) Examines possible revisions of the proposal that would eliminate the exceeding of the standards in subpart C of this part; and

(4) Convenes a meeting with all interested persons for the purpose of gathering all facts relevant to the effect of the proposed construction or alteration on the safe and efficient utilization of the navigable airspace.

(c) The Regional Manager, Air Traffic Division or his designee issues a determination as to whether the proposed construction or alteration would be a hazard to air navigation and sends copies to all known interested persons. This determination is final unless a petition for review is granted under 77.37.

(d) If the sponsor revises his proposal to eliminate exceeding of the standards of subpart C of this part, or withdraws it, the Regional Manager, Air Traffic Division, or his designee, terminates the study and notifies all known interested persons.

(Amdt. 77-6, Eff. 8/31/68); (Amdt. 77-11, Eff. 10/25/89)

### **77.37 Discretionary review.**

(a) The sponsor of any proposed construction or alteration or any person who stated a substantial aeronautical objection to it in an aeronautical study, or any person who has a substantial aeronautical objection to it but was not given an opportunity to state it, may petition the Administrator, within 30 days after issuance of the determination under 77.19 or 77.35 or revision or extension of the determination under 77.39(c), for a review of the determination, revision, or extension. This paragraph does not apply to any acknowledgment issued under 77.19(c)(1).

(b) The petition must be in triplicate and contain a full statement of the basis upon which it is made

(c) The Administrator examines each petition and decides whether a review will be made and, if so, whether it will be:

(1) A review on the basis of written materials, including study of a report by the Regional Manager, Air Traffic Division of the aeronautical study, briefs, and related submissions by any interested party, and other relevant facts, with the Administrator affirming, revising, or reversing the determination issued under 77.19, 77.35 or 77.39(c); or

(2) A review on the basis of a public hearing, conducted in accordance with the procedures prescribed in subpart E of this part.

(Amdt. 77-3, Eff. 6/5/67); (Amdt. 77-11, Eff. 10/25/89)

### **77.39 Effective period of determination of no hazard.**

(a) Unless it is otherwise extended, revised, or terminated, each final determination of no hazard made under this subpart or subpart B or E of this part expires 18 months after its effective date, regardless of whether the proposed construction or alteration has been started, or on the date the proposed construction or alteration is abandoned, whichever is earlier.

(b) In any case, including a determination to which paragraph (d) of this section applies, where the proposed construction or alteration has not been started during the applicable period by actual structural work, such as the laying of a foundation, but not including excavation, any interested person may, at least 15 days before the date the final determination expires, petition the FAA official who issued the determination to:

(1) Revise the determination based on new facts that change the basis on which it was made; or

(2) Extend its effective period.

(c) The FAA official who issued the determination reviews each petition presented under paragraph (b) of this section, and revises, extends, or affirms the determination as indicated by his findings.

(d) In any case in which a final determination made under this subpart or subpart B or E of this part relates to proposed construction or alteration that may not be started unless the Federal Communications Commission issues an appropriate construction permit, the effective period of each final determination includes--

(1) The time required to apply to the Commission for a construction permit, but not more than 6 months after the effective date of the determination; and

(2) The time necessary for the Commission to process the application except in a case where the Administrator determines a shorter effective period is required by the circumstances.

(e) If the Commission issues a construction permit, the final determination is effective until the date prescribed for completion of the construction. If the Commission refuses to issue a construction permit, the final determination expires on the date of its refusal.

(Amdt. 77-5, Eff. 5/2/68)

## **Subpart E--Rules of Practice for Hearings Under Subpart D**

### **77.41 Scope.**

This subpart applies to (J) hearings held by the FAA under titles 1, III, and X of the Federal Aviation Act of 1958 (49 U.S.C. subchapters I, III, and X), on proposed construction or alteration that affects the use of navigable airspace.

### **77.43 Nature of hearing.**

Sections 4, 5, 7, and 8 of the Administrative Procedure Act (5 U.S.C. 1003, 1004, 1006, and 1007) do not apply to hearings held on proposed construction or alteration to determine its effect on the safety of aircraft and the efficient use of navigable airspace because those hearings are fact-finding in nature. As a fact-finding procedure, each hearing is non adversary and there are no formal pleadings or adverse parties.

### **77.45 Presiding officer.**

(a) If, under 79.37, the Administrator grants a public hearing on any proposed construction or alteration covered by this part, the Director, Air Traffic Operations Service designates an FAA employee to be the presiding officer at the hearing. (b) The presiding officer may:

- (1) Give notice of the date and location of the hearing and any prehearing conference that may be held;
- (2) Administer oaths and affirmations;
- (3) Examine witnesses;
- (4) Issue subpoenas and take depositions or have them taken;
- (5) Obtain, in the form of a public record, all pertinent and relevant facts relating to the subject matter of the hearing;
- (6) Rule, with the assistance of the legal officer, upon the admissibility of evidence;
- (7) Regulate the course and conduct of the hearing; and
- (8) Designate parties to the hearing and revoke those designations.

(Amdt. 77-11, Eff. 10/25/89)

### **77.47 Legal officer.**

The Chief Counsel designates a member of his staff to serve as legal officer at each hearing under this subpart. The legal officer may examine witnesses and assist and advise the presiding officer on questions of evidence or other legal questions arising during the hearing.

### **77.49 Notice of hearing.**

In designating a time and place for a hearing under this subpart the presiding officer considers the needs of the FAA and the convenience of the parties and witnesses. The time and place of each hearing is published in the "Notices" section of the FEDERAL REGISTER before the date of the hearing, unless the notice is impractical or unnecessary.

### **77.51 Parties to the hearing.**

The presiding officer designates the following as parties to the hearing--

- (a) The proponent of the proposed construction or alteration.
- (b) Those persons whose activities would be substantially affected by the proposed construction or alteration.

### **77.53 Prehearing conference.**

(a) The presiding officer may, in his discretion, hold a prehearing conference with the parties to the hearing and the legal officer before the hearing.

(b) At the direction of the presiding officer, each party to a prehearing conference shall submit a brief written statement of the evidence he intends to provide through his witnesses and by questioning other witnesses at the hearing, and shall provide enough copies of the statement so that the presiding officer may keep three for the FAA and give one to each other party.

(c) At the prehearing conference, the presiding officer reduces and simplifies the subject matter of the hearing so far as possible and advises the parties of the probable order of presenting the evidence.

### **77.55 Examination of witnesses.**

(a) Each witness at a hearing under this subpart shall, after being sworn by the presiding officer, give his testimony under oath.

(b) The party for whom a witness, other than an employee of the FAA, is testifying shall examine that witness. After that examination, other parties to the hearing may examine the witness, in the order fixed by the presiding officer. The presiding officer and the legal officer may then examine the witness. The presiding officer may grant any party an additional opportunity to examine any witness, if that party adequately justifies the additional examination.

(c) The legal officer examines each FAA employee who is a witness, before the other parties examine him. After that examination, the order prescribed in paragraph (b) of this section applies. An FAA employee may testify only as to facts within his personal knowledge and the application of FAA regulations, standards, and policies.

### **77.57 Evidence.**

(a) The presiding officer receives all testimony and exhibits that are relevant to the issues of the hearing. So far as possible, each party shall submit enough copies of his exhibits that the presiding officer may keep three copies for the FAA and give one to each other party.

(b) The presiding officer excludes any testimony that is irrelevant, unduly repetitious, or consists of statements made during an aeronautical study in an effort to reconcile or compromise aviation or construction or alteration requirements. A party to the hearing may object to the admission of evidence only on the ground that it is irrelevant.

### **77.59 Subpoenas of witnesses and exhibits.**

(a) The presiding officer of a hearing may issue subpoenas for any witness or exhibit that he determines may be material and relevant to the issues of the hearing. So far as possible, each party to the hearing shall provide the witnesses and exhibits that he intends to present at the hearing.

(b) If any party to the hearing is unable to provide his necessary witnesses and exhibits, he shall advise the presiding officer far enough in advance that the presiding officer can determine whether he should issue subpoenas for the desired witnesses or exhibits.

### **77.61 Revision of construction or alteration proposal.**

(a) The sponsor of any proposed construction or alteration covered by this part may revise his proposal at any time before or during the hearing. If he revises it, the presiding officer decides whether the revision affects the proposal to the extent that he should send it to the Administrator for a redetermination of the need for a hearing.

(b) If the presiding officer decides that it does not need to be resubmitted to the Administrator, he advises the parties of the revised proposal and takes the action necessary to allow all parties to effectively participate in the hearing on the revised proposal. Without limiting his discretion, the presiding officer may recess and reconvene the hearing, or hold another prehearing conference.

### **77.63 Record of hearing.**

(a) Each hearing is recorded verbatim by an official reporter under an FAA contract. The transcript, and all exhibits, become a part of the record of the hearing. (b) Any person may buy a copy of the transcript of the hearing from the reporter at the price fixed for it.

(c) The presiding officer may allow any party to withdraw an original document if he submits authenticated copies of it.

(d) Any person may buy, from the FAA, photostatic copies of any exhibit by paying the copying costs.

(e) A change in the official transcript of a hearing may be made only if it involves an error of substance. Any recommendation to correct the transcript must be filed with the presiding officer within 5 days after the hearing closes. The presiding officer reviews each request for a correction to the extent he considers appropriate and shall make any revisions that he finds appropriate as a result of that review.

### **77.65 Recommendations by parties.**

Within 20 days after the mailing of the record of hearing by the official reporter, or as otherwise directed by the presiding officer, each party may submit to the presiding officer five copies of his recommendations for a final decision to be made by the Administrator.

### **77.67 Final decision of the Administrator.**

After reviewing the evidence relevant to the questions of fact in a hearing, including the official transcript and the exhibits, The Administrator resolves all these questions, based on the weight of evidence, and makes his determination, stating the basis and reasons for it. He then issues an appropriate order to be served on each of the parties.

### **77.69 Limitations on appearance and representation.**

(a) A former officer or employee of the FAA may not appear on behalf of, or represent, any party before the FAA in connection with any matter to which this part applies, if he considered or passed on that matter while he was an officer or employee of the FAA.

(b) A person appearing before the FAA on any matter to which this part applies may not, in connection with that appearance, knowingly accept assistance from, or share fees with, any person who is prohibited by paragraph (a) of this section, from appearing himself on that matter.

(c) A former official or employee of the FAA may not, within 6 months after he ceases to be such an officer or employee, appear before the FAA on behalf of, or represent, any party in connection with any proceeding that was pending under this part while he was an officer or employee of the FAA, unless he obtains written consent from an appropriate officer of the FAA, based on a verified showing that he did not personally consider the matter concerned or gain particular knowledge of it while he was an officer or employee of the FAA.

## **Subpart F--Establishment of Antenna Farm Areas**

### **77.71 Scope.**

(a) This subpart establishes antenna farm areas in which antenna structures may be grouped to localize their effect on the use of navigable airspace.

(b) It is the policy of the FAA to encourage the use of antenna farms and the single structure multiple antenna concept for radio and television towers whenever possible. In considering proposals for establishing antenna farm areas, it considers as far as possible the revision of aeronautical procedures and operations to accommodate antenna structures that will fulfill broadcasting requirements.

### **77.73 General provisions.**

(a) An antenna farm area consists of a specified geographical location with established dimensions of area and height, where antenna towers with a common impact on aviation may be grouped. Each such area is established by appropriate rule making action.

(b) Each proposal for an antenna farm area is evaluated on the basis of its effect on the use of navigable airspace. The views of the Federal Communications Commission are requested on the effect that each establishment of an antenna farm area would have on its statutory responsibilities. Any views submitted by it are fully considered before the antenna farm concerned is established. If the Commission advises that the establishment of any proposed antenna farm area would interfere with its statutory responsibility, the proposed area is not established.

(c) The establishment of an antenna farm area is considered whenever it is proposed by:

- (1) The FAA;
- (2) The Federal Communications Commission;
- (3) The sponsor of a proposed antenna tower; or
- (4) Any other person having a substantial interest in a proposed antenna tower.

(Amdt. 77-10, Eff. 3/4/72)

### **77.75 Establishment of antenna farm areas.**

The airspace areas described in the following sections of this subpart are established as antenna farm areas.

Note: Sections 77.77 through 77.1100 reserved for descriptions of antenna farm areas.

*Please see next page.*