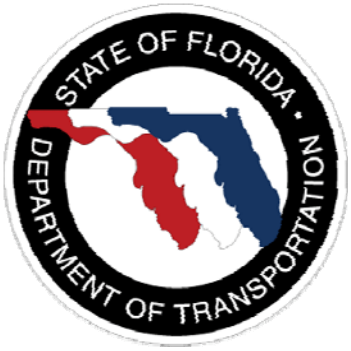
Florida Department of Transportation
Aviation Office



AIRPORT COMPATIBLE LAND USE GUIDEBOOK

August 2010

Tracked Changes

March 2010 – Original guidebook release.

August 2010 – Several minor text and formatting corrections; inclusion of notice to local governments on s. 163.3177(6)(a), F.S. requirement to adopt airport land use compatibility criteria; addition of Appendix AA, which lists all local governments adjacent to Florida's public-use aviation facilities.

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Foreword

This guidebook is a product of the Florida Department of Transportation (FDOT). The guidebook is a result of an Airport Compatible Land Use Study sponsored by the Florida Department of Community Affairs (DCA), the Florida Airports Council (FAC), and FDOT. The Land Use Study benefited from valuable discussion and input from many local and statewide planners, developers, and professional associations who served on a Working Group.

The mission of the Working Group was to review, assess, and recommend potential improvements to the evaluation and permitting process for new development in the vicinity of Florida's public-use airports and military airfields. The Working Group carefully considered competing demands for protecting public investment and ensuring public safety. Also considered were the equally important requirements of managed growth and economic benefit that comes from a vibrant transportation system. Commercial and general aviation airports in Florida help to contribute an estimated $97 billion to Florida's economy each year; protecting airports throughout Florida from incompatible land use encroachment helps to promote a healthy transportation system and vibrant economy. FDOT is extremely grateful for the efforts of the public-spirited professionals who served on the Working Group and for the contributions of their time and energy to provide ideas and information that served as the basis for this guidebook.

Land development in the vicinity of public-use airports and military airfields is regulated by federal, state, and local government laws, statutes, rules, and regulations. These have been developed over many years and are enforced today to protect airports and airfields from encroachment from competing land uses that are not compatible with current operations or approved airport improvements. Encroachment can be in the form of a structure that, due to its height, may create a potential hazard for aircraft; these encroachments are referred to as "tall structures". Another form of encroachment is land development that is not considered compatible; this type of encroachment is referred to as incompatible land use. Incompatible land use may increase public concerns related to environmental and safety issues or heighten the perception of aircraft noise or aircraft accident potential. Tall structures and/or incompatible land use can endanger people on board an aircraft, as well as people on the ground.

Timely consideration and evaluation of proposed development must be given to ensure that tall structures or incompatible land use do not have an adverse effect on public-use airports or military airfields. Disregarding federal, state, and local statutes related to regulating development in the airport environs can endanger public safety and may also expose responsible local governments to legal liability.

Information in this Airport Compatible Land Use Guidebook is applicable to individuals, land developers, professional aviation consultants, state agencies and planners, and local government officials and planners. The Airport Land Use Compatibility Guidebook highlights important information and factors that must be considered in the process to evaluate various land use and development decisions that have the potential to impact public-use airports or military airfields in Florida. The guidebook is based on current state law and existing federal regulations. The focus of the guidebook is on providing information that helps all applicable parties comply with existing law and regulations.

The guidebook is presented in four sections. Readers seeking information on a particular topic are encouraged to consult the table of contents for the guidebook or the appendices at the end

of the document. **Section One** provides an overview of the process that all local governments in Florida should follow when they review a development application in order to be compliant with existing state statutes and federal regulations. **Section Two** provides more detail on state laws, federal regulations, and various processes in place to prevent incompatible development around airports/airfields. **Section Three** provides more detail on the specific areas around airports and airfields that need to be protected from tall structures that may interfere with navigation and/or land uses which may jeopardize compatibility. **Section Four** discusses strategies to prevent or correct land use incompatibilities around airports/airfields and responsibilities related to compatible land use.

Appendix A provides a list of local governments, where a tall structure proponent may be subject to either FDOT tall structure permitting or local government airport protection zoning requirements. The appendix also indicates whether a noise study has been completed for a specific facility. **Appendix AA** provides a list of those local governments adjacent to aviation facilities, and therefore, subject to recently adopted land use compatibility requirements contained in s. 163.3177(6)(a), F.S. **Appendix B** provides more detailed information on specific areas around airports/airfields that should be protected from encroachment. **Appendix C** provides information on how to access state statutes, federal regulations, and advisory circulars from the Federal Aviation Administration, as well as contacts for various agencies referenced in the guidebook. The appendix also provides information on accessing airport notification areas for all airports. **Appendix D** provides information on example zoning ordinances. **Appendix E** provides a summary of terms and definitions used in this report.

Notice

On May 27, 2009, Governor Crist approved HB 1021 making it Chapter 2009-85, Laws of Florida. The law revised s. 163.3177(6)(a), Florida Statutes, to require Future Land Use Elements of local government comprehensive plans to include criteria to achieve the compatibility of lands adjacent to an airport as defined in s. 330.35 and consistent with s. 333.02. The law provides that local governments are to adopt and transmit amendments to the state land planning agency by June 30, 2012, for this purpose. This measure is intended to increase protection afforded to public-use airports against negative operational impacts due to encroachment of incompatible development. This guidebook can be utilized as an information source in preparation of such criteria by local governments affected by this statutory change.

Section One
Process for Reviewing Development Applications

I. Introduction

In accordance with Florida law, Chapter 333, F.S., local governments in Florida are required to adopt, administer, and enforce airport zoning. This section provides an overview of the steps to be followed when a local government receives an application for development. All local governments with an airport hazard area within its territorial limits are required to adopt, administer, and enforce airport zoning. An airport hazard as defined in Chapter 333, F.S., is any structure, tree, or land use which would exceed federal obstruction standards contained in 14 CFR Part 77 and which obstructs the airspace required for the flight of aircraft in taking off, maneuvering, or landing or is otherwise hazardous to such taking off, maneuvering, or landing of aircraft. There is no standard size for the airport hazard area; this area is specific to each airport and its limits are also influenced by the elevation of each airport hazard.

It is a complex process to ensure that development and land use around airports is compatible. For development around airports to be compatible, it must not pose an obstruction from a height standpoint. In addition, there are certain types of land uses around airports, particularly ones that are noise sensitive, that according to Chapter 333, F.S. should be restricted. Uses around airports which could lead to reduced visibility, attract birds/wildlife, or lead to large congregations of people should also be avoided.

II. Steps for Local Governments to Follow When Reviewing an Application for Development

This section provides a "how to guide" that local governments can follow to comply with existing state law. To simplify the discussion, the development approval process is divided between tall structure approval and land use approval.

A. Tall Structure Approval Process

The discussion of the development approval process related to tall structures is divided into two parts. The first part discusses the approval process for local governments that have adopted an airport protection zoning ordinance or that have entered into an interlocal agreement that is in accordance with Chapter 333.03, F.S. The second part provides an overview of the process for local governments that do not have an airport protection zoning ordinance or an interlocal agreement.

Specific guidelines for determining the compatibility of the height of objects around public-use airports or military airfields in Florida are based on Federal Aviation Regulations (FAR) Title 14 Part 77, "Objects Affecting Navigable Airspace (Part 77)." (Section Three and Appendix B to this guidebook provide more information and graphics that depict Part 77 surfaces).

Part 77 surfaces are designed to protect navigable airspace and airport operational areas from hazards. Briefly, Part 77 surfaces are three-dimensional and extend outward at various angles and distances from each active runway. Part 77 surfaces vary for each aviation facility. For more detailed information on Part 77 surfaces for various aviation facilities, contact the Florida Department of Transportation (FDOT) Aviation

Office or the Federal Aviation Administration (FAA) Southern Region office. Appendix C provides contact information.

1. Airport Notification Areas

To simplify the development review process, FDOT has established general areas around each public-use airport or military airfield that should be considered by local government when development is proposed. These areas are referred to in this guidebook as "airport notification areas." The FDOT Aviation Office has established airport notification areas in order to focus attention on those areas in proximity to aviation facilities where proposed development is most likely to be of greatest concern.

The airport notification area serves merely as a rule of thumb to help determine if land development proposals present a potential conflict; and, therefore, greater evaluation of the development proposal may be required by federal or state regulations or law.

Figure 1-1 provides a graphic representation of an example airport notification area. Information in Appendix A indicates the dimensions for the appropriate airport notification area for each public-use airport and military airfield in Florida and shows the counties and municipalities within 10 nautical miles of each airport and airfield. Appendix C to this guidebook provides information on how to view maps that show the airport notification area for all public-use airports and military airfields in Florida.

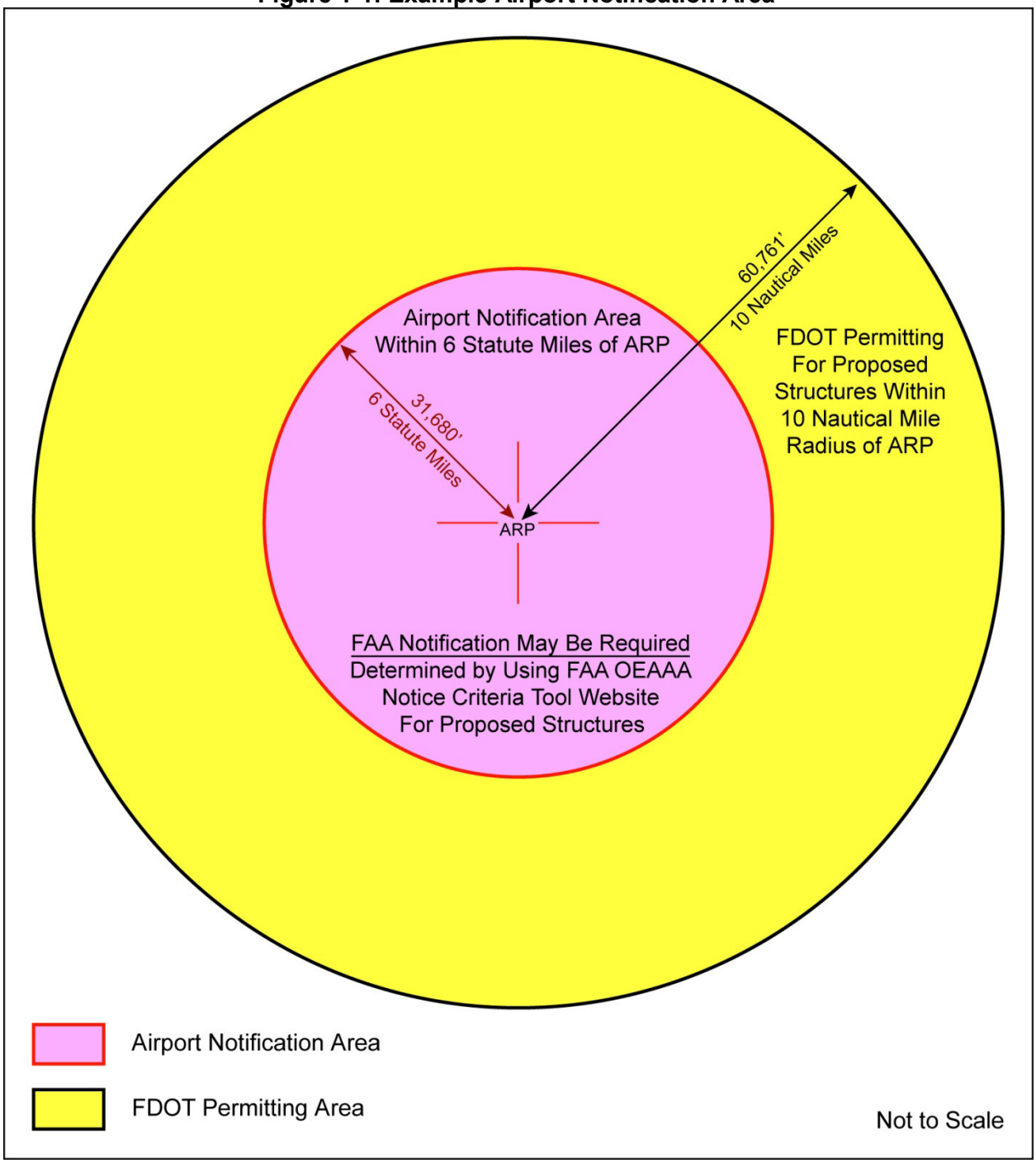
If a local government has a development proposal that falls within the limits of an airport notification area, special care should be taken to review the compatibility of the developments particularly from a height standpoint, but also for other land use compatibility considerations specified in Chapter 333, F.S.

If a proposed development is within the airport notification area, FAA's Obstruction Evaluation Airport Airspace Analysis tool should be used to determine if it is necessary to file for an obstruction evaluation (OE) study with the FAA. Any development that is 200 feet above ground level automatically requires an FAA aeronautical study/obstruction evaluation. More information on the obstruction evaluation tool is present later in this section.

In addition to the airport notification area, Figure 1-1 also shows the area around public-use airports and military airfields that is subject to FDOT permitting, as it relates to tall structures. This area extends out 10 nautical miles from the center of the airport, the airport reference point (ARP). FDOT permitting for tall structures in this 10 nautical mile area is required if the proposed development site is not within an area covered by an airport zoning ordinance. FDOT airspace permitting is a requirement for all new or altered structures that exceed federal obstruction standards in these unzoned areas. If a local government administers and enforces regulations that are more specific in addressing Part 77.13 federal notification criteria, such regulations shall prevail.

For those local governments with airport zoning, any variance request to approve tall structure development must be provided to FDOT for a 45-day comment period in accordance Chapter 333, F.S. FDOT must be included in the variance review process for all structures exceeding federal obstruction standards with the exception of temporary structures such as cranes and construction equipment.

Figure 1-1: Example Airport Notification Area



a. Airport Notification Area for Runways 3,200 Feet Long or Longer

For public-use airports and military airfields with runways that are 3,200 feet long or longer, the airport notification area is centered on the airport reference point (ARP) and extends from that point out in a circle that has

radius of six (6) statute miles. The ARP is the approximate geometric center for all usable runways. Appendix C to the guidebook provides a website for obtaining ARP information. For an airport with only one runway, the ARP is halfway between the runway's two end points. For an airport with multiple runways, the ARP is a mathematically determined point. The location of the ARP is given in terms of latitude and longitude. Each public-use airport or military airfield can provide information on its ARP, and this information can also be obtained from the FAA's Airport Facility Directory.

b. Airport Notification Area for Runways 3,200 Feet Long or Shorter

For public-use airports and military airfields with runways that are shorter than 3,200 feet, the airport notification area extends in a circle from the ARP at a radius of three (3) statute miles.

c. Airport Notification Area for Heliports

For all heliports, the airport notification area extends from the ARP in a circle with a radius of one (1) statute mile.

2. Tall Structure Approval Process for Local Governments with an Airport Zoning Ordinance or Interlocal Agreement

Figure 1-2 provides a graphic representation of the review process for an application for development related to tall structures. The process shown in Figure 1-2 applies to local governments that have adopted an airport protection zoning ordinance or that have entered into an interlocal agreement in accordance with Chapter 333.03 F.S. Steps in the tall structure development approval process are summarized following Figure 1-2.

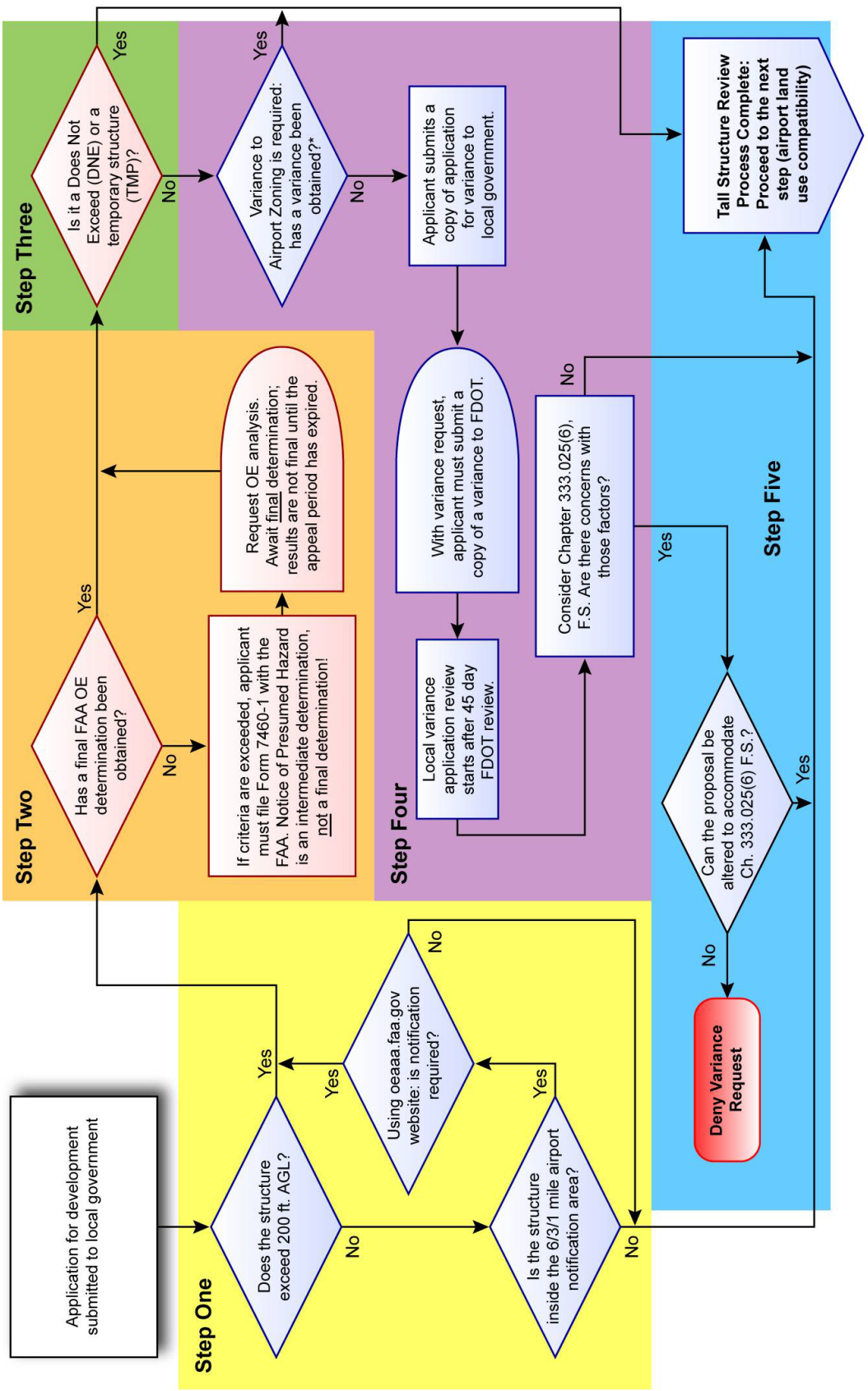


Figure 1-2: Tall Structure Review for Local Governments with Airport Zoning or an Interlocal Agreement

- **Step 1** – Determine if any structure included in the application for development exceeds a height of 200 feet above ground level (AGL). This determination is key for determining how to proceed in the development approval process.

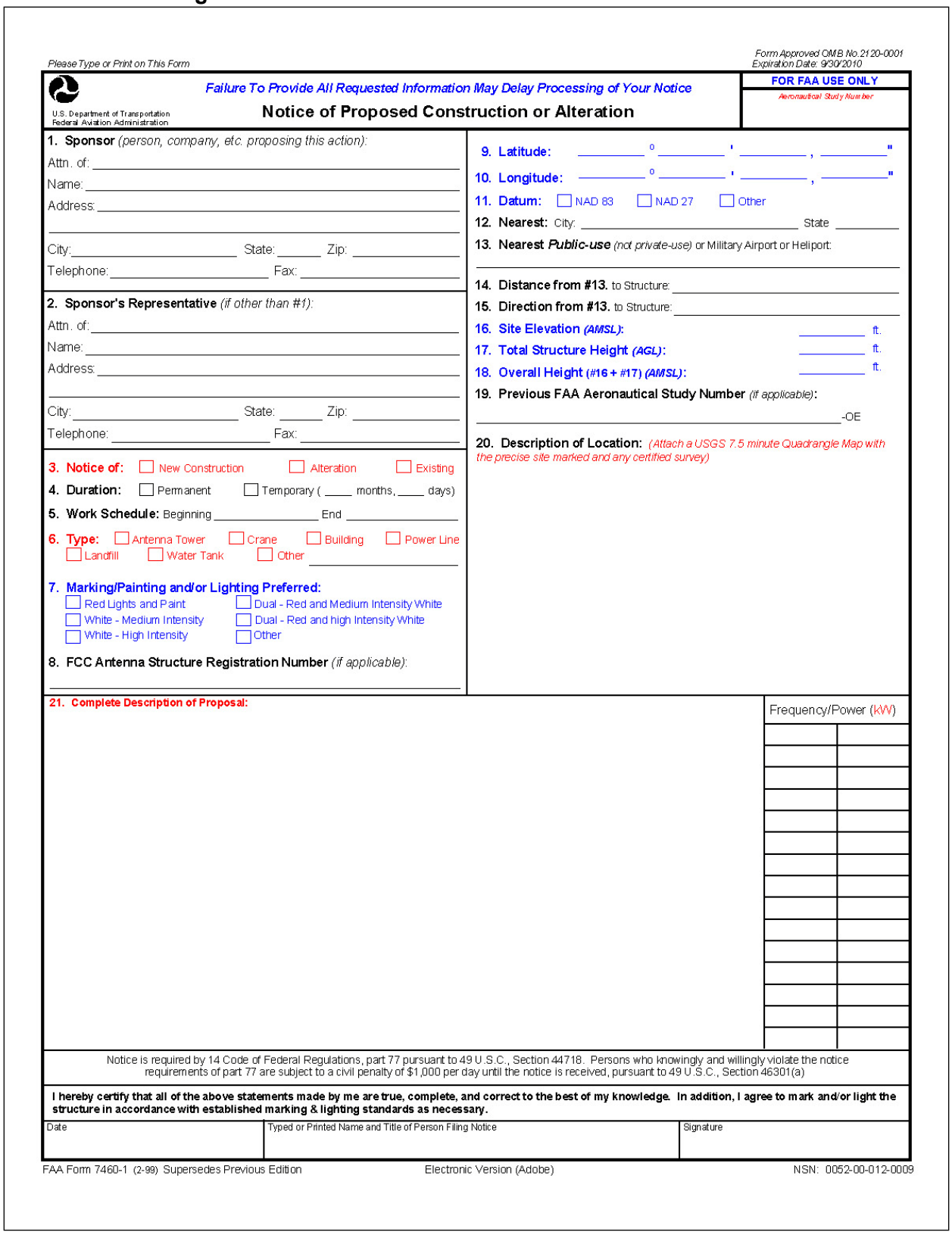
  The sponsor of any development exceeding 200 feet AGL is responsible for filing Form 7460-1, "Notice of Proposed Construction or Alteration", with the FAA. A screen shot of Form 7460-1 is shown in **Figure 1-3**. The form may be filed electronically through the OE/AAA site, or a paper copy of the form can be submitted. Electronic filing is preferred. This form must be filed at least 30 days before any construction begins. Once this form is filed, FAA initiates an airspace study, also known as an obstruction evaluation (OE). Information required to complete a Form 7460-1 generally includes, but is not limited to, the following:

  - Sponsor contact information
  - New, altered, or existing structure
  - Development schedule
  - Type of structure
  - Latitude and longitude of the structure
  - Distance from nearest aviation facility or facilities
  - Height of structure above ground level

  If all structures in the development application are lower than 200 feet AGL, next determine if the development is within an airport notification area (defined previously). If the proposed development is lower than 200 feet AGL, but it is within an applicable airport notification area, the "notice criteria tool" on the FAA OE/AAA website should be used to determine if notification of the FAA, related to the proposed structure, is required.

  Figure 1-4 provides a screen shot of the notice criteria tool. Information required to utilize the notice criteria tool is similar to that required to complete Form 7460-1 noted above. Website addresses for FAA's Form 7460-1 and the OE/AAA notice criteria tool are found in Appendix C.

Figure 1-3: Federal Aviation Administration Form 7460-1



Please Type or Print on This Form

Form Approved OMB No.2120-0001
Expiration Date: 9/30/2010

U.S. Department of Transportation
Federal Aviation Administration

Failure To Provide All Requested Information May Delay Processing of Your Notice

Notice of Proposed Construction or Alteration

FOR FAA USE ONLY
Aeronautical Study Number

1. Sponsor *(person, company, etc. proposing this action):*
Attn. of: _____
Name: _____
Address: _____
_____
City: _____ State: _____ Zip: _____
Telephone: _____ Fax: _____

2. Sponsor's Representative *(if other than #1):*
Attn. of: _____
Name: _____
Address: _____
_____
City: _____ State: _____ Zip: _____
Telephone: _____ Fax: _____

3. Notice of: ☐ New Construction ☐ Alteration ☐ Existing

4. Duration: ☐ Permanent ☐ Temporary (____ months, ____ days)

5. Work Schedule: Beginning _____ End _____

6. Type: ☐ Antenna Tower ☐ Crane ☐ Building ☐ Power Line
☐ Landfill ☐ Water Tank ☐ Other _____

7. Marking/Painting and/or Lighting Preferred:
☐ Red Lights and Paint ☐ Dual - Red and Medium Intensity White
☐ White - Medium Intensity ☐ Dual - Red and high Intensity White
☐ White - High Intensity ☐ Other

8. FCC Antenna Structure Registration Number *(if applicable):*
_____

9. Latitude: _____ ° _____ ' _____ , _____ "

10. Longitude: _____ ° _____ ' _____ , _____ "

11. Datum: ☐ NAD 83 ☐ NAD 27 ☐ Other

12. Nearest: City: _____ State _____

13. Nearest *Public-use* *(not private-use)* or Military Airport or Heliport:
_____

14. Distance from #13. to Structure: _____

15. Direction from #13. to Structure: _____

16. Site Elevation ***(AMSL)***: _____ ft.

17. Total Structure Height ***(AGL)***: _____ ft.

18. Overall Height ***(#16 + #17) (AMSL)***: _____ ft.

19. Previous FAA Aeronautical Study Number *(if applicable)*:
_____-OE

20. Description of Location: *(Attach a USGS 7.5 minute Quadrangle Map with the precise site marked and any certified survey)*

21. Complete Description of Proposal:

Frequency/Power (kW)	

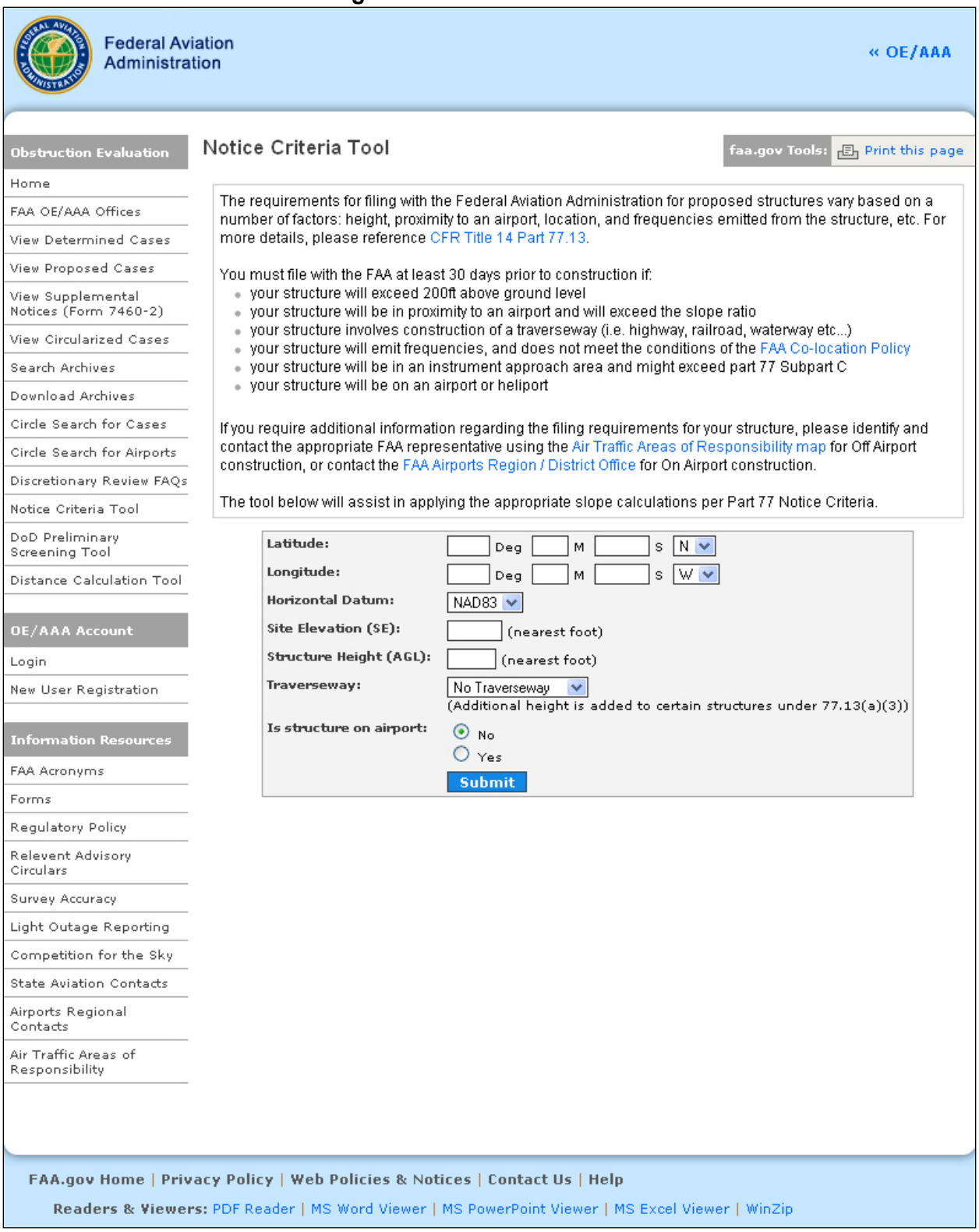
Notice is required by 14 Code of Federal Regulations, part 77 pursuant to 49 U.S.C., Section 44718. Persons who knowingly and willingly violate the notice requirements of part 77 are subject to a civil penalty of $1,000 per day until the notice is received, pursuant to 49 U.S.C., Section 46301(a)

I hereby certify that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to mark and/or light the structure in accordance with established marking & lighting standards as necessary.

Date	Typed or Printed Name and Title of Person Filing Notice	Signature

FAA Form 7460-1 (2-99) Supersedes Previous Edition Electronic Version (Adobe) NSN: 0052-00-012-0009

Figure 1-4: OE/AAA Website



If no structures in the development application exceed 200 feet AGL and the notice criteria tool indicates FAA notification is not required, the OE for this particular structure is complete, and the development review process should proceed to evaluate the application from a land use compatibility standpoint. (See Figure 1-7)

If the notice criteria tool indicates that FAA notification is required or the structure is taller than 200 AGL, the application review process should proceed to Step 2.

- **Step 2** – Step 2 is undertaken when the application for development has a structure or structures that exceed 200 feet AGL or when the OE/AAA notice criteria tool indicates FAA review of the development from a height standpoint is required. If either one of these conditions is met, the planner should determine if the FAA has already completed an OE study.

  Once the FAA initiates its OE study, there are several possible outcomes, and more explanation of the FAA obstruction evaluation process is found in Section Two of this guidebook. FAA findings from an obstruction evaluation study can range from a determination that the structure poses no hazard to a determination that the proposed structure poses a hazard and requires modification or lighting and marking.

  It is not the intent of this guidebook to make users of the guidebook experts in the FAA obstruction evaluation process; therefore, the discussion focuses on determinations that are most critical to the tall structure approval process. Those seeking more information on FAA's obstruction evaluation process are encouraged to review Appendix C to this guidebook where sources of additional information on the review process can be found.

  FAA can issue a finding that the structure is a "presumed hazard" to air navigation. In that event, a notice of presumed hazard (NPH) is issued; a more detailed study and circularization to the aeronautical public is required in order for a final determination to be made. A NPH is not a final determination. A final FAA determination is needed for the approval process to continue.

  If FAA determines the structure does not exceed federal obstruction criteria set forth in Part 77, a "Does Not Exceed" (DNE) determination is issued and the approval process can proceed.

  If the tall structure is a crane or other similar object that will be in a location for a short period of time, an FAA obstruction evaluation could also result in a temporary finding (TMP). This determination indicates that due to the temporary nature of the structure, FAA can make accommodations to ensure that an appropriate margin of aeronautical safety is maintained. A DNE or TMP determination indicates that the review process can continue.

  For all other structures that exceed federal height obstruction standards, the process to obtain a variance to the local airport zoning ordinance must be followed as shown in Figure 1-2. A final determination from the FAA OE process is needed before the local government proceeds with the review of any

application for tall structure development. More information on FAA determinations on obstruction evaluation studies can be obtained as needed from FDOT's Aviation Office.

- **Step 3** – Assuming review of the application for development has resulted in the FAA undertaking an OE, there are two potential outcomes.

  1. If the FAA OE determination is a DNE or a TMP, the tall structure review process for this scenario is complete.

  2. If the FAA's determination from their OE falls into another category, other than DNE or TMP, the tall structure review process proceeds to Step 4.

  FAA determinations described in this section relate only to airspace and do not override any local or state land use or zoning requirements.

- **Step 4** – Even if the OE determination does not fall into the DNE or TMP categories, the FAA through their review may still determine that it is possible to adjust the parameters of the development (height/location) and/or to mark or light the structure in such a way that it will not constitute a hazard. If the FAA's OE process determines that the structure does not constitute a hazard, the next step in the review process is to submit a request to the local government for a variance to the local airport zoning ordinance. Each local government variance process is unique. Therefore, it is necessary to consultant the appropriate local zoning authority for the correct procedure for obtaining a variance to the airport protection zoning ordinance. `

  If a variance request to the local airport zoning ordinance has already been obtained for the tall structure development application, the approval process should proceed to evaluate the application from a land use compatibility standpoint. (See Figure 1-7)

  If a variance request to the local airport zoning ordinance has not previously been submitted, at this point in the process, a variance application should be submitted to the appropriate representative of the local government.

  At the same time that the variance request is submitted to the local government, a copy of the variance request must, by state law, be submitted to the FDOT Aviation Office. There is a 45-day state review period for all variance requests to a local airport zoning ordinance. Local review of a variance requests to airport zoning should not commence until the end of the 45-day FDOT review period or until FDOT waives their right to comment. At the end of the 45-day review period, FDOT will provide comment or provide a letter of no comment to the local government.

  Local government should include this step in their local procedures to help ensure that the proponent has submitted a copy as required and that the local review/approval process incorporates the necessary time for FDOT to review the development proposal. The FDOT review period provides the opportunity for

FDOT to consult with local government and to provide technical assistance that may be requested.

FDOT reviews and comments on the variance request in accordance with all factors specified in Chapter 333.025(6), F.S. FDOT determines, based on state law, if there are concerns related to the proposed variance request. Factors reviewed by FDOT in accordance with Chapter 333.025(6), F.S. are as follows:

1. What is the nature of the terrain and the height of existing structures in the vicinity of the proposed development? (Chapter 333.025(6)(a), F.S.). More specifically, the FDOT will analyze whether the proposed object's height has a more detrimental effect than the existing terrain or structures that have been reviewed or for which a variance or permit has been issued.

2. What are the public and private investments in the vicinity of the proposed development? (Chapter 333.025(6)(b), F.S.)

3. What is the character of the flying operations at the airport that will be impacted by the development and what development projects are planned for this airport? (Chapter 333.025(6)(c), F.S.) Specific attention is given to the type and frequency of flights at the airport and any planned improvements to the facility as identified in the airport layout plan (ALP).

4. Will the proposed development result in a change in the minimum descent altitude or in an increase to the decision height during an approach to the airport? (Chapter 333.025(6)(e), F.S.)

5. What will the development's cumulative effect on navigable airspace be considering existing, proposed, and all known structures in the area? (Chapter 333.025(6)(j), F.S.)

6. Will the proposed development impact federal airways as designated by the FAA? (Chapter 333.025(6)(d), F.S.)

7. Will anticipated technological advances in any way impact the development project in either a positive or a negative way? (Chapter 333.025(6)(f), F.S.) FDOT evaluates the impact of technological advances for aircraft, navigational aids, and air traffic management on the volume and character of airspace required.

8. Will the safety of persons on the ground or in the air be compromised by the proposed development? (Chapter 333.025(6)(g), F.S.)

9. Will the proposed development project in anyway impede the safe and efficient use of navigable airspace? (Chapter 333.025(6)(i), F.S.). FDOT evaluates whether the proposed structure reduces the margin of error for airspace users.

10. Although FDOT has no authority over land use density considerations, the Department may evaluate the proposed land use and offer an analysis of the potential impacts of the proposed change to land use density or intensity of use. Impacts of Land use density are an issue within the local government's purview and should be considered during the variance review process. (Chapter 333.025(6)(h), F.S.)

It is important to note that although FDOT reviews and comments on the variance request in accordance with the factors listed above, it is the responsibility of the local government to consider all of these factors when they review a variance request. These factors must be considered when local governments grant or deny a variance request based on their findings.

Following FDOT and local review noted in this step, the tall structure application review process can proceed to Step 5.

- **Step 5** – If after reviewing factors noted Chapter 333.025(6), F.S., FDOT determines, that based on state law, there are concerns related to the proposed variance request, the request for tall structure development should be altered to address FDOT concerns.

  If concerns can be satisfactorily resolved, the variance can be approved and the local government can proceed to evaluate the application from a land use compatibility standpoint. (See Figure 1-7)

  If the development request cannot be altered, then the request for a variance to the local airport zoning ordinance should be denied.

  FDOT is not bound to provide a favorable review of the variance request based solely on the fact that the proposed structure does not exceed federal obstruction standards in Part 77 or any other federal aviation regulations. It is important to note, however, that it is ultimately the responsibility of the local government, not FDOT, to approve or deny a variance request.

3. Tall Structure Approval Process for Local Government without an Airport Zoning Ordinance or Interlocal Agreement

It is very important to note that in accordance state law (Chapter 333, F.S.) all local governments having an airport hazard area within their territorial boundaries are required to adopt, administer, and enforce airport zoning. Chapter 333 F.S. provides specific guidance on the restriction of tall structures and certain types of land use/development that should be part of all local airport zoning ordinances. Appropriate steps should be taken immediately to adopt airport zoning to make the local government compliant with Chapter 333, F.S. if zoning has not been adopted.

Information in Appendix A also shows which local governments currently have zoning ordinances that have been reported to FDOT; Chapter 333, F.S., requires this submission of the local airport zoning ordinance to FDOT. All local governments having an area upon which structures taller than 500 feet AGL

could be erected or where structures raising the Minimum Obstruction Clearance Altitude (MOCA) could be established must adopt an airport zoning ordinance.

It is also important to note that many of the airport zoning ordinances now in place are not fully compliant with all aspects of Chapter 333, F.S. As discussed in this guidebook, local airport zoning ordinances should regulate as required tall structure development, the development of educational facilities, residential development, the development of sanitary landfills, and/or any development in the runway clear zone/runway protection zone (RPZ). More information on the zoning requirements of Chapter 333, F.S. is presented in Section Two of the guidebook.

Figure 1-5 provides a graphic representation of the process for considering an application for development for tall structures when the local government has not adopted an airport zoning ordinance or entered into an interlocal agreement in accordance with Chapter 333, F.S.

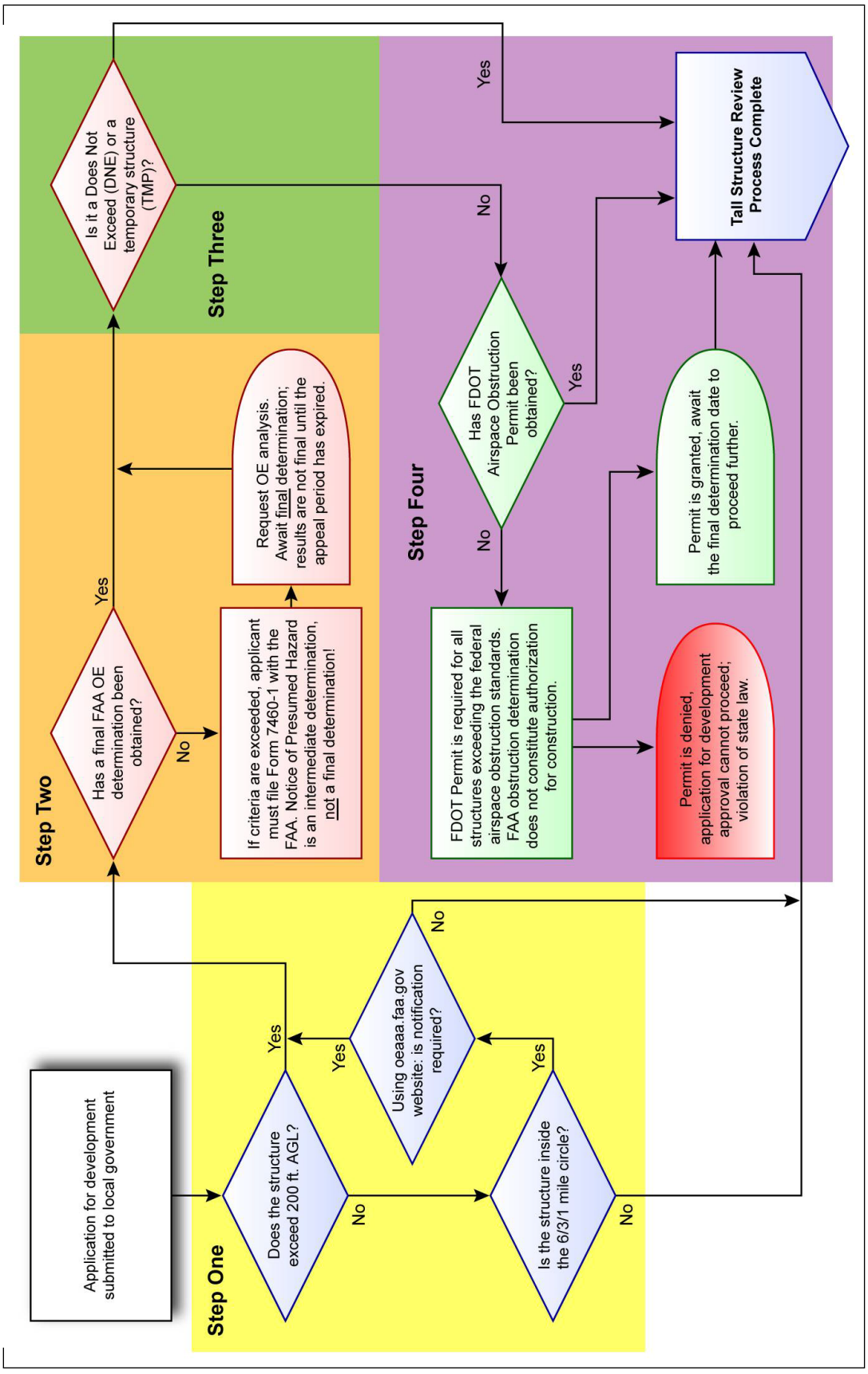


Figure 1-5: Tall Structure Review for Local Governments without Airport Zoning or Interlocal Agreement

When a local government does not have an airport zoning ordinance in place, development applications for tall structures may still require FAA obstruction evaluation and FDOT permitting. Many of the steps in this approval process are similar to those previously described for local governments that do have an airport zoning ordinance or interlocal agreement.

- **Step 1** – Determine if any structure included in the application for development exceeds a height of 200 feet above ground level (AGL). This determination is key for determining how to proceed in the development approval process.

  The sponsor of any development exceeding 200 feet AGL is responsible for filing Form 7460-1, "Notice of Proposed Construction or Alteration", with the FAA. A screen shot of Form 7460-1 was shown in Figure 1-3. The form may be filed electronically through the OE/AAA site, or a paper copy of the form can be submitted. Electronic filing is preferred. This form must be filed at least 30 days before any construction begins. Once this form is filed, FAA initiates an airspace study also known as an obstruction evaluation (OE). Information required to complete a Form 7460-1 generally includes, but is not limited to, the following:

  - Sponsor contact information
  - New, altered, or existing structure
  - Development schedule
  - Type of structure
  - Latitude and longitude of the structure
  - Distance from nearest aviation facility or facilities
  - Height of structure above ground level

  If all structures in the development application are lower than 200 feet AGL, next determine if the development is within an airport notification area (defined previously). If the proposed development is lower than 200 feet AGL, but it is within an applicable airport notification area, the "notice criteria tool" on the FAA OE/AAA website should be used to determine if notification of the FAA, related to the proposed structure, is required.

  Figure 1-4 provided a screen shot of the notice criteria tool. Information required to utilize the notice criteria tool is similar to that required to complete Form 7460-1 noted above. Website addresses for FAA's Form 7460-1 and the OE/AAA notice criteria tool are found in Appendix C.

  If no structures in the development application exceed 200 feet AGL and the notice criteria tool indicates FAA notification is not required, the OE for this particular structure is complete, and the development review process should proceed to evaluate the application from a land use compatibility standpoint. (See Figure 1-7)

  If the notice criteria tool indicates that FAA notification is required or the structure is taller than 200 AGL, the application review process should proceed to Step 2.

- **Step 2** – Step 2 is undertaken when the application for development has a structure or structures that exceed 200 feet AGL or when the OE/AAA notice

criteria tool indicates FAA review of the development from a height standpoint is required. If either one of these conditions is met, the planner should determine if the FAA has already completed an OE study.

Once the FAA initiates its OE study, there are several possible outcomes, and more explanation of the FAA obstruction evaluation process is found in Section Two of this guidebook. FAA findings from an obstruction evaluation study can range from a determination that the structure poses no hazard to a determination that the proposed structure poses a hazard and requires modification or lighting and marking.

It is not the intent of this guidebook to make users of the guidebook experts in the FAA obstruction evaluation process; therefore, the discussion focuses on determinations that are most critical to the tall structure approval process. Those seeking more information on FAA's obstruction evaluation process are encouraged to review Appendix C to this guidebook where sources of additional information on the review process can be found.

FAA can issue a finding that the structure is a "presumed hazard" to air navigation. In that event, a notice of presumed hazard (NPH) is issued; a more detailed study and circularization to the aeronautical public is required in order for a final determination to be made. A NPH is not a final determination. A final FAA determination is needed for the approval process to continue.

If FAA determines the structure does not exceed federal obstruction criteria set forth in Part 77, a "Does Not Exceed" (DNE) determination is issued and the approval process can proceed.

If the tall structure is a crane or other similar object that will be in a location for a short period of time, an FAA obstruction evaluation could also result in a temporary finding (TMP). This determination indicates that due to the temporary nature of the structure, FAA can make accommodations to ensure that an appropriate margin of aeronautical safety is maintained. A DNE or TMP determination indicates that the review process can continue.

- **Step 3** - If the FAA OE determination is a DNE or a TMP, the tall structure review process for this scenario is complete. If the FAA's determination from their OE falls into another category, other than DNE or TMP, the tall structure review process for local governments without a zoning ordinance or an interlocal agreement proceeds to Step 4. An FDOT Airspace permit is required to develop or alter any structure that exceeds federal height obstruction guidelines.

- **Step 4** – The next step in the development application review process is to determine if an FDOT airspace obstruction permit has been obtained.

  In accordance with Chapter 333, F.S., FDOT has the authority and the responsibility to permit structures within 10 nautical miles of all public-use airports and military airfields.

If an FDOT airspace obstruction permit has been obtained, the process to review the development application for tall structure development is complete.

If the FDOT airspace obstruction permit has not previously been obtained, at this point in the process, the applicant must submit a copy of an airspace obstruction permit application to the FDOT Aviation Office. The permit has a 30-day review period.

Figure 1-6 provides a screen shot of the FDOT form for airspace permitting.

Figure 1-6: FDOT Airspace Permit Form

Rule 14-60, F.A.C.

Form 725-040-11
Aviation
OGC – 07/08
Page 1 of 2

Type or Print on this Form

State of Florida
Department of Transportation

AIRSPACE OBSTRUCTION PERMIT APPLICATION

FOR FDOT USE ONLY
FDOT Permit Number
- FLA - -

1. Applicant (person proposing this action):
Name: _____
Title: _____
Address 1: _____
Address 2: _____
City: _____ State: _____ Zip: _____
Phone #: _____ Fax #: _____
E-mail: _____

2. Applicant's Representative (if other than #1):
Name: _____
Title: _____
Address 1: _____
Address 2: _____
City: _____ State: _____ Zip: _____
Phone #: _____ Fax #: _____
E-mail: _____

3. Type: ☐ Antenna Tower ☐ Antenna – Side Mount ☐ Crane
☐ Building ☐ Power Line ☐ Pole ☐ Traverse Way
☐ Landfill ☐ Water Tank ☐ Other: _____

4. Notification Requirements:
Is proposed site within an incorporated community? ☐ Yes ☐ No
Have appropriate building/zoning authorities been notified?
☐ Yes ☐ No
City/county requiring building permit: _____
Name of local official: _____
Title: _____
Address 1: _____
Address 2: _____
City: _____ Zip: _____
Phone #: _____ Fax #: _____
E-mail: _____

5. Site Elevation (AMSL): _____ Feet
6. Total Structure Height (AGL): _____ Feet
7. Overall Height (#5 + #6)(AMSL): _____ Feet

8. Latitude: _____° _____' _____._____" N
9. Longitude: _____° _____' _____._____" W
10. Datum: ☐ NAD 83 ☐ NAD 27 ☐ Other _____
11. County: _____

12. Nearest Military & Public-Use Airport(s): _____

13. This application **MUST** be accompanied by **ALL** of the following attachments:

a) A copy of FAA Form 7460-1, Notice of Proposed Construction or Alteration, filed with FAA.
b) An Aeronautical Study or FAA document showing the determination issued in response to your Notice of Proposed Construction.
c) A USGS 7.5 minute Quadrangle Map with the precise site marked and any certified survey.
d) A scaled construction diagram showing the size, type, and dimensions of the proposed construction.
e) Zoning statement from the appropriate zoning agency showing this proposal will comply with local zoning regulations and any conditions which must be accomplished for such compliance.
f) If the applicant is not the landowner, attach a copy of the authorization to construct or lease of land involved.
g) Copy of an existing FDOT Airspace Obstruction Permit, if one has been previously issued.

The undersigned hereby requests an Airspace Obstruction Permit in accordance with Section 333.025, Florida Statutes.
I hereby certify that all of the above statements made by me are true, complete and correct to the best of my knowledge.

Date	Typed or Printed Name of Applicant	Signature

Mail this application along with attachments to Airspace and Land Use Manager
Florida Department of Transportation, Aviation Office, 605 Suwannee Street, Mail Stop 46, Tallahassee, Florida, 32399-0450
Aviation Phone 850-414-4500, E-mail - aviation.fdot@dot.state.fl.us; http://www.dot.state.fl.us/aviation/

In accordance with Chapter 333, F.S., an FDOT airspace obstruction permit is required for all structures exceeding federal airspace obstruction standards, defined in Part 77. A federal airspace obstruction determination does not constitute an authorization for construction. For those local governments without airport zoning or an interlocal agreement, an FDOT permit is required prior to proceeding with development.

As part of its process to grant an airspace obstruction permit, FDOT reviews all factors specified in Chapter 333.025(6), F.S. FDOT determines if, based state law, there are concerns related to granting an airspace obstruction permit. The ten factors outlined in Chapter 333.025(6), F.S. were described in the previous section in Step 4. While FDOT reviews the permit application in accordance with the 10 noted factors identified previously, all proponents of tall structure development in Florida should consider these factors as they consider their development options.

If FDOT review determines the tall structure does not conflict with factors in Chapter 333.025(6), F.S., a FDOT Airspace Obstruction Permit is issued.

If FDOT determines that the development is not consistent with review factors then FDOT and the applicant need to determine if the proposed structure can be altered in such a way so that concerns can be resolved.

If concerns can be satisfactorily resolved, the Airspace Obstruction Permit will be issued.

If concerns cannot be satisfactorily resolved, the application for development should be denied since the development would be in violation of Florida law.

In accordance with Florida statutes, applications for development must consider the height of proposed structures. In addition, Chapter 333, F.S. provides guidance on certain types of development and land use that should be restricted around public-use airports. The next section of the guidebook summarizes the process that should be followed to review applications for development from a land use perspective.

B. Land Use Approval Process

According to information compiled by the National Association of State Aviation Officials (NASAO), the two most pressing concerns for airports nationally are lack of sufficient funds for needed development and encroachment from incompatible land use. Recognizing the need for compatible land use around public-use airports, the Florida legislature enacted state law that made it mandatory for local governments to adopt airport zoning that incorporates various compatible land use regulations. All local governments within an airport hazard area within their jurisdictional boundaries were to have adopted airport zoning by October, 1977. Without an airport zoning ordinance, local governments lack the authority to enforce compatible land use measures which are designed to enhance safety and the general welfare of those in the airport environs. Without an airport zoning ordinance which incorporates the principals of Chapter 333, F.S. best land use planning practices are not being followed. Further, failure to adopt an

airport zoning ordinance is a violation of Florida law. Local governments without airport zoning should adopt appropriate zoning immediately.
For local governments with an airport zoning ordinance or an interlocal agreement, each proposed land development application must be reviewed to determine not only its compatibility from a height standpoint, but also the proposed development must be reviewed for important aspects of its land use compatibility. The land use aspects of the development must be compliant with guidelines contained in Chapter 333, F.S., "Airport Zoning."

When development is proposed in local governmental jurisdictions where airport zoning or an interlocal agreement is not in place, consideration should still be given to restricting development/land use that is not compatible with airports.

Figure 1-7, on the following page, provides a summary of the process that local governments should follow to ensure that a proposed development follows land use compatibility requirements contained in Chapter, 333, F.S.

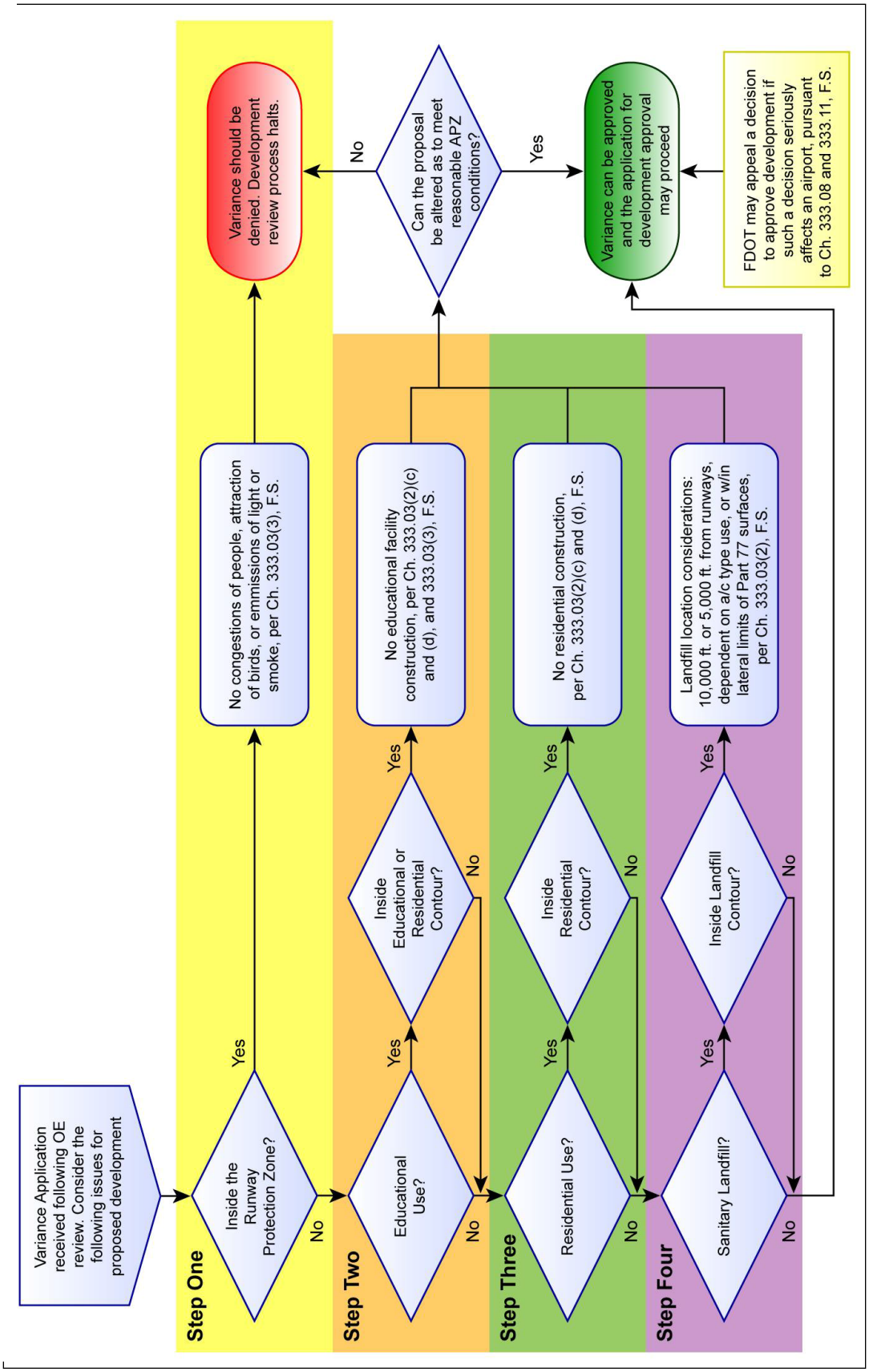


Figure 1-7: Land Use Review for Local Governments with Airport Zoning or Interlocal Agreement

- **Step One** – The first step in the land use compatibility review process is to determine if the proposed development is within an area defined by the Federal Aviation Administration (FAA) as a runway protection zone (RPZ); RPZs were formerly known as Clear Zones. More detailed information about RPZs is contained in Section Three of this guidebook.

  Each active runway end at all public-use airports has a corresponding RPZ. **Figure 1-8** provides example RPZs for a Florida general aviation airport with intersecting runways. The size of each RPZ is dependent upon the runway end's approach type and its approach minimums.

  There are several noteworthy points related to RPZs that planners should consider when reviewing development proposals for approval.

  1. It is possible for the same runway to have different sized RPZs on its two ends.

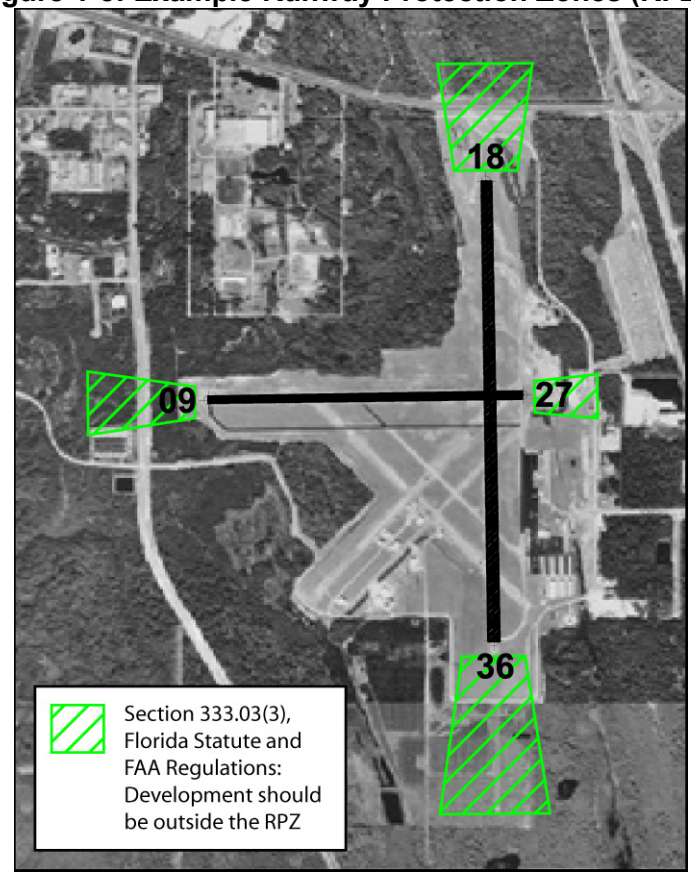
  2. The location of the RPZ can change if the runway length is changed, if the approach type to the runway end changes, or the landing approach is displaced.

  3. Chapter 333, F.S. requires land use compatibility planning to consider both existing and planned airport improvements, such as future RPZs.

  4. FAA planning guidelines call for outright airport ownership or control of each RPZ and for RPZs to be clear of development.

  Specific information on RPZs can be obtained from the FAA in their publication "Aeronautical Information Manual"; the FDOT Aviation Office; and/or the specific public-use airport. Individual airports are the best source of information on planned or future RPZs

Figure 1-8: Example Runway Protection Zones (RPZs)



If the proposed development is not in an RPZ, the review process should proceed to Step Two in the land use review process.

According to FAA guidance, the RPZ for each runway end should be owned by the airport, and the RPZ should be clear of incompatible development. When reviewing an application for development, according to Chapter 333.03 (3), F.S., if the development could lead to the congregation of people; the attraction of birds; or the emission of light, glare, or smoke, the development application should be denied, and the development review process should stop.

- **Step Two** – Assuming that the development is not in the RPZ, the next step is to determine if development is intended for use as an educational facility (public or private school).

  If the proposed development is not intended for educational use, the review process should proceed to Step Three.

  Chapter 333.03 (2) (c) and (d) and 333.03 (3), F.S. the development of educational facilities in proximity to runways at public-use airports shall not be permitted. There are two methods for determining areas which should be restricted from development involving educational facilities.

1. Restricting Educational Facilities Using 14 CFR Part 150 Airport Noise Compatibility Planning Study Results - Airport sponsors may elect to evaluate noise associated with their airport in a voluntary program that allows for the preparation of noise exposure maps under Part 150. This effort is not mandatory and is appropriate only after careful consideration of all issues facing an airport sponsor.

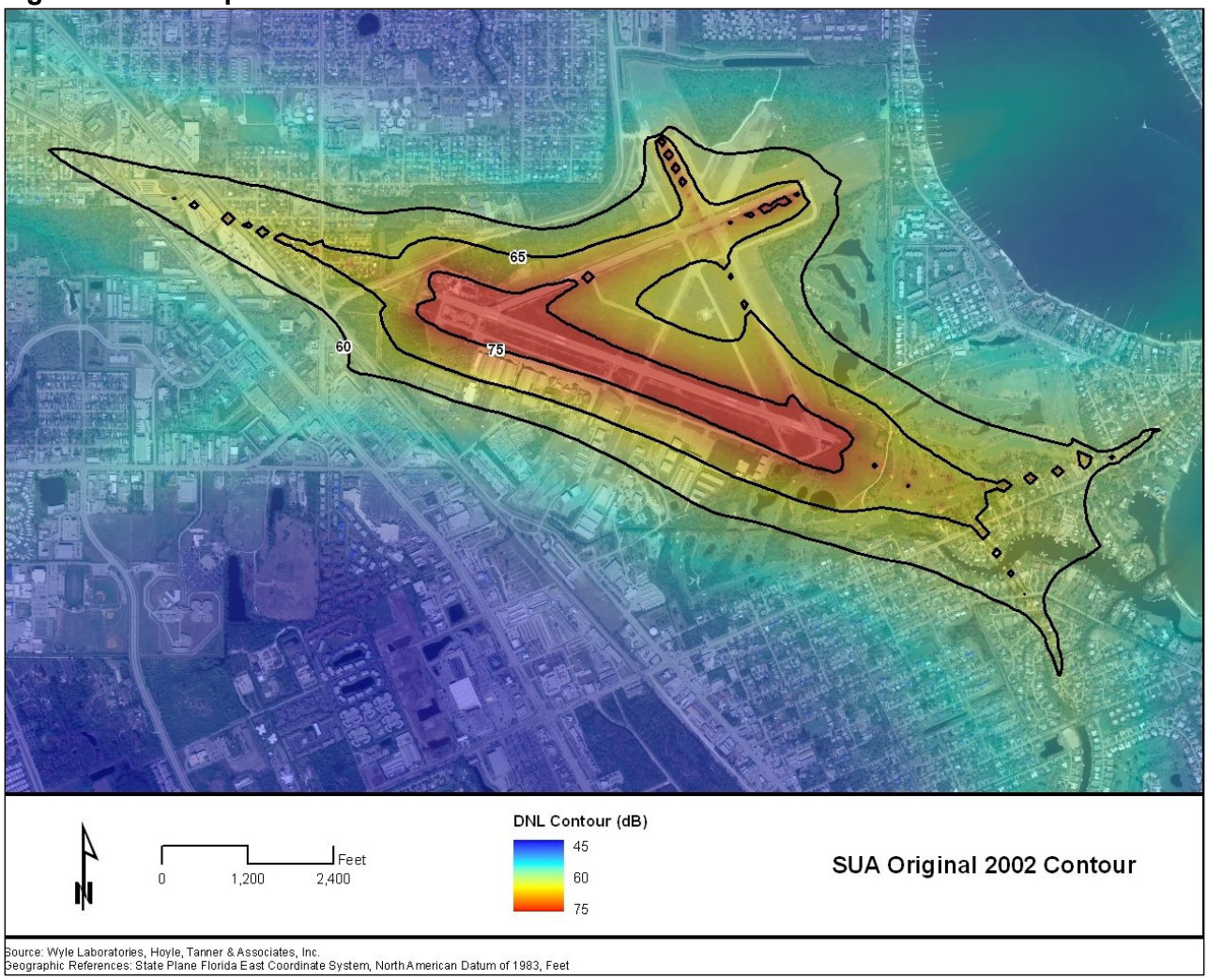
   Day-Night Average Sound Levels (DNL) contours are developed during a Part 150 Study. To be compliant with Chapter 333, F.S. any proposed development that includes an education facility should be beyond the outermost DNL contour identified in the Part 150 Study as being incompatible with education facilities. It is recommended that planners contact the airport to determine if the Part 150 contours are still representative of the existing operating environment at the airport. In addition, the planner should request from the airport any long-term noise contours (i.e. 20-year) that have been recently prepared and determine if these should be used to establish limits for restricting educational facilities.

   The FDOT Aviation Office can provide information on which airports in Florida have an approved Part 150 Noise Study.

Figure 1-9 provides an example of noise contours from a Part 150 Noise Study conducted for Witham Field in Martin County. More information on Part 150 is presented in Section Three and Appendix B of this guidebook.

In addition to restricting the development of educational facilities within areas identified as being within Part 150 noise contours, by state statute, all public airports (including those with an approved Part 150 Noise Study) must also restrict the development of educational facilities in an area off each runway end. This restricted area for educational facilities has a length of five miles and a width that is equal to ½ the length of the runway. This area is discussed in the next section.

Figure 1-9: Example Part 150 Noise Contours



This depiction of Noise Contours used with the permission of the Witham Field Airport Director

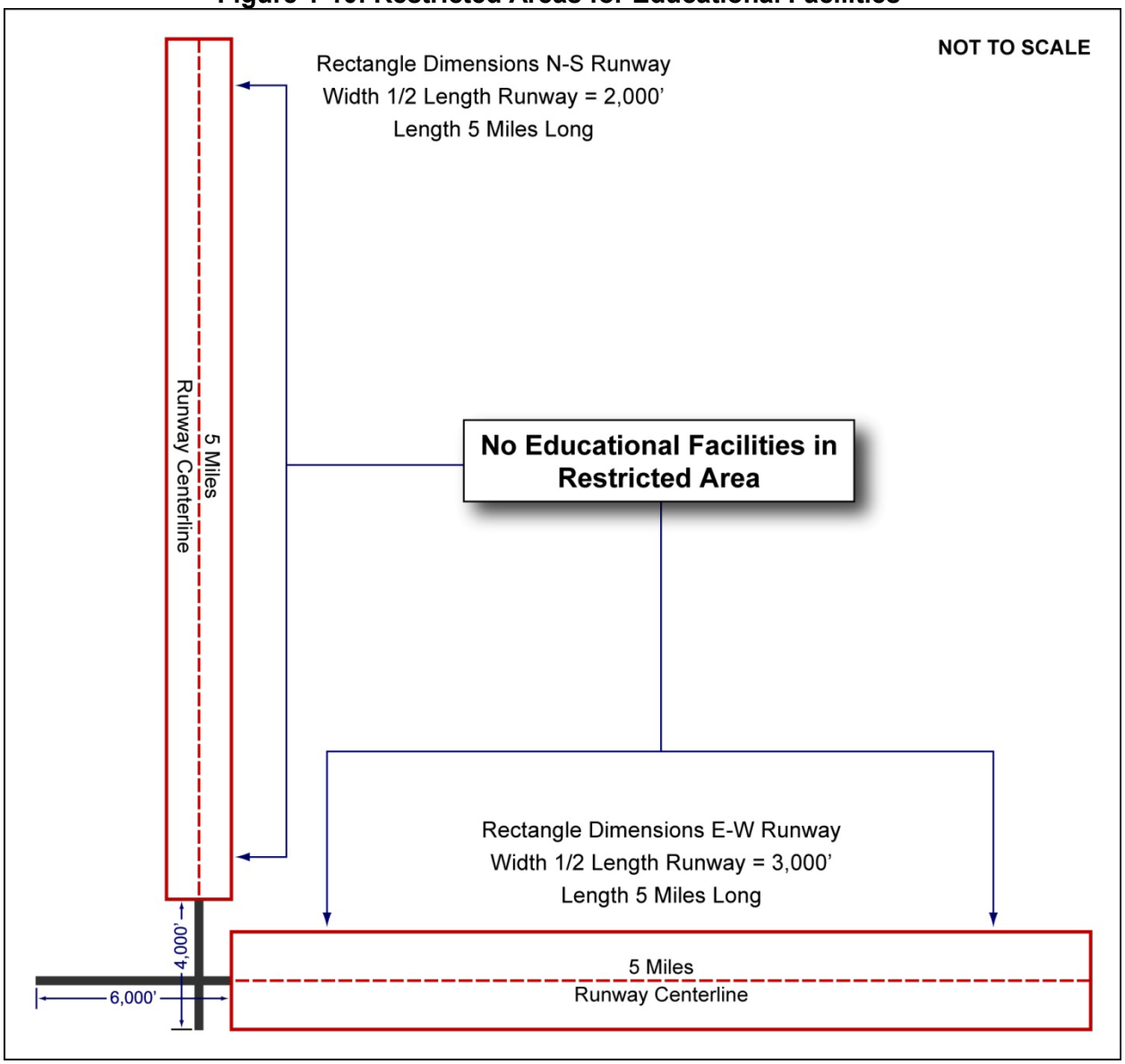
2. Restricting Educational Facilities with or without a Part 150 Noise Study - If an airport does not have an approved Part 150 noise contour, then standards specified in Chapter 333.03, F.S., apply for determining areas that should be clear of educational facilities.

   Educational facilities should be prohibited in a rectangular area extending from each runway end; the rectangle starts at the physical end of the runway pavement. The latitude and longitude of each runway's end point can be obtained from the airport. The length of the rectangle extends out five statute miles from the end of the runway. The width of the rectangle is one half the length of the runway.

   Figure 1-10 provides an example of the area that should be restricted from educational facility development. This area applies to airports that do not have an approved Part 150 Noise Study, as well as to airports with a Part 150 Noise Study. In order to determine the appropriate

dimensions for restricting educational facilities, the following are needed: runway length and the latitude and longitude of the runway end points.

Figure 1-10: Restricted Areas for Educational Facilities



If the proposed development is an educational facility and if the facility falls within the Part 150 noise contours which are identified as being inappropriate for schools or within the applicable rectangle for restricting educational facilities, there are two possible outcomes:

a. The development can be reviewed to determine whether it is possible to alter the proposal. If the proposal can be altered to make it compliant with Chapter 333.03 (2) (c) and (d) and 333.03 (3), the review process can continue to Step Three. FDOT is available to provide technical assistance in this review process.

b. If the proposed development cannot be modified to comply with Chapter 333.03 (2) (c) and (d) and 333.03 (3), the application for development should be denied and the review process stopped.

c. Local governments can make decisions to override health and safety concerns resulting from the development of an educational facility within the area described in Chapter 333.03(3), F.S., if it makes specific findings detailing how public policy outweighs such concerns.

- **Step Three -** Chapter 333.03 (2) (c) and (d), F.S. also forbid the development of structures for residential use in proximity to runways at public-use airports. There are two methods for determining areas which should be restricted from residential development.

    1. Restricting Residential Development Using 14 CFR Part 150 Noise Compatibility Planning Study Results - Airports with a Part 150 Noise Study should ensure that their noise contours identify areas that should be restricted from residential development. If an airport has an approved Part 150 Noise Study, any development that includes a residential use should take place beyond the outermost noise contour identified in the study as being incompatible for residential use. It is recommended that planners contact the airport to determine if contours from a Part 150 Noise Study are still representative of the existing operating environment at the airport. In addition, the planner should request from the airport any long-term noise contours (i.e. 20-year) that have been recently prepared and assess if these contours should be used to determine limits for restricting residential use.

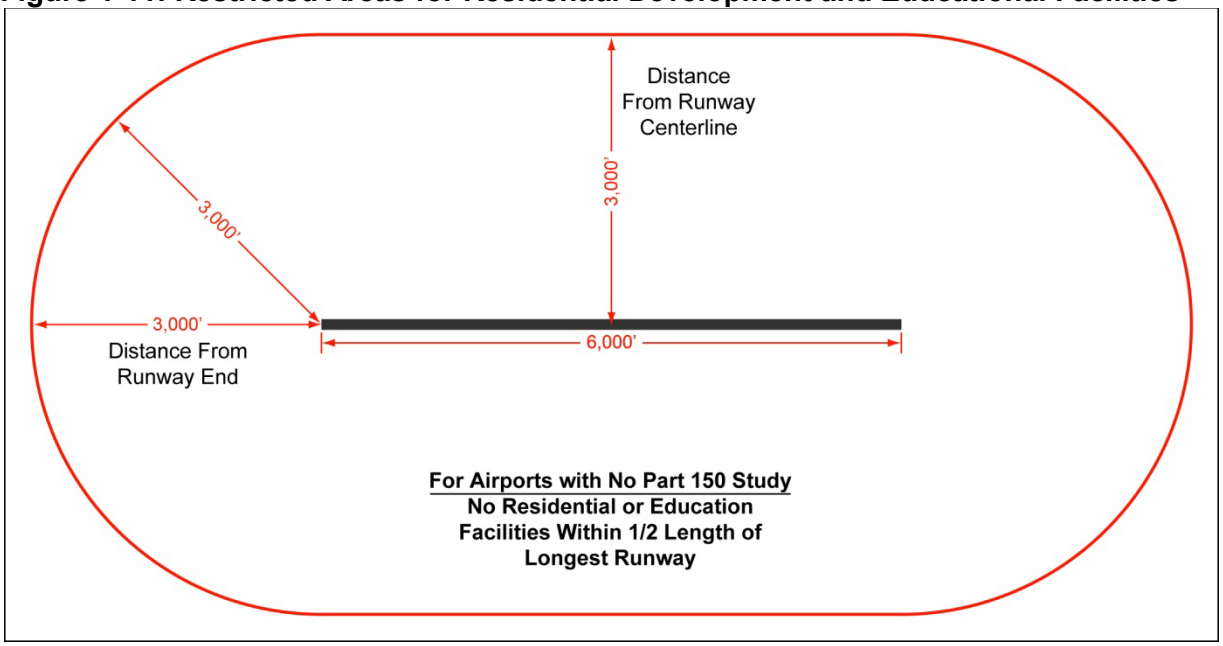
    2. Restricting Residential Development without a Part 150 Noise Study - If an airport does not have an approved Part 150 Noise Study, then standards outlined in Chapter 333, F.S., apply for determining areas that should be clear of residential development. In addition to being clear of residential development, educational facilities should also not be developed in these same areas.

       Residential uses should be prohibited in an oval area centered on each runway.

    The size of the oval is equal to one half the length of the longest runway at the airport. The size of the oval is measured laterally from the runway centerline and from each runway end. The same information needed to calculate the area for restricting educational facilities is needed to calculate the area for restricting residential development, and both the development of residential and educational uses within this oval area should be restricted.

    Figure 1-11 provides an example of the area that should be restricted from residential development and also from the development of educational facilities.

Figure 1-11: Restricted Areas for Residential Development and Educational Facilities



If the proposed development is a residential use and falls within the Part 150 noise contour considered incompatible with residential use as defined in Appendix A of 14 CFR Part 150 or the development is within the applicable oval for restricting residential and educational facilities, there are two possible outcomes:

a. The development can be reviewed to determine whether it is possible to alter the proposal. If the proposal can be altered, to make it compliant with Chapter 333.03 (2) (c) and (d), the review process can continue to Step Four. FDOT is available to provide technical assistance in this review process.

b. If the proposed development cannot comply with Chapter 333.03 (2) (c), the application for development should be denied and the review process stopped.

- **Step Four** – Assuming that the development is not in the RPZ and the development is not an educational facility or a residential use, the next step is to determine if development is a sanitary landfill. The local government may also reach this step in the approval process if a reasonable compromise on the location of a proposed educational facility or residential development has been reached.

  If the proposed development is not a sanitary landfill, the steps to comply with Chapter 333, F.S. related to land use compatibility have been met.

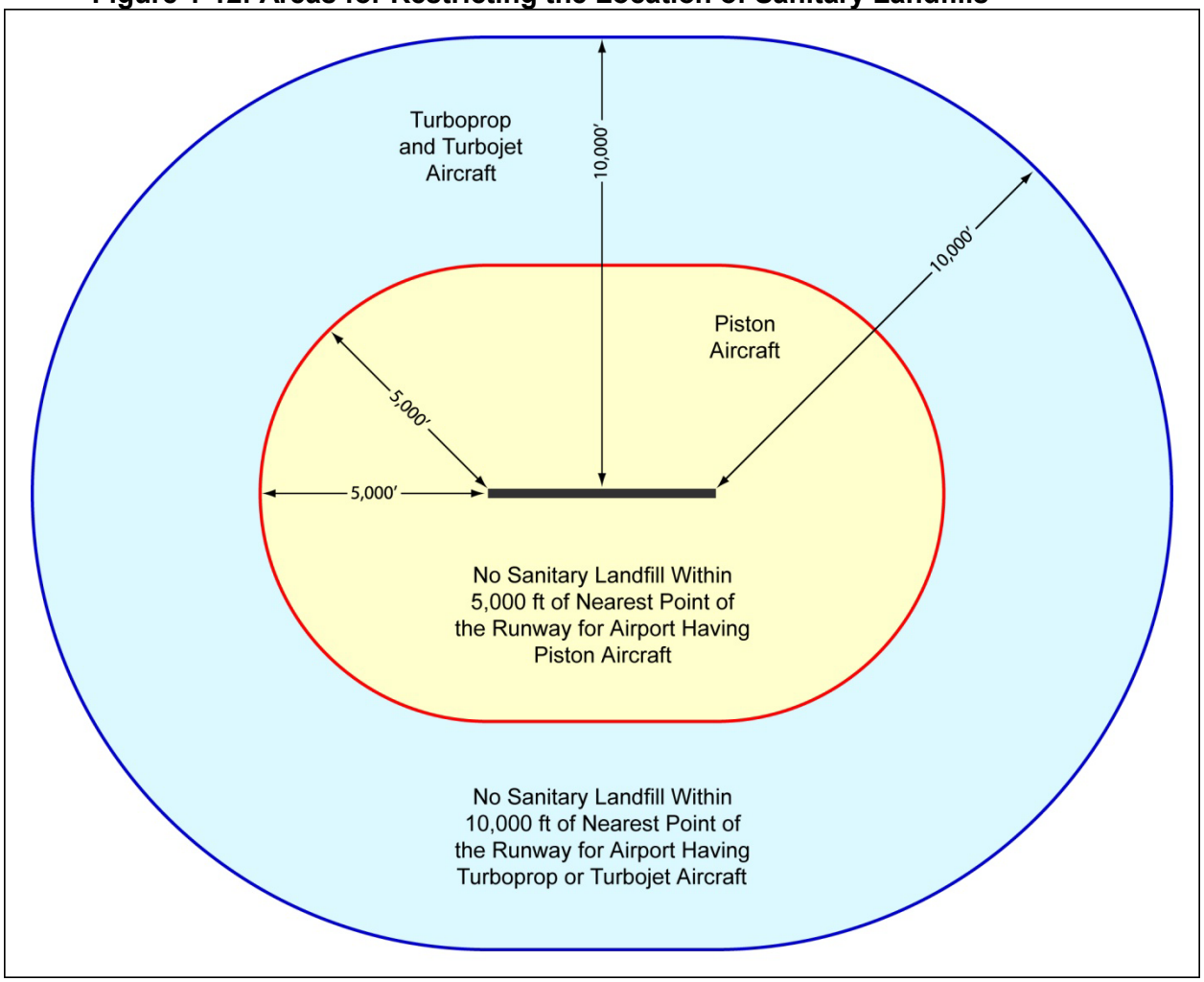
  Chapter 333.03 (2), F.S. requires local governments to consider the location of a sanitary landfill in proximity to a public-use airport. There are additional regulations for sanitary landfills from the Florida Department of Environmental Protection (FDEP) that must also be considered in the development review and

approval process. FDEP is actually the agency with primary responsibility for the landfill approval process.
There are two criteria for considering the location of a landfill relative to an active runway.

First, any landfill should be outside the lateral extent of an airport's Part 77 surfaces. Information on Part 77 surfaces is included in Section 3 of this guidebook.

Second, if the runway is used by piston-powered aircraft, the zone for prohibiting sanitary landfills extends out 5,000 feet from the edge of the runway in all directions. If the runway is used by turboprop or jet-powered aircraft, the sanitary landfill restriction area extends 10,000 feet out from the edge of the runway in all directions. **Figure 1-12** depicts the areas where sanitary landfills should be prohibited.

Figure 1-12: Areas for Restricting the Location of Sanitary Landfills



Local government and developers should consult with the applicable airport/airfield to determine the proper sanitary landfill restriction area for each runway at public-use airports and at military airfields.

If the proposed development is a sanitary landfill that is within the Part 77 surface or within either of the applicable areas depicted on Figure 1-12, there are two possible outcomes:

a. In consultation with the developer and the FDEP, the development can be reviewed to determine whether it is possible to accommodate or to alter the proposal to meet the requirements for restricting the location of sanitary landfills. In some instances, the type of debris being processed makes it possible to approve the development of some landfills. FDOT is available to provide technical assistance in this review process. If the proposal can be altered, to make it compliant with FDEP regulations and Chapter 333.03 (2), F.S., the review process is complete. The application for development can be approved.

b. If in consultation with the developer and FDEP, the proposed sanitary landfill development cannot comply with Chapter 333.03 (3), F.S., the application for development should be denied and the review process stopped.

The next section of the guidebook provides more information on Florida statutes, FAA regulations, and other processes discussed this section as they relate to reviewing and approving development proposals.

Section Two
Statutes, Regulations, and Processes Governing Land Use Compatibility

I. Introduction

This section provides more information on Chapter 333, F.S., as well on as other state laws and rules that relate to compatible land use planning for airports. In addition to Chapter 333 F.S., Chapter 163 has guidelines for airport compatible land use that are discussed in this section, as are Rules 14-60 and 9J-5 of the Florida Administrative Code (FAC). More information on these statutes and rules and more information on the process needed to adhere to existing state law on land use in the airport environs are presented in this section of the guidebook.

II. State Laws and Rules Governing Airport Related Compatible Land Use Planning In Florida

Compatible land use around airports in Florida is regulated primarily by the following statutes and rules:

- Chapter 333, F.S., Airport Zoning
- Rule 14-60, FAC, Airport Licensing, Registration, and Airspace Protection
- Chapter 163, Part II, F.S., Growth Management Act/Local Government Comprehensive Planning and Land Development Regulations Act
- Rule 9J-5, FAC, Minimum Criteria for Review of Local Government Comprehensive Plan and Plan Amendments, Evaluation Appraisal Reports, Land Development Regulations, and Determination of Compliance

These Florida statutes and rules are discussed in the following sections; information on how to access these statutes and rules is provided in Appendix C.

A. Requirements of Chapter 333, F.S., Airport Zoning

The purpose of Chapter 333, F.S., is to protect the health, safety, and welfare of the public on the ground and in the air by preventing the creation or establishment of hazards to airports. Hazards to airports, according to Chapter 333, F.S., may be the form of tall structures, objects of natural growth, or incompatible land uses and/or activities.

Chapter 333, F.S. aims to protect navigable airspace from the encroachment of structures that are dangerous to air navigation. Such structures can endanger users of airports and those on the ground in the vicinity of airports. Structures which have a negative impact on an airport's navigable airspace can also limit the utility of an airport and compromise public investment.

Chapter 333.03(2), F.S. also identifies certain land uses or activities in the vicinity of airports that are not compatible with airport operations. When incompatible land uses exist in the airport environs, such uses may result in negative impacts for both aeronautical activities and for the activities associated with the incompatible use. Chapter 333, F.S., aims to protect the health and welfare of the general public around airports and airfields. At the same time, Chapter 333, F.S. aims to protect public

investment in aviation facilities and to promote the sustainability of important transportation resources.

Both Chapter 333, F.S., and Title 14 Part 77 (Part 77) contain land use/development control provisions, and both provide directives to evaluate the impact of existing and proposed activities at aviation facilities. Under the provisions of both Chapter 333, F.S., and Part 77, changes which alter the character of an airport's operations and which are identified on an Airport Layout Plan (ALP) approved by the FAA are subject to the same zoning protection as existing facilities. The same standard applies to proposed facilities that are depicted in a comparable military plan. Planned or proposed new public-use airports whose development has been submitted to and approved by FAA are also protected.

1. Florida's Airport Zoning Regulation Requirements

Chapter 333.03 (1) (a), F.S., provides the power to adopt local zoning regulations and establishes minimum zoning ordinance requirements. According to Chapter 333, F.S., land use compatibility in the airport environs should be accomplished, to the extent legally possible, by the exercise of police power, without compensation. All local governments and political subdivisions, in accordance with Chapter 333.03 F.S., were required to adopt, administer, and enforce airport zoning regulations for airport hazard areas by October 1, 1977.

As per Chapter 333, F.S., the airport hazard area is any area, no matter what distance from a public-use airport or military airfield, where a structure could be erected that would pose a hazard to navigation. Development within 10 nautical miles from the airport reference point (ARP) may also require a Florida Department of Transportation (FDOT) Airspace Obstruction Permit. A permit is required if the development is taking place in an area that does not have airport zoning and if the height of the development exceeds federal obstruction standards contained in Part 77. If development is taking place beyond the 10 nautical mile permitting area, an airport hazard could be established without the requirement for an FDOT permit. The Airspace and Land Use Manager at FDOT can provide clarification on this subject as needed.

Any local government that is located within an airport hazard area must adopt airport zoning in accordance with Chapter 333, F.S. It is the responsibility of each local government to provide the FDOT Aviation Office a copy of their most current airport zoning or land use development regulations. Local governments must notify FDOT of any changes to local airport zoning ordinances. It is the responsibility of those submitting an application for development to notify FDOT when they are seeking a variance to the airport zoning ordinance.

According to Chapter 333.03 (2), F.S., airport zoning regulations shall at a minimum require:

a. A variance for the erection, alternation, or modification of any structure which would exceed federal obstruction standards contained in Part 77. (More information on complying with federal obstruction standards is presented later in this section of the

guidebook and more information on Part 77 is presented in Section Three of the guidebook).

b. Obstruction lighting and marking for structures as specified in Chapter 333.07(3).

c. Documentation showing that those applying for a variance have complied with the federal requirement for notification of proposed construction (FAA Form 7460-1, Notice of Proposed Construction), and they have a valid aeronautical evaluation.

d. When a variance is issued or denied, consideration should be given to all of the factors identified in Chapter 333.025 (6).

e. Variances shall not be approved solely on the basis that the proposed structure/development will not exceed federal obstruction standards contained in Part 77.

For simplicity, Section One of this guidebook identified six, three, and one statute mile "airport notification areas" for all public-use airports and airfields. Information on the size of the appropriate notification area size for each airport/airfield is presented in Appendix A.

If proposed development falls within an airport notification area, the Federal Aviation Administration's (FAA) Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) website should be used to determine if it is necessary for FAA Form 7460-1 to be filed. If the FAA's OE review results in a final determination that the structure exceeds Part 77 standards, the five conditions noted above should be met. In addition, a request for a variance to the local airport zoning ordinance is needed under these conditions. As per Chapter 333, F.S., conditions noted above apply to all of the airport hazard area.

Airport zoning regulations, according to Chapter 333, F.S., shall also consider and regulate the following:

a. The location of sanitary landfills related to airports shall be considered; bird strikes pose a serious risk to both individuals onboard an aircraft and persons on the ground. It is important that landfills be located so that they do not attract birds to approach and/or departure paths for all runways. Figure 1-12 in Section One provided information on the location of sanitary landfills in relationship to active runways. As per Chapter 333.03 (2) (a), F.S, the following should be considered:

   1) Sanitary landfills should be 10,000 feet from the nearest point on runways used by turboprop or jet aircraft.

   2) Sanitary landfills should be 5,000 feet from the nearest point on runways used by piston aircraft.

3) Sanitary landfills should also ideally be located outside the lateral limits of the airport's Part 77 surfaces. Case by case review of landfills in these areas is recommended.

b. As per Chapter 333.03 (2) (c) and (d), F.S., the location of educational facilities and residential construction, relative to all active runways, shall be considered. If an airport has conducted a noise study in accordance with 14 CFR Part 150 Airport Noise Compatibility Planning (Part 150), with the exception of aviation schools, there should not be any residential development or educational facilities within the outermost noise contour that is considered incompatible for such uses per Appendix A of 14 CFR Part 150. (More information on Part 150 is included in Section Three of the guidebook and in Appendix B). Educational facilities are defined in Chapter 1013, F.S. Appendix A to this document indicates which airports had approved a Part 150 Noise Study at the time this guidebook was published.

c. If an airport does not have an approved Part 150 Noise Study, the development of educational facilities and/or residential units should be restricted in the manner noted Figures 1-10 and 1-11 and as discussed in Section One of this guidebook.

d. New incompatible uses, activities, or construction should not be permitted within the runway protection zone (RPZ). More information on RPZs is presented in Section Three of this guidebook, and Figure 1-8 in Section One provided a graphical example of RPZs. Chapter 333, F.S. refers to RPZs as "clear zones". As per Chapter 333.03 (3), F.S., airport zoning ordinances should prevent uses, activities, and construction in RPZs which are incompatible with normal airport operations or endanger public health, safety, or welfare. To accomplish this, RPZs should be clear of activities or uses that would result in the congregation of people, the emission of light or smoke, or the attraction of birds.

Websites for obtaining access to examples of airport zoning regulations are presented in Appendix D to this guidebook as are selected example ordinances.

2. FDOT Airspace Permits for Structures Exceeding Federal Obstruction Standards

According to Chapter 333, F.S. (2), (3), and (4), each proponent of a development shall secure from the FDOT a permit for the erection, alteration, or modification of any structure that exceeds federal obstruction standards contained in 14 CFR Part 77. Permits from FDOT are required when the following conditions are met:

- Federal obstruction standards are exceeded.

- The proposed action is within 10 nautical miles of the geographic center of a publicly owned airport, military airfield, or an airport that is licensed by the state for public use.

The FDOT airspace obstruction permit application is Form 725-040-11.

FDOT permits do not apply to projects which received a permit from the Federal Communications Commission (FCC) for structures exceeding federal obstructions prior to May 20, 1975. The permit requirements also do not apply to previously approved structures erected prior to Chapter 333, F.S., going into effect or to any necessary replacement or repairs to existing structures, as long as the height of the structure does not change.

More information on the permitting and application process is provided in the discussion of Rule 14-60, FAC which follows.

B. Requirements of Rule 14-60, FAC, Airport Licensing, Registration, and Airspace Protection

The purpose of Rule 14-60, FAC is to promote aviation safety by eliminating hazards; to provide airfield standards; to provide standards for airport lighting and marking; to license and register airports in accordance with the requirements of Chapter 333, F.S.; and to promote safety by providing airspace protection in accordance with Chapter 333, F.S. As per Rule 14-60.003 (3), FAC, the State Aviation Manager is authorized to issue airspace obstruction permits subject to the requirements of Chapter 333.025, F.S.

- Rule 14-60, FAC influences compatible land use in three ways:
- Rule 14-60.005, FAC governs the approval of sites for new airport development
- Rule 14-60.007, FAC provides standards for landing and surface areas for airports that are licensed by FDOT
- Rule 14-60.009, FAC provides airspace protection

1. Requirements of Rule 14-60.005, FAC for New Airports

In Florida, any new airport requires FDOT site approval. For new publicly-owned airports, a Public Airport Site Approval Application (FDOT Form 725-040-12, Rev. 02/04) is required as per 14-60.001, FAC. For site approval, a proposed airport must comply with all requirements of Chapter 330.30, F.S.; this includes reference to the land use compatibility requirements and height restriction protection requirements outlined in Chapter 333, F.S.

As part of the approval process for a new airport site, land use compatibility efforts are required as follows:

- Each authoring having zoning jurisdiction within five nautical miles of a proposed airport site must be notified, and proof of contact must be

supplied. Correspondence with each applicable city/county is required to show that airport development is in compliance with local zoning.

- Real property owners within 1,000 feet of an airport site perimeter and 300 feet of a helistop or heliport perimeter must be notified and copies of correspondence maintained.

- A public notice related to the proposed airport/heliport site must appear in a newspaper of general circulation in the county in which the new facility is proposed and in counties that are within five nautical miles of the proposed site.

- Witten confirmation that the proposed airport will not be within 5,000 or 10,000 feet (whichever citing criteria is applicable) of a sanitary landfill is also needed.

Site approval will be granted for public and private airports only after FDOT determines that the conditions of subsection Rule 14-60.005 (4), FAC have been met.

2. Requirements of Rule 14-60.007, FAC Related to Airport Standards

For a public or private airport in Florida to be licensed or registered, respectively, as per Rule 14-60.006, FAC, the facility must comply with Rule 14-60.007, FAC, Airfield Standards for Licensed Airports. Within Rule 14-60.007 (2) (c) and (d), FAC, primary, approach, and transitional surface requirements for licensed airports are provided in this section.

Since these surfaces often extend beyond airport property, it is important for planners, developers, and airports to understand the dimensions of primary, approach, and transitional surface standards as they relate to requirements for airport licensing in Florida. Primary, approach, and transitional surface requirements for licensed airports in Florida are presented in **Figure 2-1**.

It is important to note that dimensions of primary, approach, and transitional surfaces are specific to each runway and airport. For planning and zoning purposes, the required approach and transitional surface can best be obtained directly from each airport. More information on surface requirements can be obtained from FDOT's Aviation Office or from the FAA's Airports District Office; contact information for both agencies is presented in Appendix C.

It is also important to note that local governments should also consider development within each airport's horizontal surface when development is proposed in the airport environs. Discussion of the horizontal surface is provided in Section Three of this guidebook and in Appendix B in the section on FAR Part 77.

Figure 2-1: Landing and Surface Areas for FDOT Licensed Airports from 14-60 FAC

Landing Area		Primary Surface		Approach Surface				Transition Surface	
Surface	Approach	Length	Width	Ratio	Length	Width		Ratio	Distance
						Inner	Outer		
Not Paved	Visual	End of Runway	250 feet	20:1	5,000 feet	250 feet	1,250 feet	N/A	N/A
Paved & Aircraft Weight < = 12,500 Pounds	Visual	200 feet Beyond End of Runway	250 feet	20:1	5,000 feet	250 feet	1,250 feet	N/A	N/A
	Non Precision		500 feet	20:1	10,000 feet	500 feet	2,000 feet	7:1	150 feet Vertical
Paved & Aircraft Weight > 12,500 Pounds	Visual	200 Feet Beyond End of Runway	500 feet	20:1	5,000 feet	500 feet	1,500 feet	N/A	N/A
	Non Precision Visibility > 3/4 Mile		500 feet	34:1	10,000 feet	500 feet	3,500 feet	7:1	150 feet Vertical
	Non Precision Visibility = 3/4 Mile		1,000 feet	34:1	10,000 feet	1,000 feet	4,000 feet	7:1	150 feet Vertical
	Precision		1,000 feet	50:1 Then 40:1	10,000 feet Then 40,000 feet	1,000 feet	16,000 feet	7:1	150 feet Vertical
Helicopter Final Approach and Takeoff Area (FATO)	Visual	42 feet	42 feet	8:1	4,000 feet	42 feet	500 feet	2:1	250 feet Vertical
	Non Precision	500 feet	500 feet	34:1	10,000 feet	500 feet	5,000 feet	4:1	350 feet Vertical
	Precision	1,000 feet	1,000 feet	50:1	25,000 feet	1,000 feet	6,000 feet	7:1	350 feet Vertical
Ultralight Area	Visual	End of Runway	150 feet	15:1	2,500 feet	150 feet	625 feet	N/A	N/A
Seaplane Marked	Visual	End of Runway	250 feet	20:1	5,000 feet	250 feet	1,250 feet	N/A	N/A
Seaplane Not Marked	Visual	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Additional requirements, within Rule 14-60.007, FAC as they relate to tall structures in the airport environment include:

- Licensed airports are required to remove any airport hazards, as so identified by the FDOT.
- Obstructions shall be marked and lighted in accordance with Rule 14-60.009 FAC.
- Obstructions that are applicable to Chapter 333.025 may be permitted pursuant to that section or subject to a variance under a local zoning ordinance.

3. Requirements of FAC Rule 14-60.009 Related to Tall Structure Permitting

Florida law protects navigable airspace by recommending the prevention of incompatible uses of land near public-use airports and military airfields. If a proposed structure exceeds federal obstruction standards, Florida law gives FDOT the responsibility and the authority to issue an airspace obstruction permit

for proposed structures within a 10 nautical mile radius of the geographical center of a public-use airport or military airfield.
An FDOT airspace obstruction permit is required when airport zoning or land development regulations have not been adopted by the local government and the local government has not executed an interlocal agreement on airport zoning enforcement with a county that has an airport zoning ordinance. If a county has an airport zoning ordinance, but the proposed structure is within the boundaries of a local government that does not have a zoning ordinance or an executed interlocal agreement with a county, a FDOT airspace permit is required.

The airspace obstruction permit application is DOT Form 725-040-11 Rev. 07/08. The airspace obstruction permit application is submitted to the Airspace and Land Use Manager, Florida Department of Transportation, 605 Suwannee Street, M.S. 46, Tallahassee, Florida 32399-0450. Once a completed application has been received, FDOT has 30 days to issue or deny the permit. Questions on the permitting process can be directed to the FDOT Airspace and Land Use Manager.

When the Department of Transportation decides whether or not to issue a permit, they consider, as per Chapter 333, F.S., the following:

a. The nature of the terrain and the height of existing structures.

b. Public and private interests and investments.

c. The character of flying operations and planned development of airports.

d. Federal airways as designated by the FAA.

e. Whether the construction of the proposed structure would cause an increase in the minimum descent altitude or the decision height at the affected airport.

f. Technological advances.

g. The safety of persons on the ground and in the air.

h. Land use density.

i. The safe and efficient use of navigable airspace.

j. The cumulative effects on navigable airspace of all existing structures, proposed structures identified in the applicable jurisdiction's comprehensive plans, and all other know proposed structures in the area.

The FDOT will not approve a permit unless the applicant submits documentation showing they have complied with FAA requirements for notification of proposed construction (Form 7460-1), and the applicant needs to provide the results of a valid FAA aeronautical determination. More information on FAA aeronautical

determinations is presented later in this section of the guidebook. FDOT does not provide a permit based solely on the basis that the proposed structure does not exceed federal obstruction standards or other federal aviation regulations.

If FDOT issues an airspace obstruction permit, the recipient of the permit may be required to comply with appropriate obstruction lighting and marking standards contained in Rule 14-60, FAC as a condition of the permit. Any local airport zoning ordinance adopted in accordance with Chapter 333, F.S. needs to require obstruction marking and lighting in accordance with Rule 14-60, FAC. Most marking and lighting of obstructions follows federal guidelines discussed later in this section. However, if state or local guidelines for the marking and lighting of tall structures are more stringent, the state and/or local guidelines prevail.

4. Local Government Responsibilities for Airspace Obstruction Zoning

By state law, every local government having an airport hazard area within its territorial limits should have enacted its own local airport zoning ordinance in accordance with the provisions of Chapter, 333, F.S. The statutory compliance date was October 1, 1977. Additionally, in accordance with the same statute, a copy of the local zoning ordinance should have been submitted to the FDOT Aviation Office in Tallahassee. All changes to a local zoning ordinance must also be submitted to FDOT.

If the local government has adopted airport zoning or land development regulations are in place, then a permit from FDOT for tall structure development is not required. There are, however, other requirements related to obtaining a variance for tall structure development.

When tall structures are proposed, the proponent of the development needs to submit, as appropriate, FAA Form 7460-1, initiating the process for a federal airspace determination from the FAA. This process is discussed later in this section. After that determination is received, the proponent of the project applies directly to the local government for a variance from the local airport zoning ordinance. At the same time the variance request is submitted to the local government, a copy of the variance must be submitted by the applicant to the FDOT Aviation Office. FDOT has a 45-day comment period. After that time, they will either provide technical comment on the variance application or waive their right to comment.

According to state statute, any person filing a request with a local government that seeks a variance from an airport zoning ordinance in order to:

- Erect a structure,
- Increase the height of any structure,
- Allow the growth of any vegetation to exceed federal obstruction standards, or
- Use property contrary to airport zoning regulations

must forward a copy of the variance request to the FDOT Airspace and Land Use Manager via certified mail.

Once the local government has made a decision on the application for a variance, they must provide FDOT with a copy of the local decision within 10 days of the issuance of a decision or a granting of the variance. Any variance to zoning that is granted may require the applicant to install, operated, and maintain obstruction marking and lighting in accordance with Rule 14-60, FAC, as such lighting and marking may be required as a condition of the variance.

5. Rule 14-60, FAC Marking and Lighting Requirements for Tall Structures

If during their aeronautical review/evaluation, the FAA's final determination (discussed in the next section) identifies the need for obstruction marking and/or lighting, then this marking or lighting becomes a condition for the FDOT's compliance with standards and a condition for the issuance of a permit or variance. Minimum standards for the marking and lighting of obstructions are the same as those contained in FAA Advisory Circular 70/7460-1K dated August 2000. More information on marking is contained in Appendix B of this guidebook.

C. Requirements of Chapter 163, F.S. Florida Growth Management Act

In accordance with Chapter 163, F.S., all 67 counties and all 411 municipalities in Florida are required to adopt a comprehensive plan. When a local government has adopted land development regulations (LDRs) these LDRs should address airport zoning in a manner consistent with the provisions of Chapter 333. Chapter 163 is discussed in this section of the guidebook.

1. Purpose of a Comprehensive Plan

The local comprehensive plan is a policy document. According to Chapter 163.3177 (10) (1) F.S., the Department of Community Affairs (the state land use agency), in conjunction with the state's department of transportation (FDOT), shall consider land use compatibility issues in the vicinity of all airports. In addition, the state land use agency shall consider land use issues adjacent to or in close proximity to all military airfields in coordination with the Department of Defense (DOD).

Based on local needs and values, the comprehensive plan defines a long-term vision for each community. In addition, the comprehensive plan establishes specific goals, objectives, and policies needed to meet statutory requirements. The comprehensive plan helps to manage growth, while at the same time protecting the environment and the health and welfare of the community.

As development or redevelopment is proposed in a community, those actions must be consistent with the goals, objectives, and policies contained in the local comprehensive plan. The comprehensive plan helps to identify infrastructure improvements needed to accommodate growth, including those needs related to transportation. At this time, however, it is not a requirement for the five year capital plan included in the comprehensive plan to include projects needed to serve anticipated aviation demand.

2. Definition of Land Use Compatibility

Land use compatibility is defined as a condition in which land uses can coexist in relative proximity to each other in a stable fashion. For land uses to be compatible, this means that over time no land use is unduly negatively impacted directly or indirectly by another. Chapter 163, F.S. and 9J-5, FAC work together to provide the framework for addressing land use compatibility around airports. Rule, 9J-5.019 (4) (c) 21, FAC specifies the protection of airports from land uses which are incompatible with their operations. The available statutory guidance on airport compatible land use is contained in Chapter 333.03, F.S.

3. Inclusion of Airports in the Comprehensive Plan

There are many elements in a comprehensive plan. Airports are most frequently included and addressed in one or more of the following elements:

- Transportation
- Future Land Use
- Intergovernmental Coordination
- General Circulation

Comprehensive plans sometimes contain optional elements that may also address airports.

On May 27, 2009, Governor Crist approved HB 1021 making it Chapter 2009-85, Laws of Florida. The law revised s. 163.3177(6)(a), Florida Statutes, to require Future Land Use Elements of local government comprehensive plans to include criteria to achieve the compatibility of lands adjacent to an airport as defined in s. 330.35 and consistent with s. 333.02. The law provides that local governments are to adopt and transmit amendments to the state land planning agency by June 30, 2012, for this purpose. This measure is intended to increase protection afforded to public-use airports against negative operational impacts due to encroachment of incompatible development. This guidebook can be utilized as an information source in preparation of such criteria by local governments affected by this statutory change.

According to Chapter 163.3177 (6) (j) 5, F.S., the transportation element of a comprehensive plan prepared for an urban area (population of 50,000 or greater) must address aviation, rail, seaport facilities, and intermodal terminals and access to those facilities. Chapter 163.3177 (6) (j) 7 F.S., also requires each comprehensive plan to consider land use compatibility around airports. For municipalities less than 50,000, airports are addressed in the general circulation component of the comprehensive plan (Chapter 163.3177 (7) (b) F.S. and FAC 9J-5.019 (4) (6)).

Chapter 163.3177 (6) (k) F.S., addresses the relationship between local comprehensive plans and airport master plans. An airport master plan and any subsequent amendments to an airport master plan prepared for a publicly-owned, operated, and licensed airport in accordance with Chapter 333.06 may be incorporated into the local comprehensive plan. This section of Chapter 163,

F.S., further specifies that amendments to all comprehensive plans shall address land use compatibility for airports in a fashion that is consistent with Chapter 333, F.S. Airport master plans adopted into the comprehensive plan are exempt from the development of regional impacts (DRI) process. It is important to note that based on their size, many public-use airports are not subject to DRI requirements.

According to FAC 9J-5.006 (3) (c) 2, the future land use map in a comprehensive plan must be consistent with state policies regarding the compatibility of land uses adjacent to and around airports. These policies are contained in Chapter 333, F.S.

The transportation element of a comprehensive plan requires the mapping of both existing and future airport facilities. These facilities should include runways, runway protection zones (RPZs), and obstructions. This inclusion is per FAC 9J-5.019 (2) (a) 5 and 5 (a) 7. Also as per FAC 9J-5.019 (4) (b) 6, within the transportation element of a comprehensive plan, analysis is required to determine the interaction of land uses and modes of transportation; this required analysis includes airports.

4. Amendments to a Comprehensive Plan

Amendments to comprehensive plans can be made twice a year. According to Rule 9J-11.009 (6), FAC, it is the responsibility of each local government to include FDOT in the review of amendments to their comprehensive plan. Each local government is required to transmit a copy of a comprehensive plan amendment to the FDOT district office as part of the review process. This includes reviewing any amendments that could impact public-use airports or military airfields.

Every seven years, major updates to comprehensive plans take place through the Evaluation and Appraisal Report (EAR). Each EAR examines the success of the comprehensive plan; the community's current vision, conditions, and needs; and new policies, strategies, and programs as needed. According to the requirements of Chapter 163, F.S., FDOT is a participant in the EAR; and FDOT must review any EAR based amendments to the local comprehensive plan.

Through the amendment and EAR process, the comprehensive plan provides a means for refining and improving coordination between airports, land use, and other transportation networks. The amendment and EAR process also serves as a platform for improving intergovernmental coordination with airports.

D. Requirements of Rule 9J-5, FAC

Rule 9J-5, FAC implements the principles of Chapter 163, F.S. Rule 9J-5 defines "land use compatibility" and states that the future land use map in each local comprehensive plan must be consistent with policies regarding compatibility of land uses adjacent to airports. This requirement is per FAC 9J-5.006 (3) (c) 2.

Rule 9J-5 also requires that as part of the transportation element of a comprehensive plan that existing and future airport facilities be mapped FAC 9J-5.019 (2) (a) 5, (5) (a) 7.

Rule 9J-5 requires, as part of the development or the update to a comprehensive plan, that an analysis of the interaction of land use and transportation be conducted. This includes land use compatibility around airports as per FAC 9J-5.019 (3) (d).

Rule 9J-5, FAC requires coordination related to the siting of new or the expansion of existing airports with future land use (FAC 9J-5.019 (4) (b) 6) identified in the local comprehensive plan. For local governments with populations of 50,000 or greater, Rule 9J-5, FAC requires coordination with facility plans for public-use airports and military airfields (FAC 9J-5.019 (4) (b) 8). Section FAC 9J-5.109 (4) (c) 21 specifically calls for the protection of airports from encroachment of incompatible land uses.

III. Federal Requirements for Compatible Land Use Planning

When an application is submitted to build or modify a structure in Florida, one of the most important considerations is the potential impact of that development on the national airspace system. Federal law requires that the FAA have prior notification regarding the construction or alteration of a structure, either temporary or permanent, if it meets certain criteria. Structures may include, but are not necessarily limited to: highways/roads, railroads, bridges, overpasses, light/utility poles, antennas/towers, building, signs/billboards, natural terrain/vegetation, temporary construction equipment, or dirt piles.

At the present time, federal regulations govern primarily the height of objects around airports and not the surrounding land use. Land use determinations are made on the state and local level.

Aside from its guidance as per Part 77 on restricting the height of objects in the airport environment, on the federal level, there is limited other guidance on the subject of compatible land use in the airport environment. As noted elsewhere in this guidebook, federal regulations do exist related to restricting certain uses/activities in the airport environs. These are uses which could interfere with a pilot's visibility or uses which could cause electronic interference with important navigational aids, either ground based or in an aircraft.

Federal guidance is also available through FAA standards which prohibit incompatible development off the ends of all active runways in an area defined by the RPZ.

A. Complying with Federal Land Use Regulations

As discussed in Section One of this guidebook, on-line information is available (OE/AAA website) to determine the need for FAA notification related to tall structure development. Appendix B to the guidebook provides more information as per Part 77 as to when FAA notification on development is required.

If FAA notification is required, the project applicant must submit FAA Form 7460-1. The preferred method for submitting this form is electronically via the OE/AAA website. Hard copy documents can also be submitted to:

Express Processing Center
Federal Aviation Administration
Southwest Regional Office
Air Traffic Airspace Branch, ASW-520

2601 Meacham Boulevard
Fort Worth, Texas 76137-0520

Form 7460-1 must be submitted to the FAA 30 days before the earlier of two dates:

1. The date the proposed construction or alternation starts

2. The date an application for a construction permits is filed

FAA conducts an aeronautical study after receiving a notice of proposed construction or alteration. The focus of the aeronautical study is to determine if the structure has a potential negative impact on navigable airspace. As a result of their aeronautical study, the FAA indicates whether or not the proposed structure exceeds FAA standards. The FAA's aeronautical study results in a determination of "hazard" or "no hazard." Depending upon individual circumstances, it is possible for a structure to exceed standards but for it to still receive a no hazard determination.

If the results of the FAA's aeronautical study show that the structure does not exceed standards, the sponsor of the development is not required to go through FDOT's permitting process nor are they required to obtain a variance to the local airport zoning ordinance. Any FAA determination that shows the structure exceeds federal obstruction standards requires either an FDOT airspace permit or a variance to the local airport zoning ordinance.

As it relates to obstructions (tall structures), state and local government have the authority to deny issuance of an Airspace Obstruction Permit or variance to the Airport Protection Zoning ordinance to allow construction of a structure, even if an FAA aeronautical study determines that the structure will have no substantial adverse effect on air navigation, and a Determination of No Hazard (DNH) is issued. Conversely, if the sponsor has properly notified FAA under the provisions of Part 77, the sponsor can still proceed with construction of the structure, even if the FAA through their aeronautical study determines the structure to be a hazard. This course of action, however, is strongly discouraged.

Despite the fact that the FAA has issued a determination that a structure can be accommodated without substantial adverse impact to air navigation, the state public airport licensing criteria which are based on Part 77 obstruction surfaces as contained in chapter 330.30 FS, may be impacted. If an aviation facility fails to meet minimum licensing standards, the facility's operational capabilities may be adversely affected. In order to meet licensing standards the facility may be required to displace a runway threshold, shorten a runway, or may be issued a limited or special license, or any combination of those measures. In a worst case scenario, the airport may lose complete operational capability on the affected runway end. Please consult the FDOT Aviation Office for additional information.

It is important to note that FAA determinations are not an approval or a permit for construction. FAA does not have this authority. The approval and permitting process rests with the State of Florida and local governments.

Summary

This section of the guidebook for compatible land use around Florida airports summarized important information on the state and federal laws and processes that govern tall structure and other types of land use development around public-use airports. The next section of the guidebook provides more detailed information on what areas around airports need to be protected and why they need to be protected.

Section Three
Principals Underlying Land Use Compatibility Requirements

I. Introduction

This section of the guidelines provides planners, developers, local governments, airports, and others with more information on the underlying principals upon which current laws, regulations, and processes related to airport compatible land use are based.

II. Areas Around Airports That Need To Be Protected

Federal and state laws and regulations now in place seek to protect airports, airspace, people, and property around airports and military airfields in three important areas. These areas are:

- Height
- Noise
- Safety

State and federal laws and regulations, discussed in Section Two, are based on areas around airports and airfields that should be protected from either a height, noise, or safety standpoint. This section of the guidebook provides more detail on each of these three important protection areas.

This section of the guidebook provides information on 14 CFR Part 77 Objects Affecting Navigable Airspace (Part 77) and 14 CFR Part 150 Airport Noise Compatibility Planning (Part 150). Areas around civilian airports where land use compatibility planning should consider FAA zones designated to promote safety are also discussed in this section. Finally, the Department of Defense (DOD) has specific guidelines for land use planning around military airfields. These DOD guidelines are contained in the Air Installation Compatible Use Zone (AICUZ) program; this program is discussed in this section of the guidebook.

Much of the technical detail for Part 77, Part 150, FAA safety zones, and AICUZ is provided in Appendix B to the guidebook for readers needing more detail on topics discussed in this section.

III. Areas around Airports to be Protected from a Height Standpoint

Part 77, defines areas around public-use airports and military airfields that need to be protected from tall structures (both manmade and natural) that pose a hazard to safe airport operations and/or navigable airspace. Part 77 also provides guidance on activities in the airport environment that could compromise safe operations. Part 77 is the standard for determining height restrictions for both civilian public-use airports and military airfields.

Part 77 establishes standards for the following:

- Determining obstructions to navigable airspace

- Setting requirements and standards for notifying the FAA on objects/development that could affect navigable airspace

- Providing procedures for a public hearing if it is determined that construction or alteration of an object could have a negative impact on airspace or an airport
- Evaluating and studying the actual impacts of construction or alteration on operating procedures and air navigation
- Identifying mitigation measures, as needed relative to proposed construction, to enhance air safety
- Providing guidelines for establishing antenna and windfarm locations
- Charting new man-made or natural objects that could have an impact on air navigation

Part 77 is divided into five subparts. Appendix B provides a description of the various subparts contained in Part 77 for those wishing to review this information.

A. Imaginary Surfaces within Part 77

Part 77 establishes standards for determining which structures, from a height standpoint, pose potential hazards to airports and/or air navigation. This is accomplished by defining specific areas around each airport or military airfield that should not contain any protruding objects. These areas are referred to as "imaginary surfaces."

Objects which may protrude through Part 77 imaginary surfaces include natural growth, terrain, or objects related to permanent or temporary construction. There are a host of objects that present potential obstructions. While this list is not all inclusive, each of the following, depending on their location and height could be an obstruction: towers, light poles, billboards, bridges, tethered balloons, traverse ways (roads, railroads, parking lots, waterways), buildings, and antennas.

The imaginary surfaces described in Part 77 include:

- Primary Surface
- Transitional Surface
- Horizontal Surface
- Conical Surface
- Approach Surface

Part 77 surfaces are depicted on **Figure 3-1**; Figure 3-1 provides a plan view of the Part 77 surfaces. It is important to note that many of the surfaces shown in Figure 3-1 are actually three-dimensional. Part 77 imaginary surfaces are designed to protect specific airspace areas.

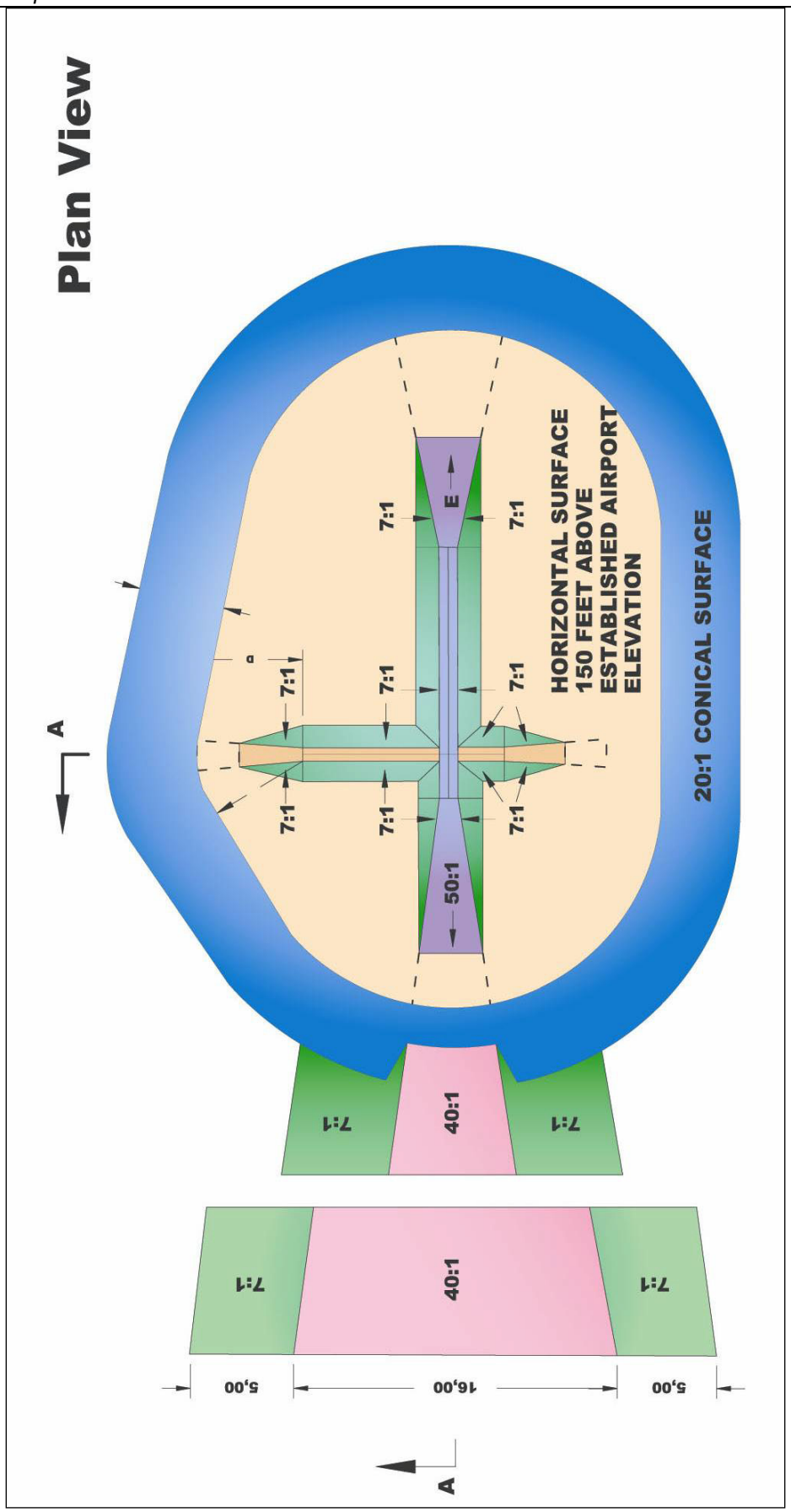


Figure 3-1: Part 77 Surfaces: Plan View

Source: FAA FAR Part 77: Objects Affecting Navigable Airspace

Determining the appropriate Part 77 surfaces for each public-use airport or military airfield is best done in consultation with that aviation facility. FDOT also serves as another resource for obtaining more specific information on Part 77 and its implications for zoning and approvals for applications for development.

Since Chapter 333, F.S., states that airport zoning needs to consider planned facilities, it is important to consider approach upgrades, new runways, or extended runways that may be implemented in the future to ensure that long-term Part 77 surfaces are adequately protected.

B. Structures that Pose a Hazard to Air Navigation

Not all objects whose height exceeds a Part 77 surface are necessarily a hazard to air navigation. The FAA has the sole authority to make the determination as to whether or not a structure poses a hazard to air navigation. This determination is made through an FAA aeronautical study, also called an obstruction evaluation.

If an FAA aeronautical study shows that a structure penetrates a Part 77 surface but that the structure does not pose a hazard to air navigation, FAA issues a no hazard determination. Even if a no hazard determination is issued by the FAA, the FAA may require the obstruction be lighted and marked in accordance with FAA guidelines. Regardless of an FAA determination of no hazard, FDOT requires a displaced threshold if there is an impact to the approach surface, and the new structure becomes the controlling obstacle.

Despite the fact that the FAA has issued a determination that a structure can be accommodated without substantial adverse impact to air navigation, the state public airport licensing criteria which are based on Part 77 obstruction surfaces as contained in chapter 330.30 FS, may be impacted. If an aviation facility fails to meet minimum licensing standards, the facility's operational capabilities may be adversely affected. In order to meet licensing standards the facility may be required to displace a runway threshold, shorten a runway, or may be issued a limited or special license, or any combination of those measures. In a worst case scenario, the airport may lose complete operational capability on the affected runway end. Please consult the FDOT Aviation Office for additional information.

Key metrics established in Part 77 help determine if an object constitutes an obstruction to air navigation. These are the metrics that FAA considers when they conduct an obstruction evaluation; they are presented here for informational purposes. Determination as to whether a structure constitutes a hazard to air navigation is the responsibility of the FAA, not the local government. Part 77 evaluation metrics are as follows:

- The object is 200 feet above the ground elevation for the airport or the elevation of the airport up to 3 miles from the airport for runway length greater than 3200 feet. The height of the threshold increases 100 feet for every one (1) mile in distance from the airport, up to a maximum of 500 feet at a distance of six miles from the airport reference point (ARP).

- The object is 500 feet or more above AGL at its site.

- The object penetrates one or more of the imaginary Part 77 surfaces.

- The object penetrates an area know as the terminal clearance area; this area includes approach and departure paths and circling approach areas.

- The object penetrates enroute obstacle areas which include turn and termination areas.

In an effort to streamline the complexity of Part 77, developers/planners should consider the six, three, and one mile airport notification circles discussed in Section One of these guidelines. If development is located within an airport notification circle, the OE/AAA notification criteria tool should be used to determine if the development might pose a hazard, resulting in the need for an FAA obstruction evaluation. The FDOT Aviation Office can provide additional technical assistance as needed. More detailed information on when to notify FAA on tall structure development is contained in Appendix B to this guidebook.

It is important to reiterate that Florida law requires that an airspace obstruction permit be obtained for any development that exceeds heights established by Part 77 federal obstruction standards. A permit is needed if development is within 10 nautical miles of a public-use airport or military airfield. A permit is not required if the local government has adopted airspace protection zoning in accordance with Chapter 333, F.S. and that zoning is on file with the FDOT Aviation Office. FDOT, however, must still be notified of any application to grant a variance to the local zoning ordinance. FDOT has the right/responsibility to review variance applications in accordance with Florida statutes.

C. Other Types of Development that are a Concern within Part 77

Aside from the height of objects, Part 77 also notes that the following should be avoided within any of the imaginary Part 77 surfaces:

- Any object or development that would create electrical interference with radio or navigational equipment used by aircraft, the airfield, or the FAA.

- Any object or development that would generate light that could be confused with airport lighting. Lights that shine upward around an airport are potentially hazardous since they can detract from a pilot's ability to indentify an airport.

- Any object or development that would generate steam or smoke that would lead to reduced visibility in the airport environs. Visual impairment can result from smoke and steam.

- Any object or development that would create or cause glare which would interfere with airport operations. Reflective surfaces can produce glare which can distract a pilot.

- Any use which would attract birds or other wildlife, thereby creating hazards either on the ground or in the air.

D. Responsibilities for Part 77 Compliance

The responsibility for ensuring height compatible development rests with the airport, local governments/political subdivisions, construction companies and/or developers, FDOT, and the FAA. If the proposed development is 200 feet or more above ground level, the FAA must be notified. If the development is within the 6, 3, or 1 airport notification areas discussed in Section One of this guidebook, the FAA Notice Criteria Tool should be used to determine if FAA notification is necessary.

FAA Form 7460-1 initiates an obstruction evaluation. This form can be completed on-line via the OE/AAA website. Appendix B provides more information on obstruction evaluations and steps that may be required following an FAA determination from an airspace study.

Part 77 surfaces are complex because of their three-dimensional nature and the size of the Part 77 surface is specific to each runway/airport. Help in determining if development in any of the Part 77 surfaces poses a hazard to aircraft, airspace, or navigational aids is available from the FDOT Aviation Office; FDOT can provide local governments and developers with expertise in this area.

IV. Areas around Airports to be Protected from a Noise Standpoint

To achieve compatibility in the airport environs, minimizing aircraft noise on areas surrounding each public-use airport or military airfield is desirable. Noise by definition is unwanted sound. The degree to which persons perceive aircraft to generate “noise” differs on an individual basis, as does each person’s perception of annoyance. On the broadest level, perceptions of whether aircraft operations are perceived as noise can often be related to how noise from aircraft either blends in with or stands out from background noise.

This section pertains to measuring noise primarily at civilian airports; a discussion of noise associated with military airfields is provided later in this section.

A. Evaluating Aircraft Noise

Noise generated by aircraft operations is generally tied to various components as follows:

- Type of aircraft and type of engine on the aircraft performing the operation
- Volume of aircraft operations
- Time of day the operation takes place
- Weather and wind conditions
- Whether the operation is a landing or a takeoff
- Flight path of the aircraft
- Aircraft weight/stage length

The industry standard for quantifying and expressing aircraft noise at civilian airports is the FAA-approved Integrated Noise Model (INM). The INM generates contours that show cumulative noise exposure over a 24-hour period for an average annual day, or the model can be programmed to show noise exposure at a pre-selected location in proximity to an airport.

The FAA and the Department of Housing and Urban Development (HUD) use the Day-Night Average Sound Level (DNL) to quantify noise exposure. Contours representing DNL levels are generated from the INM. The military also uses the DNL methodology to express noise impacts, but the military typically uses the Noisemap noise model which has an extensive database for military aircraft. Joint-use facilities can readily incorporate data from both noise models as may be required to address specific operational factors. Sound levels associated with DNL contours are expressed in decibel units.

B. Noise Contours and Compatible Land Use

DNL noise contours are unique to each airport. Many of the public-use airports and military airfields in Florida have their own noise contours on file. Noise contours may be generated as part of an Airport Master Plan and included in a drawing in the Airport Layout Plan (ALP), an Environmental Assessment (EA), an Environmental Impact Statement (EIS), or a Part 150 Noise Study. Less frequently, an airport may have noise contours developed specifically for the purpose of off-airport compatible land use planning.

As depicted in the example DNL noise contours generated by the INM shown in Section One, Figure 1-9, the contours representing the high noise levels may be primarily on property actually owned by the airport. For busy commercial airports, noise contours can extend several miles off airport property.

C. Part 150 Noise Studies

Part 150 outlines a federally regulated process for assessing noise in the airport environment and identifying opportunities to improve the compatibility between the airport and the surrounding community. Conducting a Part 150 noise study is voluntary on the airport's behalf. Nationwide, about 250 airports, out of over 5,000 public airports, have completed a Part 150 Study. Appendix A shows the airports in Florida that had an approved Part 150 Noise Study at the time this guidebook was developed.

There are two basic components of a Part 150 Noise Study, and FAA approves each component separately. The Noise Exposure Map (NEM) presents that actual noise contours and relates levels of noise impact with appropriate land use restrictions. Some airports update their NEM without completing a complete update to their Part 150 Study. The Noise Compatibility Program (NCP) outlines various strategies that the airport may consider to reduce noise, assuming adverse noise impacts are identified through the Part 150 process.

The military equivalent of a Part 150 study is known as an Air Installation Compatible Use Zone (AICUZ). Comparable noise impact areas for military airfields are discussed later in this section.

If an airport has an approved Part 150 Noise Study or an approved NEM, in accordance with Chapter 333, F.S., the noise contours from this study must be used to limit/restrict residential development and the development of educational facilities. When an airport does not have a Part 150 Noise Study/NEM or a military airfield does not have an AICUZ study addressing noise impacts, residential development and educational facilities

around public-use airports and military airfields should be restricted in areas around airports as discussed in Section One of these guidelines and as shown previously in Figures 1-10 and 1-11.

D. The Local Airport Traffic/Training Pattern and Airport Noise

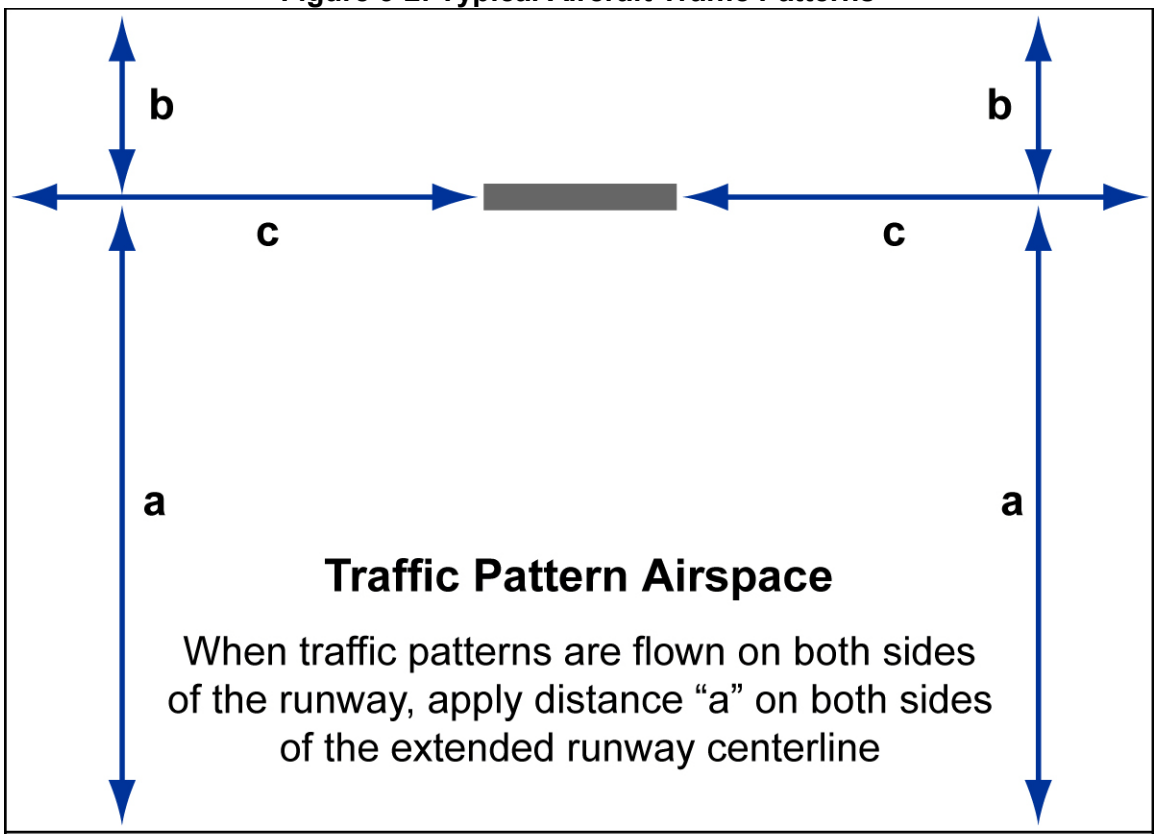
By federal land use compatibility guidelines established by HUD, if noise generated from aircraft operations is at level of 65 DNL or lower, most uses and activities are considered compatible from a noise standpoint. For many general aviation airports, the noise contour representing 65 DNL does not extend beyond airport property. However, these same airports sometimes experience community concerns relative to noise.

While general aviation training aircraft are relatively quiet, when compared to other aircraft or community noise events, the frequency of overflight associated with training pattern activities has the potential to create concerns. Individuals can be sensitive to the repetitive nature of aircraft in training patterns. The annoyance caused by this type of activity may not be captured by DNL metrics. The DNL is reflective of an average day, taking the total aircraft activity for the year and dividing it by 365 to reflect the operations (and noise exposure) for a typical day.

Aircraft training patterns typically include an aircraft taking off, flying a close-in pattern to the airport, touching down (landing), and taking off again. When an aircraft is conducting this form of training, it often makes a number of these passes sequentially. An aircraft or multiple aircraft may be in a training pattern anywhere from a few minutes, up to a few hours, continuously flying over the same geographic area. It should be noted, however, that training does not happen everyday, and there may be several days without any training. Because of its sporadic pattern, an annual average day for noise as measured by DNL may not fully reflect potential annoyance associated with a high frequency of training overflights occurring on any given day. While the sound of the aircraft is what raises awareness, it is often the concern over an aircraft accident, rather than actual noise, that contributes to community concerns.

Figure 3-2 depicts typical traffic pattern airspace. The source of this information is FAA Order JO 7400.2G, April, 2008. The dimensions of the traffic pattern are determined by the approach speed of the aircraft performing the operation. Aircraft categories A-D shown in Figure 3-2 reflect approach speeds for aircraft grouped by size. Aircraft category A represents the smallest aircraft and D the largest. More information on aircraft in each category is presented in Appendix B to this guidebook.

Figure 3-2: Typical Aircraft Traffic Patterns



Aircraft Category	Distance (nautical miles)			
	a	b	c	d*
A	1.25	0.25	1.25	0.375
B	1.5	0.25	1.5	0.5
C	2.25	0.5	2.25	0.875
D	4	0.5	3	1

*Increase distance "C" by adding distance specified in "d" for each aircraft over four (of the same category) anticipated to be operating in the traffic pattern at the same time.

Aircraft performing training operations generally are included in Category A or B. As a result, the traffic pattern for smaller aircraft typically extends out from the runway for a distance of 1.25 to 1.5 nautical miles and laterally from the runway centerline for the same distance. This rectangle is repeated on the other side of the runway if the traffic pattern is flown on both sides of the runway.

Chapter 333, F.S., does not specifically address land use compatibility within the airport traffic pattern. Use and development within this area is to varying degrees addressed within sections of Chapter 333, F.S., that restrict residential development and the development of educational facilities either within areas defined by a Part 150 Noise Study or within specific areas centered on each runway. Restricting residential development and the development of educational facilities in the areas that fall

underneath the local traffic patterns helps to promote land use compatibility. (These areas are depicted in Figures 1-10 and 1-11 in Section One of the guidebook).

When local governments develop airport zoning ordinances, they should use Chapter 333, F.S. to determine the minimum measures that should be implemented through local zoning. To promote additional compatibility, particularly around general aviation airports, local governments should consider further restriction of noise sensitive uses within the traffic pattern airspace areas discussed in this section. Additional information on noise in this area can be found in FAA Order 7400-2G, Traffic Pattern Area.

V. Areas around Airports to Protect from a Safety Standpoint

Providing safe airport operations and navigable airspace is the primary objective of surfaces within Part 77 which have been previously discussed. To promote compatible land use and to comply with state law and federal regulations, there are other safety concerns that must be considered. These relate to:

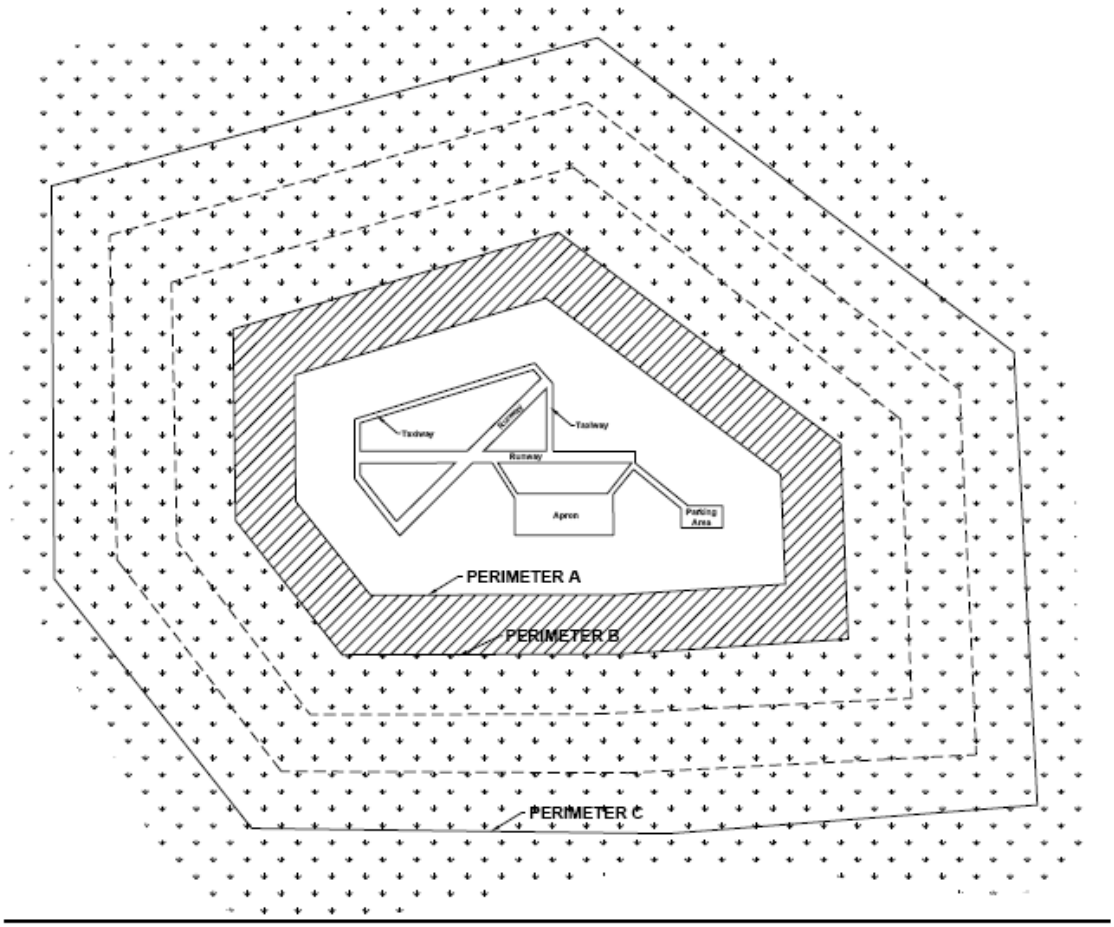
- Activities and uses that are wildlife attractants
- Areas where there is the highest potential for an aircraft accident
- Zones that are designated by the FAA for safety

A. Protecting Airport Operations from Wildlife Hazard Attractants On and Near Airports

There are a variety of land uses, facilities, and structures on and near airports that can create wildlife hazard attractants which can pose a threat to aircraft operations. Examples of these include: sanitary landfills, sewage facilities, stormwater facilities, agricultural areas, natural areas, water, and landscaping. Airport managers are encouraged by the FAA to assess potential wildlife hazard attractants on and near airports and to work with local land use planners to avoid the establishment of attractants on and near airports.

The FAA provides guidance on separation criteria for potential wildlife hazard attractants (non-compatible land uses and facilities) within FAA Advisory Circular 150/5200-33B "Wildlife Hazard Attractants On and Near Airports." This circular provides a graphic that identifies a 5,000-foot separation distance from the operation area for an airport serving piston-powered aircraft; and a 10,000-foot separation distance from the operation area for an airport serving turbine-powered aircraft. Also recommended is a five mile separation radius for approach, departure, and circling aircraft. Within these separation distances, shown on Figure 3-3, hazardous wildlife attractants should be avoided, eliminated, or mitigated.

Figure 3-3: Wildlife Hazard Attractants – Separation Criteria



PERIMETER A: For airports serving piston-powered aircraft, hazardous wildlife attractants must be 5,000 feet from the nearest air operations area.

PERIMETER B: For airports serving turbine-powered aircraft, hazardous wildlife attractants must be 10,000 feet from the nearest air operations area.

PERIMETER C: 5-mile range to protect approach, departure and circling airspace.

Source: FAA AC 150/5200-33B (2007)

Airport operators and local land use planners and decision makers may find it helpful to review land uses, development plans, and conservation plans within the separation distances reflected in Figure 3-3. The following sections provide brief overviews of typical wildlife hazard attractants that can occur on and near airports. Airport operators should assess potential wildlife hazards on a case-by-case basis relative to specific circumstances and the environment that surrounds individual airports.

1. Sanitary Landfills

Sanitary landfills can create wildlife hazard attractants. There are state and federal regulations and guidance that apply to locating and/or expanding these types of facilities near airports.

- Florida Statute (F.S.) Title XXV Chapter 333.03 Power to adopt airport zoning regulations. (2)(a) and (b) – discuss sanitary landfills as potential attractants for hazardous bird movements and gives airports the opportunity to report on whether a new landfill will incorporate bird management techniques or other practices to minimize bird hazards to airborne aircraft. Interim land use compatibility should consider if a sanitary landfill is located within 10,000 feet from a runway serving jet aircraft and 5,000 feet from a runway serving piston aircraft.

- 40 Code of Federal Regulation (CFR) Part 258 subpart 10 – provides criteria for the location of existing, new, and laterally expanding municipal solid waste landfills (MSWLF) within 10,000 feet of a public-use runway end that serves jet aircraft and 5,000 feet of a public-use runway end that serves piston aircraft. MSWLF facilities within these separation distances must show that they do not create a wildlife attractant that creates a hazard to aircraft. This section also states that proponents of new MSWLF facilities or proposed lateral expansion of an existing facility, within a 5 mile radius of a public-use airport must notify the airport, and the FAA.

- FAA Advisory Circular 150/5200-34-A, Construction or Establishment of Landfills near Public Airports – provides more information on separation criteria between airports/runways and landfills. These recommendations are geared at reducing potential wildlife conflicts with aircraft operations.

2. Sanitary Sewer Systems

Open water sanitary sewer systems may create a wildlife hazard attractants due to the aquatic environment that is created with such facilities. New open sanitary sewer systems should be strongly discouraged within the separation distances described in Figure 3-3. If new facilities are proposed within the separation distances, the airport operator should be notified prior to approval. If an existing facility is expanded or a new facility is planned within the separation areas, the airport operator should work with the sanitary system operator to determine if the proposed development creates a wildlife hazard attractant. A strategy to implement best management practices to decrease the potential risk to aircraft operations should be developed.

3. Stormwater Management Facilities

A variety of stormwater management facilities are utilized to retain and treat stormwater run-off. Above ground stormwater facilities may consist of open water features, canal or water conveyance structures, marsh areas, dry detention, and littoral zone areas. Due to the aquatic and vegetative

environments associated with these features, airport operators should avoid their placement within the airport operations area as a minimum measure to decrease potential wildlife hazard attractants.

It may not be practical to avoid the use of stormwater facilities within the separation criteria described in Figure 3-3. If an airport operator or other land owner within the separation criteria proposes to develop new stormwater management facilities or they have existing stormwater facilities in these areas, best management practices should be put in place to decrease the potential for wildlife hazard attractants. Airport operators are encouraged to evaluate existing and proposed new stormwater facilities to determine if best management practices can be put in place to decrease the potential wildlife attractiveness. These measures include steep-slopes; rip-rapped lined storm water detention areas (littoral zone planting is strongly discouraged); and vegetation management to control emergent plants in canals, conveyance systems, dry detention areas, and side slopes of detention areas. Airports should consult with a qualified airport wildlife biologist to develop strategies to address these issues at individual airports.

Local land use planners, decision makers, and agencies involved in regulating stormwater management in the State of Florida should be active participants in developing solutions to meet water quantity and quality regulations in conjunction with preventing the development of wildlife hazard attractants on and near airports.

4. Wetlands

Wetland areas are typically considered wildlife hazard attractants. Airport operators should assess these areas to determine wildlife utilization and the potential risk posed to aircraft operations at their airport. Wetland areas may be regulated by federal, state, and local agencies. If wetlands occur on airport property and are posing a risk to the safe operation of aircraft, the airport should take steps to immediately address the situation and contact the appropriate regulatory agencies to develop strategies and best management practices to reduce the risk.

Wetland conservation, preservation, or mitigation should not occur on airport property and is strongly discouraged for any property within the 5,000 and 10,000 foot separation criteria shown in Figure 3-3. Local land use planners, decision makers, and agencies involved in regulating wetlands in the State of Florida should be active participants in developing solutions to meet wetland regulation requirements in conjunction with preventing the development of wildlife hazard attractants on and near airports. Consideration should be given to developing off-site wetland mitigation strategies, where applicable, and utilizing wetland mitigation banks that are located outside of the separation distances shown in Figure 3-3.

5. Agricultural Areas

Many types of agricultural areas are considered wildlife hazard attractants due to the presence of livestock and an available food source for wildlife. Agricultural activities should be strongly discouraged on airport property. If an agricultural area off-airport property is determined to create a wildlife hazard attractant, airport operators, land owners, and local land use planners should work collaboratively to develop a strategy to decrease any potential risk to aircraft safety.

6. Parks, Natural Resources, and Natural Areas

Parks, natural resources, and natural areas have the potential to create wildlife hazard attractants on or near airports. Areas that are pre-existing within the separation criteria distances in Figure 3-3 should be assessed on a case-by-case basis to determine if they pose a risk to aviation safety. These areas may support wildlife corridors; roost sites; rookeries; or migratory flyway stop over sites that may cross airspace for approaching, departing, circling, or training aircraft. These activities may occur well above ground level and out of reach for airport operators to deter the activity. Airport operators should work with local land use planners and managers/land owners of these areas if it is determined that wildlife are moving in size and numbers to and from these areas to create a risk to aviation safety.

Local land use planners, decision makers, and regulatory agencies should discourage the location of new protected lands or land for conservation that has the potential to create wildlife hazard attractants within the separation distances described in Figure 3-3. The airport operator should be notified prior to the approval of any conservation or protected natural areas being proposed with a five mile radius of the airport operation area.

7. Landscaping

Certain types of landscaping materials and designs may create wildlife hazard attractants on and near airports. Local land use planners and local development review staff should work with airport operators to develop a local landscaping list that is less attractive to wildlife. This landscape list should be used to provide guidance for new developments proposed within the separation distances described in Figure 3-3.

Safety related guidance on restricting wildlife and birds in the airport environs and on the location of landfills is contained in the following publications:

- FAA Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports
- FAA Advisory Circular 150/5200-34-A, Construction or Establishment of Landfills near Public Airports
- Wildlife Hazard Management at Airports: A Manual for Airport Personnel, 2nd Edition, July 2005, prepared by the FAA and USDA.

- FAA provides a web-site with information on management, regulations, and guidance related to wildlife hazards at airports: http://wildlife-mitigation.tc.faa.gov/public_html/index.html

B. Areas around Airports with the Highest Accident Potential Risk

As discussed later in this section, the military has specific designations for areas around military airfields that are of the greatest risk for an aircraft accident. FAA's planning for civilian airports does not designate or identify similar accident potential zones.

Information on aircraft accidents for both commercial and general aviation aircraft is maintained by the National Transportation Safety Board (NTSB). Statistics maintained by the NTSB indicate that roughly 60 to 65 percent of all aircraft accidents take place during landing or takeoff. As a result, approach and departure paths around airports should be considered in land use planning. More information on areas around civilian airports that have the highest accident potential is presented in Appendix B to this guidebook.

While Chapter 333, F.S. provides guidance for keeping approach and departure areas to runways clear from height obstructions, Chapter 333, F.S. does not provide specific guidance on compatible land use within approach and departure paths from runways. These areas are the ones where the potential for an aircraft accident are statistically the greatest.

The guidance in Chapter 333, F.S. on the restriction of residential uses and educational facilities coincides with the runway approach and departure paths. The higher accident potential in the areas off the end of a runway makes controlling land use in these areas critical from the standpoint of safety.

The area for restricting educational facilities (Figure 1-10) is a rectangle whose width is one half the width of the runway and whose length is five miles (5 miles). The area for restricting residential development (Figure 1-11) is an oval whose dimensions are equal to one half the length of the longest runway. By restricting educational and residential uses in these areas, Chapter 333, F.S. helps to provide some protection to areas around civilian airports that are at the greatest risk for an accident.

C. Areas FAA Identifies to Increase Safety

FAA provides guidance on areas that should be considered to avoid height obstructions and on areas that should not have noise sensitive uses. Compatible land use in both of these areas has implicit, underlying safety objectives. FAA design standards identify additional areas around airports that should be protected from certain uses or development. This protection helps to provide an increased margin of safety.

While Part 77 helps to improve aircraft and airspace safety by restricting the height of objects in various imaginary surfaces that rise above the airport's elevation, FAA safety zones help to protect areas on the ground around airports. FAA recommends that all zones it identifies for safety be free of objects, with the exception of those objects that are related to the airport and whose location is fixed by function.

The runway protection zone (RPZ) is the most critical FAA safety zone. Chapter 333, F.S. specifically spells out the need to restrict incompatible use and development in the runway "clear zone." Advisory Circular 150/5300-13 dated 9/29/89 Airport Design, introduced the Runway Protection Zone criteria. This replaced the prior AC 150/5300-4B and redefined the area as a RPZ in lieu of "clear zone." The RPZ function is to enhance the protection of people and property on the ground. This AC update also introduced the recommendation for the RPZ to be accessible to rescue and fire fighting vehicles.

As noted in the discussion of zones where aircraft accidents take place, most accidents occur during landing or take-off, near the runway end. This is the area contained within the RPZ. Control of the RPZ is critical when it comes to improving compatible land use, restricting incompatible development, and improving safety. The RPZ is an FAA safety area that protects people and property on the ground.

The size of the RPZ varies by runway end. The size of the RPZ can be different even for the same runway. The dimensions for the RPZ are based on the approach speed of the most demanding or "critical" aircraft using the runway and on approach visibility minimums. Information on determining the critical aircraft and on establishing RPZ dimensions is presented in Appendix B to this guidebook.

As per Chapter 333, F.S., the clear zone or runway protection zone should be cleared, graded, and free of surface variations. The RPZ should be controlled, and ideally owned outright, by the airport according to FAA guidelines. Local airport zoning adopted or amended to comply with Chapter 333, F.S. should prohibit any type of development in the RPZ. Each airport is the best source of information pertaining to the size of current and future RPZs for all runway ends.

VI. Cumulative Height, Noise, and Safety Areas around Civilian Airports for Compatible Land Use Planning and Zoning

Chapter 333 F.S., specifically calls for local governments within the hazard area for public-use airports to adopt airport zoning. This zoning should specifically consider:

- Restricting development that may penetrate imaginary surfaces defined in Part 77
- Restricting residential development or the development of educational facilities either within noise contours developed as part of an approved Part 150 noise study and/or within areas specifically established by Chapter 333, F.S.
- Restricting sanitary landfills around airports
- Restricting development within clear zones (runway protection zones)

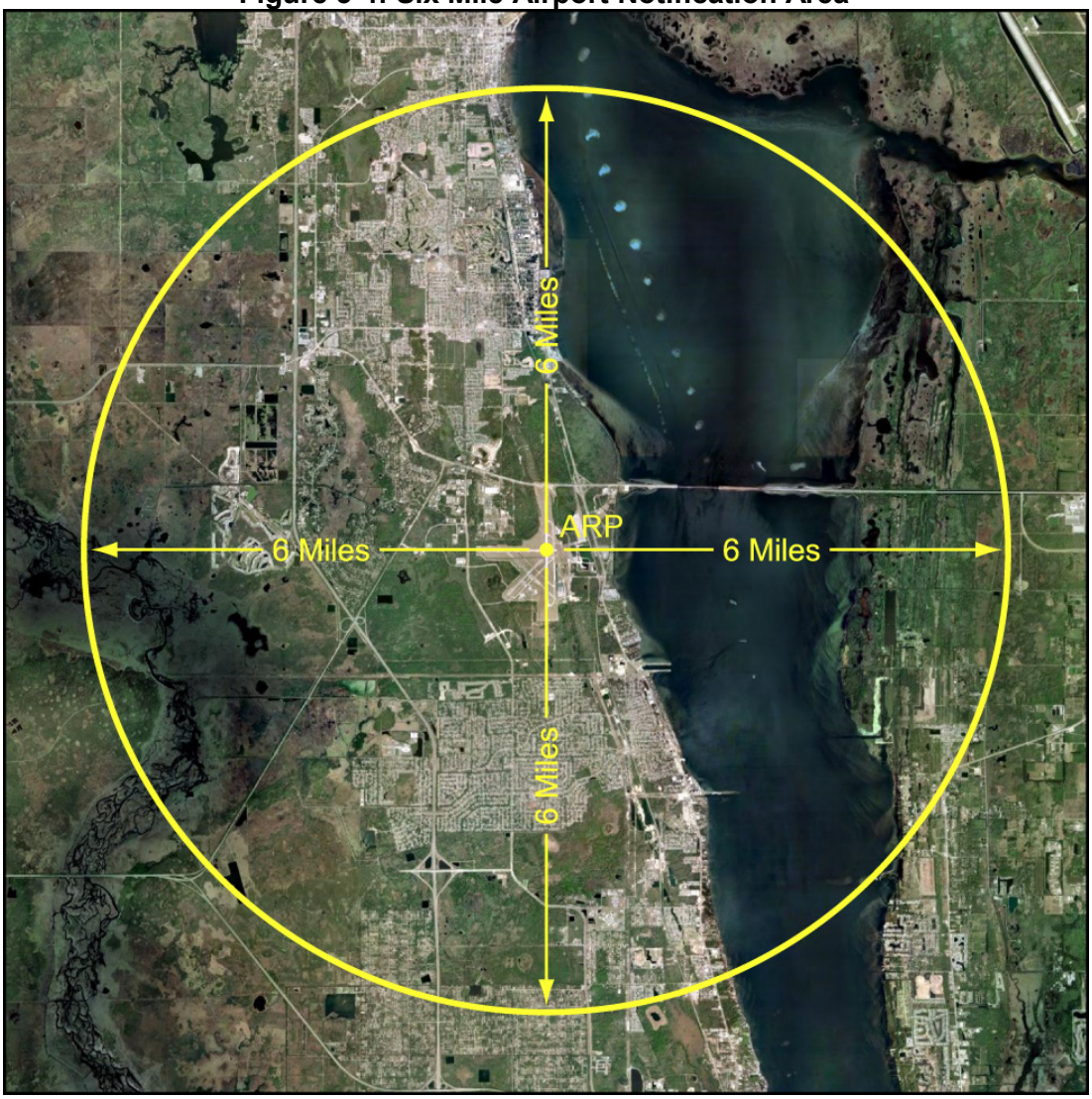
Using Space Coast Regional Airport as an example airport, critical areas to be protected in accordance with Chapter 333, F.S. are shown in **Figures 3-4** through **3-9**.

A. Height Restrictions

As per Chapter 333, F.S., development or alterations to existing or new structures which could result in height obstructions are restricted in the Part 77 surfaces. To simplify determining whether or not development is within the area included in the Part 77 imaginary surfaces, airport notification areas have been established by FDOT. These notification areas were defined in Section One of the guidebook.

Since Space Coast Regional Airport has a runway length exceeding 3,200 feet, this airport has a 6 statute mile notification area centered on the airport reference point (ARP). Figure 3-4 reflects the airport notification area for Space Coast Regional Airport; Appendix A to the guidebook provides information on the appropriate notification area for public-use airports and military airfields in Florida. Appendix C provides information on how to access maps depicting the airport notification area for all public-use airports and military airfields in Florida.

Figure 3-4: Six Mile Airport Notification Area

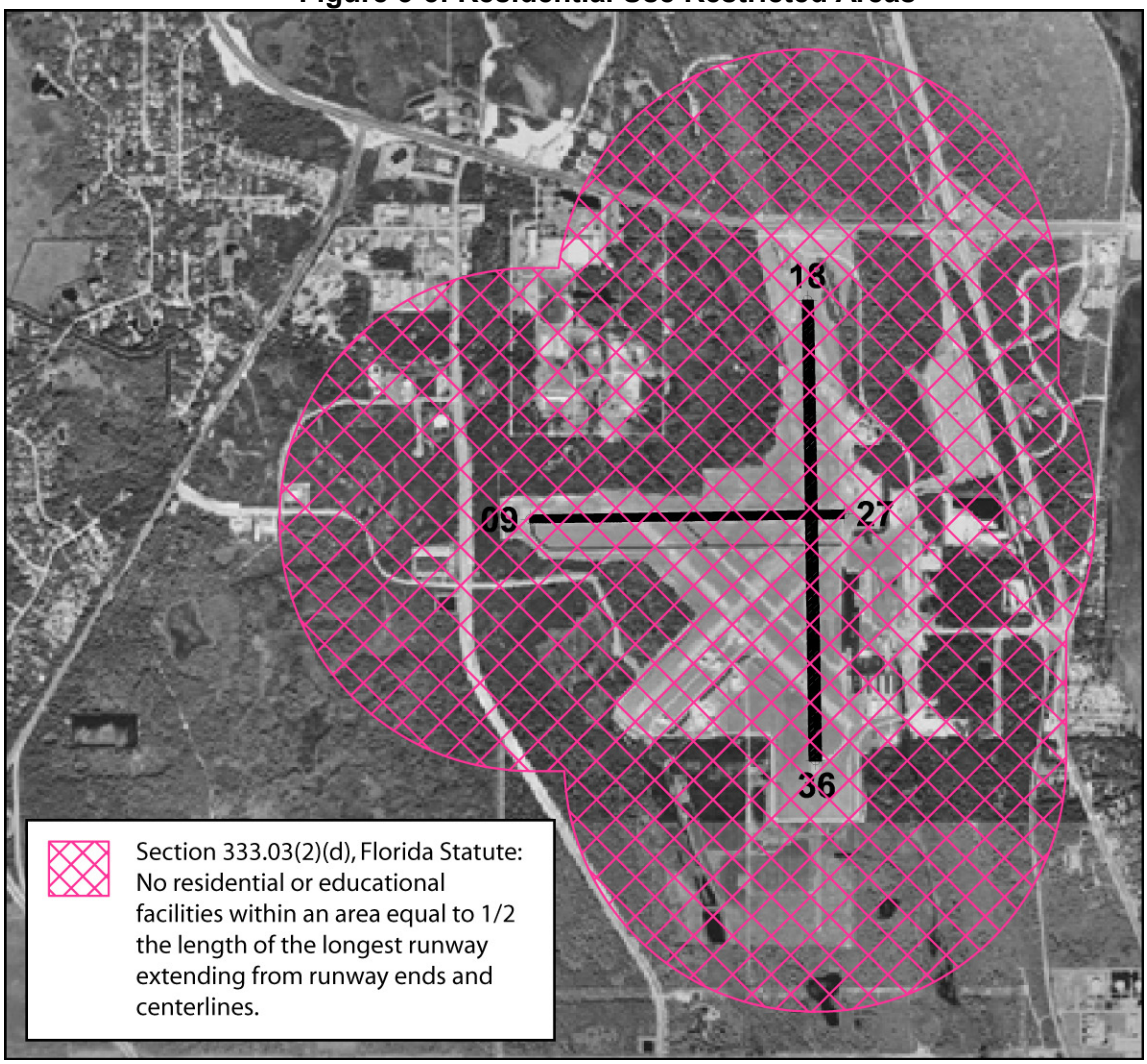


B. Residential Use Restrictions

Chapter 333, F.S., calls for residential development to be restricted in noise sensitive areas around airports. Areas in which residential development should be restricted are defined either by noise contours from a Part 150 Noise Study and/or by areas specifically outlined in Chapter 333, F.S.

Appendix A provides a list of airports with a Part 150 Noise Study. Since Space Coast Regional Airport does not have a Part 150 study, residential restriction areas are determined as per guidelines set in Chapter 333. **Figure 3-5,** reflects the areas around the airport that should be restricted from residential use. As per Chapter 333, F.S., the development of educational facilities should be restricted within these same areas.

Figure 3-5: Residential Use Restricted Areas

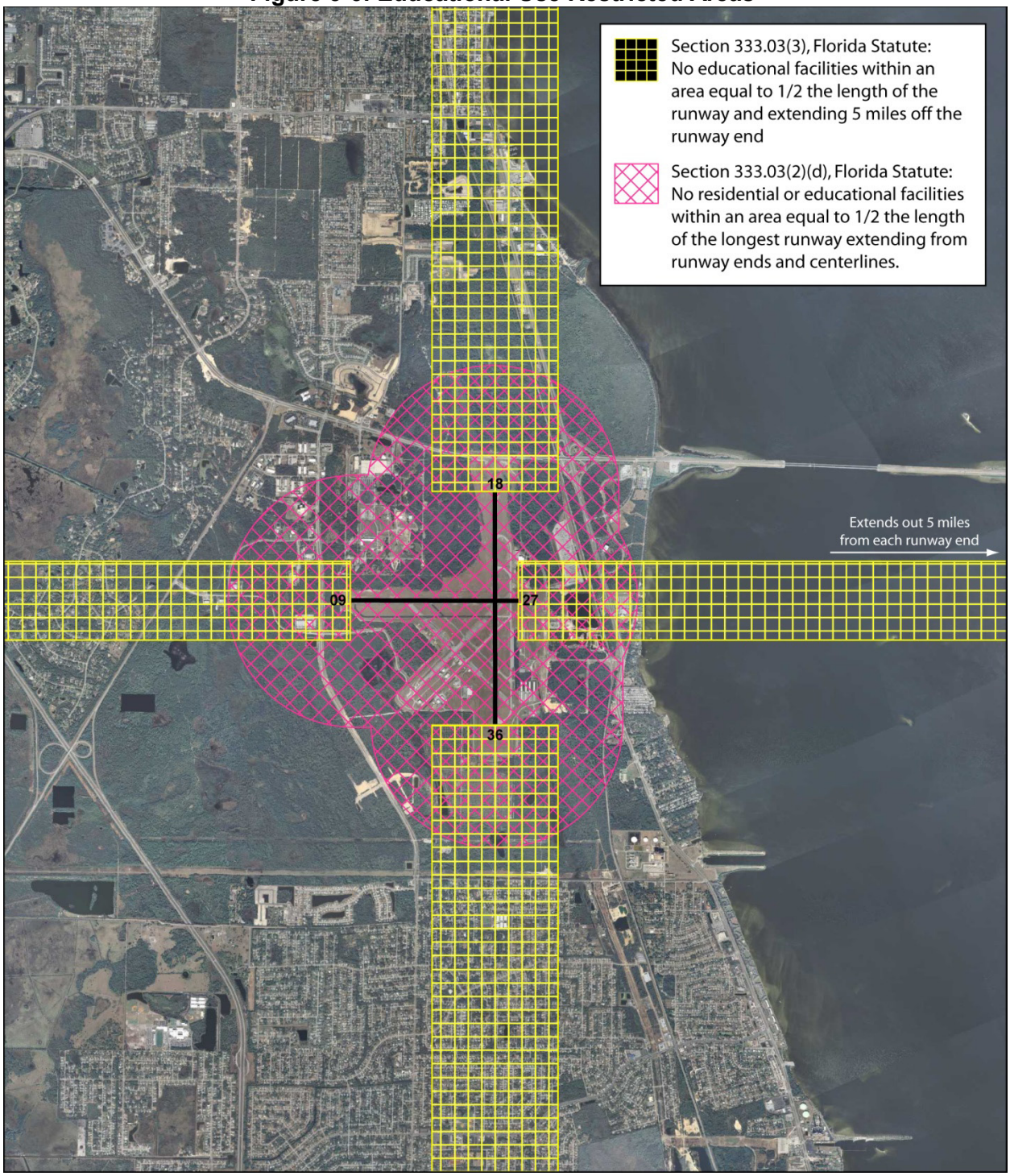


C. Educational Facility Restrictions

Chapter 333, F.S., calls for the development of educational facilities to be restricted around airports. Areas in which educational facilities should be restricted are defined either by noise contours from a Part 150 Noise Study and/or by areas specifically outlined in Chapter 333, F.S., if an airport does not have a Part 150 study.

Since Space Coast Regional Airport does not have a Part 150 study, areas to restrict educational facilities are determined as per guidelines set in Chapter 333, F.S. **Figure 3-6,** reflects that areas around the airport that should be restricted from the development of educational facilities. The development of educational facilities should also be restricted within the residential restriction areas previously shown in Figure 3-5.

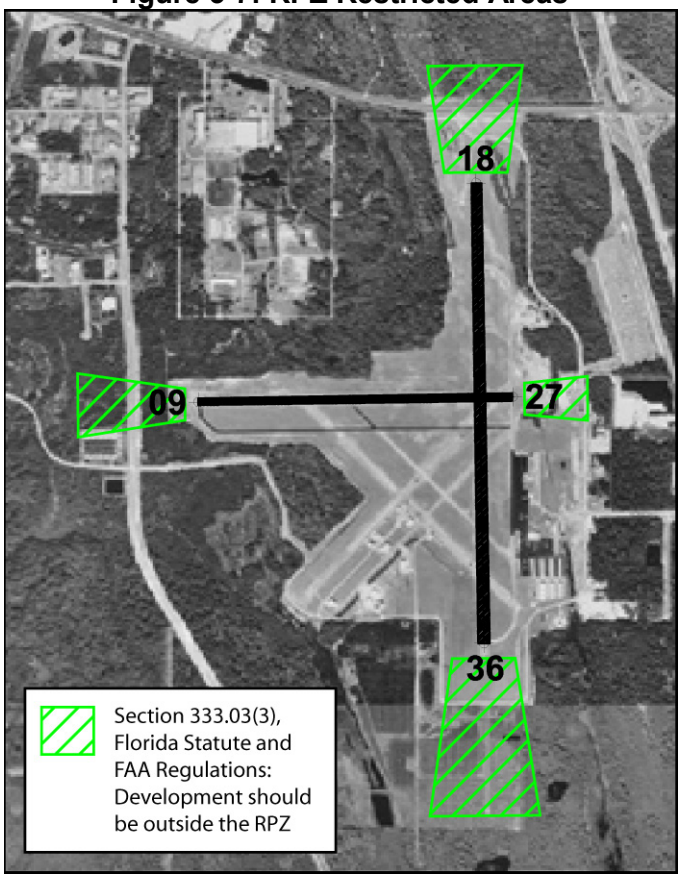
Figure 3-6: Educational Use Restricted Areas



D. Runway Protection Zone (RPZ) Restrictions

As per Chapter 333, F.S., airport zoning should restrict development from the area defined by the clear zone, now known as the runway protection zone (RPZ). The size of the RPZ for each runway end varies based on factors previously discussed in this section of the guidebook. The airport is the best source for obtaining information on the size of current and future RPZs for an airport. **Figure 3-7** depicts RPZs for Space Coast Regional Airport.

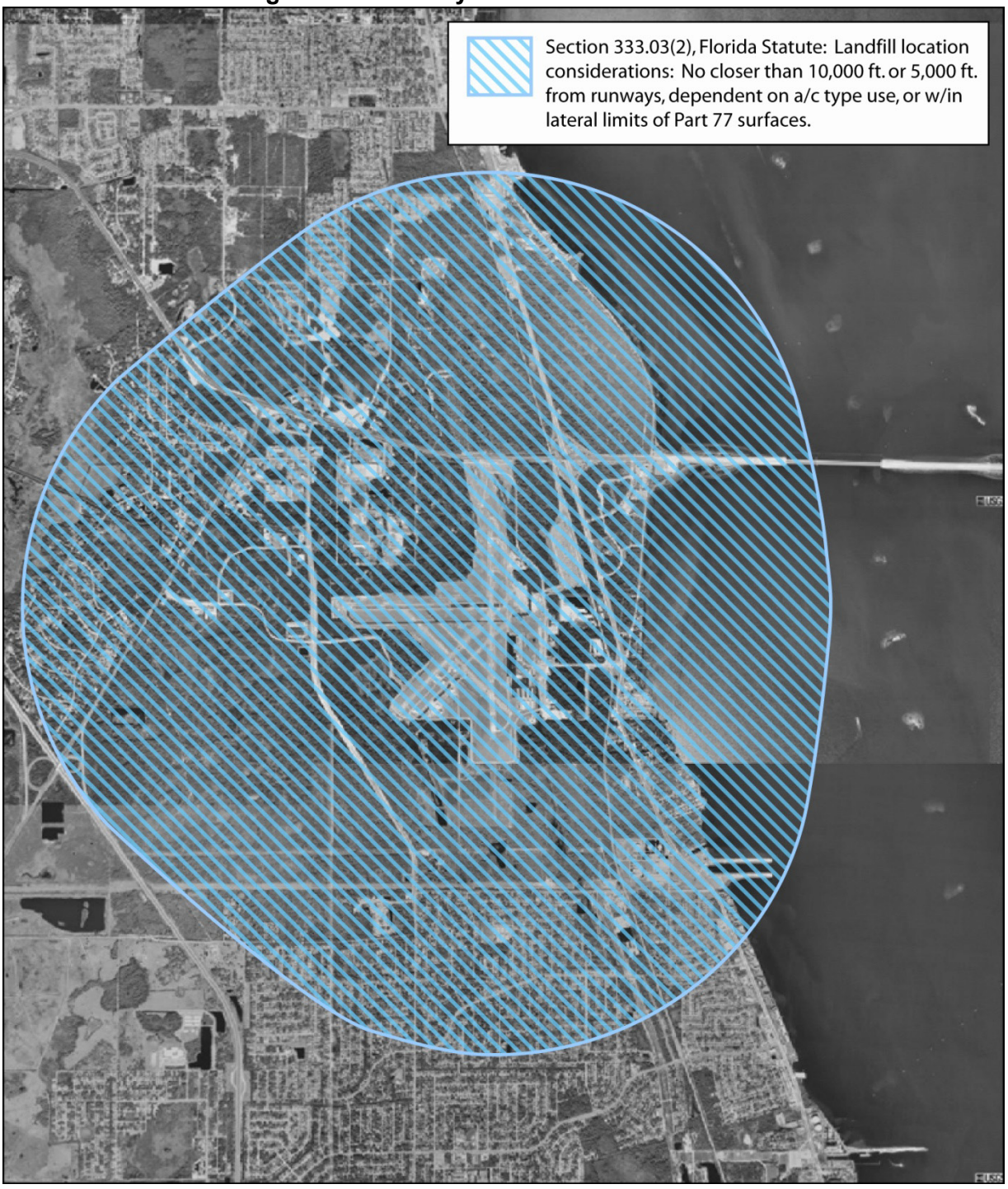
Figure 3-7: RPZ Restricted Areas



E. Areas Restricted from Landfill Development

To improve the safety of airport operations, landfills should not be located near airports. Specific areas for restricting this use were previously discussed in this section and are contained in Chapter 333, F.S., guidance on airport zoning. **Figure 3-8** depicts the areas around Space Coast Regional Airport that should not have sanitary landfills based on the type of aircraft using the runways at this particular airport. The sanitary landfill restriction area for this example airport is 10,000 feet.

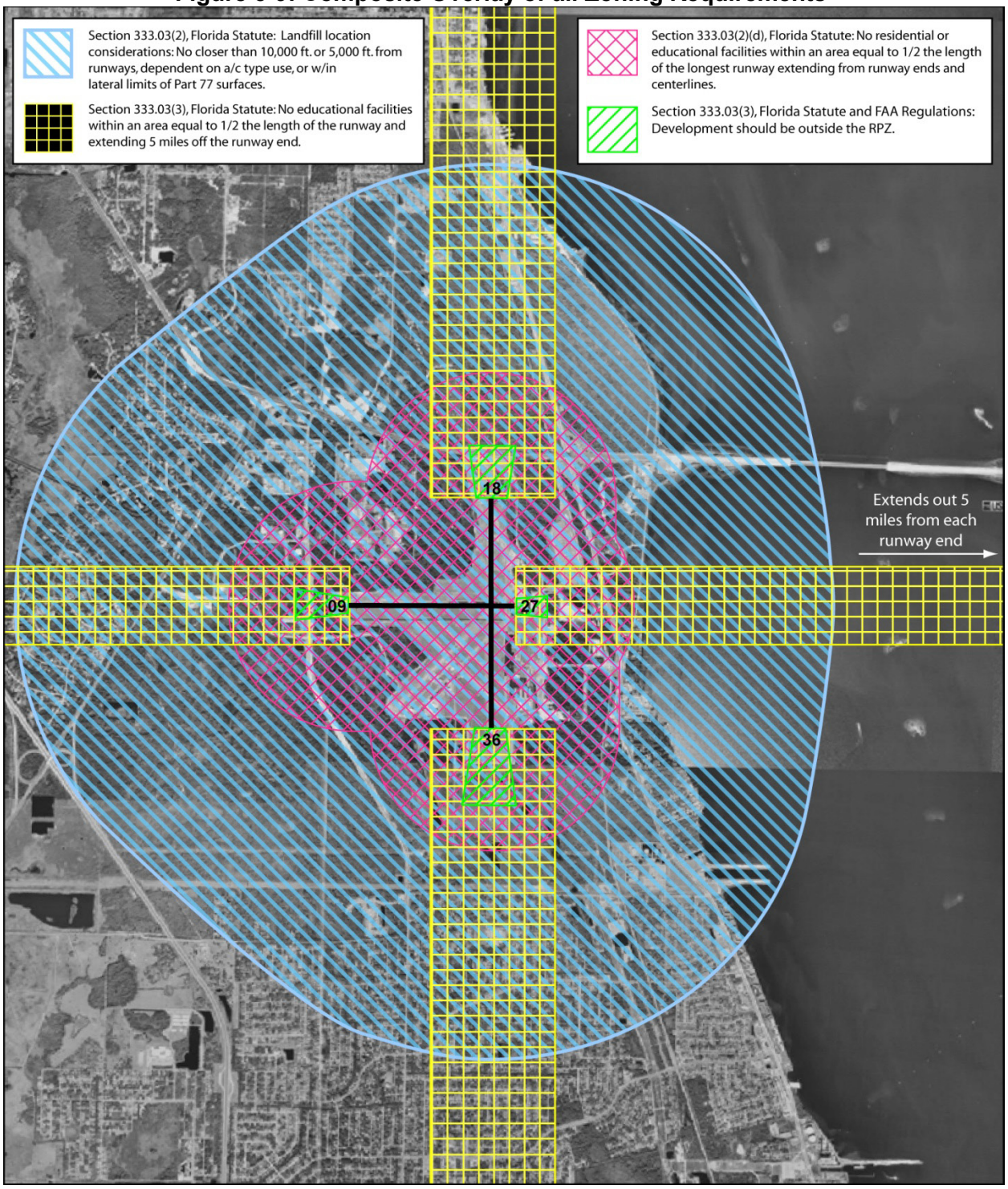
Figure 3.8: Sanitary Landfill Restricted Areas



F. Cumulative Areas for Restricted Development

Figure 3-9 provides a composite overlay of the areas around Space Coast Regional Airport that should be considered in zoning for this airport to comply with the existing requirements of Chapter 333, F.S.

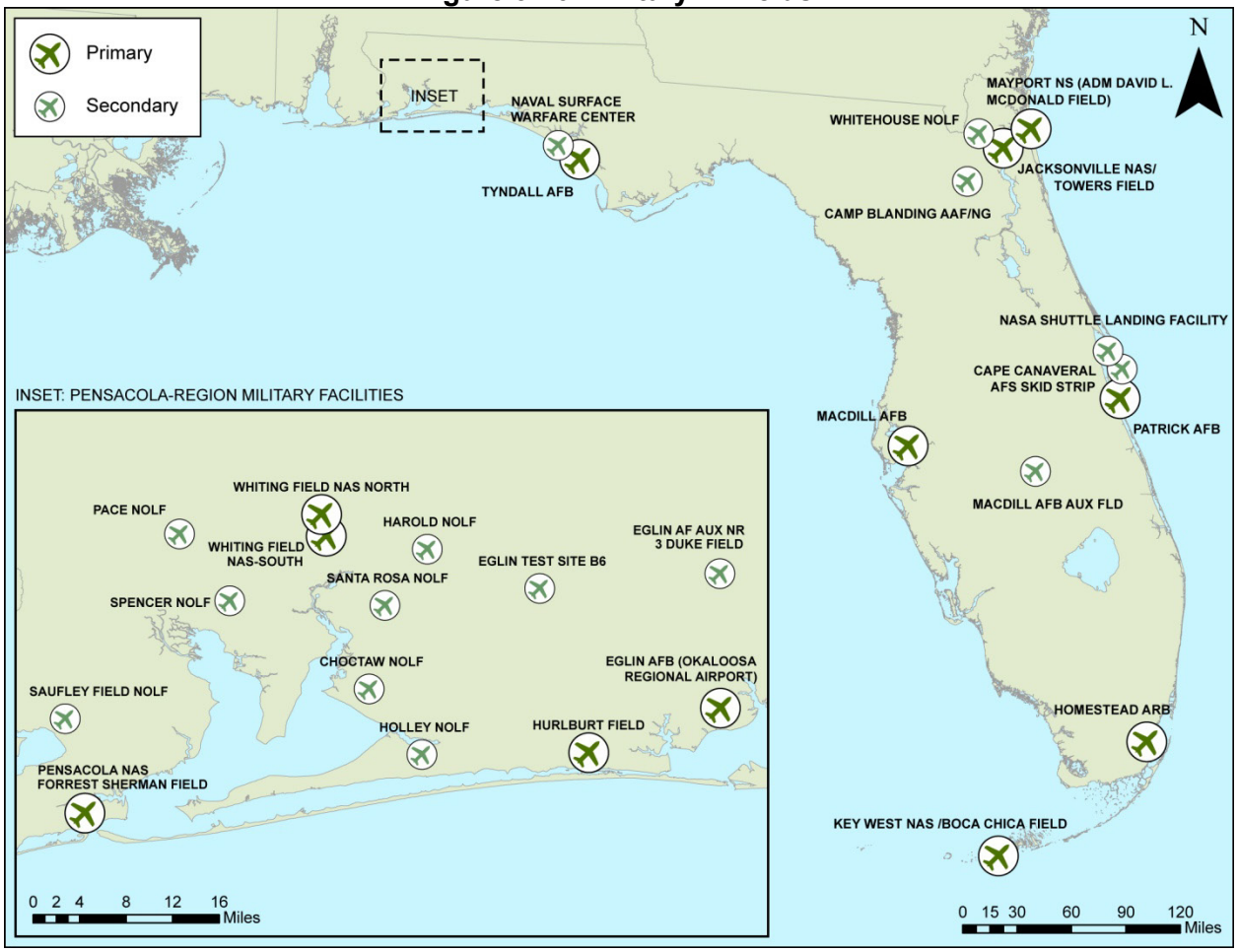
Figure 3-9: Composite Overlay of all Zoning Requirements



VII. Areas around Military Airfields to Consider in the Land Use Planning Process

As noted earlier in this guidebook, the airport height zoning requirements contained in Chapter 333, F.S., apply to both civilian public-use airports and military airfields. **Figure 3-10** provides a map that shows military airfields in Florida; these are both Air Force and Navy facilities. While the FAA is the agency primarily responsible for providing guidance for civilian airport planning, operation, and development, the Department of Defense (DOD) is responsible for military airfield installations. Compatible land use planning for military airfields is covered by the Air Installation Compatible Use Zone (AICUZ) program.

Figure 3-10: Military Airfields



A. AICUZ

AICUZ is DOD's discretionary program to provide compatible land use around military airfields. There are two primary purposes for the AICUZ program; these are:

- To protect the operational integrity of military flying missions
- To promote public health and safety around military airfields through local adoption of land use controls

DOD Instruction 4165.57 establishes the AICUZ program. In some respects, AICUZ is similar to its civilian counterpart, the Part 150 program. Both programs use the DNL noise contours to identify areas where certain land uses are either compatible or incompatible with the level of aircraft noise exposure and to promote compatible land use planning in the airport/airfield environs.

Another important consideration for compatible land use planning around military airfields is the Accident Potential Zone (APZ). Studies on accidents involving military planes conducted between 1968 and 1972 and then again between 1984 ands 1998 show that 75 percent of all accidents occurred on or adjacent to the runway. This led the military to include the APZ in their compatible land use planning guidance.

The APZ extends 1,000 feet laterally to either side of the runway from the runway centerline. From the runway threshold, the APZ is actually divided into three separate subparts as follows:

- The Clear Zone starts at the runway threshold and ends out 3,000 feet; at all points, the APZ is 3,000 feet wide.

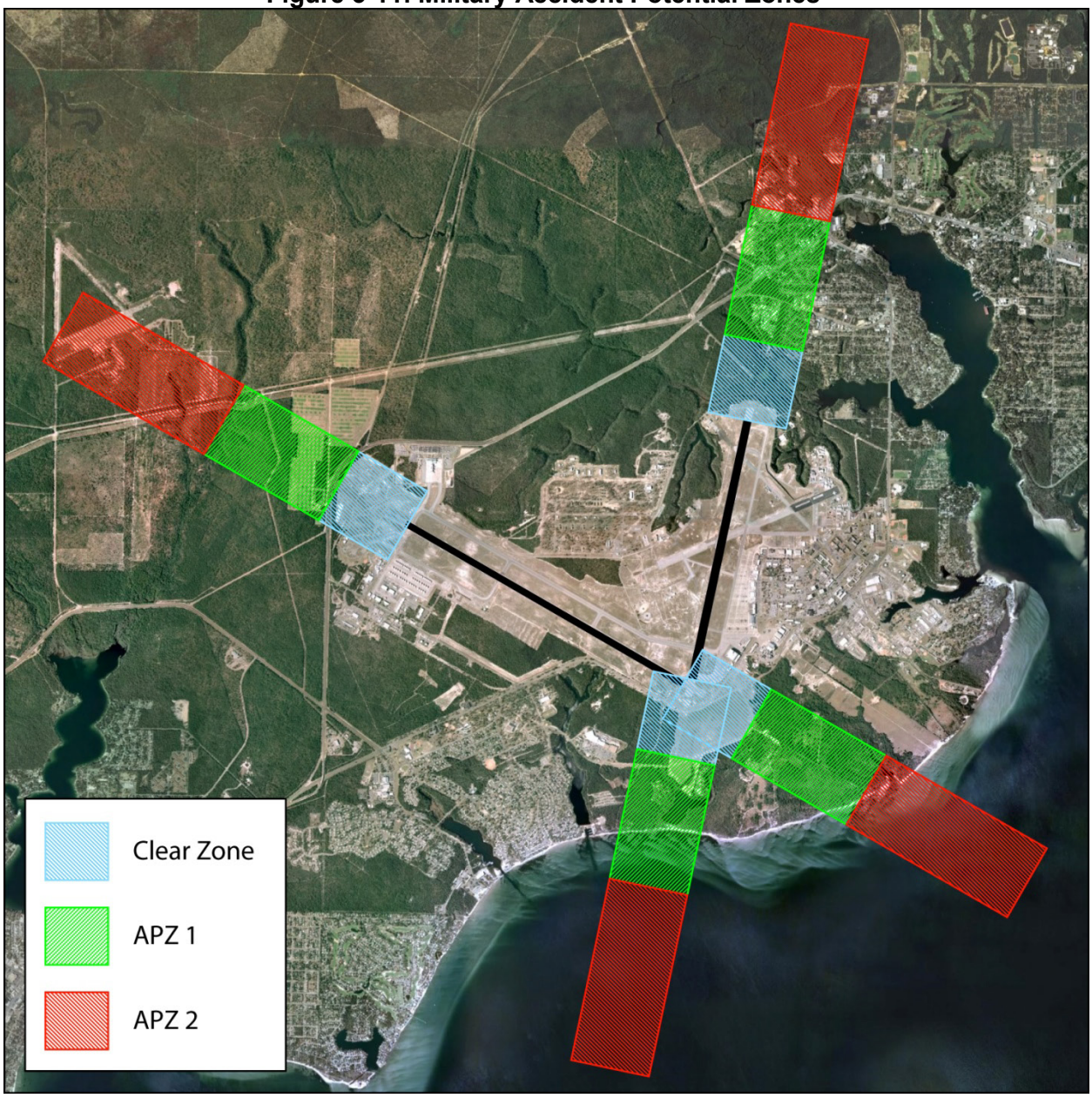
- The APZ I starts at the end of the Clear Zone and extends from that point out another 5,000 feet.

- The APZ II starts at the end of the APZ I and extends out another 7,000 feet.

In total, starting at the runway threshold, the APZ extends out for a total of 15,000 feet at a width of 3,000 feet. The AICUZ process provides specific guidance for land uses and land use densities that are appropriate or inappropriate in each area of the APZ. **Figure 3-11** provides a graphic representation for an APZ.

More information on the AICUZ program can be found in Appendix B of this guidebook.

Figure 3-11: Military Accident Potential Zones



B. Joint Land Use Study (JLUS) Program

The JLUS program is managed by the Office of Economic Adjustment (OEA) through the office of the Secretary of Defense. This DOD initiative provides grants to state and local governments to participate with the military in the development of compatible land use plans. The JLUS program considers areas for compatible land use planning that extend beyond areas around military airfields and areas impacted by noise and included in an APZ.

A major difference in the JLUS program is that while supported by DOD funding a local or regional agency or government takes the lead in this effort, not the military. The JLUS

program in more public in nature than the AICUZ program. Appendix B provides contacts for military land use planning information.

The next section of the guidebook provides more information on responsibilities for complying with Florida's laws and federal regulations on achieving compatible land use around airports and on methods and tools that are available to achieve this objective.

Section Four
Strategies to Prevent or Correct Land Use Incompatibilities

I. Introduction

As this guidebook has explained, compatible development around public-use airports and military airfields in Florida is essential for safety. Protecting airports from development and/or land use that is incompatible also has underlying economic benefits. On-airport and airfield businesses, construction projects, and visitors who arrive in Florida via the commercial or general aviation airports are responsible for an estimated $97 billion in annual economic benefit. Many businesses also seek locations near airports or airfields. A study completed by FDOT shows the productivity of aviation dependent businesses in Florida is increased by almost $95 billion each year. When development sites near airports are allocated to uses that are not compatible with airport/airfield activities, this incompatible development can result in lost opportunities to attract businesses seeking locations near Florida airports.

This final section of Florida's Land Use Compatibility Guidebook addresses two important topics. First, this section summarizes roles and responsibilities for compatible land use planning around public-use airports and military airfields in Florida. In addition, this section provides an overview of tactics that are available to help local governments, airports, and others achieve land use compatibility. By taking steps to promote compatible land use in the airport environs, Florida can protect its essential transportation and economic resources.

II. Roles and Responsibilities for Airport Compatible Land Use Planning

The responsibility for compatible land use planning rests with local governments. Promotion of compatible land use must be accomplished at the municipal level since local government has the sole authority to direct land use development.

Airports and military airfields have important roles in achieving land use compatibility objectives. While the Florida Department of Transportation (FDOT), Department of Community Affairs (DCA), the Federal Aviation Administration (FAA), and the Department of Defense (DOD) are important resource agencies, they have limited land use regulatory authority. Appendix C to this guidebook provides contact information for these resource agencies.

A. Responsibilities of Local Governments to Comply with Chapter 333, F.S.

Appendix A to this guidebook provides information on local governments that are within 10 nautical miles of a public-use airport and/or a military airfield. Chapter 333, F.S., requires local governments within an airport hazard area to adopt airport zoning. According to state law, each local government is also required to provide a copy of their airport zoning ordinance to FDOT. Appendix A shows those local governments reporting that they have an airport zoning ordinance.

It is important to note, that some of the existing airport zoning ordinances are not fully compliant with all aspects of Chapter 333, F.S., and many have not officially been submitted to FDOT. Any time a variance request is submitted to alter

existing airport zoning, this variance request, by law, needs to be submitted to FDOT for their review.

Local governments without an airport zoning ordinance must have an FDOT permit and proof of an FAA Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) before approving development for which an FAA Form 7460-1 has been filed. Local governments may also have a responsibility to require developers to light and mark any development deemed by the FAA or FDOT to require such marking, based on an aeronautical study.

As demonstrated in this guidebook, an airport's influence often extends beyond the physical airport property boundary, and this area can encompass more than one local government or political subdivision. Decisions by adjacent local governments have the potential to impact both airspace and land use and may affect airport access or safety. It is incumbent upon all local governments within the airport hazard area specified in Chapter 333, F.S., to work together to promote compatible land use in the airport environs.

Intergovernmental coordination is a fundamental principle of land use planning in Florida. According to Chapter 333.03, F.S., when an airport is owned or controlled by a political subdivision, if any of the airport hazard area is in another political subdivision, the political subdivision owning the airport has two options for involving other local governments in its efforts to control development and land use in the airport environment. These two options are as follows:

- In accordance with provisions in Chapter 163, F.S., by interlocal agreement, airport zoning regulations can be adopted, administered, and enforced for all local governments in the airport hazard area.

- The second option is to create a joint airport zoning board. An airport zoning board is created by ordinance or a duly adopted resolution. The airport board has the same power as a local government to adopt, administer, and enforce airport zoning within the airport hazard area. The composition for the airport zoning board is as follows: two representatives appointed by each participating local government and a chair elected by the majority of the members appointed to the board. The airport manager of the affected airport severs on the airport zoning board in a non-voting capacity.

B. Roles of the FAA in Compatible Land Use Planning for Airports

The FAA has the authority through an aeronautical study to determine which structures are hazards to air navigation. FAA, however, is not authorized to regulate the development/location of tall structures. FAA can study a structure proposed for development and issue a finding concerning the potential impact of the structure on airspace or an airport.

The FAA as part of its study may determine that a structure needs to be marked or lighted. There is no specific authorization in any statute, federal or state, that permits FAA to actually limit the height of structures or to stop their development. Local government, and in some instances FDOT, has the authority to limit the

height of objects around airports and to control other development and land use in the airport hazard area.

Through their planning and design standards, the FAA designates areas at the end of each runway, the runway protection zone (RPZ), that should be controlled by the airport sponsor and be free of development. The RPZ should also be free of other uses that could create glare, electronic interference, smoke, dust, or lighting that could be confused with that of an airport.

FAA provides noise related compatibility guidance and funding for noise mitigation measures that qualify through the Part 150 process. FAA issues a determination on Noise Exposure Maps (NEM) and approves Noise Compatibility Program (NCP) measures. Approved measures become eligible for federal funding. However, the FAA defers land use responsibilities to local government and encourages communities to look beyond the 65 DNL contour when it comes to compatible land use planning.

C. Responsibilities for FDOT in Compatible Land Use Planning for Airports

In Florida, if a local government has not adopted an airport zoning ordinance, then FDOT must be contacted to obtain a permit for the development of a tall structure in the airport hazard area. FDOT will not approve a permit unless the applicant submits documentation showing compliance with federal/FAA requirements for notification of proposed construction, and they must provide the results of a valid aeronautical evaluation. Permits are not issued by FDOT solely on the basis of an approved aeronautical study.

FDOT has the authority to appeal any variance granted to a local airport zoning ordinance and to apply for judicial relief. This is pursuant to Chapter 333.11, F.S. FDOT may institute civil action for injunctive relief in the appropriate circuit court to prevent violation of any provisions of Chapter 333, F.S.

FDOT is available to assist airports and local governments needing more information on federal obstruction standards contained in 14 CFR Part 77. FDOT can provide assistance as needed to help establish allowable heights for structures, trees, and other types of development on or near airports. FDOT can also provide each local government and airport with more information on specific areas that should have land use controls that follow specifications presented in Chapter 333, F.S., and they can assist local governments with the preparation of airport zoning ordinances, as needed.

D. Responsibilities for Airports in Compatible Land Use Planning

It is imperative for every airport sponsor to understand local zoning ordinances that impact their airport and which local governments are responsible for zoning around their facility. Airport sponsors/managers need to advocate for zoning that, at a minimum, is compliant with all facets of Chapter 333, F.S.

While the focus of the discussion on Part 77 surfaces in this guidebook has been on property that is beyond the control/ownership of the airport, it is equally

important for airports to insure that proposed development and or vegetation that is on airport property does not penetrate Part 77 surfaces.

Every airport should verify that the FAA has their most current runway endpoint data, including the information for planned new runways and/or runway extensions. The accuracy of an FAA aeronautical study depends on this information.

When an airport develops or updates its master plan, the airport needs to provide information to all local governments that are within its airport hazard area on proposed changes that could impact current zoning or comprehensive plans. Such changes are most likely to include new runways, longer runways, or upgraded approaches to one or more runway ends.

Representatives from public-use airports and military airfields may sit on joint airport zoning boards, and it is imperative for airport representatives to take an active role in the local comprehensive planning and zoning process.

Title 14 CFR Part 151, Federal Aid to Airports (Part 151), specifies that airports receiving federal grants have certain responsibilities related to compatible land use and development around their airport. Several sections of Part 151 address requirements related to land use near airports as a requirement for receiving federal funds.

Sections 151.9 and 151.11 require airport sponsors to own, acquire, or agree to acquire an interest in (such as an easement related to the height of objects) the RPZ as a condition for federal funding of runway or taxiway related projects. This requirement can also be expanded to include major projects such as terminal development or airport-wide drainage improvements.

Section 151.26 of CFR 151 requires airport sponsors to provide a statement with their application for a federal grant covering the actions they have taken to restrict the use of land adjacent to or in the immediate vicinity of their airport to activities and purposes that are compatible with normal airport operations and the landing and take-off of aircraft.

This statement should include airport-related zoning that has been enacted to protect the airport. Documentation of other efforts of the airport sponsor to secure compatible land use in the airport environs, in lieu of zoning, is also requested. Failure to comply with federal grant assurances can result in a loss of future federal funding and can even lead to possible re-payment of historic federal grants.

Airports that receive state grants in accordance with the Florida Capital Improvement Program Joint Participation Agreement also have certain responsibilities related to compatible land use planning. Any entity receiving a state grant for airport development is obligated to comply with and assure the following:

- Appropriate airport zoning ordinances are in place and these zoning ordinances are consistent with Section 333.03, F.S., “Airport Zoning”.

- If zoning is not in place, appropriate action necessary to ensure local government adoption of an airport zoning ordinance or interlocal agreement with another local government body having an airport zoning ordinance, consistent with the provisions of Section 333.03, F.S. will be taken.

- Disapprove or oppose any attempted alteration or creation of objects, natural or man-made, dangerous to navigable airspace or any objects that would adversely affect the current or future levels of airport operations.

- Disapprove or oppose any attempted change in local land use development regulations that would adversely affect the current or future levels of airport operations by creation or expansion of airport incompatible land use areas.

As it relates to compatible land use, it is the airport's responsibility to identify its activities, functions, and development plans to the public, the local controlling governmental body, and other local governments that fall within the airport hazard area. This responsibility is often accomplished through the development or update of an airport master plan.

Airport master plans are prepared in accordance with FAA AC 150/5070-6B, Airport Master Plans. FDOT also has a guidebook on Airport Master Planning. Master plans document future aeronautical demand in order to establish appropriate land use controls. The Off-Airport Land Use Drawing is usually part of the airport layout plan (ALP). The ALP is the actual blueprint for future airport development.

According to Chapter 333, F.S., an airport master plan shall be prepared for each publicly-owned and operated airport that is licensed by FDOT. Whenever an airport completes an environmental assessment, a site selection study, a master plan, or an amendment to a master plan, a copy of this document is to be forwarded by certified mail to all affected local governments. For this requirement of Chapter 333, F.S., this applies to the entity having jurisdiction over the airport plus any other political subdivision that is within two miles of the boundary of the airport.

There is currently no requirement for intergovernmental review or coordination of the airport master plan with surrounding communities. Currently, there is no requirement for the airport sponsor to ensure the master plan is incorporated into appropriate comprehensive plans or local zoning considerations. To fulfill federal and state grant assurances, however, the responsibility for ensuring that the airport and its need for surrounding compatible land use and development are fully communicated to surrounding local governments rests with the airport and its sponsor/owner.

III. Tactics Available to Achieve Land Use Compatibility

Compatible land use around public-use airport and military airfields can essentially be accomplished in one of two ways. Either incompatible uses can be prevented or they

can be corrected, if they already exist. This section provides an overview of preventative and corrective compatible land use planning measures. This section is intended to be very general in nature, providing only basic information. Entities seeking to implement measures discussed in this section will require additional information and may benefit from professional technical support.

A. Strategies to prevent Incompatible Land Use around Airports

It is best to take steps to prevent incompatible land use around airports. Planning, zoning, and acquisition are the three strategies used most frequently to prevent incompatible land use around airports.

1. Planning

In accordance with Chapter 163, F.S., all local governments in Florida are required to complete and update periodically a comprehensive plan. How an airport is incorporated into the comprehensive plan is determined by the size of the community preparing the plan.

As discussed in Section Two of this guidebook, in accordance with the provisions of Chapter 163, F.S., all local governments are obligated to include airports in the comprehensive planning process and to provide for compatible land use in accordance with the Chapter 333, F.S., either through airport zoning, land development regulations, or interlocal agreements.

Although not required by state statute, the comprehensive plan development and amendment process should be coordinated with each airport's master plan. In particular, information on Part 77 surfaces, FAA safety zones, and planned airport improvements should be considered. Comprehensive plans generally provide the basis for more specific zoning ordinances. As a result, the comprehensive plan and planning process are critical to preventing incompatible land use and development around airports.

2. Zoning

Zoning is the most common form of land use control. By state statute, airport zoning for all affected local governments was to be in place by October, 1977. Ideally, zoning ordinances can promote land use compatibility while at the same time preserving private ownership, maintaining tax revenue, and continuing economic productivity.

Zoning is subject to change. When reviewing a request for a zoning variance, it is important for local governments to ensure that the integrity of land use and development controls contained in Chapter 333, F.S., are not compromised. Any variance request to airport zoning must by state law be submitted to FDOT for their review.

It is important for both airport and off-airport property to be zoned appropriately. Appropriate zoning restricts incompatible development,

while enabling other development to proceed. Airport zoning is often adopted as an overlay zone and incorporated into a broader municipal zoning ordinance.

The FAA has information on airport zoning ordinances in FAA AC 150/5190.4A, A Model Zoning Ordinance to Limit Height of Objects around Airports. This advisory circular has example language that can be used by local governments to establish ordinances. Information on example airport zoning ordinances adopted by local governments in Florida is contained in Appendix D to this guidebook.

Drilling down into zoning ordinances, specific building codes for areas around airports are another way to prevent incompatible land use. Requirements for sound insulation are one way to improve land use compatibility. By establishing airport districts or zones, local government can stipulate that land use in a particular area cannot discharge fumes, dust, or smoke that could obstruct visibility in the airport environs.

3. Acquisition

Acquisition is the most effective method of preventative land use control, but it is also the most costly. Acquisition can also be considered a tool for corrective action if land use incompatibilities already exist. Acquisition strategies can be broken down into three categories as follows:

- **Land purchase** – outright or fee simple acquisition is the most positive form of land use control. In developed areas, such as those that surround most of Florida's public-use and military airfields, the cost of outright acquisition as a preventative or corrective land use compatibility tool is often cost prohibitive.

  As discussed in Section Three of this guidebook, the FAA recommends that all airports own/control land within their RPZs. If an RPZ extends off airport property, and the airport does not currently own this property, federal funding from the FAA is available to assist with land acquisition in this critical safety area. Securing FAA funding to purchase land as a preventative measure to control incompatible land use or development outside of specified FAA safety zones is not, however, typically available.

  The local government controlling the airport can consider land acquisition with the intent of re-selling the land for a compatible land use. Or they may acquire land and devote it to a compatible public use. Land banking with restrictive covenants is another acquisition option that may be considered to control land use incompatibility in the airport environs. This type of strategy generally is most realistic when land around an airport is open and undeveloped.

- **Easements** – an easement is another way to prevent incompatible development through property control. An easement, by definition, is a right of another to part of the total benefit of ownership of real property. An easement permits the owner of the easement use of another's property and property rights for the purpose stated in the easement agreement. Easements can be used either in combination with zoning or in areas where zoning has not been adopted. Easements are permanent unless they are sold or released. Easement can be purchased, negotiated, or obtained through condemnation.

  There are different types of avigation and hazard easements. In general, easements facilitate the following: provide for the right of flight over the land in question; enable the owner of the easement to remove obstructions (manmade or natural); restrict future obstructions; or prohibit certain types of development. One advantage of an easement over zoning is that zoning can be changed; easements are more permanent in nature. Easements are typically far less expensive than outright property acquisition.

  If easements are used as a corrective rather than a preventative means to address incompatible land use or development around an airport, it is worth noting that the purchase of any easement does not in and of itself change the incompatible land use. As a corrective measure, the cost of the easement should ideally be used to help mitigate or resolve land use incompatibility for the property in question.

- **Transfer of development rights** – a transfer of development rights involves separate ownership and the use of various rights associated with a particular piece of property. For instance, if a developer owned land in an approach path to an airport that he wanted to use for residential development, the public owner of the airport might own property in a different location where they could transfer the owner's right to develop. Thus, preventing incompatible development near the airport. The owner is compensated by selling development rights at an alternate location. This type of acquisition as a means to prevent incompatible land use or development around airports is more complicated and is used less frequently.

4. Notification

In limited instances, communities in Florida have adopted various means for notification or disclosure when the ownership of a property near the airport is changing. Notification strategies in general alert the purchaser that the property is near an airport.

There are numerous ways that disclosure or notification can be handled. Most often this type of approach requires the seller to notify the purchaser

that the property in question is near an airport and could, therefore, be exposed to some level of aircraft noise. A buyer awareness program such as this does not necessarily change an incompatible land use but helps to foster acceptance of existing and future conditions.

Disclosure agreements can be placed on applicable covenants, plats, or site development plans. Each local government has the authority to determine where and if such notification should occur. Areas in safety zones, overflight areas, areas of noise impact, and runway approach and departure paths are areas to be considered for notification.

When considering adoption of an ordinance for notification/disclosure as a means of addressing incompatible use near airports, local governments should use the 55 DNL noise contour as their notification threshold if the airport has a noise study, NEM, or other noise contours.

B. Corrective Actions to Address Incompatible Land Use

In many instances, incompatible development or land use already exists around public-use airports and military airfields in Florida. This section provides an overview of strategies to correct land use incompatibilities that already exist around Florida's public-use airports and military airfields. In some instances, preventative strategies discussed under acquisition in the previous section can also be considered for corrective action when incompatible land use already exists.

1. Land Re-Use

FAA AC 150/5020-1 provides a discussion of alternatives for local governments to consider when existing land use is incompatible. When extensive development has already taken place in the airport environs, some of the alternatives noted here are complex, difficult, and expensive to implement.

One strategy that can be considered as a longer term corrective action is change to a current land use. A comprehensive plan coupled with an effective airport zoning ordinance can re-direct development in certain areas around an airport or military airfield that is currently incompatible.

Land use change can best be accomplished through public policy and planning, and such change can often be supported by constructive use of public capital improvement projects. Corrective land management techniques such as re-construction, re-development, or infill in previously developed areas are strategies that can be considered to correct current land use incompatibilities.

2. Noise Mitigation and Operational Procedures

Title 14 CFR Part 150, Airport Noise Compatibility Planning (Part 150), provides the framework for voluntary studies on aircraft noise. Once noise impacted areas are identified, funds can be sought through the Part

150 implementation program to acquire or soundproof building/residences. Through the implementation of a well developed and defined Part 150 noise compatibility program, land use incompatibilities can in some instances be mitigated, if not resolved.

Title 14 CFR Part 161, Notice and Approval of Airport Noise and Access Restrictions (Part 161) identifies actions that can be taken to seek the right to restrict aircraft operations by certain classes of aircraft or restrict operations at certain times of day. Few Part 161 studies have been successfully completed and they are very costly and time intensive; recommendations resulting from these studies are often at cross purposes with assurances for federally funded airports to avoid discrimination in airport use.

FAA must approve operational restrictions resulting from a Part 161 study. While restrictions to limit types of aircraft and/or hours of operation may help mitigate land use incompatibilities, other issues may arise from these recommendations that could jeopardize the airport's standing in the federal airport system and its ability to obtain federal funding. A Part 161 study is considered a last resort with a historically low likelihood of success.

Primarily through Part 150 noise studies, actions can be identified to improve land use compatibility if existing incompatibility is driven by aircraft noise. Corrective actions for mitigating or reducing noise related most often to the following:

- **Sound Insulation** – reducing noise through the use of sound insulation can lessen interior noise impacts in the range of 10 to 30 decibels. Sound proofing and insulation in noise impacted areas can be funded by the FAA if these recommendations are part of an approved Part 150 noise compatibility program. The benefit versus the cost of soundproofing is often determined by the age of the building or dwelling.

- **Operational procedures** – Part 150 studies consider ways to reduce noise exposure and increase land use compatibility through changes in operational procedures for aircraft. Operational procedures to reduce noise exposure may include restricting ground movements and engine run-ups, use of preferential runway ends, managing power and flap setting for the aircraft on take-off, limiting thrust reverse, and changing traffic patterns.

  It is important to note that altering standard operational procedures in an attempt to reduce noise exposure can result in safety compromises. Using operational procedures as a strategy to improve land use compatibility requires detailed

technical analysis and close coordination with airport users, airlines, and the FAA.

- **Noise barriers** – noise barriers are most effective for mitigating or reducing aircraft noise that is generated when planes are on the ground. This type of noise is often referred to as "ground run up." Aircraft maintenance areas and the runway/taxiway system generate ground noise. There are several types of noise barriers that can be considered to correct ground level generated noise. It should be kept in mind that noise barriers are rare at airports and should be considered only as a supplemental measure.

Summary

Florida law specifies that all local governments are required to adopt and enforce airport zoning. This guidebook should be used to strengthen the relationship between local governments, public-use airports, and military airfields in Florida. To most effectively utilize the information in these land use compatibility guidelines, the following should be considered:

- Is the local government in defined airport hazard area?
- Has airport protection zoning been enacted?
- Is airport zoning that is in place fully compliant with all aspects of Chapter 333, F.S.?
- Is the airport addressed in the comprehensive plan as required by Chapter 163, F.S.?
- Has the local government taken steps to identify existing development that conflicts with the development restrictions contained in Chapter 333, F.S.?
- Does the local government have a copy of the airport's most current master plan or airport layout plan?
- Is intergovernmental coordination to adopt/enforce zoning in the airport hazard area needed or in place?
- Does FDOT have a copy of the current airport zoning regulation?
- Is FDOT included in the review process when a variance request is submitted?
- Is there a formalized communication plan between the local government(s) and the airport?

This menu of activities is the basis for a process that can help all parties meet legal responsibilities pertaining to Florida law.

Appendix A

Florida Counties and Municipalities within 10 nm of an Airport

APPENDIX A

FLORIDA COUNTIES AND MUNCIPALITES WITHIN 10 NM OF AN AIRPORT

Airport	Counties Within 10nm	Municipalities Within 10nm	REFERENCE TO PART 150 or NOISE STUDY?	AIRPORT ZONING FOUND?	SIZE OF NOTIFICATION AREA
AIRGLADES	Glades, Palm Beach, Hendry	Clewiston, Moore Haven			6
AIRPORT MANATEE	Hillsboro, Manatee, Pinellas	Bradenton, Palmetto, St. Petersburg			6
ALBERT WHITTED	Hillsboro, Manatee, Pinellas	Gulfport, Kenneth City, Largo, Madeira Beach, Pinellas Park, Seminole, South Pasadena, St. Pete Beach, St. Petersburg, Tampa, Treasure Island		Y	6
APALACHICOLA REGIONAL	Franklin, Gulf	Apalachicola			6
ARCADIA MUNICIPAL	Charlotte, De Soto, Hardee	Arcadia			6
ARTHUR DUNN AIR PARK	Brevard, Orange, Seminole, Volusia	Titusville		Y	3
AVON PARK EXECUTIVE	Hardee, Highlands, Polk	Avon Park, Frostproof, Sebring			6
BARTOW MUNICIPAL	Polk	Auburndale, Bartow, Dundee, Eagle Lake, Fort Meade, Lake Alfred, Lake Hamilton, Lake Wales, Lakeland, Winter Haven		Y	6
BELLE GLADE STATE MUNICIPAL	Palm Beach	Belle Glade, Pahokee, South Bay			6
BOB LEE FLIGHT STRIP	Flagler, Lake, Volusia	Daytona Beach, Deland, Deltona, Lake Helen, Orange City, Pierson			6
BOB SIKES	Okaloosa, Walton	Crestview			6
BOB WHITE FIELD	Lake, Orange	Apopka, Astatula, Eustis, Howey-in-the-Hills, Montverde, Mount Dora, Ocoee, Tavares		Y	6
BOCA RATON	Broward, Palm Beach	Boca Raton, Boynton Beach, Briny Breezes, Coconut Creek, Coral Springs, Deerfield Beach, Delray Beach, Golf, Gulf Stream, Highland Beach, Hillsboro Beach, Lighthouse Point, Margate, Ocean Ridge, Parkland, Pompano Beach	Y		6
BUCHAN	Charlotte, Sarasota	North Point, Venice			3
CALHOUN COUNTY	Calhoun, Jackson, Liberty	Altha, Blountstown, Bristol			3
CARRABELLE-THOMPSON	Franklin	Carrabelle			6
CECIL FIELD	Clay, Duval, Nassau	Baldwin, Jacksonville, Orange Park		Y	6
CHALET SUZANNE AIR STRIP	Osceola, Polk	Dundee, Eagle Lake, Haines City, Highland Park, Hillcrest Heights, Lake Alfred, Lake Hamilton, Lake Wales, Winter Haven			3
CHARLOTTE COUNTY	Charlotte, De Soto, Lee, Osceola, Polk, Sarasota	North Point, Punta Gorda			6
CLEARWATER AIR PARK	Hillsboro, Pinellas	Belleair, Belleair Beach, Belleair Bluffs, Clearwater, Dunedin, Indian Rocks Beach, Indian Shores, Kenneth City, Largo, North Redington Beach, Oldsmar, Pinellas Park, Redington Beach, Redington Shores, Safety Harbor, Seminole, St. Petersburg, Tampa, Tarpon Springs			6
COASTAL	Escambia, Santa Rosa	Pensacola			3

Airport	Counties Within 10nm	Municipalities Within 10nm	REFERENCE TO PART 150 or NOISE STUDY?	AIRPORT ZONING FOUND?	SIZE OF NOTIFICATION AREA
COSTIN	Franklin, Gulf	Port St. Joe			3
CRAIG MUNICIPAL	Duval, St. Johns	Atlantic Beach, Jacksonville, Jacksonville Beach, Neptune Beach	Y	Y	6
CROSS CITY	Dixie, Gilchrist, Levy	Cross City, Fanning Springs			6
CRYSTAL RIVER	Citrus, Levy	Crystal River, Inglis		Y	6
DADE-COLLIER TRAINING AND TRANSITION	Broward, Collier, Miami-Dade, Monroe		N	N	6
DAYTONA BEACH INTERNATIONAL	Flagler, Volusia	Daytona Beach, Daytona Beach Shores, Holly Hill, New Smyrna Beach, Ormond Beach, Ponce Inlet, Port Orange, South Daytona	Y		6
DEFUNIAK SPRINGS	Holmes, Walton	De Funiak Springs			6
DELAND MUNI-SIDNEY H TAYLOR FIELD	Lake, Volusia	Daytona Beach, De Bary, De Land, Deltona, Lake Helen, Orange City	Y		6
DESTIN-FORT WALTON BEACH	Okaloosa, Walton	Cinco Bayou, Destin, Fort Walton Beach, Niceville, Shalimar, Valparaiso	Y		6
DOWNTOWN FORT LAUDERDALE	Broward, Miami-Dade	Aventura, Coconut Creek, Cooper City, Coral Springs, Dania Beach, Davie, Deerfield Beach, Fort Lauderdale, Golden Beach, Hallandale, Hillsboro Beach, Hollywood, Lauderdale Lakes, Lauderdale-by-the-Sea, Lauderhill, Lighthouse Point, Margate, Miramar, North Lauderdale, North Miami Beach, Oakland Park, Pembroke Park, Pembroke Pines, Plantation, Pompano Beach, Sea Ranch Lakes, Sunny Isles Beach, Sunrise, Tamarac, Wilton Manors			1
DUNNELLON/MARION CO & PARK OF COMMERCE	Citrus, Levy, Marion, Sumter	Dunnellon, Ocala			6
EVERGLADES AIRPARK	Collier, Monroe	Everglades			3
EXECUTIVE	Orange, Seminole	Altamonte Springs, Casselberry, Eatonville, Edgewood, Longwood, Maitland, Orlando, Oviedo, Winter Park, Winter Springs	Y	Y	6
FERGUSON	Escambia, Santa Rosa	Gulf Breeze, Pensacola			6
FERNANDINA BEACH MUNICIPAL	Duval, Nassau	Fernandina Beach, Jacksonville		Y	6
FLAGLER COUNTY	Flagler, Volusia	Beverly Beach, Bunnell, Flagler Beach, Ormond Beach, Palm Coast			6
FLYING TEN	Alachua, Gilchrist, Levy	Alachua, Archer, Gainesville, Newberry			3

Airport	Counties Within 10nm	Municipalities Within 10nm	REFERENCE TO PART 150 or NOISE STUDY?	AIRPORT ZONING FOUND?	SIZE OF NOTIFICATION AREA
FORT LAUDERDALE EXECUTIVE	Broward, Palm Beach	Boca Raton, Coconut Creek, Cooper City, Coral Springs, Dania Beach, Davie, Deerfield Beach, Fort Lauderdale, Hillsboro Beach, Hollywood, Lauderdale Lakes, Lauderdale-by-the-Sea, Lauderhill, Lighthouse Point, Margate, North Lauderdale, Oakland Park, Parkland, Plantation, Pompano Beach, Sea Ranch Lakes, Sunrise, Tamarac, Wilton Manors	Y		6
FORT LAUDERDALE/HOLLYWOOD INTERNATIONAL	Broward, Miami-Dade	Aventura, Coconut Creek, Cooper City, Dania Beach, Davie, Fort Lauderdale, Golden Beach, Hallandale, Hollywood, Lauderdale Lakes, Lauderdale-by-the-Sea, Lauderhill, Margate, Miramar, North Lauderdale, North Miami, North Miami Beach, Oakland Park, Pembroke Park, Pembroke Pines, Plantation, Pompano Beach, Sea Ranch Lakes, Sunny Isles Beach, Sunrise, Tamarac, Wilton Manors	Y		6
FORT WALTON BEACH	Escambia, Okaloosa, Santa Rosa	Fort Walton Beach, Mary Esther			3
GAINESVILLE REGIONAL	Alachua, Bradford	Alachua, Gainesville, Waldo	Y		6
GEORGE T LEWIS	Levy	Cedar Key			3
HERLONG	Clay, Duval, Nassau	Baldwin, Jacksonville, Orange Park		Y	6
HERNANDO COUNTY	Hernando, Pasco	Brooksville, Weeki Wachee			6
HILLIARD AIRPARK	Nassau	Callahan, Hilliard			6
HOMESTEAD GENERAL AVIATION	Miami-Dade	Florida City, Homestead	N	N	6
IMMOKALEE	Collier, Hendry, Lee				6
INDIANTOWN	Martin, Palm Beach				6
INVERNESS	Citrus, Hernando, Marion, Sumpter	Inverness			6
JACK BROWNS	Polk	Auburndale, Bartow, Dundee, Eagle Lake, Haines City, Lake Alfred, Lake Hamilton, Lake Wales, Lakeland, Polk City, Winter Haven			6
JACKSONVILLE INTERNATIONAL	Duval, Nassau	Callahan, Jacksonville		Y	6
KENDALL-TAMIAMI EXECUTIVE	Miami-Dade	Coral Gables, Homestead, Miami, Pinecrest, South Miami, Sweetwater, West Miami	Y	N	6
KEY WEST INTERNATIONAL	Monroe	Key West	Y	Y	6
KEYSTONE AIRPARK	Alachua, Bradford, Clay, Putnam	Hampton, Keystone Heights, Starke, Waldo		Y	6
KISSIMMEE GATEWAY	Orange, Osceola, Polk	Bay Lake, Kissimmee, Lake Buena Vista, Orlando, St. Cloud	Y	Y	6
LA BELLE MUNICIPAL	Charlotte, Glades, Hendry, Lee	Labelle		Y	6
LAKE CITY MUNICIPAL	Baker, Columbia, Union	Lake City			6
LAKE WALES MUNICIPAL	Polk	Dundee, Eagle Lake, Frostproof, Highland Park, Hillcrest Heights, Lake Hamilton, Lake Wales, Winter Haven		Y	6
LAKELAND LINDER REGIONAL	Hillsborough, Polk	Bartow, Lakeland, Mulberry, Plant City		Y	6
LEESBURG REGIONAL	Lake, Marion, Orange, Sumter	Astatula, Eustis, Fruitland Park, Howey-in-the-Hills, Lady Lake, Leesburg, Mount Dora, Tavares, Umatilla			6

Airport	Counties Within 10nm	Municipalities Within 10nm	REFERENCE TO PART 150 or NOISE STUDY?	AIRPORT ZONING FOUND?	SIZE OF NOTIFICATION AREA
MARCO ISLAND	Collier	Marco Island, Naples			6
MARIANNA MUNICIPAL	Jackson	Bascom, Greenwood, Malone, Marianna		Y	6
MASSEY RANCH AIRPARK	Volusia	Daytona Beach Shores, Edgewater, New Smyrna Beach, Oak Hill, Ponce Inlet, Port Orange			6
MELBOURNE INTERNATIONAL	Brevard	Indialantic, Indian Harbour Beach, Malabar, Melbourne, Melbourne Beach, Melbourne Village, Palm Bay, Palm Shores, Satellite Beach, West Melbourne	Y	Y	6
MERRITT ISLAND	Brevard	Cape Canaveral, Cocoa, Cocoa Beach, Melbourne, Palm Shores, Rockledge, Satellite Beach			6
MIAMI INTERNATIONAL	Miami-Dade	Biscayne Park, Coral Gables, El Portal, Hialeah, Hialeah Gardens, Key Biscayne, Medley, Miami, Miami Beach, Miami Shores, Miami Springs, Miramir, North Bay Village, North Miami, North Miami Beach, Opa-locka, Pinecrest, South Miami, Sweetwater, Virginia Gardens, West Miami	Y	Y	6
MIAMI SEAPLANE BASE	Miami-Dade	Aventura, Bal Harbour, Bay Harbor Islands, Biscayne Park, Coral Gables, El Portal, Hialeah, Hialeah Gardens, Indian Creek, Key Biscayne, Medley, Miami, Miami Beach, Miami Shores, Miami Springs, North Bay Village, North Miami, North Miami Beach, Opa-locka, Pinecrest, South Miami, Sunny Isles Beach, Surfside, Virginia Gardens, West Miami			6
MID FLORIDA AIR SERVICE	Lake, Marion, Orange	Apopka, Astatula, Eustis, Mount Dora, Tavares, Umatilla			6
NAPLES MUNICIPAL	Collier, Lee	Bonita Springs, Naples	Y	Y	6
NEW HIBISCUS AIRPARK	Indian River, St. Lucie	Fellsmere, Indian River Shores, Sebastian, Vero Beach			3
NEW SMYRNA BEACH MUNICIPAL	Volusia	Daytona Beach, Daytona Beach Shores, Edgewater, New Smyrna Beach, Ponce Inlet, Port Orange, South Dayton	Y	Y	6
NORTH PALM BEACH COUNTY GENERAL AVIATION	Martin, Palm Beach	Juno Beach, Jupiter, Lake Park, Mangonia Park, North Palm Beach, Palm Beach Gardens, Riviera Beach, Royal Palm Beach, Tequesta, Wellington, West Palm Beach			6
NORTH PERRY	Broward, Miami-Dade	Aventura, Bal Harbour, Bay Harbor Islands, Biscayne Park, Cooper City, Dania Beach, Davie, El Portal, Fort Lauderdale, Golden Beach, Hallandale, Hialeah, Hialeah Gardens, Hollywood, Indian Creek, Lauderdale Lakes, Lauderhill, Miami, Miami Beach, Miami Shores, Miramar, North Bay Village, North Miami, North Miami Beach, Opa-locka, Pembroke Park, Pembroke Pines, Plantation, Sunny Isles Beach, Sunrise, Surfside, Weston			6
NORTHWEST FLORIDA REGIONAL (EGLIN AFB)	Okaloosa, Walton	Cinco Bayou, Destin, Fort Walton Beach, Mary Esther, Niceville, Shalmar, Valparaiso		Y	6
OAK TREE LANDING	Alachua, Columbia, Gilchrist, Levy	Alachua, High Springs, Newberry			6

Airport	Counties Within 10nm	Municipalities Within 10nm	REFERENCE TO PART 150 or NOISE STUDY?	AIRPORT ZONING FOUND?	SIZE OF NOTIFICATION AREA
OCALA INTL-JIM TAYLOR FIELD	Marion	Ocala	Y	Y	6
OKEECHOBEE COUNTY	Glades, Highlands, Okeechobee	Okeechobee		Y	6
OPA LOCKA EXECUTIVE	Broward, Miami-Dade	Aventura, Bal Harbour, Bay Harbor Islands, Biscayne Park, Cooper City, Coral Gables, Davie, El Portal, Golden Beach, Hallandale, Hialeah, Hialeah Gardens, Hollywood, Indian Creek, Medley, Miami, Miami Beach, Miami Shores, Miami Springs, Miramar, North Bay Village, North Miami, North Miami Beach, Opa-locka, Pembroke Park, Pembroke Pines, Sunny Isles Beach, Surfside, Sweetwater, Virginia Gardens, West Miami	N	N	6
ORLANDO APOPKA	Lake, Orange, Seminole	Altamonte Springs, Apopka, Astatula, Eustis, Montverde, Mount Dora, Oakland, Ocoee, Orlando, Tavares, Winter Garden			3
ORLANDO INTERNATIONAL	Orange, Osceola	Belle Isle, Edgewood, Kissimmee, Orlando, St. Cloud, Winter Park	Y	Y	6
ORLANDO SANFORD INTERNATIONAL	Lake, Orange, Seminole, Volusia	Altamonte Springs, Casselberry, De Bary, Deltona, Lake Mary, Longwood, Orange City, Oviedo, Sanford, Winter Springs	Y	Y	6
ORMOND BEACH MUNICIPAL	Flagler, Volusia	Daytona Beach, Daytona Beach Shores, Flagler Beach, Holly Hill, Ormond Beach, Palm Coast, Port Orange, South Daytona		Y	6
PAGE FIELD	Lee	Bonita Springs, Cape Coral, City of Fort Myers		Y	6
PALATKA MUNICIPAL - LT. KAY LARKIN FIELD	Putnam, St. Johns	Palatka, Pomona Park		Y	6
PALM BEACH CO GLADES	Palm Beach	Belle Glade, Pahokee, South Bay			6
PALM BEACH COUNTY PARK	Palm Beach	Atlantis, Boynton Beach, Briny Breezes, Cloud Lake, Delray Beach, Glen Ridge, Golf, Greenacres, Gulf Stream, Haverhill, Hypoluxo, Lake Clarke Shores, Lake Worth, Lantana, Manalapan, Mangonia Park, Ocean Ridge, Palm Beach, Palm Springs, Royal Palm Beach, South Palm Beach, Wellington, West Palm Beach			6
PALM BEACH INTERNATIONAL	Palm Beach	Cloud Lake, Glen Ridge, Greenacres, Haverhill, Hypoluxo, Lake Clarke Shores, Lake Park, Lake Worth, Lantana, Manalapan, Mangonia Park, North Palm Beach, Ocean Ridge, Palm Beach, Palm Beach Gardens, Palm Beach Shores, Palm Springs, Riviera Beach, Royal Palm Beach, South Palm Beach, Wellington, West Palm Beach	Y	Y	6
PANAMA CITY-BAY CO INTERNATIONAL	Bay	Callaway, Cedar Grove, Lynn Haven, Panama City, Panama City Beach, Parker, Springfield	Y	Y	6

Airport	Counties Within 10nm	Municipalities Within 10nm	REFERENCE TO PART 150 or NOISE STUDY?	AIRPORT ZONING FOUND?	SIZE OF NOTIFICATION AREA
PENSACOLA REGIONAL	Escambia, Santa Rosa	Gulf Breeze, Pensacola	Y	Y	6
PERRY-FOLEY	Taylor	Perry			6
PETER O KNIGHT	Hillsborough, Pinellas	St. Petersburg, Tampa, Temple Terrace			6
PETER PRINCE FIELD	Santa Rosa	Milton			6
PIERSON MUNICIPAL	Flagler, Lake, Putnam, Volusia	Pierson			3
PILOT COUNTRY	Hernando, Hillsborough, Pasco				3
PLANT CITY AIRPORT	Hillsborough, Polk	Lakeland, Plant City			6
POMPANO BEACH AIRPARK	Broward, Palm Beach	Boca Raton, Coconut Creek, Coral Springs, Dania Beach, Deerfield Beach, Fort Lauderdale, Highland Beach, Hillsboro Beach, Hollywood, Lauderdale Lakes, Lauderdale-by-the-Sea, Lauderhill, Lighthouse Point, Margate, North Lauderdale, Oakland Park, Parkland, Plantation, Pompano Beach, Sea Ranch Lakes, Sunrise, Tamarac, Wilton Manors			6
QUINCY MUNICIPAL	Gadsen, Leon	Gretna, Havana, Midway, Quincy		Y	3
RIVER RANCH RESORT	Highlands, Okeechobee, Osceola, Polk				6
SARASOTA/BRADENTON INTERNATIONAL	Manatee, Sarasota	Bradenton, Bradenton Beach, Longboat Key, Palmetto, Sarasota	Y		6
SEBASTIAN MUNICIPAL	Brevard, Indian River	Fellsmere, Indian River Shores, Malabar, Orchid, Palm Bay, Sebastian, Vero Beach		Y	6
SEBRING REGIONAL	Highlands, Okeechobee	Lake Placid, Sebring			6
SHELL CREEK AIRPARK	Charlotte, De Soto, Sarasota	North Point, Punta Gorda			3
SOUTH LAKELAND	Hillsborough, Polk	Bartow, Lakeland, Mulberry, Plant City			3
SOUTHWEST FLORIDA INTERNATIONAL	Collier, Lee	Bonita Springs, Fort Myers	Y	Y	6
SPACE COAST REGIONAL	Brevard, Orange	Cocoa, Titusville	Y		6
ST AUGUSTINE	St. Johns	St. Augustine, St. Augustine Beach	Y		6
ST GEORGE ISLAND	Franklin	Apalachicola			6
ST LUCIE COUNTY INTERNATIONAL	Indian River, St. Lucie	Fort Pierce, Port St. Lucie, St. Lucie, Vero Beach	Y		6
ST PETERSBURG-CLEARWATER INTERNATIONAL	Hillsborough, Pinellas	Belleair, Belleair Beach, Belleair Bluffs, Clearwater, Dunedin, Gulfport, Indian Rocks Beach, Indian Shores, Kenneth City, Largo, Madeira Beach, North Redington Beach, Oldsmar, Pinellas Park, Redington Beach, Redington Shores, Safety Harbor, Seminole, South Pasadena, St. Pete Beach, St. Petersburg, Tampa, Treasure Island		Y	6
SUWANNEE COUNTY	Hamilton, Suwannee	Live Oak			6
TALLAHASSEE COMMERCIAL	Gadsen, Leon	Havana, Midway, Tallahassee			3
TALLAHASSEE REGIONAL	Gadsen, Leon, Wakulla	Midway, Tallahassee	Y	Y	6
TAMPA EXECUTIVE		Plant City, Tampa, Temple Terrace			6
TAMPA INTERNATIONAL	Hillsborough, Pinellas	Clearwater, Oldsmar, Pinellas Park, Safety Harbor, St. Petersburg, Tampa, Temple Terrace	Y	Y	6

Airport	Counties Within 10nm	Municipalities Within 10nm	REFERENCE TO PART 150 or NOISE STUDY?	AIRPORT ZONING FOUND?	SIZE OF NOTIFICATION AREA
TAMPA NORTH AERO PARK	Hillsborough, Pasco	San Antonio, St. Leo, Tampa, Temple Terrace, Zephyrhills			6
THE FLORIDA KEYS MARATHON	Monroe	Key Colony Beach, Marathon	Y		6
TRI-COUNTY	Holmes, Jackson, Washington	Bonifay, Chipley, Esto, Graceville, Noma			6
UMATILLA MUNICIPAL	Lake, Marion, Orange	Eustis, Mount Dora, Tavares, Umatilla			3
VALKARIA	Brevard, Indian River	Indialantic, Malabar, Melbourne, Melbourne Beach, Melbourne Village, Palm Bay, Sebastian, West Melbourne		Y	6
VENICE MUNICIPAL	Charlotte, Sarasota	North Point, Venice			6
VERO BEACH MUNICIPAL	Indian River, St. Lucie	Fellsmere, Indian River Shores, Orchid, Sebastian, St. Lucie, Vero Beach	Y	Y	6
WAKULLA COUNTY	Franklin, Liberty, Wakulla	Sopchoppy			3
WAUCHULA MUNICIPAL	Hardee, Polk	Bowling Green, Wauchula, Zolfo Springs			6
WILLISTON MUNICIPAL	Alachua, Levy, Marion	Williston		Y	6
WINTER HAVEN'S GILBERT	Polk	Auburndale, Bartow, Davenport, Dundee, Eagle Lake, Haines City, Lake Alfred, Lake Hamilton, Lake Wales, Lakeland, Polk City, Winter Haven			6
WITHAM FIELD	Martin, St. Lucie	Jupiter Island, Ocean Breeze Park, Port St. Lucie, Sewall's Point, Stuart	Y		6
ZEPHYRHILLS MUNICIPAL	Hillsborough, Pasco, Polk, Sumter	Dade City, San Antonio, St. Leo, Tampa, Zephyrhills			6

Airport	Counties Within 10nm	Municipalities Within 10nm	REFERENCE TO PART 150 or NOISE STUDY?	AIRPORT ZONING FOUND?	SIZE OF NOTIFICATION AREA
MILITARY INSTALLATIONS					
CAMP BLANDING AAF/NG		Keystone Heights, Lawtey, Penney Farms, Starke		Y	
CAPE CANAVERAL AFS SKID STRIP		Cape Canaveral, Cocoa Beach			
CHOCTAW NOLF		Milton			
EGLIN AF AUX NR 3 DUKE FIELD		Crestview, Niceville, Valparaiso			
EGLIN FIELD NR 2		Destin, Niceville, Valparaiso			
EGLIN TEST SITE B6		Crestview			
HAROLD NOLF		Milton			
HOLLEY NOLF					
HOMESTEAD ARB		Florida City, Homestead, Islandia, Pinecrest	N	N	
HURLBURT FIELD		Cinco Bayou, Fort Walton Beach, Mary Esther, Shalimar, Valparaiso		Y	
JACKSONVILLE NAS /TOWERS FIELD		Jacksonville, Orange Park			
KEY WEST NAS /BOCA CHICA FIELD		Key West			
MAC DILL AFB		Pinellas Park, St. Petersburg, Tampa			
MACDILL AFB AUX FLD		Avon Park, Sebring			
MAYPORT NS (ADM DAVID L. MCDONALD FIELD)		Atlantic Beach, Jacksonville, Jacksonville Beach, Neptune Beach			
NAVAL SURFACE WARFARE CENTER		Callaway, Cedar Grove, Lynn Haven, Panama City, Panama City Beach, Parker, Springfield			
PACE NOLF		Milton			
PATRICK AFB		Cape Canaveral, Cocoa, Cocoa Beach, Indialantic, Indian Harbour Beach, Melbourne, Melbourne Beach, Melbourne Village, Palm Shores, Rockledge, Satellite Beach, West Melbourne			
PENSACOLA NAS/FORREST SHERMAN FIELD		Gulf Breeze, Pensacola			
SANTA ROSA NOLF		Milton			
SAUFLEY FIELD NOLF		Gulf Breeze, Pensacola			
SPENCER NOLF		Milton, Pensacola			
TYNDALL AFB		Callaway, Cedar Grove, Lynn Haven, Panama City, Parker, Springfield			
WHITEHOUSE NOLF		Baldwin, Jacksonville			
WHITING FIELD NAS NORTH		Milton			
WHITING FIELD NAS-SOUTH		Milton			

Appendix AA

Florida Counties and Municipalities Adjacent to an Airport (per s. 163.3177(6)(a), F.S.)

APPENDIX AA

FLORIDA COUNTIES AND MUNCIPALITES ADJACENT TO AN AIRPORT (per s. 163.3177(6)(a), F.S.)

Airport	Adjacent County	Adjacent Municipalities
AIRGLADES	Hendry	
AIRPORT MANATEE	Manatee	
ALBERT WHITTED		St. Petersburg
APALACHICOLA REGIONAL	Franklin	
ARCADIA MUNICIPAL	De Soto	
ARTHUR DUNN AIR PARK	Brevard	Titusville
AVON PARK EXECUTIVE	Highlands	Avon Park
BARTOW MUNICIPAL	Polk	Bartow
BELLE GLADE STATE MUNICIPAL	Palm Beach	Belle Glade
BOB LEE FLIGHT STRIP	Volusia	
BOB SIKES	Okaloosa	
BOB WHITE FIELD	Orange	
BOCA RATON		Boca Raton
BUCHAN	Sarasota	North Point, Venice
CALHOUN COUNTY	Calhoun	Altha, Blountstown, Bristol
CARRABELLE-THOMPSON	Franklin	Carrabelle
CECIL FIELD		Jacksonville
CHALET SUZANNE AIR STRIP	Polk	Lake Wales
CHARLOTTE COUNTY	Charlotte	
CLEARWATER AIR PARK	Pinellas	Clearwater
COASTAL	Escambia	
COSTIN	Gulf	
CRAIG MUNICIPAL		Jacksonville
CROSS CITY	Dixie	Cross City
CRYSTAL RIVER	Citrus	
DADE-COLLIER TRAINING AND TRANSITION	Collier, Miami-Dade	
DAYTONA BEACH INTERNATIONAL	Volusia	Daytona Beach
DEFUNIAK SPRINGS	Walton	De Funiak Springs

Airport	Adjacent County	Adjacent Municipalities
DELAND MUNI-SIDNEY H TAYLOR FIELD	Volusia	Deland
DESTIN-FORT WALTON BEACH	Okaloosa	Destin
DOWNTOWN FORT LAUDERDALE		Fort Lauderdale
DUNNELLON/MARION CO & PARK OF COMMERCE	Marion	
EVERGLADES AIRPARK	Collier	Everglades
EXECUTIVE	Orange	Orlando
FERGUSON	Escambia	
FERNANDINA BEACH MUNICIPAL	Nassau	Fernandina Beach
FLAGLER COUNTY		Palm Coast
FLYING TEN	Alachua	
FORT LAUDERDALE EXECUTIVE	Broward	Fort Lauderdale, Tamarac
FORT LAUDERDALE/HOLLYWOOD INTERNATIONAL	Broward	Dania Beach, Fort Lauderdale
FORT WALTON BEACH	Santa Rosa	
GAINESVILLE REGIONAL	Alachua	Gainesville
GEORGE T LEWIS	Levy	Cedar Key
HERLONG		Jacksonville
HERNANDO COUNTY	Hernando	
HILLIARD AIRPARK	Nassau	Hilliard
HOMESTEAD GENERAL AVIATION	Miami-Dade	
IMMOKALEE	Collier	
INDIANTOWN	Martin	
INVERNESS	Citrus	
JACK BROWNS SEAPLANE BASE	Polk	Winter Haven
JACKSONVILLE INTERNATIONAL		Jacksonville
KENDALL-TAMIAMI EXECUTIVE	Miami-Dade	
KEY WEST INTERNATIONAL	Monroe	Key West
KEYSTONE AIRPARK	Bradford, Clay	
KISSIMMEE GATEWAY	Osceola	Kissimmee
LA BELLE MUNICIPAL	Hendry	Labelle
LAKE CITY MUNICIPAL	Columbia	

Airport	Adjacent County	Adjacent Municipalities
LAKE WALES MUNICIPAL	Polk	Lake Wales
LAKELAND LINDER REGIONAL	Polk	Lakeland
LEESBURG REGIONAL	Lake	Leesburg
MARCO ISLAND	Collier	
MARIANNA MUNICIPAL	Jackson	
MASSEY RANCH AIRPARK	Volusia	Edgewater
MELBOURNE INTERNATIONAL		Melbourne, West Melbourne
MERRITT ISLAND	Brevard	
MIAMI INTERNATIONAL	Miami-Dade	Miami, Virginia Gardens
MIAMI SEAPLANE BASE		Miami
MID FLORIDA AIR SERVICE	Lake	Mount Dora
NAPLES MUNICIPAL	Collier	Naples
NEW HIBISCUS AIRPARK	Indian River	
NEW SMYRNA BEACH MUNICIPAL	Volusia	New Smyrna Beach
NORTH PALM BEACH COUNTY GENERAL AVIATION	Palm Beach	Palm Beach Gardens
NORTH PERRY		Miramar, Pembroke Pines
NORTHWEST FLORIDA REGIONAL (EGLIN AFB)	Okaloosa	Valparaiso
NW FLORIDA BEACHES INTL. AIRPORT	Bay	
OAK TREE LANDING	Alachua, Gilchrist	
OCALA INTL-JIM TAYLOR FIELD	Marion	Ocala
OKEECHOBEE COUNTY	Okeechobee	Okeechobee
OPA LOCKA EXECUTIVE	Miami-Dade	Hialeah, Miami Gardens, Miami Lakes, Opa-locka
ORLANDO APOPKA	Orange	Apopka
ORLANDO INTERNATIONAL	Orange	Orlando
ORLANDO SANFORD INTERNATIONAL	Seminole	Sanford
ORMOND BEACH MUNICIPAL	Volusia	Ormond Beach
PAGE FIELD	Lee	Fort Myers
PALATKA MUNICIPAL - LT. KAY LARKIN FIELD	Putnam	Palatka
PALM BEACH CO GLADES	Palm Beach	

Airport	Adjacent County	Adjacent Municipalities
PALM BEACH COUNTY PARK	Palm Beach	Atlantis
PALM BEACH INTERNATIONAL	Palm Beach	Cloud Lake, Glen Ridge, Haverhill, West Palm Beach
PENSACOLA REGIONAL	Escambia	Pensacola
PERRY-FOLEY	Taylor	
PETER O KNIGHT	Hillsborough	Tampa
PETER PRINCE FIELD	Santa Rosa	
PIERSON MUNICIPAL	Volusia	Pierson
PILOT COUNTRY	Pasco	
PLANT CITY AIRPORT	Hillsborough	Plant City
POMPANO BEACH AIRPARK		Pompano Beach
QUINCY MUNICIPAL	Gadsen	Quincy
RIVER RANCH RESORT	Polk	
SARASOTA/BRADENTON INTERNATIONAL	Manatee, Sarasota	Sarasota
SEBASTIAN MUNICIPAL	Indian River	Sebastian
SEBRING REGIONAL	Highlands	
SHELL CREEK AIRPARK	Charlotte	
SOUTH LAKELAND	Polk	
SOUTHWEST FLORIDA INTERNATIONAL	Lee	
SPACE COAST REGIONAL	Brevard	Titusville
ST AUGUSTINE	St. Johns	
ST GEORGE ISLAND	Franklin	
ST LUCIE COUNTY INTERNATIONAL	St. Lucie	
ST PETERSBURG-CLEARWATER INTERNATIONAL	Pinellas	Largo
SUWANNEE COUNTY	Suwannee	Live Oak
TALLAHASSEE COMMERCIAL	Leon	
TALLAHASSEE REGIONAL	Leon	Tallahassee
TAMPA EXECUTIVE	Hillsborough	
TAMPA INTERNATIONAL	Hillsborough	Tampa
TAMPA NORTH AERO PARK	Pasco	
TAVARES SEAPLANE BASE	Lake	Tavares
THE FLORIDA KEYS MARATHON		Marathon

Airport	Adjacent County	Adjacent Municipalities
TRI-COUNTY	Holmes, Jackson	
UMATILLA MUNICIPAL	Lake	Umatilla
VALKARIA		Grant-Valkaria
VENICE MUNICIPAL	Sarasota	Venice
VERO BEACH MUNICIPAL	Indian River	Vero Beach
WAKULLA COUNTY	Wakulla	
WAUCHULA MUNICIPAL	Hardee	
WILLISTON MUNICIPAL	Levy	Williston
WINTER HAVEN'S GILBERT	Polk	Lake Alfred, Winter Haven
WITHAM FIELD	Martin	Stuart
ZEPHYRHILLS MUNICIPAL	Pasco	Zephyrhills

Appendix B

Protected Airspace Around Airports

Appendix B

This appendix provides more detailed/technical information on topics presented in Sections Two and Three of the FDOT Land Use Compatibility Guidebook. Further clarification and assistance with information presented in this appendix or in the guidebook proper can be obtained from FDOT's Aviation Office in Tallahassee.

I. Airport Land Use Related Height Restrictions

Additional information on FAR Part 77 is provided here.

A. Subparts of Part 77

Part 77 is divided into five subparts. These subparts are as follows:

- Subpart A – General: this section covers definitions and the purpose of the regulation.

- Subpart B – Notice of Construction or Alteration: this subpart provides the requirements for notifying FAA of proposed construction or alteration in the airport environs that could exceed Part 77 standards. Sections One and Two of the guidebook have previously outlined the FAA notification process related to tall structures within Part 77 surfaces.

- Subpart C – Obstruction Standards: this section defines the imaginary surfaces within Part 77. These surfaces surround all civilian airports, military airfields, and heliports. The imaginary surfaces serve to define the maximum elevation above which an object could pose a hazard to air navigation. These surfaces are depicted and discussed later in this appendix.

- Subpart D – Aeronautical Studies of the Effect of Proposed Construction on Navigable Airspace: this section defines the general process and timeframes within which FAA performs aeronautical studies. These studies start once FAA is notified of proposed construction within Part 77 surfaces as defined in Subpart C above. The FAA's review process during an aeronautical study was discussed in Section Two of this guidebook; and as previously noted; these aeronautical studies result in a determination of hazard or no hazard.

- Subpart E – Rules of Practice for Hearings under Subpart D: this section defines the process that must be followed if a sponsor files an appeal related to FAA's decision from an aeronautical study.

B. Part 77 Imaginary Surfaces

The imaginary surfaces described in Part 77 include:

- Primary Surface
- Transitional Surface
- Horizontal Surface
- Conical Surface

- Approach Surface

These surfaces are discussed below.

1. **Primary Surface** – The primary surface is a rectangular area. The primary surface is longitudinally centered on the runway. When the runway has a hard surface, the primary surface extends 200 feet beyond the end of each runway end. When the runway does not have a hard surface, nor are there plans to provide the runway with a hard surface, the primary surface terminates at the end of the runway. The width of the primary surface ranges from 250 to 1,000 feet, depending on the existing or planned approach and runway type. The more precise the approach, the wider the primary surface. The elevation of the primary surface is the same as the runway centerline at all points.

   Figure B-1 provides the dimensional requirements for the primary surface, as determined by the type of aircraft using the runway, the type of approach, and the approach visibility minimums. Since the size of the primary surface is runway dependent, information on applicable dimensions for a particular runway should be obtained from each airport. FDOT or the FAA ADO in Orlando can also provide guidance on determining the applicable size of each imaginary Part 77 surface. It is important to note that Rule14-60, FAC, also has requirements for appropriate dimensions for each runway's primary surface; these requirements correspond to those contained in Part 77.

Figure B-1: Primary Surface Dimensional Requirements

FAR PART 77 "IMAGINARY SURFACES" DIMENSION[1] REQUIREMENTS										
Runway Type	**Runway End**		**Conical Surface (L4)**	**Horizontal Surface (L3)**	**Approach Surface**			**Approach Slope**	**Primary Surface Width**	**Transitional Surface**
					Length (L2)	**Inner Width (W1)**	**Other Width (W3)**			
	Approach	**Other**								
Small Airplanes[2]	V	V	4,000	5,000	5,000	250	1,250	20:1	250	7:1
		NP	4,000	5,000	5,000	500	1,250	20:1	500	7:1
		NP 3/4	4,000	5,000	5,000	1,000	1,250	20:1	1,000	7:1
		P	4,000	5,000	5,000	1,000	1,250	20:1	1,000	7:1
	NP	V	4,000	5,000	5,000	500	2,000	20:1	500	7:1
		NP	4,000	5,000	5,000	500	2,000	20:1	500	7:1
		NP 3/4	4,000	5,000	5,000	1,000	2,000	20:1	1,000	7:1
		P	4,000	5,000	5,000	1,000	2,000	20:1	1,000	7:1
Large Airplanes[3]	V	V	4,000	5,000	5,000	500	1,500	20:1	500	7:1
		NP	4,000	10,000	5,000	500	1,500	20:1	500	7:1
		NP 3/4	4,000	10,000	5,000	1,000	1,500	20:1	1,000	7:1
		P	4,000	10,000	5,000	1,000	1,500	20:1	1,000	7:1
	NP	V	4,000	10,000	10,000	500	3,500	34:1	500	7:1
		NP	4,000	10,000	10,000	500	3,500	34:1	500	7:1
		NP 3/4	4,000	10,000	10,000	1,000	3,500	34:1	1,000	7:1
		P	4,000	10,000	10,000	1,000	3,500	34:1	1,000	7:1
Large and Small Airplanes	NP 3/4	V	4,000	10,000	10,000	1,000	4,000	34:1	1,000	7:1
		NP	4,000	10,000	10,000	1,000	4,000	34:1	1,000	7:1
		NP 3/4	4,000	10,000	10,000	1,000	4,000	34:1	1,000	7:1
		P	4,000	10,000	10,000	1,000	4,000	34:1	1,000	7:1
	P	V	4,000	10,000	10,000/40,000	1,000	4,000/16,000	50:1/40:1	1,000	7:1
		NP	4,000	10,000	10,000/40,000	1,000	4,000/16,000	50:1/40:1	1,000	7:1
		NP 3/4	4,000	10,000	10,000/40,000	1,000	4,000/16,000	50:1/40:1	1,000	7:1
		P	4,000	10,000	10,000/40,000	1,000	4,000/16,000	50:1/40:1	1,000	7:1

1 - In Feet
2 - Less than 12,500 lbs maximum certified takeoff weight
3 - Greater than 12,500 lbs maximum certified takeoff weight

V = Visual Approach 20:1
NP = Nonprecision Approach 34:1
NP 3/4 = Nonprecision approach with visibility minimums as low as 3/4 statute miles 34:1
P = Precision approach 50:1

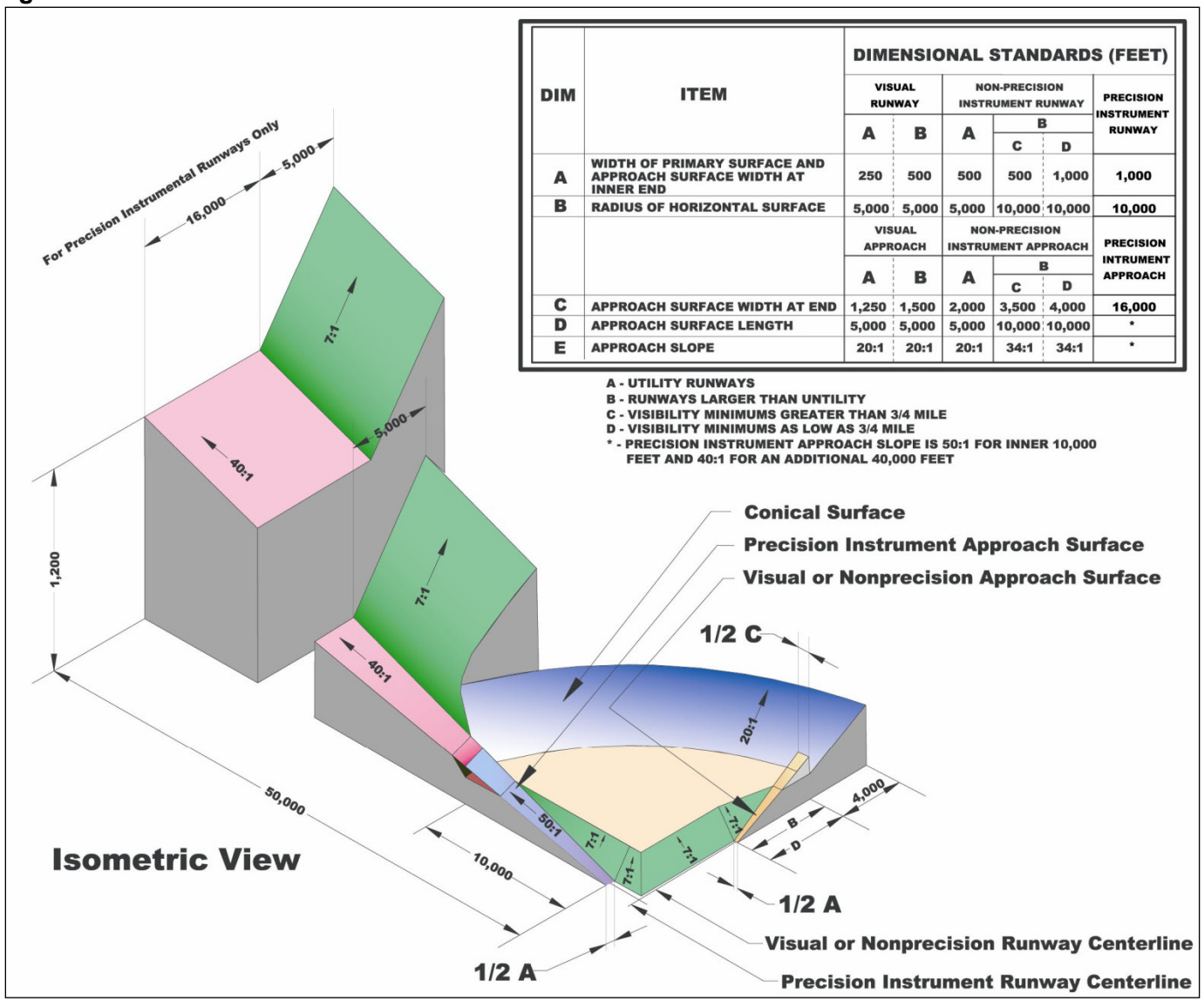
Note: L1 is the length of the RPZ and W2 is the outer width of the RPZ as defined by approach visibility minimums

Source: Federal Aviation Administration

2. **Transitional Surface** – Transitional surfaces extend outward and upward at a slope of 7:1. This means the transitional surfaces extends upward and outward at a slope of seven (7) feet horizontally for each one (1) foot vertically. The transitional surface extends outward from the sides of the primary surface and all approach surfaces. **Figure B-2** provides a graphic representation of the three-dimensional transitional surface. The transitional surfaces extend outward to the point where they intercept the horizontal surface (discussed in the next paragraph) at a height 150 feet above the runway's elevation.

   When a runway has a precision instrument approach surface, the transitional surface and the approach surface extend beyond the limits of the conical surface. When the runway has a precision approach surface, the transitional surface also extends out a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline. The runway centerline is located half the distance from the edge of the runway and extends the entire length of the runway.

Figure B-2: Part 77 Surfaces: Isometric View



Source: FAA FAR Part 77: Objects Affecting Navigable Airspace

3. **Horizontal Surface** – This surface within Part 77 is defined as a horizontal plane located 150 feet above the established airport elevation; the horizontal surface is oval in shape. The horizontal surface extends outward from the transitional surface to the edge of the conical surface (discussed in the next paragraph). The perimeter of the horizontal surface is established by swinging arcs from the center of each end of the primary surface and then by connecting the adjacent arcs by lines that are tangent to those areas. The radius of each arc for the horizontal surface is 5,000 feet if the runway has a visual approach, and the arc is 10,000 feet for all other approach types.

4. **Conical Surface** – The conical surface begins at the edge of the horizontal surface. This is a three-dimensional surface that extends out at a slope of one (1) foot for every 20 feet (20:1) for a distance of 4,000 feet. Figure B-2 provides graphic representations of the conical surface.

5. **Approach Surface** – The approach surface to each runway end varies based on the type of approach and the visibility minimums. The approach surface is longitudinally centered on the extended runway centerline, and the approach surface extends outward and upward from the end of the runway's primary surface. The approach surface begins at the end of the primary surface. The approach slope, depending on the runway's approach type, is either 20:1, 34:1, or 50:1. The length of the approach surface varies and ranges from 5,000 to 50,000 feet. The end of the most demanding approach surface for a precision approach can extend almost 10 miles out from the airport. The inner edge of the approach surface is the same width as the primary surface. From this point and width, the approach surface expands outward to an ultimate width ranging from 1,250 feet to 16,000 feet. The width for the approach surface to each runway end is again dependent on the approach type.

Determining the appropriate approach surface/type for each runway end is best done in consultation with the airport. Since Chapter 333, F.S., states that airport zoning needs to consider planned facilities, it is important to consider approach upgrades that may be implemented in the future to insure that appropriate approach surfaces for each runway end are protected.

C. Part 77 guidelines for FAA notification on Tall Structures

According to Part 77, FAA notification is needed when one of the following conditions is met:

1. The proposed development is more than 200 feet above ground level (AGL).

2. The proposed development or alteration is near an airport or airfield and penetrates Part 77 imaginary surfaces at any of the following points:

    - A slope of 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest public-use or military runway that is more than 3,200 feet in length. This notification area essentially corresponds to

the six (6) mile notification area discussed in Section One of this guidebook.

- A slope of 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest public-use or military runway no more than 3,200 feet in length. This notification area essentially corresponds to the three (3) mile notification area discussed in Section One of this guidebook.

- A slope of 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest public-use or military helicopter landing area. This notification area essentially corresponds to the one (1) mile notification area discussed in Section One of this guidebook.

3. Any highway, railroad, or other traverse way for mobile objects of a height, which if adjusted upward by the amount noted below, would exceed any of the slopes identified in number two.

    - An adjusted height of 17 feet for an Interstate Highway where over-crossings are designed for a minimum of 17 feet vertical distance

    - An adjusted height of 15 feet for any public roadway

    - An adjusted height of 10 feet or the height of the highest object that would normally traverse the road (whichever is greater) for a private road

    - An adjusted height of 23 feet for a railroad

    - An adjusted height equal to the height of the highest mobile object that would normally traverse a waterway or other traverse way not previously mentioned

4. Any structure located directly on a public-use airport, including any structure that is existing, planned, proposed, or under construction

5. Any structure located in an instrument approach area, and available information indicates that the structure might exceed Part 77 standards.

Notification can also be required when it is requested by the FAA. Notification is required when construction or alteration is located on a public-use airport, heliport, or military airfield.

The FAA may inform the sponsor of the notice of construction or alteration that "supplemental notice" is required. If supplemental notice is required, the sponsor needs to submit FAA Form 7460-2, Part 1 to the FAA within 48 hours of the start of construction. This submittal needs to be made to the Southwest Regional Office or through the OE/AAA website. Within five days after the object reaches its greatest height, the sponsor must notify the same FAA regional office using FAA Form 7460-2, Part 2.

If emergency circumstances (essential public services, public health, or public safety) require immediate construction or alteration, the 30-day advanced notice to the FAA is waived. In emergency circumstances, the required notification can be sent by phone (800-992-7433) or by contacting the nearest FAA Flight Service Station. Within five days of the action, FAA Form 7460-1 must be submitted through normal channels.

During on-airport construction, objects sometimes exceed federal height standards. In these instances, the FAA's Airports District Office (ADO) in Orlando (407-812-6331) should be contacted.

D. FAA Obstruction Evaluation

After FAA receives the sponsor's notification requesting an obstruction evaluation, they issue an acknowledgement that they have received the request. At this time, the FAA may seek information to confirm the location of the structure, its coordinates, and the height of the structure. The FAA will also assign an FAA Aeronautical Study Number and provide the sponsor with a point of contact within FAA. It is important for the sponsor to understand that this initial acknowledgement is not a determination.

If the structure exceeds federal obstruction standards, FAA will circulate the proposed notice of construction. The notice is circulated to the aviation public. The circularization process identifies the proposed structure and requests comments on the proposed structure by a set date.

A "notice of presumed hazard" is issued by the FAA when an aeronautical study completed by the FAA reveals that the structure would exceed federal obstruction standards. A notice of presumed hazard can also be issued if the FAA aeronautical study determines that the structure would have an adverse physical impact or would have electromagnetic interference with navigable airspace or air navigation facilities. When the FAA issues a notice of presumed hazard, they can provide the sponsor with information on an alternative location or height to avoid impact. The sponsor is given a 60-day period to respond. Providing this alternative does not authorize construction. A favorable determination from an FAA aeronautical study is still needed.

If an FAA aeronautical study reveals that a proposed structure would have a substantial and adverse negative impact on the safe and efficient use of airspace by aircraft or on the operation of navigational facilities, the FAA will provide the sponsor with a date by which a petition for additional review can be submitted to the FAA. The FAA will also provide the sponsor with a date by which their determination from their aeronautical study will be considered final, unless a petition is filed in a timely manner. The status of the aeronautical study and its determination is not final until there is a resolution of the petition for review, assuming such a petition is submitted.

If the FAA, through aeronautical study, determines that the notice of construction as submitted would not have a substantial negative impact on aircraft operations, airspace, or navigational facilities, there are three types of determinations that the FAA can issue:

- It is possible that an FAA aeronautical could determine that the structure does not pose a "hazard", but that the structure does exceed federal obstruction standards. If a structure is found to exceed federal obstruction standards, the

FAA provides a date for filing comments with them regarding this structure. At the same time that the FAA issues this information, they also provide to the sponsor a subsequent date on which their determination of no hazard becomes final. Information regarding the date on which the determination expires, unless extended, is also provided. If the FAA recommends lighting and marking of the structure as per FAA Advisory Circular 70/7460-1K, this information is also provided at this time.

- Another possible outcome from an FAA aeronautical study is a finding that the structure does not exceed federal obstruction standards and that the structure's location does not pose a hazard to aircraft or navigation. An expiration date for a determination of no hazard can also be provided. Even if the structure is not a hazard and it does not exceed federal obstruction standards, it is still possible that the FAA may provide guidance for marking and lighting the structure in accordance with AC 70/7460-1K.

- If the FAA in an aeronautical study determines that the structure is not a hazard, but that it does exceed federal obstruction standards, the FAA can issue a determination that even though the structure exceeds federal standards it has been determine through their aeronautical evaluation to be okay. In this type of determination, it is likely that the FAA will provide the sponsor with specific compliance conditions that must be met. This may include marking and lighting. The FAA may also issue an expiration date for this type of determination.

Any FAA determination is advisory in nature and does not constitute an approval to construct the proposed structure. FAA determinations evaluate and give an opinion on the effect of the proposed structure on safe and efficient use of navigable airspace by aircraft. The results of an FAA determination do not relieve the sponsor of complying with other applicable federal, state, or local laws or ordinances.

E. FAA Guidelines and Lighting and Marking Tall Structures

FAA guidelines for lighting and marking are presented below:

- Objects that exceed a height of 200 feet AGL or that exceed any federal obstruction standards will be lighted and marked to meet FAA requirements.

- Lighting and marking of objects lower than 200 feet AGL within lateral boundaries of low level aircraft routes will be required.

- Objects above 300 feet AGL up to 500 feet AGL within six nautical miles of a public-use airport or military airfield will be marked and lighted in accordance with specific federal guidelines. These guidelines include medium white lighting for daytime and twilight and for dual lighting red medium intensity white systems. The FAA guidelines call for a system that includes automatic sensors that change between red and white lighting and vary the white strobe intensity between twilight and full day.

- Objects which exceed 500 feet AGL within six nautical miles of a public-use airport or military airfield require high intensity white lighting for daytime and twilight and for dual lighting red/high intensity white systems.

- Objects which exceed 800 feet AGL within six nautical miles of a public-use airport or military airfield require high intensity white lighting for daytime and twilight and for dual lighting.

- When the FAA recommends dual lighting for objects less than the specified heights above because the need for greater visual conspicuity, the more stringent FAA guidelines should be met as a condition for issuing an FDOT permit. When an object does not exceed federal standards, but the FAA as a result of an aeronautical study recommends lighting, this recommendation becomes a requirement for an FDOT permit.

Standards for marking and lighting of structures are also available on FAA's OE/AAA website, and more information on this topic can be obtained from FDOT's Aviation Office or from the FAA ADO in Orlando. More information for complying with all facets of Chapter 333, F.S. and Rule 14-60, FAC can be obtained from FDOT's Aviation Office in Tallahassee.

II. Airport and Land Use Related Noise Restrictions

Additional information on land use compatibility and aircraft noise is presented in this section.

A. Measuring Aircraft Noise

The standard in the aviation industry for measuring aircraft noise is the Integrated Noise Model (INM). The most current version of this model at the time this guidebook was prepared was INM 7.0a. This is a recent update to the INM and includes noise generated by very light jets. The latest version of the INM also provides a more reliable means for modeling helicopter noise.

The INM is based on algorithms and the framework used in the procedure for calculation of airplane noise in the vicinity of airports, AIR-1845.

The FAA prescribes the use of the INM in their Order 1050 when an airport related environmental assessment (EA) or environmental impact statement (EIS) is being prepared. The INM is also used to generate noise contours that are produced as part of a FAR Part 150 Noise Study. The capabilities of the INM include its ability to:

- Reflect current noise exposure through the generation of measurable noise contours

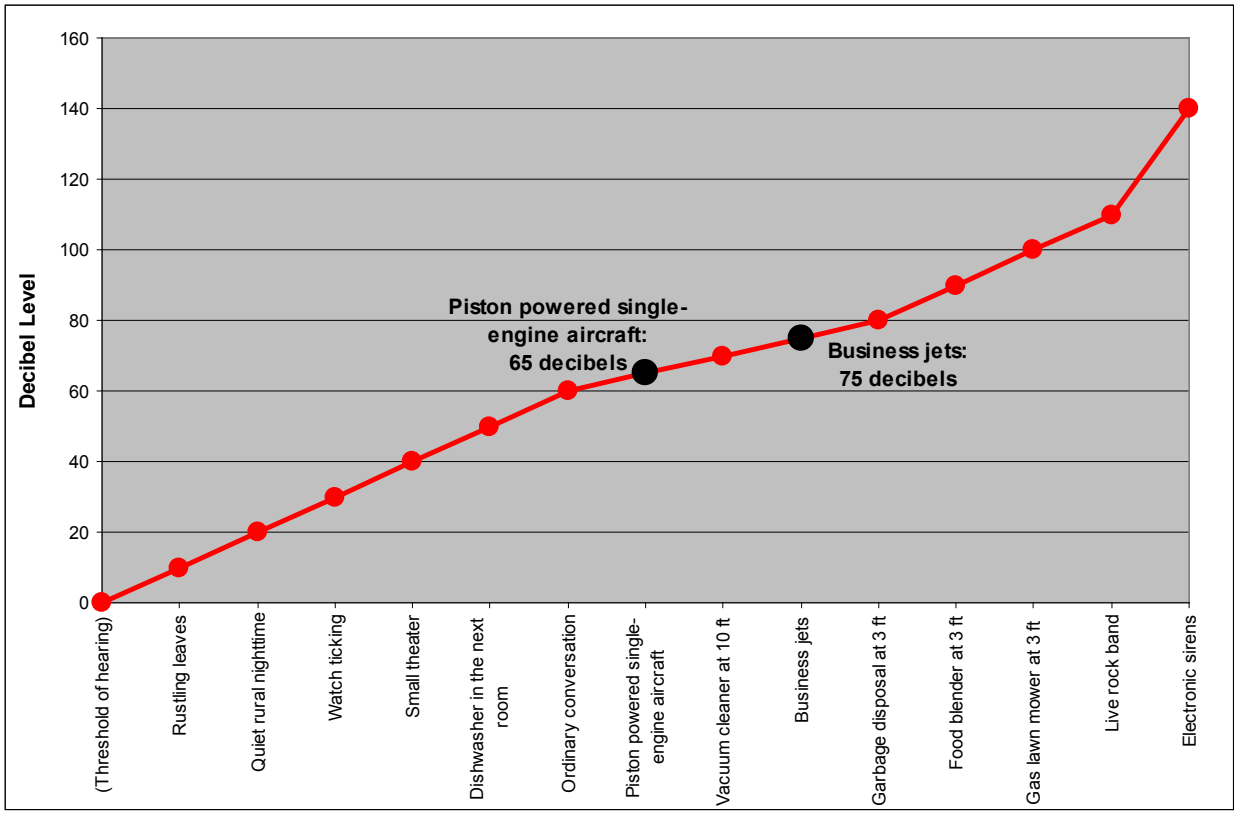
- Show how noise exposure levels could change as result of new or extended runways

- Reflect changes in noise exposure that could result from changes in the mix of aircraft operating at an airport

- Show how areas subject to certain levels of noise exposure could change with new approach or departure procedures

Figure B-3 shows a range of common sounds measured by decibel level. The Department of Housing and Urban Development (HUD) and the FAA have determined through their study and research that noise sensitive uses, such as residential development, are generally compatible at a level of 65 dB or less. That means that noise sensitive land uses and activities should be discouraged in areas where noise contours from the INM show levels of 65 DNL or above. Some local governments within their specific zoning ordinances may base land use guidelines and development restrictions on lower levels of cumulative noise exposure. In fact many communities use the 55 DNL to restrict noise sensitive development. Noise sensitive development around an airport can increase perceptions of incompatible noise issues.

Figure B-3: Sound Level Comparisons



It is important to note that when aircraft noise is modeled using the INM, a 10 point decibel "penalty" is applied to aircraft operations that take place between 10 p.m. and 7 a.m. Nighttime aircraft operations are generally perceived as being more invasive and less compatible.

DNL is the FAA's and the military's preferred method for expressing aircraft related noise impacts for the following reasons:

- This methodology is based on extensive research and has been in use for many years

- The DNL methodology provides a means of "quantifying" noise impacts at given locations

- The methodology, relative to others, is more easily understood

- The DNL results can be readily compared to noise from alternative sources of noise

- This methodology expresses in a general fashion how a community reacts to certain levels of noise, making the results more effective for compatible land use planning

Aircraft noise is most commonly measured and expressed using the DNL method. However, aircraft noise can also be expressed and measured using the sound exposure level (SEL). The SEL methodology for expressing aircraft noise measures the noise associated with a single aircraft takeoff or landing. Because of the technique used in the SEL methodology, SEL noise levels are generally thought be roughly 10 dB higher than the actual noise level of the takeoff or landing event.

B. Part 150 Noise Studies

A Part 150 Noise Study is generally undertaken by an airport when one or more surrounding communities express issues with aircraft noise. Less frequently, a Part 150 Noise Study is undertaken as preemptive strategy to avoid or mitigate potential noise issues. The Part 150 process provides a prescribed framework for bringing together the airport, airport operators/users, and communities in constructive dialogue.

Key components of a Part 150 Noise Study are the base case and the future noise exposure maps (NEMs). Using resulting from the INM, these maps depict areas around the airport where the highest levels of cumulative noise exposure occur currently, or they reflect areas where adverse noise impacts will occur in the future. Noise exposure maps generated during a Part 150 Noise Study help to identify land uses and activities that are incompatible with current or future aircraft noise.

Airports with an FAA approved Part 150 Noise Study can take advantage of federal funds that are available to address noise incompatibilities. The Part 150 program provides funds for acquisition, sound insulation, noise barriers, and other corrective actions aimed at reducing incompatibilities related to aircraft noise exposure. The program is also a source of funds for acquiring land to prevent future incompatibilities or to mitigate current incompatibilities.

As discussed in this guidebook, if a Florida airport has an approved Part 150 Noise Study, residential development and educational facilities, through zoning and the comprehensive planning process, should be restricted in a area defined by the outer most noise contour. This restriction is per Chapter 333, F.S. As discussed in Section One of this guidebook, if an airport does not have an approved Part 15 Noise Study,

other methods for determining areas around the airport that should be free of residential development or educational facilities are followed, as per Chapter 333, F.S.

III. Areas around Airports to Protect from a Safety Standpoint

Additional information on land use compatibility and safety considerations is presented in this section.

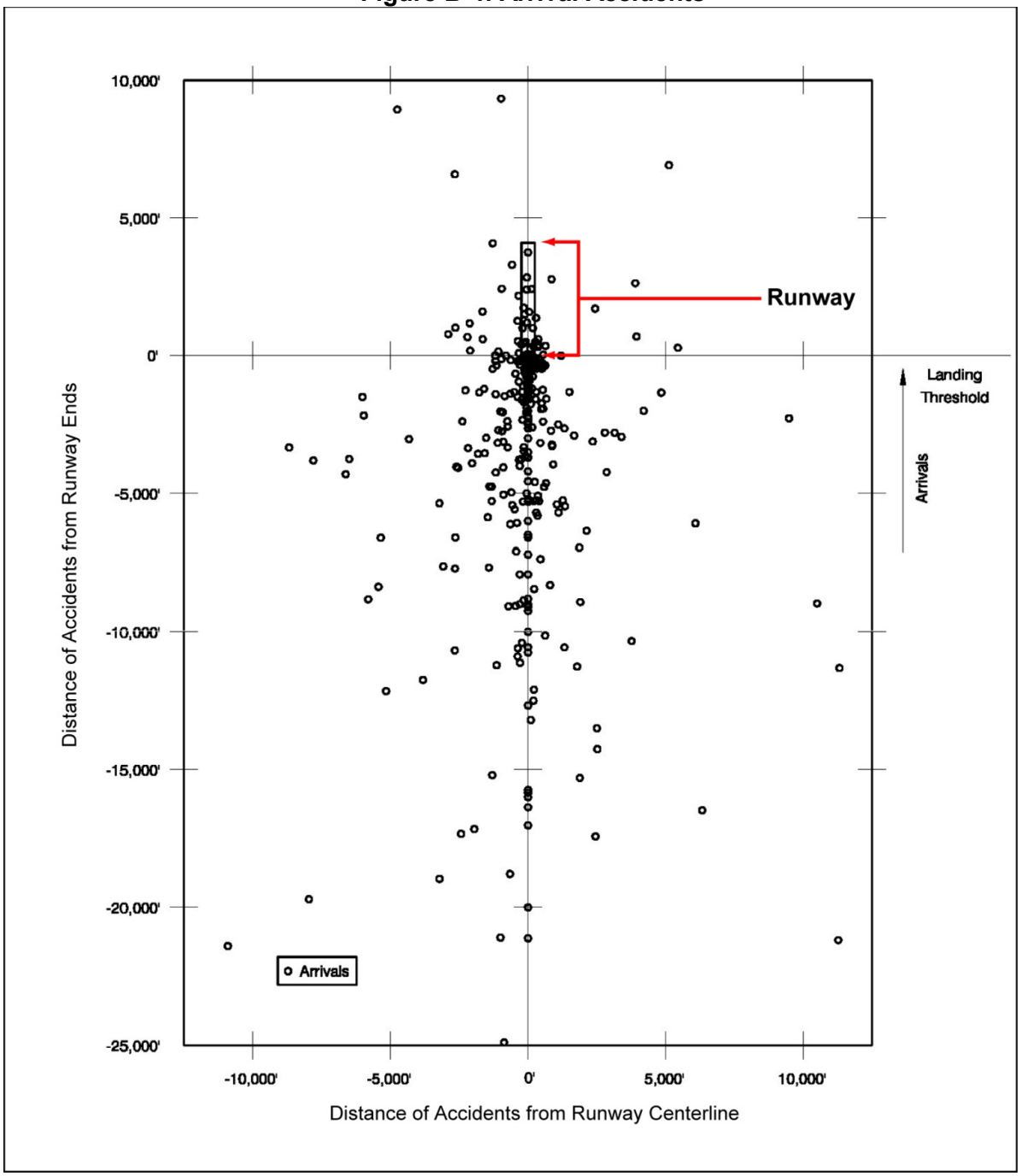
A. Accident Potential Risk Areas

In 2002, CALTRANS completed an extensive study on the location of aircraft accidents relative to the runway. This study was undertaken to support compatible land use planning efforts for airports in California. The CALTRANS work represents the most recent work that is available on aircraft accidents.

Figures B-4 and **B-5** are taken from the CALTRANS study. Figure B-4 is a scatter plot showing the distribution of aircraft accidents on arrival or approach. As shown in the information presented on this figure, most accidents in the approach phase of flight took place within 10,000 feet of the runway end and within an area 5,000 feet on either side of the extended runway centerline.

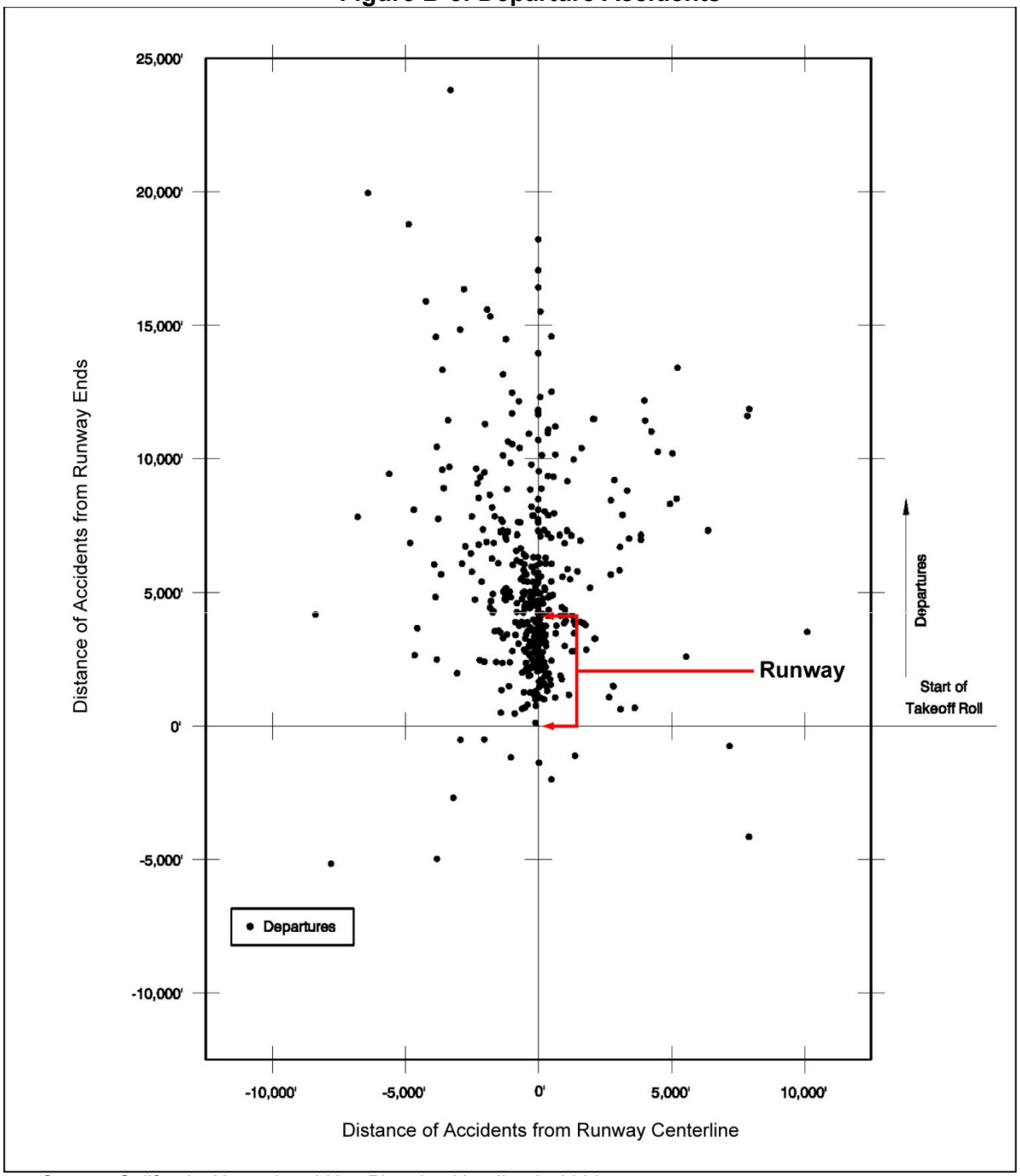
Figure B-5 shows a scatter plot for accidents that occurred during the departure phase of flight. Again, the majority of the accidents occurred in the same area as noted for accidents taking place on arrival. It is prudent for local governments to consider these areas and information from the CALTRANS research when developing or modifying airport protection zoning.

Figure B-4: Arrival Accidents



Source: California Airport Land Use Planning Handbook, 2002

Figure B-5: Departure Accidents



Source: California Airport Land Use Planning Handbook, 2002

B. Runway Protection Zones (RPZ)

The type of approach to the runway helps to establish the appropriate size for the RPZ. Approaches to each runway end are classified as being visual, non-precision, or precision. If an approach is visual, there is no instrumentation to assist a pilot in locating the runway or landing. If the approach is non-precision, instrumentation is available to

provide horizontal guidance during landing. If a precision approach is present, instruments provide both horizontal and vertical landing guidance.

FAA design criteria are used to set appropriate dimensions for each RPZ. Design standards for airports are determined using the FAA's airport reference code (ARC) system. Applicable design standards for each runway are established by identifying the critical aircraft. The critical aircraft is defined as the largest aircraft or group of aircraft that perform at least 250 landings and takeoffs (500 annual operations) at the airport each year.

Once the critical aircraft is determined, the appropriate ARC is established by determining the approach speed and the wingspan for that aircraft. The ARC for each runway is expressed by a letter (reflecting the aircraft's approach speed) and a Roman numeral (reflecting the wingspan of the aircraft). **Figure B-6** provides example aircraft approach speeds and wingspans used to determine a runway's ARC.

Figure B-6: Aircraft Approach Speeds and Wingspan

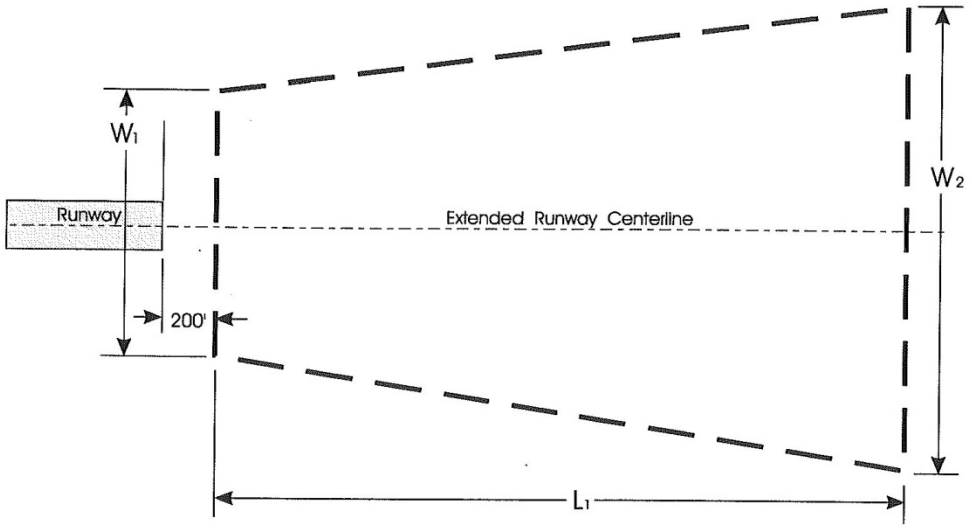
FAA Aircraft Approach Category Classification	
Approach Category	**Approach Speed in Knots**
A	Less than 91
B	91 but less than 121
C	121 but less than 141
D	141 but less than 166
E	166 or greater

FAA Airplane Design Group Classification			
Airplane Design Group	**Tail Height (feet)**	**Wing Span (feet)**	**Typical Aircraft**
I	Less than 20	Less than 49	Cessna 172 Lear 35 King Air 90 Cessna Citation Mustang
II	20 but less than 30	49 but less than 79	Cessna Citation V Gulfstream IV Beechcraft 1900 Super King Air
III	30 but less than 45	79 but less than 118	Dash-8 B737 A320 Gulfstream 650
IV	45 but less than 60	118 but less than 171	A300 B757 B767 B787
V	60 but less than 66	171 but less than 197	B747 B777 A340
VI	66 but less than 80	197 but less than 262	A380

Source: FAA Advisory Circular 150/5300-13, "Airport Design"

The RPZ starts 200 feet from the end of a paved runway and at then of a turf runway. Depending on the aforementioned factors, the length of the RPZ is 1,000, 1,700, or 2,500 feet. Each RPZ is a trapezoid. The inner width of the trapezoid, the end nearest the runway, ranges from 250 to 1,000 feet in width. The outer width of the RPZ ranges from 450 to 1,750 feet. **Figure B-7** provides a graphic representation of an RPZ and dimensions that are appropriate based on approach type and visibility minimums.

Figure B-7: RPZ Dimensions



Approach Visibility Minimums 1/	Facilities Expected To Serve	Dimensions			
		Length L Feet (meters)	Inner Width W_1 feet (meters)	Outer Width W_2 feet (meters)	RPZ acres
Visual And Not lower than 1-Mile (1 600 m)	Small Aircraft Exclusively	1,000 (300)	250 (75)	450 (135)	8.035
	Aircraft Approach Categories A & B	1,000 (300)	500 (150)	700 (210)	13.770
	Aircraft Approach Categories C & D	1,700 (510)	500 (150)	1,010 (303)	29.465
Not lower than ¾-Mile (1 200 m)	All Aircraft	1,700 (510)	1,000 (300)	1,510 (453)	48.978
Lower than ¾-Mile (1 200 m)	All Aircraft	2,500 (750)	1,000 (300)	1,750 (525)	78.914

1/ The RPZ dimensional standards are for the runway end with the specified approach visibility minimums. The departure RPZ dimensional standards are equal to or less than the approach RPZ dimensional standards. When a RPZ begins other than 200 feet (60 m) beyond the runway end, separate approach and departure RPZs should be provided. Refer to Appendix 14 for approach and departure RPZs.

Source: FAA Advisory Circular 150/5300-13

IV. Compatible Land Use Considerations for Military Airfields

Additional information on land use compatibility and aircraft noise for military airfields is presented in this section.

A. AICUZ

The AICUZ program started in 1971 with its predecessor, the Greenbelt concept. Realizing that the Greenbelt concept did not adequately identify those areas that should be considered for compatible land use planning, the AICUZ program was developed between 1972 and 1973. Continued encroachment from incompatible land use on the nation's military installations made the AICUZ program a necessity.

Noise, which impacts areas off each military airfield, is a primary consideration in AICUZ. Noise related guidelines for land use planning contained in the AICUZ program are a result of the 1980 Federal Interagency Committee on Urban Guidelines for Considering Noise in Land Use Planning and Control. Noise contours similar to those produced in a Part 150 Noise Study are an important output from an AICUZ study. An AICUZ report contains guidance on land uses that are considered compatible in various noise zones.

There are five steps or tasks in an AICUZ study. These are as follows:

1. **Data Collection and Analysis** – Similar to a Part 150 Noise Study for a civilian airport, a considerable amount of information is needed before noise contours for a military installation can be generated. While the INM is used for civilian airports, NOISEMAP is used to produce noise contours for military airfields. This is the model approved by the Environmental Protection Agency (EPA) to reflect noise impacts for military aircraft. Inputs for NOISEMAP are similar to those needed for the INM, with two distinctions. A substantial contribution to noise generated by military airfields can come from ground run-up; hence, this noise is modeled by NOISEMAP. In addition, flight altitude is an important input for NOISEMAP since military flights frequently take place at lower altitudes for longer durations.

2. **Data Review, Validation, and Computer Processing** – During this part of the AICUZ process, review of critical data inputs are reviewed by the installation and by the Major in Command (MAJCOM). Validated data is then entered into NOISEMAP.

3. **AICUZ Study/Amendment Preparation** – This phase produces a final draft of the AICUZ and the Implementation and Maintenance Plan (IMP) for MAJCOM approval. Publication and release of the AICUZ is coordinated with the area's congressional delegation.

4. **AICUZ Study/Amendment Public Release** – With MAJCOM approval, the AICUZ is released to the general public.

5. **AICUZ Implementation and Maintenance** – This task involves continuous outreach following the completion of the AICUZ study. Outreach to agencies, groups, and individuals on the need for compatible land development is part of this process. Monitoring of development that is taking place off-base and providing comment on proposed development in the airfield environs is also an element of this task. This

task provides the opportunity for developing and maintaining relationships with communities that are in proximity to each military airfield. A Citizen's Brochure is often produced to summarize AICUZ findings and recommendations.

The AICUZ report provides recommendations for achieving land use compatibility related to aircraft accident potential, noise, height restrictions, and other local considerations. Among the other considerations are recommendations similar to those in Part 77 that provide guidance on the restriction of activities or uses that would cause the attraction of birds or wildlife, uses that would produce electrical emissions that would interfere with aircraft or navigational aid systems, or uses that would cause smoke, light, dust, or glare that would interfere with a pilot's vision.

An AICUZ report provides an analysis of both current and future land use incompatibilities. Similar to Florida's civilian airports, findings and recommendations from an AICUZ report for a military airfield should be incorporated in to all applicable comprehensive plans and/or all amendments to those plans. Recommendations from an AICUZ report need to be adopted by and enforced by local government; DOD has no enforcement powers. The AICUZ provides the basis for communities to exercise police powers to protect public health, welfare, and safety. Through planning, zoning, and building codes, the authority and the responsibility for addressing AICUZ recommendations rests with local government.

Military responsibilities under AICUZ are focused on fostering compatible land use with neighboring communities through each of the following:

- Minimizing, to the extent possible, the adverse effects of noise from aircraft operations on people and activities in surrounding communities
- Defining areas of noise impact and accident potential zones
- Providing information for local, regional, and state governments and agencies to use in land use decision making
- Engaging with neighboring communities in the land use planning process

Appendix C
Resources and Contacts

APPENDIX C
References & Contacts

I. Federal and State Airspace and Land Use Statutes & Administrative Code

Code of Federal Regulations Search Page
Website: www.gpoaccess.gov/cfr/

Title 14 CFR FAR Part 77 Objects Affecting Navigable Airspace
Website: www.access.gpo.gov/nara/cfr/waisidx_04/14cfr77_04.html
OR https://oeaaa.faa.gov/oeaaa/external/content/FAR_Part77.pdf

Title 14 CFR FAR Part 150, Airport Noise Compatibility Planning
Website: www.access.gpo.gov/nara/cfr/waisidx_05/14cfr150_05.html

Title 14 CFR FAR Part 161, Notice & Approval of Airport Noise Access Restrictions
Website: www.access.gpo.gov/nara/cfr/waisidx_02/14cfr161_02.html

Florida Statutes, Chapter 333 Airport Zoning
Website: www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&URL=Ch0333/titl0333.htm

Florida Statutes, Chapter 163, Part II, F.S., Growth Management Act/Local Government Comprehensive Planning and Land Development Regulations Act
Website: www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&URL=Ch0163/part02.htm&StatuteYear=2009&Title=%2D%3E2009%2D%3EChapter%2016 3%2D%3EPart%20II

Florida Administrative Code, Chapter 14-60 Airport Licensing, Registration, & Airspace Protection
Website: www.flrules.org/gateway/ChapterHome.asp?Chapter=14-60

Florida Administrative Code, Rule 9J-5 Minimum Criteria for Review of Local Government Comprehensive Plan and Plan Amendments, Evaluation Appraisal Reports, Land Development Regulations, and Determination of Compliance
Website: www.flrules.org/gateway/ChapterHome.asp?Chapter=9J-5

II. FAA's Obstruction Evaluation Airport Airspace Analysis

Website: https://oeaaa.faa.gov/oeaaa/external/portal.jsp

FAA Contacts:

FAA Supervisor for OE/AAA	National Office for OE/AAA Petitions
Sheri Edgett Baron Supervisor, Eastern U.S. Operations & U.S. Wind Turbine Evaluations FAA National Headquarters Room 400 East 800 Independence Ave, SW	Edith V. Parish Manager, Airspace and Rules Office of System Operations and Safety Federal Aviation Administration 800 Independence Avenue Room 423

Washington, DC 20591 Phone: (202) 267-9400 Fax: (202) 267-5467 Email: sheri.edgett-baron@faa.gov	Washington, DC 20591 Phone: (202) 267-8783 Fax: (202) 267-9328

OE/AAA Filing Instructions

E-File Instructions
Website: https://oeaaa.faa.gov/oeaaa/external/content/efilerGuide.jsp

Form 7460-1 Notice of Proposed Construction or Alteration
Website: http://forms.faa.gov/forms/faa7460-1.pdf

If construction or alteration IS NOT LOCATED on an airport:

E-File using New User Registration
https://oeaaa.faa.gov/oeaaa/external/userMgmt/permissionAction.jsp?action=showRegistrationForm

OR Mail Forms 7460-1 and 7460-2 To:
Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Service, AJR-322
2601 Meacham Blvd.
Fort Worth, TX 76193
Fax: (817) 838-1991

Contact FAA Air Traffic with Questions:
North Florida:
Website:
https://oeaaa.faa.gov/oeaaa/external/public/aorDetails.jsp?aorID=61

South Florida:
Website:
https://oeaaa.faa.gov/oeaaa/external/public/aorDetails.jsp?aorID=62

If construction or alteration IS LOCATED on an airport:

E-File using New User Registration
https://oeaaa.faa.gov/oeaaa/external/userMgmt/permissionAction.jsp?action=showRegistrationForm

OR Contact FAA Airports Region District Office (ADO) having jurisdiction over the airport on which the construction is located.

For Florida, contact:
Orlando Airports District Office
5950 Hazeltine National Dr., Suite 400
Orlando, FL 32822-5024

Phone: (407) 812-6331
FAX: (407) 812-6978

Form 7460-2 Supplemental Notice:
Website: http://forms.faa.gov/forms/faa7460-2.pdf

FAA's Notice Criteria Tool
Website: https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?Action=showNoNoticeRequiredToolForm

To View Recently Determined 7460-1 Forms by state (within last 30 days)
Website: https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?Action=showNoNoticeRequiredToolFormhttps://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchDeterminedCasesForm

To View Recently Proposed 7460-1 Forms by state (processed but not yet determined
Website: https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchProposedCasesForm

To View Recently Supplemental 7460-2 Forms by state (within last 120 days)
Website: https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchSuppNoticesForm

To View Circularized Cases where FAA Solicits Input from the Public
Website: https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchCircularizationForm

To submit comments for circularized cases:
Website: https://oeaaa.faa.gov/oeaaa/external/userMgmt/permissionAction.jsp?action=showLoginForm

To Receive an Email Notification Whenever a Case is Circularized, Register at the following website
Website: https://oeaaa.faa.gov/oeaaa/external/userMgmt/permissionAction.jsp?action=showRegistrationForm

To Search the Entire Archive of OE/AAA Cases, 1988 – present
Website: https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchArchivesForm

To Perform a Circle Search for Obstacles:

Cases around a center point with a specified radius
Website: https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchArchivesForm

Public use airports around a center point with a specified radius
Website: https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAirportsForm

Instructions on How to File a Petition Requesting FAA Discretionary Review of a Determination
Website: https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchPetitionsForm

Additional questions or concerns about obstacles can contact:
NBAA's Access Committee, obstacles@nbaa.org.

III. FAA Advisory Circulars & Orders

Search Advisory Circulars
Website: www.faa.gov/airports/resources/advisory_circulars

FAA AC 70/7460-1K, Obstruction Marking and Lighting
Website:
http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/b993dcdfc37fcdc486257251005c4e21/$FILE/AC70_7460_1K.pdf

FAA AC 150/5020—1, Noise Control and Compatibility Planning for Airports
Website: www.faa.gov/airports/resources/advisory_circulars/media/150-5020-1/150_5020_1.pdf

FAA AC 150/5070-6B, Airport Master Plans
Website: www.faa.gov/airports/resources/advisory_circulars/media/150-5070-6B/150_5070_6b_chg1.pdf

FAA AC 150/5190.4A, A Model Zoning Ordinance to Limit Height of Objects around Airports
Website: http://www.faa.gov/airports/resources/advisory_circulars/media/150-5190-4A/150_5190_4A.PDF

FAA AC 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports
Website: www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf

FAA AC 150/5200-34-A, Construction or Establishment of Landfills near Public Airports
Website:
http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/53bdbf1c5aa1083986256c690074ebab/$FILE/150-5200-33.pdf

Title 40 CFR Part 258, Subpart 10, Criteria for Municipal Solid Waste Landfills
Website: www.epa.gov/waste/wycd/tribal/pdftxt/40cfr258.pdf

Florida Administrative Code Chapter 17-701, Solid Waste Management Facilities
Website: ftp://ftp.dep.state.fl.us/pub/reports/62-701/FloridaSWRegulations1966_1997_eff05-19-1994.pdf

Florida Administrative Code Chapter 62-701 Solid Waste Management Facilities
Website: www.dep.state.fl.us/waste/quick_topics/rules/documents/62-701.pdf

FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects
Website: www.faa.gov/airports/resources/publications/orders/ environmental_5050_4

FAA Order JO 7400.2G, Traffic Pattern Area
Website: www.faa.gov/documentLibrary/media/Order/7400.2G.pdf

IV. FAA Forms

FAA Form 7460-1 - Notice of Proposed Construction or Alteration
Website: https://oeaaa.faa.gov/oeaaa/external/content/7460-1.pdf

FAA Form 7460-2 - Notice of Actual Construction or Alteration
Website: https://oeaaa.faa.gov/oeaaa/external/content/faa7460-2.pdf

FAA Form 5010-3 - For newly established public-use airports
Website: https://oeaaa.faa.gov/oeaaa/external/content/faa5010-3.pdf

FAA Form 5010-5 - For newly established private-use airports
Website: https://oeaaa.faa.gov/oeaaa/external/content/faa5010-5.pdf

FAA Form 7480-1 - Notifies the FAA of any construction, alteration, activation, deactivation, or change to the status or use of a civil or joint-use (civil/military) airport (part 157)
Website: https://oeaaa.faa.gov/oeaaa/external/content/airspace_f7480-1.pdf

V. FDOT Forms

725-040-11 Airspace Obstruction Permit Application
PDF: www.florida-aviation-database.com/dotsite/pdfs/725-040-11.pdf
Word Form: http://formserver.dot.state.fl.us/MiscRepository/forms/w72504011.doc

Submit Completed Form To:
Airspace and Land Use Manager
Florida Department of Transportation
605 Suwannee Street, M.S. 46
Tallahassee, Florida 32399-0450

725-040-12 Airport Site Approval and License Application
PDF: http://formserver.dot.state.fl.us/MiscRepository/forms/72504012.pdf
Word Form: http://formserver.dot.state.fl.us/MiscRepository/forms/w72504012.doc

Exhibit "C" Aviation Program Assurances
PDF: http://formserver.dot.state.fl.us/MiscRepository/forms/72504015.pdf
Word Form: http://formserver.dot.state.fl.us/MiscRepository/forms/w72504015.doc

VI. Military Program Resources

Air Installation Compatible Use Zone Program Guidance

Website: www.afcee.af.mil/resources/aicuz

Air Installations Compatible Use Zones
Website: www.dtic.mil/whs/directives/corres/pdf/416557p.pdf

Air Force Center for Engineering and the Environment
AICUZ Staff Contacts:

- **Program Manager** - Telephone: (210) 536-5675; DSN 240-5675
- **Mathematician -** Telephone: (210) 536-5500; DSN 240-5500
- **Technician -** Telephone: (210) 536-4210; DSN 240-4210
- **FAX Number:** (210) 536-2239, DSN 240-2239:

Joint Land Use Study Program Manual
Website:
www.oea.gov/OEAWeb.nsf/FD3D3C042BA4EC1285256E83004497AD/$File/Joint%20Land%20Use%20Study%20Guidance%20Manual.pdf

Video: www.oea.gov/oeaweb.nsf/BND?readform

Practical Guide to Compatible Civilian Development Near Military Installations
Website: http://www.oea.gov/OEAWeb.nsf/PG?readform

Federal JLUS Program Contact:
Office of Economic Adjustment
400 Army Navy Drive, Suite 200
Arlington, VA 22202-2884
Phone (703) 604-6020
Website: www.oea.gov

Florida JLUS Guidance
Website: http://www.cuesfau.org/toolbox/subchapter.asp?SubchapterID=51&ChapterID=12

Florida JLUS Contact:
Phone (850) 487-4545

Florida Division of Community Planning, Military Base Encroachment
Website: www.dca.state.fl.us/fdcp/dcp/militarybase/

Florida Department of Community Affairs, Division of Community Affairs Contacts:

Regional Staff Assignment Website
http://www.dca.state.fl.us/fdcp/dcp/regionalreviewstaff/index.cfm.

Florida Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
(850) 488-8466
Toll-Free 1-877-352-3222

TDD 1-800-226-4329 Re

Other FCA Contacts

Director
Division of Community Planning
(850) 488-2356
Fax: (850) 488-3309

Chief
Office of Comprehensive Planning
(850) 487-4545
Office of the General Counsel:
(850) 488-0410

VIII. Additional FAA Guidance

Airport Noise Compatibility Planning Toolkit
Website: www.faa.gov/about/office_org/headquarters_offices/aep/planning_toolkit/

Overview of FAA Policy on Part 150 Approval of Noise Mitigation Measures
Website: www.faa.gov/about/office_org/headquarters_offices/aep/planning_toolkit/media/II.D.pdf

Land Use Compatibility and Airports, A Guide for Effective Land Use Planning
Website:www.faa.gov/about/office_org/headquarters_offices/aep/planning_toolkit/media/III.B.pdf

Land Use Planning Process Flowchart
Website: www.faa.gov/about/office_org/headquarters_offices/aep/planning_toolkit/media/IV.A.pdf

Part 150 Checklists:
Website: www.faa.gov/airports/environmental/airport_noise/part_150/checklists/

FAA Airport Facility Directory
Website: www.avn.faa.gov/index.asp?xml=naco/online/d_afd

FAA Environmental Contacts:
Phone: (202) 267-3263 for Environmental Inquiries
Fax: (202) 267-5383
Website: www.faa.gov/about/office_org/headquarters_offices/arp/offices/app/app400/environmental/

FAA Planning Contacts
Phone: (202) 267-3451 for Planning Inquiries
Fax: (202) 267-5383
Website: www.faa.gov/about/office_org/headquarters_offices/arp/offices/app/app400/planning/

IX. Additional FDOT Guidance

FDOT Guidance on Airspace Obstructions
Website: www.dot.state.fl.us/Aviation/pdfs/Airspace_Obstructions.pdf

Florida Airports Directory

Website: www.florida-aviation-database.com/dotsite/publications/FLDOT_Airport_Directory.pdf

Florida Aviation System Plan (FASP)
Website: www.dot.state.fl.us/Aviation/FASP_details.shtm

FDOT Contact:
FDOT Aviation Office
Airspace and Land Use Manager
605 Suwannee Street, MS 46
Tallahassee, Florida 32399-0450
phone (850) 414-4500
fax (850) 414-4508.

X. Other Information

Airport Reference Point Computation
Website: www.ngs.noaa.gov/AERO/arpcomp/arpframe.html

XI. Airport Notification Areas

The maps will soon be accessible on the listed website.
If you'd like to receive a copy of a map for your airport immediately, please contact the Florida DOT Airspace and Land Use Manager at 850-414-4502.
FDOT Airports Notification Areas
Website: www.dot.state.fl.us/aviation

Appendix D
Land Use Zoning Examples

APPENDIX D
Examples of Florida Land Use Zoning Ordinances

A. **Hendry County Code of Ordinances** (LaBelle Airport/Airglades Airport)
URL: http://library8.municode.com:80/default-test/template.htm?view=browse&doc_action=setdoc&doc_keytype=tocid&doc_key=b889f72ddf1a4ede9b529d32debefdb2&infobase=10908

B. **Martin County Land Development Code** (Witham Field)
URL: http://library8.municode.com:80/default-test/template.htm?view=browse&doc_action=setdoc&doc_keytype=tocid&doc_key=2d9bef11b3235ec6d849134bd17b6a26&infobase=13592

C. **Okaloosa County Land Development Code** (Northwest Florida Regional Airport, Destin/Ft. Walton Beach Airport, Bob Sikes Airport)
URL: www.co.okaloosa.fl.us/doc/chapter%2003.pdf

D. **Escambia County Code of Ordinances** (Pensacola Regional Airport, NAS Pensacola Airfield, Ferguson and Coastal airports and NOLF Saufley, NOLF Site 8 and Navy Hospital heliport)
URL:http://library8.municode.com:80/default-test/template.htm?view=browse&doc_action=setdoc&doc_keytype=tocid&doc_key=77f4de6acab5b7862e74baf8a1163012&infobase=10700

A. Code of Ordinances, County of Hendry Florida (LaBelle Municipal Airport and Airglades Airport)

Chapter 1-53 ZONING

Sec. 1-53-6. Supplemental regulations.

1-53-6.13. ***Airports.*** The following regulations shall apply to areas identified herein, and which shall be delineated on the zoning map:

(1) ***Zones and airspace height limitations.***

a. In order to carry out the provisions of this section, there are hereby created and established certain zones which include all of the land lying beneath the approach, transitional, horizontal and conical surfaces as they apply to a particular airport. Such zones are shown on the LaBelle and Airglades Airport zoning maps, which are attached to the ordinance codified in this section and made a part hereof.

Editor's note: The airport zoning maps referred to in this section are not printed herein, but are available for public inspection at the county offices.

b. An area located in more than one of the described zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established as follows:

1. ***Primary zone.*** An area longitudinally centered on a runway extending 200 feet beyond each end of that runway with the width so specified for each runway for the most precise approach existing or planned for either end of the runway. No structure or obstruction will be permitted within the primary zone that is not part of the landing and takeoff area and is of a greater height than the nearest point on the runway centerline. The width of the primary zone is as follows:

i. *LaBelle Municipal Airport.*

(a) Runway 05/23: 250 feet for utility runways having only visual approaches.

(b) Runway 14/32: For other than utility runways the width is 500 feet for non-precision-instrument runways having visibility minimums greater than three-fourths of a statute mile.

ii. *Airglades Airport.* Runway 13/31: For other than utility runways the width is 500 feet for non-precision-instrument runways having visibility minimums greater than three-fourths of a statute mile.

The width of the primary zone 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.

2. ***Horizontal zone.*** The area around each civil airport with an outer boundary, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary zone of each airport's runway and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is:

i. *LaBelle Municipal Airport.*

(a) Runway 05/23: 5,000 feet for all runways designated as utility or visual.

(b) Runway 14/32: 10,000 feet for all other runways.

ii. *Airglades Airport.* Runway 13/31: 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 composite value 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 a perimeter of the horizontal zone. No structure or obstruction will be permitted in the horizontal zone that has a height greater than 150 feet above the airport height.

3. *Conical zone.* The area extending outward from the periphery of the horizontal zone for a distance of 4,000 feet. Height limitations for structures in the conical zone are 150 feet above airport height at the inner boundary with permitted height increasing one foot vertically for every 20 feet of horizontal distance measured outward from the inner boundary to a height of 350 feet above airport height at the outer boundary.

4. *Approach zone.* An area longitudinally centered on the extended runway centerline extending outward from each end of the primary surface. An approach zone is designated for each runway based upon the type of approach available or planned for that runway end.

i. The inner edge of the approach zone is the same width as the primary zone and it expands uniformly to a width of:

(a) *LaBelle Municipal Airport.*

Runway 05/23: 1,250 feet for that end of a utility runway with only visual approaches.

Runway 14/32: 3,500 feet for that end of a non-precision-instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile.

(b) *Airglades Airport.* Runway 13/31: 3,500 feet for that end of a non-precision-instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile.

ii. The approach surface extends for a horizontal distance of:

(a) *LaBelle Municipal Airport.*

Runway 05/23: 5,000 feet for all utility and visual runways.

Runway 14/32: 10,000 feet for all non-precision-instrument runways other than utility.

(b) *Airglades Airport.* Runway 13/31: 10,000 feet for all non-precision-instrument runways other than utility.

iii. The outer width of an approach zone 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.

iv. Permitted height limitation within the approach zones is the same as the runway end height at the inner edge and increases with horizontal distance outward from the inner edge as follows:

(a) *LaBelle Municipal Airport.*

Runway 05/23: Permitted height increases one foot vertically for every 20 feet horizontal distance for all utility and visual runways.

Runway 14/32: Permitted height increases one foot vertically for every 20 feet horizontal distance for all non-precision-instrument runways other than utility.
(b) *Airglades Airport.* Runway 13/31: Permitted height increases one foot vertically for every 34 feet horizontal distance for all non-precision-instrument runways other than utility.

5. *Transitional zone.* The area extending outward from the sides of the primary zones and approach zones connecting them to the horizontal zone. Height limits within the transitional zone are the same as the primary zone or approach zone at the boundary line where it adjoins and increases at a rate of one foot vertically for every seven feet horizontally, with the horizontal distance measured at right angles to the runway centerline and extended centerline, until the height matches the height of the horizontal zone or conical zone or for a horizontal distance of 5,000 feet from the side of the part of the precision approach zone that extends beyond the conical zone.

6. *Other areas.* In addition to the height limitations imposed in subparagraphs b.1 through 5 above, no structure or obstruction will be permitted within the county that would cause a minimum obstruction clearance altitude, a minimum descent altitude, a decision height or a minimum vectoring altitude to be raised.

(2) *Land use restrictions.*

a. *Use restrictions*. Notwithstanding any other provision of this section, no use may be made of land or water within any zones established by this section in such a manner as to interfere with the operation of an airborne aircraft. The following special requirements shall apply to each permitted use:

1. All lights or illumination used in conjunction with street, parking, signs or use of land and structures shall be arranged and operated in such a manner that it is not misleading or dangerous to aircraft operating from a public airport or in [the] vicinity thereof.

2. No operations from any type shall produce smoke, glare or other visual hazards within three statute miles of any usable runway of a public airport.
3. No operations from any type shall produce electronic interference with navigation signals or radio communication between the airport and aircraft.

4. Use of land within the accident potential hazard area shall prohibit high density residential use, schools, hospitals, storage of explosive material, assemblage of large groups of people or any other use that could produce a major catastrophe as a result of an aircraft crash.

b. *Lighting*. Notwithstanding the preceding provisions of this section, the owner of any structure over 200 feet above ground level shall install lighting in accordance with Federal Aviation Administration Advisory Circular 70-7460-1D and amendments thereto on such structure. Additionally, high-intensity white obstruction lights shall be installed on a high structure which exceeds 749 feet above mean sea level. The high-intensity white obstruction lights must be in accordance with Federal Aviation Administration Advisory Circular 70-7460-1D and amendments.

c. ***Hazard marking and lighting***. Any permit or variance granted shall require the owner to mark and light the structure in accordance with FAA Advisory Circular 70-7460-1D or subsequent revisions. The permit may be conditioned to permit the county at its own expense to install, operate and maintain such markers and lights as may be necessary to indicate to pilots the presence of an airspace hazard if special conditions so warrant.

(3) ***Noise standards.***

a. Within the airport impact area, the following uses shall be prohibited where the Ldn is 75 or greater:

1. Public assembly halls and auditoriums.
2. Restaurants.
3. Motion picture theaters and theaters.
4. Churches.
5. Museums.
6. Libraries.
7. Educational and institutional facilities.

b. All other uses shall be constructed so as to achieve interior sound reduction (as certified by a registered architect or registered professional engineer) as follows:

Use	Ldn 75+	Ldn 70--75	Ldn 65--70
Residential	35	30	25
Other	30	25	25

c. No person shall sell, lease or offer to sell or lease any land within the airport impact area unless the prospective buyer or lessee has been given the following notice in writing: "Noise Warning--This land lies beneath the aircraft approach and departure routes for (LaBelle or Airglades) Airport and is subject to noise that may be objectionable."

B. Martin County Land Development Regulations (Witham Field)

ARTICLE 3, DIVISION 2

Division 2, Standard Zoning Districts

Sec. 3.32. PAF public airport facility district.

3.32.A. ***Definitions.*** In addition to any other definitions elsewhere in the LDR which may apply, for purposes of this section (3.32), the following words, terms and phrases shall have meanings as set forth below:

Aeronautical school means a commercial or educational establishment providing instruction in the flying, manufacturing or repairing of airplanes.

Air traffic control tower means a structure designed and constructed for the express purpose of providing for the safe operation and control of aircraft as denoted by Federal Aviation Administration (FAA) regulations and which is staffed by federally certified and licensed air traffic control personnel.

Air freight operations means the transportation of cargo or freight by air on a nonscheduled basis.

Aircraft assembly and service means an establishment providing assembly and/or mechanical repair for airplanes and other types of aircraft, excluding aircraft manufacturing.

Aircraft manufacturing means a use that manufactures aircraft or aircraft components.

Aircraft sales and rentals means the sale, storage or rental of aircraft including airplanes, jets and gliders, and related equipment with incidental services and maintenance.

Aircraft storage hangars means a facility used to store aircraft when not in service.
Aviation-related business and professional offices means a use which extends services by providing advice, information or consultation of a professional nature, including but not limited to executive management and administrative services, but excluding medical office and excluding as a principal use commercial storage of goods for the purpose of sale.

FAA means Federal Aviation Administration.

Fixed base operator (FBO) means an entity authorized and required by agreement with the County to provide aeronautical services, including the sale of aviation fuel and lubricants, tie downs, hanger space, parking of aircraft, maintenance of aircraft, and ancillary aircraft ground support services.

Flying clubs, large means nonprofit entities that own and operate aircraft larger than a twin-engine piston type aircraft and are organized for the express purpose of fostering and promoting flying for pleasure, developing aeronautical skills, and awareness of

aviation techniques and requirements. Such clubs must conform to all provisions of FAA Order 5190.6A, Appendix 8.

Flying clubs, small means nonprofit entities of less than 20 members that own and operate aircraft no larger than a twin-engine piston type aircraft (example: Baron or Seneca) and are organized for the express purpose of fostering and promoting flying for pleasure, developing aeronautical skills and awareness of aviation techniques and requirements. Such clubs must conform to all provisions of FAA Order 5190.6A, Appendix 8.

Nonscheduled charter airline service means an entity that transports people or cargo by aircraft on a nonscheduled basis, specifically excluding air carriers holding a certificate of public convenience and necessity from the Federal Aviation Administration, large aircraft commercial operators or regularly scheduled commercial operators.

Personal service means establishments primarily engaged in providing services involving the care of a person or his or her apparel such as cleaning and pressing services, beauty shops, barber shops and shoe repair.

Public ground transportation means any public or private entity providing nonaeronautical transportation services, such as but not limited to automobile rental, bus, train or taxi service.

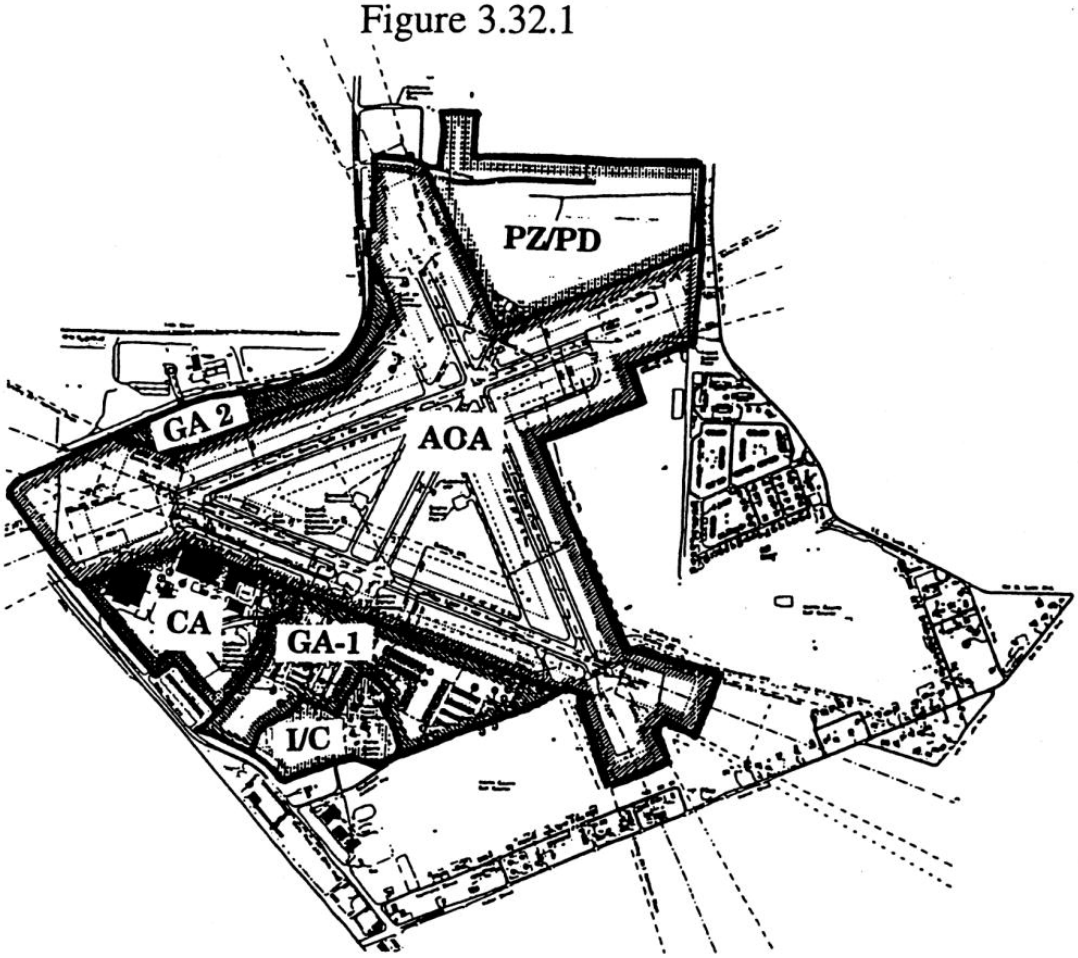
Research center means an establishment or other facility for carrying on investigation in the natural, physical or social sciences, and may include engineering and product development.

Runway dependent uses means aviation-related uses which are immediately and necessarily dependent upon the existence of a runway and use of airplanes, such as parachute training, air show operators, and aircraft sign towing operations.

3.32.B. *Permitted uses.*

1. *In general*. In order to allow development which is consistent with the CGMP and the FAA approved Master Plan for Witham Field, the following development zones are hereby created: Airport Operation; General Aviation 1., General Aviation 2., Commercial Aviation, Industrial/Commercial, and Preservation Zone/Post Planning Period Development (see Figure 3.32.1). The area designated Airport Operations is restricted to the landing, takeoff and movement of aircraft. This area also includes the safety and runway protection areas required by the FAA. The area designated as Preservation Zone/Post Planning Period Development is set aside. No aeronautical or nonaeronautical need for this area has been identified within the current planning period of the Airport Master Plan. No uses are permitted in this zone until the Airport Master Plan is revised. The permitted uses allowed in each of the other zones are as follows as indicated by an "X".

Figure 3.32.1



	Zone			
Use	General Aviation 1 Zone	General Aviation 2 Zone	Industrial/ Commercial Zone	Commercial Aviation Zone
Administrative services, not-for-profit	X	X	X	X
Aeronautical Schools	X		X	X
Aircraft assembly and service	X		X	X
Aircraft manufacturing			X	X
Aircraft sales and rentals	X		X	X
Aircraft storage hangars	X	X	X	X
Aviation-related business and professional office	X	X	X	X
Club, fraternity, lodge	X		X	
Educational facilities	X	X	X	X
Fixed base operators	X		X	X
Flying clubs, small	X	X	X	X
Flying clubs, large	X		X	
Golf courses	X		X	
Hotels and motels	X		X	
Runway dependent uses	X		X	X
Air freight operations on an unscheduled basis	X		X	X
Limited impact industry	X		X	X
Nonscheduled charter airline service	X		X	X
Personal services	X		X	
Professional offices and business	X	X	X	X
Public ground transportation services	X	X	X	X
Recreational facility	X		X	X
Research center			X	
Restaurant general	X	X	X	X

2. ***Special development approval procedures.*** Federal Aviation Administration regulations, particularly Advisory Circular 150/5070-6A, requires land use plans for all airports subject to FAA regulation. Development plan approval shall be required for all development within the PAF district. The application shall be submitted in accordance with the procedures outlined in Article 10. The Board of County Commissioners (BCC) shall review any master or final development plans within the public airport facilities districts. The BCC shall review each development application and determine its consistency with the FAA approved Master Plan for Witham Field, as it may be amended

from time to time. In addition to any other materials that may be required pursuant to Article 10, applications for development in the PAF district shall include a map showing the area within 500 feet of the site, including the location of all existing or proposed runways, taxiways and aprons.

3.32.C. ***Size and dimension criteria.***

1. ***Minimum lot size****:* 10,000 square feet.

2. ***Minimum lot width****:* 80 feet.

3. ***Maximum building height****:*

a. Buildings shall be the lower of 40 feet or as per the height restrictions of the Federal Aviation Regulations, Part 77.

b. Air traffic control towers may exceed the limit for the express purpose of providing for the safe operation and control of aircraft into, out of, and within the control area of Martin County Airport/Witham Field as denoted by the Federal Aviation Administration regulations, provided that such towers are staffed by federally certified and licenses air traffic control personnel.

4. ***Setbacks****:*

a. Front: 30 feet.
b. Side (interior/corner): 25 feet/25 feet.
c. Rear: 25 feet.
d. There shall be no setback required adjacent to railroad right-of-way.
e. From residential zoning districts: 100 feet.

5. ***Maximum building coverage****:* 40 percent.

6. ***Minimum open space****:* 40 percent (based on overall airport property acreage).

7. ***Minimum internal separation of buildings****:* 20 feet.

3.32.D. ***Specific use criteria.*** When located in the PAF district, the following specific use restrictions shall apply:

1. ***Restaurant general.***

a. The minimum landscape buffer adjacent to residential districts shall be 50 feet wide, Type 4.
b. Eating establishments shall not have access on a local residential street.
c. Signs shall not exceed 20 square feet and shall be nonilluminated.

2. ***Limited and extensive impact industry.***

a. When located in a PAF District, no building shall be located closer than 100 feet to any lot line which abuts a residential district.

3. ***Business and professional offices.***

a. The minimum landscape buffer adjacent to residential districts shall be 50 feet wide, Type 4.
b. Signs shall not exceed 20 square feet and shall be nonilluminated.

4. ***Personal services.***

a. The minimum landscape buffer adjacent to residential districts shall be 50 feet wide, Type 4.

b. Signs shall not exceed 20 square feet and shall be nonilluminated.

5. ***Research center.***

a. No building shall be located closer than 100 feet to any lot line which abuts a residential district.

b. No off-street parking or loading space shall be located closer than 50 feet to any lot line abutting a residential district.

6. ***Recreational facility.***

a. No off-street parking area, loading area, building or structure shall be located within 50 feet of any lot line abutting a residential district.

b. Areas which abut residential districts and accommodate active recreation, buildings, recreational apparatus or related facilities which attract large user groups shall provide a Type 4 landscape buffer.

(Ord. No. 608, pt. 1, 3-19-2002; Ord. No. 633, pt. 1, 9-2-2003)

Secs. 3.33--3.50. Reserved.

ARTICLE 4, DIVISION 12

Division 12. Airport Area Height Restrictions and Safety Standards

Subdivision 1. In General

Sec. 4.501. Authority of Commissioners in respect to airport property.

Secs. 4.502--4.520. Reserved.

Subdivision 2. Airport Height Restrictions and Safety Requirements

Sec. 4.521. Short title.

Sec. 4.522. Definitions.

Sec. 4.523. Airport zones and airspace height limitations.

Sec. 4.524. Airport land use restrictions.

Sec. 4.525. Administration and enforcement.

Sec. 4.526. Board of Adjustment.

Sec. 4.527. Appeals.

Sec. 4.528. Judicial review.

Secs. 4.529--4.550. Reserved.

Subdivision 3. Noise Abatement

Sec. 4.551. Generally.

Sec. 4.552. Noise abatement procedures--For jet aircraft; required takeoff paths.

Sec. 4.553. Same--For reciprocating aircraft.

Sec. 4.554. Preferential runway system for aircraft using Witham Field during daylight hours (sunrise to sunset).

Sec. 4.555. Notice.

Secs. 4.556--4.580. Reserved.

DIVISION 12. AIRPORT AREA HEIGHT RESTRICTIONS AND SAFETY STANDARDS

SUBDIVISION 1. IN GENERAL

Sec. 4.501. Authority of Commissioners in respect to airport property.

The Board of County Commissioners of Martin County, Florida, shall have the authority to acquire, [or] lease as lessor or lessee, lands for airport purposes, provided, however, that no such lease shall exceed a total of 30 years, also, to construct, reconstruct, improve, extend, enlarge, equip, furnish, repair, maintain, operate and otherwise contract with regard to any property, whether real or personal, for the purpose of developing such property for airport purposes.
(Code 1974, § 3-1; Laws of Fla. ch. 67-1708, § 1)

Secs. 4.502--4.520. Reserved.

SUBDIVISION 2. AIRPORT HEIGHT RESTRICTIONS AND SAFETY REQUIREMENTS*

***State law references:** Airport zoning, F.S. ch. 333.

Sec. 4.521. Short title.

This subdivision shall be known and may be cited as "Martin County Airport Height Restrictions and Safety Ordinance."
(Code 1974, § 3-21; Ord. No. 233, § 1, 4-10-1984)

Sec. 4.522. Definitions.

As used in this subdivision, unless the context otherwise requires, the following words and terms shall have the meanings respectively ascribed:

Airport. Witham Field Airport.

Airport elevation. The highest point of an airport's usable landing area, measured in feet above mean sea level.

Airport obstruction. Any structure or object of natural growth or use of land which would exceed the federal obstruction standards as contained in 14 CFR, sections 77.21, 77.23, 77.25 and 77.28, or which obstructs the airspace required for flight of aircraft in landing and takeoff at an airport or which is otherwise hazardous to such landing or takeoff of aircraft.

Airspace height. To determine the height limits in all zones set forth in this subdivision, the datum shall be mean sea level elevation (AMSL) unless otherwise specified.

Nonconforming use. Any pre-existing structure, object of natural growth or use of land which is inconsistent with the provisions of this subdivision, or amendments thereto.

Runway. A defined area on an airport prepared for landing and takeoff of aircraft along its length.

Structure. Any object construed or installed by man, including but not limited to: buildings, towers, smoke stacks, utility poles and overhead transmission lines.

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

Zoning administrator. The administrative office or agency responsible for administering zoning within each of the political subdivisions that adopt this Martin County Airport Height Restriction and Safety Ordinance.
(Code 1974, § 3-22; Ord. No. 233, § 2, 4-10-1984)

Cross references: Rules of interpretation, § 1.5.

Sec. 4.523. Airport zones and airspace height limitations.

4.523.A. In order to carry out the provisions of this subdivision, there are hereby created and established certain zones which include all of the land lying beneath the approach, transitional, horizontal and conical surfaces as they apply to a particular airport. Such zones are shown on the Witham Field Height Restriction Map A, which is attached to Ordinance No. 233 and made a part of this subdivision. An area located in more than one of the described zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

4.523.B. ***Public civil airport height zones and limitations.***

1. ***Primary zone.*** An area longitudinally centered on a runway, extending 200 feet beyond each end of that runway with the width so specified for each runway for the most precise approach existing or planned for either end of the runway. No structure or obstruction will be permitted within the primary zone that is not part of the landing and takeoff area and is of a greater height than the nearest point on the runway centerline. The width of the primary zone is as follows:

a. Witham Field: Runways 11/29, 02/20, 15/33 and 07/25: 500 feet for visual approaches.

b. The width of the primary zone 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.

c. No structure or obstruction will be permitted within the primary zone that is not part of the landing and takeoff facilities and is of greater height than the nearest point on the runway centerline.

2. ***Horizontal zone.***

a. The area around each civil airport with an outer boundary the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary zone of each airport's runway and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is 5,000 feet for all runways designated as utility or visual.

b. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest composite value 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 zone.

c. No structure or obstruction will be permitted in the horizontal zone that has a height greater than 150 feet above the airport height.

3. ***Conical zone****.* The area extending outward from the periphery of the horizontal zone for a distance of 4,000 feet. Height limitations for structures in the conical zone are 150 feet above airport height at the inner boundary with permitted height increasing one foot vertically for every 20 feet of horizontal distance measured outward from the inner boundary to a height of 350 feet above airport height at the outer boundary.

4. ***Approach zone****.* An area longitudinally centered on the extended runway centerline and extending outward from each end of the primary surface. An approach zone is designated for each runway based upon the type of approach available or planned for that runway end.

a. The inner edge of the approach zone is the same width as the primary zone and it expands uniformly to a width of:

(1) Witham Field: 1,500 feet for that end of a runway other than as utility runway with only visual approaches.

b. The approach surface extends for a horizontal distance of 5,000 feet for all utility and visual runways.

c. The outer width of an approach zone 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.

d. Permitted height limitation within the approach zones is the same as the runway end height at the inner edge and increases with horizontal distance outward from the inner edge as follows: Permitted height increases one foot vertically for every 20 feet of horizontal distance for all utility and visual runways.

5. ***Transitional zone****.* The area extending outward from the sides of the primary zones and approach zones connecting them to the horizontal zone. Height limits within the transitional zone are the same as the primary zone or approach zone at the boundary line where it adjoins and increases at a rate of one foot vertically for every seven feet horizontally, with the horizontal distance measured at right angles to the runway centerline and extended centerline, until the height matches the height of the horizontal zone or conical zone or for a horizontal distance of 5,000 feet from the side of the part of the precision approach zone that extends beyond the conical zone.

6. ***Other areas****.* In addition to the height limitations imposed in paragraphs 1 through 5 above, no structure or obstruction will be permitted within Martin County that would cause a minimum obstruction clearance altitude, a minimum descent altitude, a radar vectoring altitude or a decision height to be raised.

(Code 1974, § 3-23; Ord. No. 233, § 3, 4-10-1984)

Sec. 4.524. Airport land use restrictions.

4.524.A. ***Use restrictions.*** Notwithstanding any other provision of this subdivision, no use may be made of land or water within any zones established by this subdivision in

such a manner as to interfere with the operation of an airborne aircraft. The following special requirements shall apply to each permitted use:

1. All lights or illumination used in conjunction with streets, parking, signs or use of land and structures shall be arranged and operated in such a manner that it is not misleading or dangerous to aircraft operating from a public airport or in vicinity thereof.

2. No operations of any type shall produce smoke, glare or other visual hazards within three statute miles of any usable runway of a public airport.

3. No operations of any type shall produce electronic interference with navigation signals or radio communication between the airport and aircraft.

4.524.B. ***Lighting.*** Notwithstanding the preceding provisions of this section, the owner of any structure over 200 feet above ground level shall install lighting in accordance with Federal Aviation Administration Advisory Circular 70/7460-1 and amendments thereto on such structure. Additionally, high intensity white obstruction lights shall be installed on a high structure which exceeds 749 feet above mean sea level. The high intensity white obstruction lights must be in accordance with Federal Aviation Administration Advisory Circular 70/7460-1 and amendments.

4.524.C. ***Variances.*** Any person desiring to erect or increase the height of any structures, or use his property not in accordance with the regulations prescribed in this subdivision, may apply to the Board of Adjustment for a variance from such regulations. No application for variance to the requirements of this subdivision may be considered by the Board of Adjustment unless a copy of the application has been furnished to the appropriate zoning administrator.

4.524.D. ***Hazard marking and lighting.*** Any permit or variance granted shall require the owner to mark and light the structure in accordance with FAA Advisory Circular 70/7460-1 or subsequent revisions. The permit may be conditioned to allow Martin County at its own expense to install, operate and maintain such markers and lights as may be necessary to indicate to pilots the presence of airspace hazard if special conditions so warrant.
(Code 1974, § 3-24; Ord. No. 233, § 4, 4-10-1984)

Sec. 4.525. Administration and enforcement.

It shall be the duty of the zoning administrator to administer and enforce the regulations prescribed herein within the territorial limits over which Martin County has authority. In the event of any violation of the regulations contained herein, the person responsible for such violation shall be given notice in writing by the zoning administrator. Such notice shall indicate the nature of the violation and the necessary action to correct or abate the violation. A copy of said notice shall be sent to the Board of Adjustment. An administrative official shall order discontinuance of use of land or building; removal of trees to conform with height limitations set forth herein; removal of buildings, additions, alterations, or structures; discontinuance of any work being done; or shall take any or all other action necessary to correct violations and obtain compliance with all provisions of this subdivision.
(Code 1974, § 3-25; Ord. No. 233, § 5, 4-10-1984)

Sec. 4.526. Board of Adjustment.

4.526.A. The Martin County Zoning Board of Adjustment shall have and will exercise the following power on matters relating to areas within the territorial limit of authority:

1. To hear and decide appeals from any order, requirement, decision, or determination made by the zoning administrator in the enforcement of this subdivision;

2. To hear and decide special exceptions to the terms of this subdivision upon which such Board of Adjustment may be required to pass; and

3. To hear and decide specific variances.

4.526.B. The Board of Adjustment shall adopt rules for its governance in harmony with the provisions of this subdivision. Meetings of the Board of Adjustment shall be held at the call of the chairman[. The chairman], or in his absence the acting chairman, may administer oaths and compel the attendance of witnesses. All hearings of the Board of Adjustment shall be public. The Board of Adjustment shall keep minutes of its proceedings showing the vote of each member upon each question, or if absent or failing to vote, indicating such fact, and shall keep records of its examinations, and other official actions, all of which shall immediately be filed in the office of the County Clerk.

4.526.C. The Board of Adjustment shall make written findings of facts and conclusions of law giving the facts upon which it acted and its legal conclusions from such facts in reversing, affirming, or modifying any order, requirement, decision or determination which comes before it under the provisions of this subdivision.

4.526.D. The concurring vote of a majority of the members of the Board of Adjustment shall be sufficient to reverse any order, requirement, decision, or determination of the zoning administrator, or to decide in favor of the applicant on any matter upon which it is required to pass under this subdivision, or to effect variation of this subdivision.
(Code 1974, § 3-26; Ord. No. 233, § 6, 4-10-1984)

Sec. 4.527. Appeals.

4.527.A. Any person aggrieved, or any taxpayer affected, by any decision of the zoning administrator made in the administration of this subdivision may appeal to the Board of Adjustment.

4.527.B. All appeals hereunder must be made within a reasonable time as provided by the rules of the Board of Adjustment, by filing with the zoning administrator a notice of appeal specifying the grounds thereof. The zoning administrator shall forthwith transmit to the Board of Adjustment all the papers constituting the record upon which the action appealed was taken.

4.527.C. An appeal shall stay all proceedings in furtherance of the action appealed unless the zoning administrator certifies to the Board of Adjustment, after the notice of appeal has been filed, that by reason of the facts stated in the certificate, a stay would cause imminent peril to life or property. In such case, proceedings shall not be stayed except by order of the Board of Adjustment on notice to the zoning administrator and after due cause is shown.

4.527.D. The Board of Adjustment shall fix a reasonable time for hearing appeals, give public notice and due notice to the interested parties and render a decision within a reasonable time. During the hearing, any party may appear in person, by agent or by attorney.

4.527.E. The Board of Adjustment may, in conformity with the provisions of this subdivision, reverse or affirm, in whole or in part, or modify the order, requirement, decision, or determination, as may be appropriate under the circumstances.
(Code 1974, § 3-27; Ord. No. 233, § 7, 4-10-1984)

Sec. 4.528. Judicial review.

Any person aggrieved, or any taxpayer affected, by any decision of the Board of Adjustment may appeal to the Circuit Court as provided in F.S. § 333.11.
(Code 1974, § 3-28; Ord. No. 233, § 8, 4-10-1984)
Secs. 4.529--4.550. Reserved.

SUBDIVISION 3. NOISE ABATEMENT

Sec. 4.551. Generally.

4.551.A. ***Purpose***. The purpose of this subdivision is to enact noise abatement procedures for aircraft using Witham Field to reduce noise exposure to surrounding areas.

4.551.B. ***Data survey***. The noise abatement procedures in this subdivision are based on the data collected in "A Survey of Aircraft Noise at Witham Field, Stuart, Florida," prepared by Grumman Aerospace Corporation in June of 1976.

4.551.C. ***Definitions***. For the purposes of this division, the following terms are defined as follows:

Control tower. Control tower at Witham Field or other control center having authority over aircraft at Witham Field.
Jet aircraft. Aircraft powered by jet engines.
Reciprocating aircraft. Aircraft powered by reciprocating engines.

(Code 1974, § 3-31; Ord. No. 241, pt. 1, 6-26-1984)

Sec. 4.552. Noise abatement procedures--For jet aircraft; required takeoff paths.

4.552.A. All jet aircraft using Witham Field shall reduce power after takeoff so as to maintain a safe airspeed and a moderate rate of climb (1,000 feet per minute). All jet aircraft may resume a normal climb schedule after the aircraft reaches an altitude of 3,000 feet.

4.552.B. Unless otherwise directed by the control tower, all jet aircraft using Witham Field shall observe the following takeoff paths:

1. Runway 02: Climb straight out to the Indian River, then on course.
2. Runway 07: Climb straight out to the Indian River, then on course.
3. Runway 11: Climb straight out over golf course toward the St. Lucie Inlet, then on course.

4. Runway 15: Left climbing turn toward the St. Lucie Inlet, then on course.
5. Runway 20: Climb straight out.
6. Runway 25: Slight right climbing turn (avoiding high school) to the South Fork River of the St. Lucie River, then on course.
7. Runway 29: Left climbing turn to altitude.
8. Runway 33: Right climbing turn to the Indian River, then on course.

(Code 1974, § 3-32; Ord. No. 241, pt. 1, 6-26-1984)

Sec. 4.553. Same--For reciprocating aircraft.

Unless otherwise directed by the control tower, all reciprocating aircraft using Witham Field shall use the following traffic pattern:

4.553.A. All reciprocating aircraft shall use 1,000 feet mean sea level (MSL) for traffic pattern altitude.

4.553.B. All reciprocating aircraft shall make all turns to the left.

4.553.C. All reciprocating aircraft taking off on Runways 07, 15, 25 and 29 shall climb to 800 feet on runway heading before executing the first turn.

4.553.D. All aircraft taking off on Runways 02, 11, 20 and 33 shall climb to 400 feet on runway heading before executing the first turn.

(Code 1974, § 3-33; Ord. No. 241, pt. 1, 6-26-1984)

Sec. 4.554. Preferential runway system for aircraft using Witham Field during daylight hours (sunrise to sunset).

4.554.A. In a calm wind, all aircraft should use Runway 20.

4.554.B. When some wind exists, the preferred runway for all aircraft using Witham Field is Runway 20, with Runway 07 and Runway 11 next in sequence.

4.554.C. Pursuant to federal air regulations, the pilot in command may refuse to use a designated runway if the pilot deems the runway unsafe.

(Code 1974, § 3-34; Ord. No. 241, pt. 1, 6-26-1984)

Sec. 4.555. Notice.

4.555.A. A copy of this subdivision shall be displayed in the general aviation terminal at Witham Field.

4.555.B. A sign stating "Noise Abatement Procedures Are in Effect at This Airport" shall be posted at the entrance to each runway.

(Code 1974, § 3-35; Ord. No. 241, pt. 1, 6-26-1984)

Secs. 4.556--4.580. Reserved.

Sec. 3.56. Airports and airstrips.

3.56.A. All airports, including general aviation airports, private use airports, airstrips, heliports and helipads shall comply with the provisions of this section. This section does not apply to Witham Field lands zoned PAF.

1. A plan sealed by a registered engineer shall be submitted which indicates landing and take-off corridors and satisfies all FAA requirements, including conformance with appropriate flight hazard criteria which may hereinafter be imposed. The plan shall also include all existing land uses within 5,000 feet of the proposed facility.

2. An airspace analysis conducted by the Federal Aviation Administration (FAA), and a preliminary airport license report prepared by the FDOT shall be required. Any alteration in ground facilities or the addition of navigation aids designed to facilitate an instrument approach capability shall require a new application if the original approval was granted for visual flying rules (VFR).

3. Safety fences up to a height of six feet shall be required. Additionally, screening of at least 75 percent opacity shall be required if determined necessary to protect neighboring property from potential loss of use or diminishment of land value.

4. No area used by an aircraft under its own power shall be located within 100 feet of any property line.

5. No runway primary surface, as defined by the FDOT Chapter 14-60, F.A.C., shall be located within 300 feet of any property line or within 100 feet of any residential structure.

6. No structure or navigation aid shall be located within 50 feet of any property line.

7. In the AG and AR districts, airstrips, helipads and heliports shall be limited to those facilities and operations necessary to support bona fide agricultural use.

8. In the AG, AR, and RE-2A districts:
    a. Operations are limited to aircraft of 12,500 pounds maximum gross take-off weight.
    b. Runway length shall not exceed 4,200 feet.
    c. Aircraft operations are limited to daylight hours. Runway and taxiway landing lights are prohibited.

3.56.B. General aviation airports and aviation terminals shall be subject to the following specific use conditions:

1. General aviation airports and aviation terminals must comply with the Martin County Comprehensive Growth Management Plan.

2. General aviation airports and aviation terminals and aircraft approach and departure patterns shall not be permitted in areas which would create noise levels greater than 70 Ldn on the breeding, nesting or feeding grounds of endangered or threatened fauna identified by the Florida Fish and Wildlife Conservation Commission or the U.S. Fish and Wildlife Service.

3. General aviation airports and aviation terminals shall be located in areas where the proposed facility will not adversely impact significant recreational areas, archaeological

sites or historical resources. This shall include, but not be limited to, the prohibition of noise levels of 70 Ldn or greater in such areas.

4. General aviation airport runways shall be located at least three statute miles from any land use that produces significant smoke, glare or other visual hazards.

5. General aviation airport runways shall be located at least three statute miles from existing or proposed lighting or illumination which is arranged or operated in a manner that is misleading or dangerous to aircraft.

6. Airport runways shall not be located in an area where the proposed facility or aircraft flight patterns will create noise levels above 64 Ldn on property designated for residential uses in the Comprehensive Growth Management Plan.

7. Airports shall be located in an area where the airport operator will maintain land within designated airport clear zones under the controlling ownership of the operating entity. The lease of any such land within designated airport clear zones shall be restricted exclusively to agricultural and other uses permitted by the FAA.

8. Airport sites shall be consistent with state airport plans.

9. Airport sites shall comply with Federal Aviation Authority (FAA) site selection criteria.

10. Airports shall not be permitted in areas which would adversely impact airspace at any existing public, private or military airport.

(Ord. No. 608, pt. 1, 3-19-2002; Ord. No. 633, pt. 1, 9-2-2003)

C. Okaloosa County Land Development Code Ordinance 91-1 (Okaloosa Regional Airport, Bob Sikes Field, Destin/Ft. Walton Beach Airport)

CHAPTER 3 OVERLAY, SPECIAL AND FLOATING ZONES

3.03.00 Airport Zoning:

3.03.01 Definitions:

As used in this Section, unless the context otherwise requires:

1. ACCIDENT POTENTIAL ZONE (APZ) - Specified areas adjacent to and along each extended runway centerline at a military airfield that defines the probable impact area should an aircraft accident occur.

2. AIRPORT OVERFLIGHT ZONE - A specified area underlying the fixed, recurring flight paths for aircraft taking off or landing at a civil airport. Aircraft routinely must operate at low altitude, climb from or descend to the runway along these paths. Should an aircraft accident occur, it is statistically most likely to be located in this area.

3. AIRPORT - An area of land or water designed and set aside for the landing and taking off of aircraft, utilized or to be utilized in the interest of the public for such purpose and validly licensed by the State in the Public Airport category or operated by the federal government in the interest of national defense which includes: Okaloosa Regional Airport, Destin/Ft. Walton Beach Airport and Bob Sikes Airport.

4. AIRPORT ELEVATION - See: ESTABLISHED AIRPORT ELEVATION.

5. AIRPORT OBSTRUCTION - any structure or object of natural growth or use of land which would exceed the federal obstruction standards as contained in 14 CFR Part 77 or which obstruct the airspace required for the flight of aircraft in taking off, maneuvering or landing at an airport or may otherwise interfere with the taking off, maneuvering or landing of aircraft.

6. AIRPORT REFERENCE POINT (ARP) - The approximate geometric center of a civil airport's runways expressed by its latitude and longitude.

7. AIRSPACE OBSTRUCTION or OBSTRUCTION TO NAVIGABLE AIRSPACE - any structure, existing or planned, or any object of natural growth which would exceed federal obstruction standards as contained in 14 CFR Part 77, ss 77.21, 77.23, 77.25, 77.28 or 77.29.

8. AIRSPACE HEIGHT - The height limits as established in all zones set forth in this Ordinance. Above Mean Sea Level (AMSL) elevation shall be the datum unless otherwise specified.

9. AIRPORT NOISE ZONES or AIRPORT NOISE IMPACTED ZONES - Areas within specific airport generated noise impact Ldn contour lines in which land use should be limited to activities that are not noise sensitive, or where appropriate noise level reduction measures for construction of certain buildings are required for land uses which may be otherwise acceptable.

10. AVIGATION EASEMENT - The assignment of a right to an airport proprietor to a portion of the total benefits of the ownership of real property. The selected rights may be granted or may be purchased.

11. CLIMB GRADIENT - An aircraft instrument departure procedure requiring adherence to a minimum climb slope or grade expressed in feet per nautical mile.

12. DECISION HEIGHT - The height at which a pilot must decide, during an Instrument Landing System (ILS) approach, to either continue the approach or to execute a missed approach.

13. ESTABLISHED AIRPORT ELEVATION - The highest point on the airport's or airfield's landing surface measured in feet above Mean Sea Level (MSL or AMSL).

14. Ldn - A day/night 24-hour average sound level measurement, expressed in decibels, obtained after addition of 10 decibels to sound levels occurring during the night time period from 10 PM to 7 AM. See: YEARLY DAY-NIGHT AVERAGE SOUND LEVEL (YDNL).

15. MINIMUM DESCENT ALTITUDE (MDA) - The lowest AMSL altitude to which descent is authorized on final approach or during circling-to-land maneuvering in execution of a Standard Instrument Approach Procedure (SIAP) where electronic glide slope is not provided.

16. MINIMUM ENROUTE ALTITUDE (MEA) - The lowest published altitude between radio fixes that assures acceptable navigational signal coverage and meets obstruction clearance requirements between those fixes.

17. **MINIMUM OBSTRUCTION CLEARANCE ALTITUDE (MOCA)** - The lowest published altitude between radio fixes on Federal VOR airways, off-airway routes, or route segments that meets obstruction clearance requirements for the entire route segment and assures acceptable navigational signal coverage only within 22 miles of a VOR.

18. **MINIMUM VECTORING ALTITUDE (MVA)** - The lowest AMSL altitude at which aircraft operating on Instrument Flight Rules (IFR) will be vectored by a radar controller, except when otherwise authorized for radar approaches, departures or missed approaches.

19. NOISE REDUCTION (NR) or NOISE LEVEL REDUCTION (NLR) - Reduction in sound level transmission between locations or rooms for the expressed purpose of lessening or mitigating the impact of noise in one of the locations. The term Sound Level Reduction (SLR) can imply the same function. See: SOUND LEVEL REDUCTION (SLR).

20. NONCONFORMING USE - Any pre-existing structure, object of natural growth or use of land which is inconsistent with the provisions of this Section, or amendments thereto.

21. **NON-PRECISION INSTRUMENT RUNWAY -** A runway having an instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved or planned, and for which non-precision instrument approach facilities are planned or indicated on an appropriate civil or military airport planning document.

22. **NONSTANDARD TAKE-OFF MINIMUMS** - Conditions of existing weather required for take-off at an airport which exceed the standards prescribed in Federal Aviation Regulations Part 91.

23. **OCCUPIED ROOMS** - Rooms within enclosed structures which are or may reasonably be expected to be used for human activities which involve speech communication; education or instruction; sleeping; eating; listening to live, recorded or broadcast music or speech; or the regular use of telephones or other audio transmitting devices.

24. OTHER THAN UTILITY RUNWAY - A runway designed for and intended to be used by all types of aircraft including those having gross weights greater than 12,500 pounds.

25. **PRECISION INSTRUMENT RUNWAY** - A runway having an instrument approach procedure utilizing an Instrument Landing System (ILS), Global Positioning System (GPS), Microwave Landing System (MLS), or a Precision Approach Radar (PAR) including a runway for which such a system is planned and is so indicated on an approved civil or military airport layout plan; other FAA planning documents, or comparable military service planning documents.

26. PERSON - Individual, firm, partnership, corporation, company, association, joint stock association, or political body including the trustee, receiver, assignee, administrator, executor, guardian or other representative.

27. QUALIFIED ACOUSTICAL CONSULTANT - A person having sufficient training and experience in the science and technology of acoustics and knowledge of construction methods and materials to be qualified to evaluate the adequacy of acoustical designs, materials and methods of construction for the attenuation of noise.

28. **RUNWAY -** A defined area on an airport prepared for landing and takeoff of aircraft along its length.

29. **SITE SPECIFIC ANALYSIS (SSA)** - The analysis of a proposed land use in a designated airport noise-impacted area to determine compliance with the Okaloosa County Land Use Plan, the Destin/Ft. Walton Beach Airport, Airport Master Plan, Noise Zone Map and the Land Use Guidance Chart in order to recommend the type of construction needed to meet the Noise Level Reduction requirements.

30. SOUND ABSORPTION - Capacity of materials and furnishings to absorb sound. For the purposes of this Section, the sound absorption is equal to 0.05 times the room volume in cubic feet divided by the measured reverberation time in seconds determined with an active band of noise centered at 500 Hertz.

31. SOUND LEVEL - The quantity in decibels measured by an instrument satisfying the requirements of American Standard Specification for Type I Sound Level Meters. The sound level shall be the frequency weighted sound pressure level obtained with the frequency weighting "A" and the standardized dynamic characteristic "SLOW".

32. SOUND LEVEL REDUCTION - A measurement standard for the reduction in sound level transmission, expressed in decibels (db), between two designated locations for a stated sound frequency band. It is used to evaluate the effectiveness of or to establish requirements for techniques to limit sound transmission to prevent or mitigate undesirable impacts. See: NOISE LEVEL REDUCTION (NLR).

33. **STRUCTURE** - Any object, constructed or installed by man, including but not limited to: antennas, buildings, cranes, overhead transmission lines, smoke stacks, towers and utility poles.

34. **UTILITY RUNWAY** - A runway that is constructed for and intended to be used only by aircraft of 12,500 pounds maximum gross weight and less.

35. VISUAL RUNWAY - A runway intended solely for the operation of aircraft using visual approach procedures with no instrument approach procedure planned or indicated on an approved civil or military airport layout plan, or by any other planning document submitted to the FAA by competent authority.

36. **YEARLY DAY-NIGHT AVERAGE SOUND LEVEL (YDNL)** - A 365-day averaged, day-night average sound level measurement expressed in decibels. The symbol used for YDNL is also Ldn. YDNL is the metric designated to define airport noise impact for Noise Programs conducted under the provisions of 14 CFR Part 150. See: Ldn

37. ZONING ADMINISTRATOR - The administrative office or agency responsible for administering and enforcing the requirements of this Section within Okaloosa County or within each political subdivision that adopts this Section. The Zoning Administrator in Okaloosa County is the County Planning and Inspection Director.

38. ZONING BOARD OF ADJUSTMENT - The executive body or agency having the statutory authority and responsible to hear and decide appeals from any order, requirement, decision or determination made by the Zoning Administrator in enforcing this Section; to hear and decide special exceptions and to hear and decide variances to the requirements of this Section within Okaloosa County or within each political subdivision that adopts this Section.

3.03.02 Overlay Zones And Limitations:
The purpose of this section is to establish limitations on the height of objects and uses of land to prevent the creation of obstructions hazardous to aeronautical operations or which could increase the risk to the public's health, safety or well-being in the event of an aviation accident or which would otherwise impair the full utility and operating capacity of Okaloosa Regional Airport, Destin/Ft. Walton Beach Airport, and the Bob Sikes Airport.

The section creates specific zones for three separate purposes providing height restrictions conforming to varying obstruction standards; land use limitations based on sensitivity to aviation generated noise and land use based on increased risk of injury, hazard to health or property damage in the event of an aircraft accident.

3.03.03 Obstruction Height Zones:
Zone sizes and height limitations established in this section conform to the standards for determining obstructions to air navigation of 14 CFR Part 77, ss 77.23.

3.03.04 Civil Airports: There are hereby created and established certain zones which include all of the land lying beneath the primary, approach, transitional, horizontal and conical surfaces as they apply to a particular airport. Such zones are shown on the Airport Height and Safety Zones attached to this Section and made a part hereof as Appendix [*1*] Airport Layout Plan and the Airport Master Plan. An area located in more than one of the described zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

a) PRIMARY ZONE: An area longitudinally centered on each runway, extending to each end for turf or sod runways or extending 200 feet beyond each end for paved runways. The width of the zone will be as specified for the most precise approach existing or planned for either end of that runway as follows:

Okaloosa Regional Airport
(1) Precision Instrument Runway (s) 19/01, and 30/12: 3,000 feet
Destin/Ft. Walton Beach Airport: Runway 32: 2,500 feet
Bob Sikes Airport: Runway 17: 2,500 feet
1.a Other than Utility, Non-precision Instrument Runway(s) 01, and 12: 2,000 feet
Destin/Ft. Walton Beach Airport: Runway 14: 1,000 feet
Bob Sikes Airport: Runway 35: 1,000 feet

(1) PRIMARY ZONE HEIGHT: No object or structure will be permitted within a primary zone that is not part of the landing and take off facilities and is of a greater elevation AMSL height than the nearest point of the runway centerline.

b) APPROACH ZONE: An area longitudinally centered on the extended runway centerline and extending outward from the end of the PRIMARY ZONE. The approach zone is designated for each runway based upon the type of approach available or planned for that runway end.

(1) APPROACH ZONE WIDTHS: The inner edge of the approach zone is the same width as the PRIMARY ZONE. The outer width of the approach zone is prescribed for the most precise approach existing or planned for that runway end expanding uniformly outward to a width of:

Okaloosa Regional Airport

(h) Precision Instrument Runway(s) 19, and 30: 16,000 feet.
Destin/Ft. Walton Beach Airport: Runway 32: 16,000 feet
Bob Sikes Airport: Runway 17: 16,000 feet

(b) Other than Utility, Non-precision Instrument Runway(s)
01 and 12: 3,500 feet.
Destin/Ft. Walton Beach Airport: Runway 14: 2,000 feet
Bob Sikes Airport: Runway 35: 2,000 feet

(2) APPROACH ZONE LENGTHS: The approach zone extends for a horizontal distance of:

Okaloosa Regional Airport

(c) Precision Instrument Runway(s) 19 and 30: 50,000 feet.
Destin/Ft. Walton Beach Airport: Runway 32: 50,000 feet
Bob Sikes Airport: Runway 17: 50,000 feet

(d) Other than Utility, Non-precision Instrument Runway(s)
01, and 12: 10,000 feet
Destin/Ft. Walton Beach Airport: Runway 14: 5,000 feet
Bob Sikes Airport: Runway 35: 5,000 feet

(3) APPROACH ZONE HEIGHTS: No object or structure will be permitted within an approach zone, beginning at its intersection with the end of the PRIMARY ZONE, having a height greater than the runway end elevation, the height above the runway end elevation increasing with horizontal distance outward as follows:

Okaloosa Regional Airport, Destin/Ft. Walton Beach Airport & Bob Sikes Airport

(e) Precision Instrument Runway(s) Okaloosa: 19 and 30; Destin: 32; Bob Sikes: 17: one (1) foot vertically for every fifty (50) feet horizontally for the first 10,000 feet increasing to one (1) foot vertically for every forty (40) feet horizontally for an additional 40,000 feet.

(f) Other than Utility, Non-precision Instrument Runway(s) 01 and 12; Destin: 14; Bob Sikes: 35: one (1) foot vertically for every thirty four (34) feet horizontally.

(4) HORIZONTAL ZONE: An area surrounding each public use airport with the outer boundary constructed by swinging arcs of specified radii from the center of each PRIMARY ZONE end for each airport runway then connecting adjacent arcs by tangents. The arc radii for each runway end will have the same arithmetic value and will be the highest value determined for either end of that runway. When a smaller arc is encompassed by the tangent connecting larger arcs, the smaller shall be disregarded in determining the zone boundary. The radius of each runway arc is:

Okaloosa Regional Airport, Destin/Ft. Walton Airport, Bob Sikes Airport

(g) Precision Instrument Runway(s) 19, and 30: 10,000 feet
Destin/Ft. Walton Beach Airport: Runway 32: 10,000 feet
Bob Sikes Airport: Runway 17: 10,000 feet
(h) Other than Utility, Non-precision Instrument Runway(s) 01, and 12: 10,000 feet.
Destin/Ft. Walton Beach Airport: Runway 14: 10,000 feet
Bob Sikes Airport: Runway 35: 10,000 feet

(5) HORIZONTAL ZONE HEIGHT: No object or structure will be permitted in the horizontal zone that has a height greater than 150 feet above the airport elevation.

c) CONICAL ZONE: An area extending outward from the periphery of the HORIZONTAL ZONE for a distance of 4,000 feet.

(1) CONICAL ZONE HEIGHT: No object or structure will be permitted in the conical zone that has a height greater than 150 feet above the airport elevation at its inner boundary with permitted height increasing one (1) foot vertically for every twenty (20) feet of horizontal distance measured outward from the inner boundary to a height 350 feet above airport elevation at the outer boundary.

d) TRANSITIONAL ZONE: An area extending outward from the sides of each PRIMARY ZONE and APPROACH ZONE connecting them to the HORIZONTAL ZONE and an area outward 5,000 feet horizontally or until intersection with the CONICAL ZONE from the side of that portion of the APPROACH ZONE of a Precision Instrument Runway extending through and beyond the CONICAL ZONE.

(1) TRANSITIONAL ZONE HEIGHT: No object or structure will be permitted within the transitional zone greater in height than the PRIMARY ZONE or APPROACH ZONE at their adjoining boundary lines increasing at a rate of one (1) foot vertically for every seven (7) feet horizontally, with the horizontal distance measured at right angles to the runway centerline and extended centerline, until the height of the slope matches the height of the HORIZONTAL ZONE or the height of the CONICAL ZONE and for a horizontal distance of 5,000 feet from each side of that part of the APPROACH ZONE for a Precision Instrument Runway extending beyond the CONICAL ZONE.

3.03.05 Military Airfields:

There are hereby created and established certain zones which include all of the land lying beneath the primary, clear zone, approach clearance, inner horizontal, conical, outer horizontal and transitional surfaces as they apply to a particular military airfield. Such zones are shown on the Airport Height and Safety Zones attached to this Ordinance and made a part hereof as Appendix [*1*] Airport Layout Plan and the Airport Master Plan. An area located in more than one of the described zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

a) PRIMARY ZONE: An area longitudinally centered on each runway with the same length as the runway. The width of the primary zone is [2,000 feet or at older established bases, reduced to the former criteria].

> **PRIMARY ZONE HEIGHT:** No object or structure will be permitted within a primary zone that is not part of the landing and take off facilities and is of a greater elevation AMSL height than the nearest point of the runway centerline.

b) CLEAR ZONE: An area beginning at each end of each PRIMARY ZONE extending outward for 1,000 feet. The width of the clear zone is the same as the PRIMARY ZONE.

> **CLEAR ZONE HEIGHT:** No object or structure will be permitted within the first 200 feet of a clear zone that is not part of the landing and take off facilities and is of a greater elevation AMSL height than the nearest point of the runway centerline. No object or structure will be permitted within the remaining 800 feet of a clear zone that is not part of the landing and take off facilities and is of a greater elevation AMSL height than those heights prescribed in the following paragraphs c. and g. for the APPROACH CLEARANCE ZONE and TRANSITIONAL ZONE.

c) APPROACH CLEARANCE ZONE: A area symmetrically spaced about each runway centerline extended, beginning 200 feet beyond each end of the PRIMARY ZONE and extending outward for 50,000 feet. The width of the approach clearance zone is the same as the PRIMARY ZONE, uniformly flaring to 16,000 feet at 50,000 feet distance.

> **APPROACH CLEARANCE ZONE HEIGHT:** No object or structure will be permitted within the approach clearance zone beginning 200 feet from the runway end, having a height greater than the runway end elevation at its centerline, the height above the runway end increasing with horizontal distance outward one (1) foot vertically for every fifty (50) feet horizontally until reaching a height 500 feet above the established airport elevation, then remaining at this AMSL elevation until a distance 50,000 feet from the beginning point is reached.

d) INNER HORIZONTAL ZONE: An area around each military airfield constructed by scribing an arc of 7,500 feet about the end of each runway at its centerline and interconnecting the arcs by tangents.

> **INNER HORIZONTAL ZONE HEIGHT:** No object or structure will be permitted in the inner horizontal zone that has a height greater than 150 feet above the established airport elevation.

e) CONICAL ZONE: An area extending outward from the periphery of the INNER HORIZONTAL ZONE for a distance of 7,000 feet.

> **CONICAL ZONE HEIGHT:** No object or structure will be permitted in the conical zone that has a height greater than 150 feet above the established airport elevation at its inner boundary with permitted height increasing one (1) foot vertically for every twenty (20) feet of horizontal distance measured outward from the inner boundary to a height 500 feet above the established airport elevation at the outer boundary.

f) OUTER HORIZONTAL ZONE: An area extending outward from the outer periphery of the airfield's CONICAL ZONE for a distance of 30,000 feet.

> **OUTER HORIZONTAL ZONE HEIGHT:** No object or structure will be permitted in the outer horizontal zone that has a height greater than 500 feet above the established airport elevation.

g) TRANSITIONAL ZONES: Areas extending outward from the sides of the PRIMARY ZONE, the first 200 feet of the CLEAR ZONE and the APPROACH CLEARANCE ZONE connecting them to the INNER HORIZONTAL ZONE, the CONICAL ZONE and the OUTER HORIZONTAL ZONE.

> **TRANSITIONAL ZONE HEIGHT:** No object or structure will be permitted within the transitional zone greater in height than the PRIMARY ZONE, the CLEAR ZONE and the APPROACH CLEARANCE ZONE at their adjoining boundary lines increasing at a rate of one (1) foot vertically for every seven (7) feet horizontally, measured perpendicular to the runway centerline or centerline extended, until the transitional zone height matches the height of the INNER HORIZONTAL ZONE, the CONICAL ZONE or the OUTER HORIZONTAL ZONE.

3.03.06 Other Height Limitations:

Outside of the zones established in paragraphs 1 and 2 above, no object or structure will be permitted within Okaloosa County whose height would:

> a) Exceed 500 feet above ground level at its site.
> b) Cause an existing MDA, MOCA, MVA, or a decision height to be raised.
> c) Impose either the establishment of restrictive minimum climb gradients or nonstandard takeoff weather minimums for any runway at Okaloosa Regional Airport, Destin/Ft. Walton Beach Airport, Bob Sikes Airport.

3.03.07 Airport Noise Zones, Boundaries and Requirements:
NOTE: {AIRPORTS with FAR PART 150, AICUZ PROGRAM or EQUIVALENT NOISE STUDIES}

1. **NOISE IMPACT ZONES:** There are hereby created and established three (3) overlay land use noise zones: Zone A, Zone B, and Zone C. Such Zones are shown on the Airport Noise Impacted Zones for Okaloosa County attached to this ordinance and made a part hereof as Appendix [2] Airport Master Plan. The noise zones contained herein are based on projected yearly averaged, 24-hour day/night average noise level (YDNL)

impact projections arising from aircraft flight operations at the Okaloosa Regional Airport and the Destin/Ft. Walton Beach Airport through the year 2003.

a) Zone A: That area commencing at the outermost boundary of the airport and extending outward therefrom to a boundary indicated on the Noise Zone Map as "B". The outer boundary of Noise Zone A approximates a projected yearly averaged, 24-hour day/night average noise level (YDNL) contour of 75 Ldn.

b) Zone B: That area commencing at the boundary indicated on the Noise Zone Map as the outer boundary of Noise Zone A and extending outward therefrom to the boundary indicated on the Noise Zone Map as "C". The outer boundary of Noise Zone B approximates a projected yearly averaged, 24-hour day/night average noise level (YDNL) contour of 70 Ldn.

c) Zone C: That area commencing at the outer boundary indicated on the Noise Zone Map as the outer boundary of Noise Zone B and extending outward therefrom to the furthermost boundary indicated on the Noise Zone Map. The outer boundary of Noise Zone C approximates a projected yearly averaged, 24-hour day/night average noise level (YDNL) contour of 65 Ldn.

NOTE: Okaloosa Regional Airport & Bob Sikes Airport w/o NOISE IMPACT STUDIES

1. AIRPORT NOISE IMPACT ZONE: There is hereby created and established an overlay land use noise zone for Okaloosa County. The zone is shown on the Airport Noise Impacted Zone attached to this ordinance and made a part hereof as Appendix [2]. The noise impact zone was created by outlining an area [beneath the standard VFR traffic pattern and buffer airspace established in FAA Order 7400.2C AND/OR measuring one-half the length of the longest runway on either side of and at the end of each runway] which underlies the majority of recurring flight paths aircraft will use operating at the Okaloosa Regional Airport and the Bob Sikes Airport. This zone shall be considered to have an existing and projected yearly averaged, 24-hour day/night average noise level(YDNL) impact of [70 Ldn to 75 Ldn] for land use purposes.

2. LEGAL DESCRIPTION OF NOISE ZONE BOUNDARIES

a) Zone A applies to an area encompassing a projected yearly averaged, 24-hour day/night average noise level (YDNL) impact of 75 Ldn and above entirely within the Okaloosa Regional Airport/Eglin AFB, Hurlburt Field, Duke Field, Bob Sikes Airport and all other airfields not specifically named herein in Okaloosa County, Florida, and surrounding Okaloosa Regional/Eglin AFB Runways: 19/01, 30/12; Bob Sikes Airport: Runway 17/35 at various depths.

b) Zone B applies to an area encompassing a projected yearly averaged, 24-hour day/night average noise level (YDNL) impact of 70 Ldn to 75 Ldn surrounding the Okaloosa Regional Airport in Okaloosa County, more particularly described as follows: Eglin Air Force Base, Florida; Hurlburt Field, Duke Field and Bob Sikes Airport in Okaloosa County, Florida.

c) Zone C applies to an area encompassing a projected yearly averaged, 24-hour day/night average noise level (YDNL) impact of 65 Ldn to 70 Ldn

surrounding the Okaloosa Regional Airport in Okaloosa County, more particularly described as follows: Eglin Air Force Base, Florida; Hurlburt Field, Duke Field and Bob Sikes Airport, Florida.

NOTE: For airports without noise impact studies: That area surrounding the Okaloosa Regional Airport Runways 19/01, and 30/12 and Bob Sikes Airport 17/35 in Okaloosa County.

3. PERMITTED AND RESTRICTED ACTIVITIES: All land uses shall be permitted in the several noise zones as provided in the Aviation Compatible Land Use Chart attached to this Section and made a part hereof as Appendix [3]. Those activities and land uses not specifically listed in the Chart are permitted or restricted in the appropriate zones based on their similarity to noise tolerance and compatibility with normal airport operations as exhibited by the activities and land uses which are listed in the Chart at Appendix [3].

4. NOISE IMPACT ZONE SOUND LEVEL REDUCTION REQUIREMENTS: These provisions shall apply to the construction, alteration, moving, repair, replacement and use of any building or occupied permanent structure within Okaloosa County located within any noise impacted zone defined in this Section. Additions, alterations, repairs, and changes of use or occupancy in all buildings and structures shall comply with these provisions.

5. APPLICATION:

(1) EXISTING BUILDINGS: General buildings or structures to which additions, alteration, or repairs are made shall comply with all the requirements of this Ordinance except as specifically provided below:

a) When additions, alterations, or repairs within any three year period exceed 50 percent of the value of an existing building or structure, such buildings or structures shall be made to conform to the requirements of this Ordinance.

b) Alterations or repairs not exceeding 50 percent of the value of an existing building or structure and which are nonstructural may be made with the same materials of which the building or structure is constructed.

c) Not more than 50 percent of the roof covering of any building or structure shall be replaced in any three year period unless the next roof covering is made to conform to the requirements of this Ordinance.

d) Buildings in existence at the time of the passage of this Ordinance may have their existing use or occupancy continued if such use or occupancy was legal at the time of passage provided such continued use does not jeopardize life or health.

(2) MOVED BUILDINGS: Buildings or structures moved into or within Okaloosa County shall comply with applicable provisions of this regulation.

(3) NEW BUILDINGS: Newly constructed buildings or structures shall comply with the applicable provisions of this regulation before permanent occupancy is permitted.

6. DESIGN REQUIREMENTS: The Noise Level Reduction(NLR) requirements of the Aviation Compatible Land Use Chart at Appendix [3] may be achieved by any suitable

combination of building design, choice of building materials and construction techniques in accordance with established architectural and acoustical principles. The reduction requirements shall apply to all occupied rooms having one or more exterior walls or ceilings, when furnished in accordance with the intended final usage of the room. Recommended Construction Methods and Materials Lists for NLR are shown at Appendix [4] of this ordinance.

7. VALIDATION: Calculations to validate if sound level reduction meets requirements of this regulation may use the assumed Outside Noise Spectrum Graph shown in Appendix [5] attached to and made part of this regulation. Calculations shall take into account the area of exposed room surfaces, the sound transmission loss characteristics of exposed room surfaces, and the amount of sound absorption in the room. For rooms in residential structures, it can be assumed that the ratio of the sound absorption in each room to the room floor area is as follows:

Octave Frequency Band, Hz	**Sound absorption** Floor Area
63	0.30
125	0.50
250	0.75
500 and higher	1.00

In the calculations, allowance shall be made for a decrement of at least two decibels for sound leaks and flanking sound transmission paths.

3.03.08. Public Safety and Welfare:

1. AIRCRAFT OVERFLIGHT AND ACCIDENT POTENTIAL ZONES:

a) ZONE DEFINITION: There are hereby created and established certain zones underlying those recurring, fixed flight paths for aircraft taking off and landing at Okaloosa Regional Airport/Eglin AFB, Destin/Ft. Walton Beach Airport, Bob Sikes Airport, Hurlburt Field and Duke Field. Of necessity, aircraft must routinely operate at low altitude and climb from or descend to the runway along these paths. The potential site of an aircraft accident, should one occur, is statistically most significant in these zones thus the risk of injury to people or damage to property on the ground that could result from such an accident is greatest.

(1) CIVIL AIRPORT(S), AIRCRAFT OVERFLIGHT ZONES: The PRIMARY ZONE, APPROACH ZONE(limited to the inner 10,000 feet) and the adjoining TRANSITIONAL ZONES, described in paragraphs [A, 1., a., A, 1., b and A, 1., d.] above and shown on the Airport Height and Safety Zones attached at Appendix [1] Airport Layout Plan and the Airport Master Plan.

(2) MILITARY AIRFIELD(S), ACCIDENT POTENTIAL ZONES (APZ): APZ(s) [A, B, and C] described in the Eglin AFB, and Hurlburt Field Air Installation Compatible Use Zoning (AICUZ) Study and shown on the Airport Height and Safety Zones attached at Appendix [1] Airport Layout Plan and the Airport Master Plan.

NOTE: Minimum requirements of Ch 333, FS, ss 333.03, (3).

(3) CIVIL AIRPORTS: The PRIMARY ZONE and the APPROACH ZONE extending outward until the zone height reaches 50 feet above the runway end height described in paragraphs [A, 1., a. and A, 1., b.] above and shown on the Airport Height and Safety Zones attached at Appendix [1] Airport Layout Plan and the Airport Master Plan.

(4) MILITARY AIRFIELDS: The PRIMARY ZONE and the CLEAR ZONE described in paragraphs [A, 2., a. and A, 2., b.] above and shown on the Airport Height and Safety Zones attached at Appendix [1] Airport Layout Plan and the Airport Master Plan.

b) PERMITTED AND RESTRICTED ACTIVITIES: All land uses shall be permitted in the several zones as provided in the Aviation Compatible Land Use Chart attached to this Section at Appendix [3]. Activities and land uses not specifically listed are permitted or restricted based on their similarity for potential injury to people, risk to the public health and/or increased property damage should such activity or use be subjected to an aircraft accident as is exhibited by those activities and land uses listed in the Chart at Appendix [3].

2. IN-FLIGHT VISUAL OR ELECTRONIC INTERFERENCE:

Not withstanding any other provisions of this Section, no use may be made of land or water within any zone established by this Section in such manner as to interfere with the operation of an airborne aircraft. The following special requirements shall apply to each permitted use:

a) All lights and illumination used in conjunction with streets, parking, signs or uses of land and structures shall be arranged and operated in such manner that is not misleading to or obscure pilots vision during critical take-off or landing stages of flight or be otherwise dangerous to aircraft occupants or flight operations at an airport covered in this Section.

b) No use of high energy beam devices is permitted where the energy transmission is not fully contained within a building or some type of absorbing or masking vessel.

c) No operations from any type shall produce smoke, glare or other visual obscuration within [3] statute miles of any usable runway at an airport covered in this Section.

d) No operations from any type shall produce electronic interference with navigation signals or radio communication between aircraft, the airport, or an air traffic control facility.

3. AIRCRAFT BIRD STRIKE HAZARD:

Waste disposal and other facilities which store, handle or process organic or any other material that foster or harbor the growth of insects, rodents, amphibians or other

organisms will result in significant bird population increases above the normal background. These type facility operations increase the potential for aircraft bird strike resulting in damage to aircraft and injury to occupants. These uses are incompatible if located within the vicinity of any airport described in this Section through the application of the following criteria:

a) Facilities located within 10,000 feet of any runway used or planned to be used by turbine powered aircraft.

b) Facilities located within 5,000 feet of any runway used only by conventional piston engine powered aircraft.

c) Any facility located so that it places the runways and/or approach and departure patterns of an airport between bird feeding, water or roosting areas.

d) Facilities outside the above perimeters but still within the lateral limits of any of the zones described in Paragraphs [A., 1. and 2.] above will be reviewed on a case-by-case basis.

3.03.09 Determination Of Boundaries:

In determining the location of boundaries for land use compatibility established by Paragraphs [A. B. and C.] above and depicted on the map[s] accompanying and made a part of these regulations, the following rules shall apply:

1. Where boundaries are shown to follow streets or alleys, the centerline of such streets or alleys, as they exist at the time of adoption of these regulations shall be the zone boundary; or

2. Where boundaries are shown to enter or cross platted blocks, property lines of lots as they exist at the time of adoption of these regulations shall be the zone boundary; or

3. Notwithstanding the above, where boundaries are shown on any platted lot provisions of the more restricted zones shall apply; or

4. Where boundaries are shown on unsubdivided property less than 10 acres in area, provisions of the more restricted zone shall apply; or

5. Where boundaries are shown on unsubdivided property ten (10) or more acres in area, the location shall be determined by the scale shown on the map unless dimensions are given on the map.

3.03.10 Independent Justification:

The purpose of the overlay zoning adopted through this Section is to provide airspace protection and land use compatible with continuation of normal and routine operation of those airports covered without endangering the public health, safety and welfare. Each of the three zoning aspects requires independent justification in order to promote the public interest in health, safety and general welfare. No structure or use may be permitted in any zone unless it conforms to the specific height, noise impact sensitivity

and public safety limitations at its site as set forth in Paragraphs [A., B. and C.] of this section.

3.03.11 Nonconforming Uses:

1. The requirements prescribed by this Section shall not be construed to necessitate the removal, lowering, alteration or other changes of any existing structure or tree not conforming to the requirements as of the effective date of this Section. Nothing in this Section shall be construed to require the sound conditioning or other changes or alteration of any preexisting structure not conforming to requirements of this Section as of its effective date or to otherwise interfere with the continuance of any such preexisting nonconforming use.

2. Nothing herein contained shall require any change in the construction or alteration which was begun prior to the effective date of this Section, and is diligently pursued and completed within two (2) years thereof.

3. Before any nonconforming structure or tree may be replaced, substantially altered or repaired, rebuilt or allowed to grow higher or to be replanted, a permit must be secured from the Zoning Administrator.

4. No permit shall be granted that would allow the establishment or creation of an obstruction hazardous to aircraft operations or permit a nonconforming structure or tree or nonconforming use to be made or become higher or become a greater obstruction to air navigation than it was as of the effective date of this regulation.

5. Whenever the Zoning Administrator determines that a nonconforming use or nonconforming structure or tree has been abandoned or that the cost of repair, reconstruction or restoration exceeds the value of the structure or tree, no permit shall be granted that would allow said structure or tree to be repaired, reconstructed, restored or replanted except by a conforming structure or tree.

6. The cost of removing or lowering any tree not conforming to the requirements of this Section shall be borne by the proprietor of the airport affected by the nonconforming tree.

3.03.12 Future Uses:

No change shall be made in the use of land, and no structure shall be altered or otherwise established in any zone created by this Ordinance except in conformance with the requirements of this section.

3.03.13 Administrative Processes:

1. Administration and Enforcement:

It shall be the duty of the Zoning Administrator to administer and enforce the requirements prescribed herein within the territorial limits over which Okaloosa County has jurisdiction through the permitting process. Permits shall be requested by use of the Application Form attached at Appendix [6]. Temporary or conditional permits pending completion of review, comment or approval by any other local, state or federal agency

shall not be issued. In the event that the Zoning Administrator finds any violation of the requirements contained herein, the Zoning Administrator shall give notice to the person responsible for such violation in writing. Such notice shall indicate the nature of the violation and the necessary action to correct or abate the violation. A copy of said notice shall be sent to the Board of Adjustment. The Zoning Administrator shall order discontinuance of any work being done; or shall take any or all other action necessary to correct violations and obtain compliance with all the provisions of this Section.

2. Permits:

a) HEIGHT ZONES: No building or structure, located within the lateral boundaries of the Airport Height and Safety Zones shown in Appendix [1] Airport Layout Plan and the Airport Master Plan of this Section, may be constructed, erected, moved to or repaired, altered or modified resulting in an increase in height, unless a building permit has been issued by the Zoning Administrator. No permit shall be issued unless the Federal Aviation Administration has reviewed the proposed construction or alteration and issued a written Determination of the proposal's effect on navigable airspace where such prior notification under Title 14, Code of Federal Regulations, Part 77 is required.

Notification is required for any temporary or permanent building or structure, whose height is proposed to exceed:

(1) 200 feet above ground level at its site; OR,

(2) A slope increasing one (1) foot vertically for every one hundred (100) feet horizontally for a distance of 20,000 feet from the nearest point of the nearest runway at any airport covered by this Section.

b) NOISE ZONES: No building or structure, for which a NLR 25, NLR 30, or NLR 35 is required by the Aviation Compatible Land Use Chart at Appendix [3] of this Section may be constructed, altered, moved to, demolished, or repaired unless a building permit has been issued by the Zoning Administrator. No permit shall be issued unless construction plans and specifications for the building or structure reflect methods and materials either as recommended in Appendix [4] of this Section or an acceptable alternative source and the combination of design, materials and methods will result in a sound level reduction for the applicable room(s) at least as great as the NLR value specified in Appendix [3] for the particular usage involved.

c) APPROVAL OF METHODS OF CONSTRUCTION:

(1) The Zoning Administrator may approve any method of construction provided for in the Recommended Construction Methods and Materials Lists attached to this Ordinance at Appendix [4]; that the proposed design is satisfactory and that it complies with the NLR requirements of the Aviation Compatible Land Use Chart at Appendix [3].

(2) The Zoning Administrator may require certified professional documentation or other appropriate data be submitted as evidence or proof to substantiate any claims made as to the sound level reduction performance of submitted construction methods.

d) VERIFICATION AND ENFORCEMENT:

(1) The Zoning Administrator may, prior to granting final approval of the finished building construction, require, at the expense of the owner, field tests by a Qualified Acoustical Consultant to verify the sound level reduction(SLR) of the building.
(2) For the purpose of standardization, to vary the noise level reduction requirements the verification field test may use the aircraft noise prevailing outside the building and will employ the following procedures:

(a) Using the noise signal generated by an individual aircraft operation (fly-over event), outside and inside noise levels may be measured simultaneously. The difference between the maximum noise levels outside and inside the room for the fly-over event should be taken as the measured SLR for the flyover event, provided that the maximum inside noise level exceeds, by at least seven decibels, the background noise level of the absence of the flyover.

(b) The SLR should be determined for at least four flyover events for each room tested. The resulting SLR value assigned to the room would be the arithmetic average of the individual flyover event SLR values.

(c) For occupied rooms in residential structures, the inside noise level should be measured with a single microphone four feet above the floor near the center of the room.

(d) For other residential structures, the inside noise level should be measured with a single microphone five feet above the floor, either near the center of the room, or eight feet into the room from the exterior wall most directly exposed to the aircraft noise at whichever Okaloosa County 3-34 Land Development distance from the exposed wall is smaller. The outside noise level should be measured at an unobstructed location approximately five feet above the elevation of the floor of the room under test and eight feet away from the most directly exposed exterior wall near its center.

(e) For structures in which several rooms are to be evaluated the tests need only be conducted in those rooms whose exterior walls are most directly exposed to the aircraft noise source. If noise level reduction requirements are met for these rooms, the tests need not be repeated for rooms of similar construction which are less directly exposed to the flyover event.

(f) For structures where a number of rooms receive nearly equal exposure to aircraft noise, tests need only be conducted in two of the near identical rooms.

(g) For residential units, tests in two rooms are usually sufficient. One of the rooms tested must be the bedroom most directly exposed to aircraft noise. The other room tested may be either the

living room, dining room or family room, whichever is most directly exposed to the aircraft noise source.

(h) When an unfurnished room or a room furnished less than normal is tested, the adjusted sound level reduction shall be computed by adding ten times the logarithm to the base ten of the ratio of the floor area of the room to the sound absorption in the unfurnished room. Such correction however shall not exceed two decibels. The adjusted sound level reduction value shall be used in determining compliance with the NLR requirements. If the sound level reduction is measured in a furnished room, no adjustment in the sound level reduction shall be made.

(i) The inside and outside sound levels may be observed directly by simultaneous readings of two sound level meters. Alternatively, inside and outside may be recorded simultaneously on magnetic tape with SLR determined by analysis of the recorded signals. For either method, each measuring system used must satisfy the requirements for a Type 2 sound level meter according to ANSI SI.4-197 and be operated in the manner designated by ANSI SI.13-197 (or latest revisions thereof). Additionally, each system used must be calibrated prior to and following the flyover events so their indications are within one decibel, for the same sound level using suitable calibration procedures as specified by the system's manufacturer.

e) AIRCRAFT OVERFLIGHT AND ACCIDENT POTENTIAL ZONES: Within the lateral boundaries of any Aircraft Overflight or Accident Potential Zone shown in Appendix [1] of this Section, no building, structure, vehicle or vessel may be moved to, parked, moored, constructed, repaired, altered or modified, either permanently or temporarily, unless a building permit has been issued by the Zoning Administrator. No permit shall be issued unless the building, structure, vehicle or vessel conforms with requirements for land use within that safety zone as shown in Appendix [3]

3. Conditions:

a) HEIGHT ZONES:

OBSTRUCTION MARKING AND LIGHTING: Any permit or variance granted shall as a specific condition, require the owner to mark and light the structure to indicate to aircraft pilots the presence of an obstruction to air navigation. Such marking and lighting shall conform to the specific standards established by Rule Chapter 14-60, Florida Department of Transportation and Federal Aviation Administration Advisory Circular 70/7460-1, as amended, attached at Appendix [7].

b) AIRPORT NOISE ZONES:

NOTIFICATION OF POTENTIAL NOISE IMPACT: This notification condition shall apply to property within the various Airport Noise Impacted Zones shown in Appendix [2] of the Airport Master Plan including all

residential development or non-residential development which could be adversely affected by airport generated noise.

(1) NOISE ZONE A: No residential development shall be allowed within Noise Zone A.

(2) NOISE ZONES B and C: Constructive knowledge shall be made available to all purchasers of residential property as provided for in Chapter 475.25,(1),(b), Florida Statutes; Chapter 498.037,(1), Florida Statutes; and Public Law 96-163 (49 USC 2107).

(a) Public notice through the use of maps, depicting noise impacted areas shall be available at the Okaloosa County Planning and Inspection Department.

(b) A listing of all residential property within noise impacted areas annotated as to Noise Zone, shall be made available. The listing will be compiled by the Okaloosa County Property Appraiser from public records and shall be updated at least once each year. The listing will be used by title companies, real estate agencies and individuals to determine the Notice required to be given to prospective purchasers of residential property.

(c) A Disclosure Statement as shown Appendix [8] shall be completed for the sale of all residential property located in Noise Zones B and C and shall be filed with the property deed.

(3) When the residential occupant(s) or end user of an affected property is not the purchaser, the purchaser must convey the notification condition to these parties. Such notification must be in writing, must be acknowledged by signature of the party(s) and must be accomplished prior to the party occupying or executing a lease, rental contract or any type legally binding obligation to occupy the property. A copy of the occupant(s)'s acknowledgement shall be filed with the property deed.

4. Aircraft Overflight/Accident Potential Zones:

NOTIFICATION: This notification condition shall apply to all property within the various Aircraft Over flight and Accident Potential Zones shown in Appendix [1] including any new development or use.

a) Constructive knowledge shall be made available to all purchasers and users of property as provided for in Chapter 475.25,(1),(b), Florida Statutes; Chapter 498.037,(1), Florida Statutes; and Public Law 96-163 (49 USC 2107).

b) Constructive knowledge shall be accomplished in manner and form prescribed in

(1) When the end user of any affected property is not the purchaser, the purchaser must convey the notification condition to the user. Such notification must be in writing, must be acknowledged by user signature and must be accomplished prior to the user occupying or making any type legally binding obligation to occupy the property. A copy of the user's acknowledgement shall be filed with the property deed.

(2) When the affected property also lies partially or entirely within any Airport Noise Impact Zone shown in Appendix [2] as part of the Airport

Master Plan, notification shall include specific reference to both aircraft overflight/accident potential and airport noise impact.

3.03.14 Board Of Adjustment:

The Okaloosa County Board of Adjustment shall have and will exercise the following power on matters relating to areas within their territorial limit of authority as described in Section 11.02 of the Land Development Code.

1. VARIANCES:

a) Any person desiring to erect or increase the height of any structure or use his property not in accordance with the requirements of this Section, may apply to the Board of Adjustment for a variance from such requirement.

(1) At the time of filing, the applicant shall forward a copy of his application for variance by certified mail return receipt requested, to the Florida Department of Transportation, Aviation Office, M.S. 46, 605 Suwannee Street, Tallahassee, Florida 32399-0450.

(2) The department shall have 45 days from receipt of the application to provide comments to the applicant and the Board of Adjustment after which time that right is waived.

(3) The Board of Adjustment may proceed with consideration of an application only upon receipt of Department of Transportation comments or the waiver of that right as demonstrated by the applicant's filing a copy of a return receipt showing the 45 days have elapsed.

(4) No application for a variance may be considered unless the applicant shows evidence the requirement for Notice of Construction or Alteration under Title 14, Code of Federal Regulations, Part 77 has been complied with.

(5) No application for a variance to the requirements of this regulation may be considered by the Board of Adjustment unless a copy of the application has been furnished to the Okaloosa County Zoning Administrator and the Airports Director of Okaloosa Regional Airport/ Eglin AFB, Destin Ft. Walton Beach Airport, Bob Sikes Airport, Hurlburt Field and Duke Field.

b) A variance may be granted by the Board of Adjustment where, owing to conditions peculiar to the property and not the result of the actions of the applicant, a literal enforcement of this Section would result in unnecessary and undue hardship, and would prevent the substantial enjoyment of property rights as shared by nearby properties which do conform to this Section. In granting any variance, the Board of Adjustment may prescribe appropriate conditions, requirements and safeguards in conformity with this Section and the intent hereof including avigation easements if deemed necessary.

2. APPEALS: As describes in Section 11.02 of the Land Development Code

a) Any person aggrieved, or any taxpayer affected, by any decision of the Zoning Administrator made in the administration and enforcement of this Section, may appeal to the Board of Adjustment.

b) All appeals hereunder must be made within a reasonable time as provided by the rules of the Board of Adjustment, by filing with the Zoning Administrator a notice of appeal specifying the grounds thereof. The Zoning Administrator shall forthwith transmit to the Board of Adjustment, all the papers constituting the record upon which the action appealed was taken.

c) An appeal shall stay all proceedings in furtherance of the action appealed unless the Zoning Administrator certifies to the Board of Adjustment, after the notice of appeal has been filed, that by reason of the facts stated in the certificate, a stay would cause imminent peril to life or property. In such case, proceedings shall not be stayed except by order of the Board of Adjustment on notice to the Zoning Administrator and after due cause is shown.

d) The Board of Adjustment shall fix a reasonable time for hearing appeals, give public notice and due notice to the interested parties and render a decision within a reasonable time. During the hearing, any party may appear in person, by agent or by attorney.

e) The Board of Adjustment may, in conformity with the provisions of this Section, reverse or affirm, in whole or in part, or modify the order, requirement, decision or determination, as may be appropriate under the circumstances.

3. JUDICIAL REVIEW:

a) Any person aggrieved, or any taxpayer affected by any decision of the Board of Adjustment, may appeal to the Circuit Court as provided in Chapter 333, Florida Statutes, ss 333.11.

4. PENALTIES:

a) Each violation of this Section or of any regulation, order or ruling promulgated herein shall constitute a misdemeanor of the second degree and be punishable by a fine of not more than 500 dollars or imprisonment for not more than 60 days or both; and each day a violation continues to exist shall constitute a separate offense.

3.03.15 Conflicting Regulations:

Where there exists a conflict between any of the requirements or limitations prescribed in this Section and any other requirements, regulations or zoning applicable to the same area, whether the conflict be with respect to the height of structures or trees; the use of land; or any other matter, the more stringent limitation or requirement shall govern and prevail. The variance to or waiver of any such more stringent limitation or requirement shall not constitute automatic variance or waiver of the less stringent limitations or requirements of this Section.

3.03.16 Severability:

If any of the provisions of this Section or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the Section which can be given effect without the invalid provisions or application, and to this end the provisions of this Section are declared to be severable.

3.03.00A Airport Land Use Compatibility Regulations

3.03.01A Authority and Power:

This regulation is created and adopted as authorized by Section 333.03, Florida Statutes (2005).

3.03.02A Findings and Intent:

The findings and intent of the Florida Legislature expressed at Section 333.02, Florida Statutes (2005) are incorporated herein by reference.

3.03.03A Applicability:

These regulations shall apply to areas in the vicinity of the Bob Sikes Airport as set forth herein, and shall be supplemental to sections 3.3.00 to 3.3.16 of this Code.

3.03.04A Airport Influence Zone:

There is hereby created and established an "Airport Influence Zone" (AIZ) as a special overlay zone to the Official Zoning Map. The AIZ shall extend from the centerline of Runway 17-35 to a radius of 5,000 feet on each end and 5,000 linear feet on each side of the runway.

3.03.05A Restrictions:

Within the AIZ the following restrictions shall apply.

1. There shall be no approvals of requests for Comprehensive Plan Future Land Use Map (FLUM) amendments, other than those initiated by the County, which would increase residential densities to any greater than those allowed by the future land use categories shown on the FLUM as adopted by Ordinance No. 00-03 on August 16, 2000, **unless** the applicant can conclusively demonstrate through competent scientific evidence that any residential development enabled by the requested plan amendment would not have an adverse impact on airport or airport-related industry operations; as determined by mutual agreement of the Airport Director and Director of Growth Management.

2. There shall be no approvals of requests for rezonings, other than those initiated by the County, of properties within the AIZ to other than the zoning districts in effect and shown on the Official Zoning Map in effect on August 16, 2005, **unless** the applicant can conclusively demonstrate through competent scientific evidence that any development enabled by the requested rezoning would not have an adverse impact on airport or airport-related industry operations; as determined by mutual agreement of the Airport Director and Director of Growth Management.

3. No residential subdivisions, multi-family development, mobile home parks, or other similar residential development shall be permitted within the AIZ, **unless** the developer can conclusively demonstrate through competent scientific evidence that the proposed development will not have an adverse impact upon airport or airport-related industry operations; as determined by mutual agreement of the Airport Director and Director of Growth Management. This restriction shall not apply to any residential subdivision or Planned Unit Development (PUD) for which the required review process had commenced prior to August 16, 2005 provided; however, the developer of such subdivisions shall agree in writing to create covenants to run with the land that will require noise reduction construction methods and materials in residences as determined necessary by the Building Official, and avigation easements and real estate purchase disclosures as determined necessary by the Airport Director.

4. In those situations where a single, contiguous lot or parcel of property is split by the AIZ such that a portion of the property lies within the AIZ and a portion lies outside the AIZ the property owner may transfer the residential density inside the AIZ to the portion outside the AIZ. Any such density transfer shall be capped at the number of dwelling units per acre that is allowed by the future land use category shown on the FLUM for the property inside the AIZ on the effective date of this regulation. The existing zoning density requirement of the property would not be applied. Lot sizes may be reduced in the portion of the property outside the AIZ to a minimum 1/4 acre to recapture the transferred density. Density transfers made in this manner shall be allowed only on one whole, contiguous property as described by the same legal description and deed, and may not be made on any other separate property not included in the legal description or deed. Once a density transfer has been made in the manner allowed herein no development order, permit, or other action may be made which would authorize any development upon the portion of the property inside the AIZ from which the density was transferred.

3.03.06A Sanitary Landfills:

No sanitary landfill shall be located any closer than 10,000 feet from the nearest point of any runway.

3.03.07A Educational Facilities:

No educational facility, except for aviation schools or technical training schools associated with airport industry, shall be located within an area which extends 5 miles in a direct line from the centerline of the runway, and which has a width measuring 5,000 feet on each side of the runway.

3.03.08A Lots of Record:

Nothing in these regulations shall restrict or prohibit the construction of a single-family dwelling on any lot of record duly recorded in the public records of Okaloosa County as of August 16, 2005 provided, however, that appropriate noise attenuation may be required as determined necessary by the Building Official.

3.03.9A Nonconforming Uses and Structures:

Nothing in these regulations shall restrict or prohibit the continuation of, expansion, or addition to any residential use or structure which was lawfully in existence on the adoption date of these regulations.

D. Code of Ordinances, Escambia County Florida (Pensacola Regional Airport, NAS Pensacola Airfield, Ferguson and Coastal airports and NOLF Saufley, NOLF Site 8 and Navy Hospital heliport)

Article 11 AIRPORT/AIRFIELD ENVIRONS*

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11.00.00. Findings.

The board of county commissioners of Escambia County has considered, among other things, the character of the operations conducted and proposed to be conducted at the various airports and airfields of Escambia County, the nature of the terrain and the character of the land within airport/airfield hazard areas, the current uses of property within and around such hazard areas and the uses that are appropriate and the recommendations of the 2003 Joint Land Use Study (JLUS) addressing military airfield encroachment, and the board finds as follows:

There exist airports and airfields within Escambia County and in proximity to Escambia County that are vitally important to the county, but whose operations are potentially harmful to the health, safety and general welfare of the citizens of Escambia County;

Airports/airfields create hazards that endanger the lives and property of users of the airports and/or airfields and the occupants and owners of property in their vicinity;

Airports/airfields produce noise that is not compatible with residential uses and certain commercial and industrial uses;

Obstructions reduce the size of the area available for the landing, taking off and maneuvering of aircraft, thus tending to destroy or impair the utility of airports/airfields and the public investment therein;

The creation, establishment, enlargement, or intensification of airport/airfield hazards injures the community served by such facilities; and

Airport/airfield hazards should be prevented in the interest of the long-term viability of airports/airfields within the county and the public health, safety and general welfare.

11.00.01. Applicability. This section is adopted pursuant to the authority conferred by F.S. chs. 125, 163 and 333. It is hereby found that incompatible land uses have the potential for being hazardous to aircraft operations as well as to the persons and property on the ground in the vicinity of the incompatible land use. Incompatible land use reduces the size of areas available for the landing, taking off and maneuvering of aircraft, thus tending to destroy or impair the utility of Pensacola Regional Airport, NAS Pensacola Airfield, Ferguson and Coastal airports and NOLF Saufley, NOLF Site 8 and Navy Hospital heliport and the public investment therein. Accordingly, it is declared:

That the creation or establishment of incompatible land uses around airports and/or airfields is a nuisance and injurious to the region served by the Pensacola Regional Airport, Ferguson and Coastal airports and NAS Pensacola, NOLF Saufley and NOLF Site 8 Airfields, and the Navy Hospital heliport.

The regulations on land uses set forth herein are applicable to all lands designated as Airfield Influence Planning Districts (AIPD) and the Pensacola Regional Airport Planning District (PNSPD) on the official "Escambia County Airport/Airfield Zoning Map Series", and to all lands subject to land use regulation pursuant to the requirements of Florida Statute. In addition, all of the property as designated on the "Height Limitations Maps" are regulated pursuant to the provisions of this Code for height limitations. The official maps shall be available for public inspection during regular office hours at the Planning and Zoning Department and the County Building Inspections Office.

At such time as any military airfield or outlying landing field permanently ceases military operations and is converted to civilian use, the applicable Airfield Environs regulations for the site and the surrounding properties will revert to the underlying zoning and its attendant regulations. If the airfield is converted to a civilian airport, the Board of County Commissioners shall determine if the airfield zoning overlay, including avigation easements, should be retained for the health, safety and welfare of the surrounding residents.

Any reverted parcel with a Public zoning designation must be rezoned before any nonpublic use or development can occur.

11.00.02. ***Definitions, as pertain to Airport/Airfield Environs.***

Abandoned/discontinued. As applies to Article 11, a cessation of use lasting for 365 days, or any structure that has not been used for business or residential purposes for 365 days. Military facilities will not be considered abandoned or discontinued until they have been officially decommissioned by an appropriate military authority.

Absolute. As used in articles 6 and 11, absolute pertains to the density restrictions in some Airfield Influence Planning District areas and means that the minimum lot size allowed is established as the inverse of the maximum density. For example, when the maximum density is three dwelling units per acre, the minimum lot size is one-third acre. When the maximum density is two dwelling units per acre, the minimum lot size is one-half acre.

Accident potential zones (APZ). As applied to military airfields, those areas which are identified as being significantly impacted by accident potential from aircraft. APZ-1 is an area normally beyond the clear zone that possesses a significant potential for accidents. APZ-2 is an area normally beyond APZ-1 that has a measurable potential for accidents.

Airport. Any area of land or water that is designed and set aside for the landing and taking off of civilian aircraft and utilized or to be utilized in the interest of the public for such purposes. The airports within Escambia County are Pensacola Regional Airport, Ferguson Airport, and Coastal Airport.

Airfield. Any area of land or water that is designed and set aside for the landing and taking off of military aircraft. The airfields within Escambia County are: NAS Pensacola, NOLF Saufley, NOLF Site 8, and Navy Hospital Heliport.

Airport/airfield elevation. The highest point of an airport/airfield's landing area measured in feet above mean sea level (AMSL).

1. The established elevations for the airfields within Escambia County are:
    a. NAS Pensacola (Elevation 30 AMSL).
    b. NOLF Saufley (Elevation 85 AMSL).
    c. NOLF Site 8 (Elevation 110 AMSL).
    d. Navy Hospital Heliport (Elevation 25 AMSL).
2. The established elevations for the airports within Escambia County are:
    a. Pensacola Regional Airport (Elevation 121 AMSL).
    b. Ferguson Airport (Elevation 27 AMSL).
    c. Coastal Airport (Elevation 110 AMSL).

Airport/Airfield Environs. The area that has been identified as being significantly impacted by any airport or airfield in Escambia County.

Airport/airfield hazard. Any structure, tree or use of land which would exceed the federal standards as contained in Title 14 C.F.R. Part 77 "Objects Affecting Navigable Airspace"; FAA Handbook 7400.2(x) [x = current version] "Procedures for Handling Airspace Matters", FAA Handbook 8260.3(x) "Terminal Instrument Procedures", and FAA Advisory Circulars 70/7460-2(x) "Proposed Construction or Alteration of Objects that May Affect the Navigable Airspace," 70/7460-1(x) "Obstruction Marking and Lighting," and 150/5190-4A "Zoning and Grants," which obstructs the airspace required for the flight of aircraft taking off, maneuvering or landing and which has not previously obtained a permit or variance pursuant to F.S. § 333.025 or 333.07.

Airport/airfield hazard area. Any area of land or water upon which an airport/airfield hazard might be established if not prevented by this Code.

Airport/airfield land use administrator (administrator). The county administrator or his duly appointed designee.

Note: "Airspace height" definition deleted by Ord. No. 2004-32.

Avigation easement. A form of right-of-way, i.e., an agreement that gives the owner of the easement a clear property right to maintain flight operations in the airspace above the property, running with the land and in perpetuity. Military avigation easements will become null and void at such time as the facility reverts to civilian use. (See section 11.00.01.C.)

Clear zone (CZ). An area extending outward from the end of each runway. The parameters of clear zones are unique to each installation, but all are considered an area of high accident potential. (See section 11.04.02 for the parameters for each of the military installations in Escambia County.)

Note: "Clear zone (CZ)" definition extensively modified and "clear zone (OLF Saufley)" definition deleted by Ord. No. 2004-32.

Day-night average sound level (Ldn). A basic measure for quantifying noise exposure. (See definition of "Ldn".)

Decibel (dB). A unit for measuring the relative loudness of sound or sound pressure equal approximately to the smallest degree of difference of loudness or sound pressure ordinarily detectable by the human ear, the range of which includes about 130 decibels on a scale beginning with one for the faintest audible sound.

dBA. The unit of noise level measured in accordance with the "A-weighted scale" which replicates the response characteristics of the ear. This scale is a quantity, in decibels, read from a standard sound-level meter with A-weighting circuitry. The A-space weighting discriminates against lower frequencies according to a relationship approximating, and more accurately reflecting the auditory sensitivity and response of the human ear. The A-scale sound level measures approximately the relative "noisiness" or "annoyance" of common sounds.

Decision height. The height at which a decision must be made during an instrument approach, to either continue the approach or to execute a missed approach and regain altitude.

Note: "Easements" definition deleted by Ord. No. 2004-32.

Floor area ratio (FAR). A means for determining intensity of land use. FAR is calculated by adding all authorized floor levels minus setback, landscape and parking requirements and then dividing this total by the gross site area.

Height (airport/airfield). In the Airport/Airfield Environs, for purpose of determining the height of any structure, tree or other object, including communication towers, the height is the elevation above mean sea level (AMSL). For calculation purposes, this is the sum of the elevation of the site and the height of the structure, including any appurtenances.

Imaginary surface. See definition for "surface".

Instrument runway. A runway equipped with electronic and visual navigation aids for which a precision or non-precision approach procedure having straight-in landing minimums has been approved.

Ldn. A day/night average sound level obtained by averaging the 24-hour sound level, in decibels, after the addition of a ten decibel to night time (10:00 p.m. to 7:00 a.m.) sound levels.

Lot of record. In Article 11, Airport/Airfield Environs, a lot of record for the purpose of constructing one single-family dwelling shall be a parcel recorded on or prior to August 21, 2001.

Minimum descent altitude. The lowest altitude, expressed in feet above mean sea level, to which descent is authorized on final approach or during circle-to-land maneuvering in execution of a standard instrument approach procedure where no electronic glide slope is approved.

Note: "Minimum en route altitude", "minimum obstruction clearance altitude", and "minimum vectoring altitude" definitions deleted by Ord. No. 2004-32.

Noise level reduction (NLR). Amount of noise reduction required through construction and incorporation of sound attenuation material to reduce interior noise level.

Nonprecision instrument runway. A runway having a nonprecision instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type 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's military airfield planning document.

Owner. Any person, group of persons, firm or firms, corporation or corporations, commanding officer of any local military base, or any other legal entity having legal or equitable title to or sufficient proprietary interest in or to any property subject to this Code.

Precision instrument runway. A runway having an instrument approach procedure utilizing an instrumented landing system (ILS) or a precision approach radar (PAR).

Runway. A defined area on an airport or airfield prepared for landing and takeoff of aircraft along its length.

Surface. An imaginary geometric plane enclosing an area, penetration into which may be restricted, prohibited or controlled.

Note: "Utility runway" definition deleted by Ord. No. 2004-32.

Visual runway. A runway intended solely for the operation of aircraft using visual approach procedures and no instrument designation indicated on a FAA approved airport layout plan, a military services approved military airfield layout plan, or by any planning document submitted to the FAA by competent authority.

(Ord. No. 2006-30, § 4, 4-6-2006)

11.01.00. Airport/Airfield Environs.

11.01.01. ***Description of environs.*** Certain airport/airfield environs have been established around each of the airports/airfields within the county. These environs have been identified through data provided to the county from the United States Navy and City of Pensacola in studies completed by each of the entities, and by the Joint Land Use Study conducted by the county, for the airports/airfields that operate within Escambia County. Areas within the airport/airfield environs are subject to regulation beyond the other requirements of the Code. These additional restrictions provide an enhanced level of protection in support of the continued operations of the airports/airfields in the county.

11.01.02. ***Administration.*** The following administrative requirements apply to the airport/airfield environs.

A. ***Notification of Navy***. For any rezoning, conditional use, variance, development review committee case, administrative appeal, temporary use of a mobile home for medical purposes, or development order extension within the boundaries of any airfield environ area, Airfield Influence Planning District (AIPD-1 or AIPD-2), or any height-restricted area near NAS Pensacola, NOLF Saufley, NOLF Site 8, or the Navy Hospital heliport, mail and/or email notice shall be sent by the planning and zoning department to:

Air Operations Officer
Air Operations
Naval Air Station Pensacola, Building 1852
Pensacola, FL 32508-5217

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

for review and comment in the form of a recommendation to the final approving authority.

B. ***Notification of Pensacola Regional Airport.*** For any rezoning, conditional use, variance, development review committee case, administrative appeal, temporary use of a mobile home for medical purposes, or development order extension within the boundaries of PNSPD, within any height-restricted area near Pensacola Regional Airport, or in excess of the Pensacola Regional Airport notification requirement surface, mail or e-mail notice shall be sent by the planning and zoning department to:

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

for review and comment in the form of a recommendation to the final approving authority.

C. ***Development review***. A representative from the Navy shall be designated as an ex officio member of the development review committee (DRC) with the purpose of providing written recommendations to the DRC.

11.01.03. ***Variances, conditional uses and other relief.***

A. ***Variances and conditional uses***. No variances shall be granted to the requirements of the AIPDs or to the regulations regarding height within airfield height limitation surfaces. Variances to height restrictions, other than airfield height restrictions, shall follow the criteria outlined below. For all other variance or conditional use requests, section 2.05.00 of the Land Development Code shall apply. When considering a variance under section 2.05.02, proximity to the overlay zone boundary lines shall be considered an unusual physical condition.

1. ***Variances to height***. Applicants seeking to erect, alter, or modify a structure so as to exceed the height limitations of this article must request a variance. In

the event that federal obstruction standards as contained in Title 14 of the Code of Federal Regulations Part 77 (14 CFR Part 77) are more stringent than the height limitations of this article or zoning district height limitations, applicants seeking to erect, alter, or modify a structure so as to exceed the height limitations of 14 CFR Part 77 must request a variance. Unless otherwise noted below, variance requests shall be processed as outlined in Article 2 of the Land Development Code.

a. ***Criteria***. In determining whether to grant a variance, the Board of Adjustment (BOA) shall consider the criteria in F.S. § 333.025(6). Per F.S. § 333.03(c)5, no variances shall be granted solely on the basis that a proposed structure will not exceed federal obstruction standards as outlined in 14 CFR Part 77. In addition, no variances will be granted unless the BOA finds that all the following conditions exist:

(1) The request meets all applicable conditions in section 2.05.02 of the Land Development Code.

(2) The applicant provides documentation showing compliance with the federal requirement for notification of proposed construction and a valid aeronautical evaluation.

(3) The applicant provides a Federal Aviation Administration (FAA) aeronautical study with a "Determination of No Hazard" for the proposed project.

b. ***Notification requirements***. In addition to the notification requirements contained in Article 2 of the Land Development Code, all applicants requesting a variance to the height restrictions contained in this article shall submit a copy of the variance application by certified mail, return receipt requested, to the Florida Department of Transportation (FDOT), Aviation Office. Per F.S. § 333.07, the FDOT Aviation Office shall have 45 days to comment after receipt of the application; if FDOT does not comment within 45 days the right to comment is waived. The BOA shall not hear a height variance request until the 45-day period has expired.

B. ***Other relief.*** Any person who is denied a development order within the airport/airfield environs areas because of the restrictions imposed herein may apply for relief through procedures described in Article 2 of the Land Development Code, which provides an administrative process for appeals of administrative decisions.

11.01.04. ***Nonconforming uses, structures or objects.*** **Unless otherwise specified below, the requirements of Article 9 apply.**

A. ***Alteration of nonconforming uses, structures or objects***. No permits shall be granted that will allow the establishment or creation of an airport/airfield hazard or would permit a nonconforming structure, object, or use to be made or become higher or to become a greater hazard to air navigation than it was when the applicable regulation was enacted or than it was when the application for a permit was made.

B. ***Destroyed or abandoned nonconforming structures or objects.*** Whenever the building inspections department determines that a nonconforming structure or object has been abandoned or is more than 80 percent torn down or destroyed no permit shall be granted that would allow said structure or object to exceed the applicable height limit or otherwise deviate from the requirements of this article. A structure or object will be

considered 80 percent destroyed when the actual cost to repair the structure or object to its predamage condition would equal or exceed 80 percent of its market value before the destruction occurred.

11.01.05. ***Single-family dwelling units existing as of August 21, 2001.*** Single-family dwelling units, including mobile homes as single-family dwelling units, existing as of August 21, 2001, shall be considered conforming uses regardless of the allowable density in the overlay district or the date of construction.

11.01.06. ***Uses interfering with aircraft.*** It is unlawful to establish, maintain or continue any use within the county in such a manner as to interfere with the operation of aircraft. The following requirements shall apply to all lawfully established uses within the county.

A. ***Dangerous lighting.*** All lights or illumination used in conjunction with street, parking, signs or use of land and structures shall be arranged and operated in such a manner that is not misleading or dangerous to aircraft operating from an airport/airfield or in a vicinity thereof as determined by the airport/airfield operator.

B. ***Smoke or glare****.* No operations of any type shall produce smoke, glare or other visual hazards within three statute miles of any usable runway or a designated airport/airfield.

C. ***Electronic interference.*** No operations of any type shall produce electronic interference with navigation signals or radio communication between the airport/airfield and the aircraft.

D. ***Sanitary landfills****.* Sanitary landfills will be considered as an incompatible use if located within areas established for the airport/airfield through the application of the following criteria:

1. Sanitary landfills located within 10,000 feet of any runway used or planned to be used by turbojet or turboprop aircraft.

2. Sanitary landfills located within 5,000 feet of any runway used only by piston type aircraft.

3. Sanitary landfills located outside the above perimeters but within the imaginary surfaces described in FAR Part 77, and applied to an airport/airfield, will be reviewed on a case-by-case basis.

4. Any sanitary landfill located so that it places the runways and/or approach and departure patterns of an airport/airfield between bird feeding, water or roosting areas.

E. ***Obstruction marking and lighting****.* Notwithstanding the provisions of any other article of this ordinance or any other ordinance, the owner of any structure or obstruction over 200 feet above ground level shall install marking and lighting on the structure in accordance with the specific standards established by Chapter 14-60, Rules of the Department of Transportation (Appendix 1) and Federal Aviation Advisory Circular 70-7460-1 Series (Appendix 2) and amendments thereto. In addition, the owner shall install

high intensity white obstruction lights on a structure which exceeds 800 feet above ground level (AGL.) Towers less than 200 feet may require lighting after Navy evaluation.

F. ***Installation of marking and lighting.*** In granting any permit or variance under this article, the director or the board of adjustment may, if it deems such action advisable to effectuate the purposes of this Code and reasonable under the circumstances, so condition such permit or variance as to require the owner of the structure or tree in question to install, operate and maintain thereon, such markers and lights as may be necessary to indicate to aviators the presence of an obstruction to aeronautical operations.

(Ord. No. 2006-30, § 4, 4-6-2006)

11.02.00. Airfield Influence Planning Districts (AIPD).

11.02.01. *Airfield Influence Planning District characteristics.*

A. ***Description of Airfield Influence Planning Districts.*** Airfield Influence Planning Districts (AIPD) include the established accident potential and noise zones of an airfield and extend outward from those zones at varying distances specific to the installation and its use. AIPDs also include areas that lie between the boundaries of an installation and its respective accident potential zones. AIPDs include and define areas that are close enough to the installation to impact or to be impacted by the mission of the airfield. Because of the relationship of these areas to airfields, they are subject to additional restrictions on development. The regulations and densities adopted herein are based on the Air Installation Compatible Use Zone (AICUZ) findings, the recommendations in OPNAV Instruction 11010.36B, AICUZ Program Procedures and Guidelines for Department of the Navy Air Installations, (19 DEC 2002) and the recommendations of the Joint Land Use Study. The AIPD overlays, which incorporate and replace the regulations adopted in Ordinance No. 2002-8, and the AIPD overlay maps, including noise zones, which replace the aerial map approved by Ordinance No. 2001-44, are hereby established as follows:

1. ***Airfield Influence Planning District--1 (AIPD-1):*** An area that includes the current accident potential zones and noise contours of 65 Ldn and higher, as well as other areas near and, in some cases, abutting the airfields. Included are areas designated as Area "A" (A) and Area "B" (B).

2. ***Airfield Influence Planning District--2 (AIPD-2):*** An area that lies outside the AIPD-1 boundary but is close enough to the airfield to impact or be impacted by airfield operations.

B. ***General requirements for all AIPD areas.***

1. ***Avigation easements.*** All applications for subdivision approval and/or building permits for any structure requiring plan approval shall include the dedication of an avigation easement to the county. If the parcel on which the structure is to be built has a dedicated avigation easement on record, this requirement is waived. The dedicated avigation easement allows property owners to develop land in accordance with the applicable zoning district and

regulations. However, military airfields receive a clear right to maintain flight operations over the parcel. The easement is recorded with the deed to a property and runs in perpetuity with the land. (See section 11.00.01.D, Reversion clause.)

2. ***Noise zones****.* Permitted and conditional uses in the noise zones that are outside of APZ areas are based upon the underlying zoning along with recommended land uses as contained in "Table 2, Air Installations Compatible Use Zones, Suggested Land Use Compatibility in Noise Zones," OPNAV INST11010.36B, AICUZ Program Procedures and Guidelines for Department of the Navy Air Installations. The primary consideration for construction in the noise zones is noise level reduction/sound attenuation measures.

TABLE INSET:

Noise Zones	Maximum Density Per Acre
Noise zone 3	3
Noise zone 2	3
Noise zone 1	3

a. ***Noise reduction standards, methods and construction list.*** All new buildings shall be constructed with sound protection based on the level of noise exposure, which can be determined by the location of the building within the adopted noise contour maps. Sound attenuation is not required if the site is located outside the 65 Ldn noise contour. The provisions of this subsection shall apply to new construction and the moving of buildings (including mobile homes/manufactures homes) into noise zones 1, 2 and 3 located within the airport/airfield environs overlay zones. Noise reduction standards, construction and methods are specified in Appendix G of the Airport FAR Part 150 Study adopted by the City of Pensacola in 1990, which is available for review in the county building inspections office and the planning and zoning department.

1) Noise Zone 1. Appendix G of the Part 150 Study recommends a sound reduction of 25 decibels (dB) for residential construction within the 65--70 Ldn noise contour. The standards specified in Appendix G for a reduction of 25 dB are recommended in Noise Zone 1.

2) ***Noise Zone 2.*** Appendix G of the Part 150 Study recommends a sound reduction of 30 dB for residential construction within the 70--75 Ldn noise contour. The standards specified in Appendix G for a reduction of 30 dB are required in Noise Zone 2.

3) ***Noise Zone 3****.* Residential construction is discouraged in Noise Zone 3. The standards specified in Appendix G for a reduction of 35 dB are required in Noise Zone 3.

b. ***Existing residences****.* Any existing residence may be added to, structurally altered, or repaired without conforming to the referenced specifications provided the property owner signs a waiver that he/she was notified of said specifications.

c. ***Mobile homes/manufactured homes.*** Where state or federal law preempts the imposition of the noise attenuation construction standards of this section, mobile homes/manufactured homes not conforming to the referenced specifications, but meeting all other Land Development Code requirements, are allowed provided the property owner signs a waiver that he/she was notified of said specifications.

d. ***Enforcement.*** It shall be the duty of the building official to administer and enforce the noise reduction standards, construction and methods specified in Appendix G of the Part 150 Study.

3. ***Real estate disclosure form.*** All real estate transactions within an AIPD shall include a form disclosing the proximity of the site to the military airfield. The form shall be affixed to all listing agreements, sales and rental contracts, subdivision plats, and marketing materials provided to prospective buyers and lessees. However, the form need not be included in advertisements directed to the public at large. Disclosure is required as soon as practicable, but must be before the execution of a contract, i.e., before the making or acceptance of an offer.

4. ***Split parcels.*** For purposes of regulating parcels split by the AIPD lines, only that portion of a parcel that falls within the AIPD shall be subject to the conditions of the AIPD.

C. ***Subdivision of land for commercial use.*** Land within the AIPD overlay zones may be subdivided for commercial use subject to all other provisions of this Code and to underlying zoning. Parcels limited to one single-family dwelling unit per lot of record as of August 21, 2001, may be subdivided for commercial use if the one dwelling unit per lot of record requirement is not exceeded.

D. ***Off-site transfer of development rights.*** At such time as the county develops a comprehensive program for off-site transfer of development rights, the AIPD areas will not be included in that program as receiving parcels.

11.02.02. ***AIPD-1***

A. ***AIPD-1 regulations.*** Areas within the AIPD-1 overlay are subject to the following additional restrictions:

1. ***Prohibited concentrations of population.*** No use is allowed in AIPD-1 that concentrates, within a structure on a regular basis, more than 25 people per acre. This limitation applies to: sports stadiums, amphitheaters, auditoriums, clubhouses, churches, schools, hospitals, assisted living and other medical facilities, hotels and motels, restaurants and other eating and drinking establishments built to such a scale that gatherings of more than 25 people per acre would be expected on a regular basis. All such facilities must meet this density requirement or have a FAR of 0.11 in APZ-1 and Area "A" and 0.22 in APZ-2 and Area "B", whichever is less. (See section 11.04.00 for height limitations.)

2. ***Parks and recreational facilities.*** Outdoor sports facilities, parks and recreation areas are permitted. However, any structure located thereon shall be restricted to those that are ancillary to the outdoor sports facility, park, or recreation area. Such ancillary structures shall include, but shall not be limited to, bleachers, backstops, picnic tables, public restrooms, concession stands, etc.

3. ***Other allowed uses****.* Certain recreational, agricultural, manufacturing, service, trade, and industrial uses are allowed (see section 11.02.02.D.).

4. ***Restrictions on residential development.*** Residential development is limited to detached single-family dwellings, including mobile homes if allowed in the underlying zoning district, at maximum densities defined by the areas within the AIPD and the specific airfield as provided herein below. No attached, multifamily, or multidwelling unit structures or complexes are permitted in any area of AIPD-1. Clustering is prohibited, including mobile home parks.

5. ***Density limitations.*** Density limits established in the areas designated as AIPD-1 are absolute, meaning that the minimum size for any lot is the inverse of the maximum permitted density, except that density limits in AIPD-1 Area "B" are not absolute, i.e., no minimum lot size is required.

6. ***Rezonings****.* Rezoning to a commercial district to obtain a higher density is not permitted. Rezoning is allowed, but density is limited to the maximum density allowed in the APZ Area or AIPD in which the property is located. The overlay density takes precedence and shall be determined by the following chart, regardless of the zoning district in which the property is located. (See Article 6 for new zoning categories that allow mixed commercial and residential at a lower density.)

B. ***AIPD-1 zones.***

1. ***NAS Pensacola Airfield influence planning district-1****.* The area between the connected outermost lines of the established accident potential zones and including all areas between the APZs and the installation boundary. All densities are absolute unless otherwise noted.

AIPD-1	**Aviation Characteristics**	**Maximum Density per Acre**
CZ (Clear zones)	Areas at the end of the airfield runways	0
A (Area A)	An area of special concern between the west and north runways that abuts the NASP property line and includes a portion of APZ-2 south of Bayou Grande	0
APZ-1 (NASP) [Accident potential zone 1]	Immediately in line with NAS Pensacola North and West runways (Includes a small area of APZ-2 in Garcon Swamp abutting the APZ-1 off the West runway of NASP)	0
APZ-1 (Accident potential	All other APZ-1s	0.4 1d.u./2.5ac)

zone 1)		
B (Area B)	West of NAS Pensacola between the base boundary and the southerly curve of APZs 1 and 2	3 Not Absolute
APZ-2 (NASP) (Accident potential zone 2)	Immediately in line with NAS Pensacola North and West runways	2
APZ-2 (Accident potential zone 2)	All other APZ-2s	3

2. ***NOLF Saufley***. NOLF Saufley AIPD-1 connects the outermost lines of the existing APZs The district encloses land between the APZs and the boundary of the installation and includes the following:

AIPD-1	**Aviation Characteristics**	**Maximum Density per Acre***
CZ (Clear zones)	Areas at the end of the airfield runways	0
APZ-1 (Accident potential zone-1)	All APZ-1s	0.4 (1d.u./2.5ac)
APZ-2 (Accident potential zone-2)	All APZ-2s	3
B (Area B)	An area that does not fall under a AICUZ APZ or noise contour, but is close enough to the installation to affect airfield operations; Area B includes land on all sides of the NOLF Saufley boundary	3 Not Absolute

* All densities are absolute unless otherwise noted.

3. ***NOLF*** *Site 8.* Due to the flight characteristics of the helicopters using the NOLF Site 8, the clear zones and accident potential zones for this installation are wholly contained within its' boundary. However, concern for the health, safety and welfare of residents living in proximity to the installation has resulted in the establishment of an AIPD-1 area that extends 1,000 feet from the installation boundary and contains only Area B, with its attendant regulations:

AIPD-1	**Aviation Characteristics**	**Maximum Density per Acre**
B (Area B)	An area that does not fall under an AICUZ APZ or noise contour, but is close enough to the installation to affect or be affected by airfield operations; Area B includes land abutting all sides of the NOLF Site 8 boundary.	3 Not Absolute

C. ***Airfield Influence Planning District-1, permitted, prohibited and conditional uses.*** Listings of allowed uses in the various zoning categories when they lay beneath AIPD-1 overlay zones are detailed below.

Permitted and conditional uses are based upon the underlying zoning along with recommended land uses in accident potential zones as contained in "Table 3, Air Installations Compatible Use Zones, Suggested Land Use Compatibility in Accident Potential Zones," OPNAV INST11010.36B, or the most current edition of the AICUZ Program Procedures and Guidelines for Department of the Navy Air Installations.

1. ***AG, agricultural and VAG, villages agricultural districts.*** Where the underlying zoning is AG, the permitted and conditional uses are as follows.

a. ***Permitted uses.***

(1) One single-family dwelling per lot of record existing as of August 21, 2001. Mobile homes are allowed as single-family dwellings, subject to the other relevant provisions of this Code. New subdivisions or developments are subject to the density limits in section 11.01.01.A.

(2) Agricultural, livestock grazing and agricultural-related activities and customary accessory buildings, excluding feedlots and intensive animal husbandry, i.e., herds of sufficient size to cause the accumulation of manure within the pen or pasture and/or such that a vegetative cover cannot be maintained within the enclosure. Open lots used for feeding and rearing of poultry, and barns, dairy farms, swine facilities, beef lots and barns, horse stalls (more than four), mink ranches, zoos and exotic animals shall be considered to be animal feedlots. These activities attract concentrations of birds creating a hazard to aircraft operations. Pastures shall not be considered animal feedlots. Maximum FAR of 0.28 in APZ-1; 0.56 in APZ-2 -- no activity that produces smoke, glare or involves explosives.

(3) Silviculture.

(4) Mariculture and aquaculture.

(5) Public utility. No above ground transmission (high tension) lines in APZ-1. Distribution lines of normal height, such as are found in subdivisions, are permitted.

(6) Stables, private and public. Facilities must be low intensity (four or fewer horses). Buildings shall have a maximum FAR of 0.11 in APZ-1 and 0.22 in APZ-2.

(7) Kennels.

(8) Display and sale of fruit, vegetables and similar agricultural products.

(9) Public utility and service structures, excluding communication towers.

(10) Feed and farm equipment stores.

(11) Animal hospitals and veterinarian clinics.

(12) Other rural area related commercial uses meeting the locational requirements of Comprehensive Plan Policies 7.A.4.13 and 8.A.1.13.

(13) Golf courses, tennis centers, swimming clubs, and customary attendant facilities and accessory buildings with a

maximum FAR of 0.11 in APZ-1; 0.22 in APZ-2. Facilities such as meeting places, auditoriums, large classes, etc. are not permitted. Clubhouses that meet the FAR above, or that house no more than 25 people per acre, whichever is less, are permitted in recreational areas.

(14) Reclamation of borrow pits that existed prior to September 16, 2004 (subject to local permit and development review requirements per Escambia County Code of Ordinances, Part I, Chapter 42, Article VIII, and performance standards in Part III, the Land Development Code, Article 7).

b. ***Conditional uses***. The board of adjustment must consider whether the proposed use is consistent with military operations within Airfield Influence Planning District-1.

(1) Wastewater treatment facilities, electric power generation facilities or substations that distribute power to customers via distribution lines (normal power lines) as opposed to transmission (high tension) lines.

(2) Oil wells/mineral extraction (See section 11.02.00 for height limitations).

(3) Borrow pits and reclamation activities thereof (subject to local permit and development review requirements per Escambia County Code of Ordinances, Part I, Chapter 42, Article VIII, and performance standards in Part III, the Land Development Code, Article 7).

(4) Solid waste transfer stations, collection points and/or processing facilities.

(5) Junkyards, salvage yards, and waste tire processing facilities.

c. ***Prohibited uses.***

(1) Permanent outside storage, excluding farm equipment.

(2) Auto sales, new or used.

(3) Restaurants, bars, nightclubs or any eating or drinking establishment.

(4) Any use that may produce electronic interference, attract large concentrations of birds, have explosive characteristics or produce air-pollution or potential glare.

(5) The raising of exotic animals, such as alpacas, llamas, bison, ostriches, emus, or any other animal not native to this planning area.

(6) No use is allowed in AIPD-1 that concentrates, within a structure on a regular basis, more than 25 people per acre. This limitation applies to: sports stadiums, amphitheaters, auditoriums, churches, schools, hospitals, assisted living and other medical facilities, hotels and motels, restaurants and other eating and drinking establishments built to such a scale that gatherings of more than 25 people per acre would be expected on a regular basis. All such facilities must meet this density requirement or have a FAR of 0.11 in APZ-1 and Area "A" and 0.22 in APZ-2 and Area "B", whichever is less. (See section 11.02.00 for height limitations.)

(7) Landfills.

2. ***RR, rural residential or VR-2, villages rural residential districts****.* Where the underlying zoning is RR or VR-2, the permitted and conditional uses are as follows.

a. ***Permitted uses.*** Any use permitted in the preceding district except as noted below.

b. ***Conditional uses.***

(1) Public riding stables. Facilities must be low intensity (4 or fewer horses). Buildings shall have a maximum FAR of 0.11 in APZ1 and 0.22 in APZ-2.
(2) Kennels.
(3) Home occupations with employees.
(4) Country clubs, golf courses and tennis clubs. Maximum FAR of 0.28 in APZ-1; 0.56 in APZ-2 -- no activity that produces smoke, glare, or involves explosives. Buildings shall have a maximum FAR of 0.11 in APZ-1 and 0.22 in APZ-2. Clubhouses that meet the FAR above, or that house no more than 25 people per acre, whichever is less, are permitted.
(5) Any conditional use permitted in the preceding district with the exception of junkyards, salvage yards, and waste tire processing facilities.

c. ***Prohibited uses.***

(1) Any use prohibited in the AG district.
(2) Commercial communication towers.
(3) Junkyards, salvage yards, and waste tire processing facilities.

3. ***R-1 and R-2, single-family; V-2A, villages single-family; R-3, one-family and two-family; R-4, multifamily districts****.* Where the underlying zoning is R-1, R-2, V-2A, R-3 or R-4, the permitted and conditional uses are as follows.

a. ***Permitted uses.***

(1) One single-family dwelling per lot of record existing as of August 21, 2001. New subdivisions or developments are subject to the density limits in section 11.01.01.A.
(2) The growing of vegetables or other food crops for personal consumption by the residents. The raising of crops or other plants for commercial purposes is prohibited.
(3) Public utility. No above ground transmission (high tension) lines in APZ-1.
(4) Marina, private.
(5) Residential dock or pier.
(6) Reclamation of borrow pits that existed prior to September 16, 2004 (subject to local permit and development review requirements per Escambia County Code of Ordinances, Part I, Chapter 42, Article VIII, and performance standards in Part III, the Land Development Code, Article 7).

b. ***Conditional uses****.*

(1) Home occupations with employees.

(2) Golf courses, tennis centers, swimming clubs with customary attendant facilities and accessory buildings. Maximum FAR of 0.28 in APZ-1; 0.56 in APZ-2 -- no activity that produces smoke, glare, or involves explosives. Buildings shall have a maximum FAR of 0.11 in APZ-1 and 0.22 in APZ-2. Clubhouses that meet the FAR above, or that house no more than 25 people per acre, whichever is less, are permitted in recreational areas.

(3) Covered boathouses and covered boat docks as accessory uses.

(4) Stables accessory to a principal structure for private, noncommercial use only. Minimum lot size 100,000 square feet.

(5) Public utility and service structures, excluding communication towers.

c. ***Prohibited uses.*** Any use not listed in subparts B. or C., above.

4**.** ***R-5, residential and limited office district****.* Where the underlying zoning is R-5, the permitted and conditional uses are as follows.

a. ***Permitted uses.***

(1) Any use permitted in the preceding district.

(2) One single-family dwelling per lot of record existing as of August 21, 2001. Mobile homes are allowed as single-family dwellings, subject to the other relevant provisions of this Code. New subdivisions or developments are subject to the density limits in section 11.01.01.A.

(3) Professional offices, as listed below, are permitted in APZ-2, maximum FAR of 0.22:

a. Finance, insurance and real estate.

b. Professional services, such as architects, engineers, lawyers, tax consultants and accountants.

(4) Public utility and service structures, excluding communication towers.

b. ***Conditional Uses.***

(1) Any conditional use allowed in the previous R-1, R-2, V-2A, R-3 and R-4 districts.

(2) Cemeteries, mausoleums and crematoriums. No chapels or churches are allowed in AIPD-1, AIPD-1 Area "A", or AIPD-1 Area "B"

(3) Enclosed animal hospitals and veterinary clinics.

c. *Prohibited uses.* Any use not listed in subparts B. or C., above.

5. ***R-6, neighborhood commercial and residential district.*** Where the underlying zoning is R-6, the permitted and conditional uses are as follows.

a. ***Permitted uses****.*

(1) Any use permitted in the preceding district.

(2) Retail sales and services such as food and drugstores, personal service shops, hardware, home furnishings and appliances, specialty shops, bakeries, florists, etc. in APZ-2. Gross floor area of building not to exceed 6,000 square feet and maximum FAR of 0.22. No permanent outdoor storage allowed.
(3) Nonconforming commercial uses legally existing as of August 21, 2001 shall continue as nonconforming uses subject to the provisions of Article 9, i.e., expanding a nonconforming use, etc.
(4) Appliance repair shops. No outside storage or work permitted. In APZ-2 only. Maximum FAR of 0.22.
(5) Fortune tellers, palm readers, psychics, etc., in APZ-2. Maximum FAR of 0.22.
(6) Public utility and service structures.
(7) Other uses that are similar or compatible to the uses permitted herein that would promote the intent and purposes of this district. Determination on other permitted uses shall be made by the planning board (LPA.)

b. ***Conditional uses.***

(1) Any conditional use allowed in the preceding districts.
(2) Any building exceeding 120 feet height. See section 11.02.00, Height limitations.
(3) Neighborhood commercial uses that do not exceed 35,000 square feet of floor area (Comprehensive Plan Policy 7.A.4.13.A.).
(4) Automobile service operations, including repair and restoration (not including painting), and sale of gasoline and related service station products, gross floor area not to exceed 6,000 square feet. Outside repair and/or storage and automotive painting is prohibited. Maximum FAR of 0.11 in APZ-1; 0.22 in APZ-2.
(5) Mini-warehouses meeting the following standards: Maximum FAR of 1.0 in APZ-1 and 2.0 in APZ-2.

a. One acre or less in size (building and accessory paved area).
b. Three-foot hedge along any right-of-way line.
c. Dead storage use only.

(6) Motorcycle rental service; outside storage and outside vehicle repair is prohibited.

c. ***Prohibited uses.***

(1) Permanent outside storage.
(2) Auto sales, new or used.
(3) Restaurants, bars, nightclubs or any eating or drinking establishment.
(4) Any use that may produce electronic interference, attract large concentrations of birds, have explosive characteristics or produce air pollution or potential glare.
(5) No use is allowed in AIPD-1 that concentrates, within a structure on a regular basis, more than 25 people per acre. This limitation applies to: sports stadiums, amphitheaters, auditoriums, churches, schools, hospitals, assisted living and other medical

facilities, hotels and motels, restaurants and other eating and drinking establishments built to such a scale that gatherings of more than 25 people per acre would be expected on a regular basis. All such facilities must meet this density requirement or have a FAR of 0.11 in APZ-1 and Area "A" and 0.22 in APZ-2 and Area "B", whichever is less. (See section 11.02.00 for height limitations.)

6. ***C-1, retail commercial district.*** Where the underlying zoning is C-1, the permitted and conditional uses are as follows.

a. ***Permitted uses.***

(1) Any use permitted in the preceding district.
(2) One single-family dwelling per lot of record existing as of August 21, 2001.
(3) Nonconforming commercial uses legally existing as of August 21, 2001 shall continue as nonconforming uses subject to the provisions of Article 9, e.g., expanding a nonconforming use, etc.
(4) Automobile repair shops for ignition, fuel, brake and suspension systems or similar uses. Maximum FAR of 0.11 in APZ-1; 0.22 in APZ-2.
(5) Automobile service stations including minor auto repairs. Maximum FAR of 0.11 in APZ-1; 0.22 in APZ-2.
(6) Automobile washing facility. Maximum FAR of 0.11 in APZ-1; 0.22 in APZ-2.
(7) Off-premises signs, billboards and other sign structures erected, located and maintained as provided for in Article 8 of this Code.
(8) Convenience stores, including the incidental sale of gasoline. Maximum FAR of 0.14 in APZ-1 and 0.28 in APZ-2.
(9) Printing, bookbinding, lithography and publishing companies. Maximum FAR of 0.28 in APZ-1 and 0.56 in APZ-2.
(10) Interior decorating, home furnishing, and furniture stores. Maximum FAR of 0.28 in APZ-2, not allowed in APZ-1.
(11) Music, radio and television shops.
(12) Mortuary and funeral homes. No chapels are allowed within APZ-1 or APZ-2.
(13) Wholesale warehousing if less than 10,000 square feet. Maximum FAR of 1.0 in APZ-1; 2.0 in APZ-2
(14) Mini-warehouses. Maximum FAR of 1.0 in APZ-1; 2.0 in APZ-2
(15) Recreational and commercial marinas.
(16) Other uses that are similar or compatible to the uses permitted herein that would promote the intent and purposes of this district. Determination on other permitted uses shall be made by the planning board (LPA).

b. ***Conditional uses****.*

(1) Any conditional use permitted in the preceding district.

(2) Any permitted use that requires minor outside storage only in the rear yard and only if covered and adequate screening is provided.
(3) Used automobile sales. Maximum FAR of 0.14 in APZ-1 and 0.28 in APZ-2. In addition to other conditional use criteria, parcel must be one acre or less in size; there must be a three-foot tall hedge along the right-of-way line; and it cannot be a C-1 parcel fronting on "gateway" arterial streets which are specified as Sorrento Road/Gulf Beach Highway/Barrancas Avenue (SR 292), Blue Angel Parkway (SR 173), Pine Forest Road from I-10 to SR 173, Navy Boulevard (SR 295 and US 98), and Scenic Highway (SR 10A).
(4) Borrow pits and reclamation activities thereof (subject to local permit and development review requirements per Escambia County Code of Ordinances, Part I, Chapter 42, Article VIII, and performance standards in Part III, the Land Development Code, Article 7).

c. ***Prohibited uses.***

(1) Restaurants, bars, nightclubs and other eating or drinking establishments.
(2) Any use that may produce electronic interference, attract large concentrations of birds, have explosive characteristics, or produce air pollution or potential glare.
(3) No use is allowed in AIPD-1 that concentrates more than 25 people per acre within a structure on a regular basis. This limitation applies to: sports stadiums, amphitheaters, auditoriums, churches, schools, hospitals, assisted living and other medical facilities, hotels and motels, restaurants and other eating and drinking establishments built to such a scale that gatherings of more than 25 people per acre would be expected on a regular basis. All such facilities must meet this density requirement or have a FAR of 0.11 in APZ-1 and Area "A" and 0.22 in APZ-2 and Area "B", whichever is less. (See section 11.02.00 for height limitations.)
(4) Landfills, solid waste transfer stations, collection points, and/or processing facilities.
(5) Junkyards, salvage yards, and waste tire processing facilities.

7. ***C-2, general commercial district.*** Where the underlying zoning is C-2, the permitted and conditional uses are as follows.

a. ***Permitted uses.***

(1) Any use permitted in the preceding district.
(2) One single-family dwelling per lot of record existing as of August 21, 2001.
(3) Nonconforming commercial uses legally existing as of August 21, 2001, shall continue as nonconforming uses subject to the provisions of Article 9, i.e., expanding a nonconforming use, etc.
(4) Distribution warehousing. Maximum FAR of 1.0 in APZ-1 and 2.0 in APZ-2.

(5) New and used car sales, mobile home and motorcycle sales and mechanical services. No such activities are permitted on a public right-of-way. Maximum FAR of 0.14 in APZ-1 and 0.28 in APZ-2.
(6) Automobile repairs, including bodywork and painting services. Maximum FAR of 0.11 in APZ-1 and 0.22 in APZ-2.
(7) Commercial food freezers and commercial bakeries in APZ-2. Maximum FAR of 0.22.
(8) Building trades or construction office and warehouses with outside on-site storage. Maximum FAR of 0.11 in APZ-1 and 0.22 in APZ-2.
(9) Marinas, all types including industrial. Maximum FAR of 0.28 in APZ-1 and 0.56 in APZ-2.
(10) Cabinet shops. Maximum FAR of 0.28 in APZ-1 and 0.56 in APZ-2.
(11) Manufacturing, fabrication and assembly type operations listed below which are contained and enclosed within the confines of a building and do not produce excessive noise, vibration, dust, smoke, fumes or excessive glare:

(a) Food and kindred products in APZ-2 only. Maximum FAR of 0.56.
(b) Textile mill products in APZ-2 only. Maximum FAR of 0.56.
(c) Lumber and wood products. Maximum FAR of 0.28 in APZ-1 and 0.56 in APZ-2.
(d) Furniture and fixtures. Maximum FAR of 0.28 in APZ-1 and 0.56 in APZ-2.
(e) Paper and allied products. Maximum FAR of 0.28 in APZ-1 and 0.56 in APZ-2.
(f) Printing. Maximum FAR of 0.28 in APZ-1 and 0.56 in APZ-2.
(g) Publishing and allied industries in both APZ-1 and APZ-2. Maximum FAR of 0.28 in APZ-1 and 0.56 in APZ-2.

(12) Taxicab companies.
(13) Boat sales and service facilities. Maximum FAR of 0.14 in APZ-1 and 0.28 in APZ-2.
(14) Borrow pits and reclamation activities thereof (subject to local permit and development review requirements per Escambia County Code of Ordinances, Part I, Chapter 42, Article VIII, and performance standards in Part III, the Land Development Code, Article 7).
(15) Other uses similar to those permitted herein. Determination on other permitted uses shall be made by the planning board (LPA).

b. ***Conditional uses.***

(1) Kennels.
(2) Solid waste transfer stations, collection points and/or processing facilities.
(3) Junkyards, salvage yards, and waste tire processing facilities.

c. ***Prohibited uses.***

(1) Eating and drinking establishments, including restaurants, bars and nightclubs.

(2) No use is allowed in AIPD-1 that concentrates, within a structure on a regular basis, more than 25 people per acre. This limitation applies to: sports stadiums, amphitheaters, auditoriums, churches, schools, hospitals, assisted living and other medical facilities, hotels and motels, restaurants and other eating and drinking establishments built to such a scale that gatherings of more than 25 people per acre would be expected on a regular basis. All such facilities must meet this density requirement or have a FAR of 0.11 in APZ-1 and Area "A" and 0.22 in APZ-2 and Area "B", whichever is less. (See section 11.02.00 for height limitations.)

8. ***SDD, special development district.*** Where the underlying zoning is SDD, the permitted and conditional uses are as follows.

a. ***Permitted uses.***

(1) One single-family dwelling per lot of record existing as of August 21, 2001. Mobile homes are allowed as single-family dwellings, subject to the other relevant provisions of this Code. New subdivisions or developments are subject to the density limits above.

(2) Home occupations.

(3) Horticulture, floriculture and greenhouses.

(4) Mariculture and aquaculture.

(5) Areas for display and sale of fruit, vegetables and similar agricultural products.

(6) The growing of crops and plants.

(7) The keeping of horses and private stables for personal use only.

(8) Silviculture.

(9) Public utility. No major above ground transmission (high-tension) lines in APZ-1.

(10) Reclamation of borrow pits that existed prior to September 16, 2004 (subject to local permit and development review requirements per Escambia County Code of Ordinances, Part I, Chapter 42, Article VIII, and performance standards in Part III, the Land Development Code, Article 7).

(11) Other uses that are similar or compatible to the uses permitted herein and would promote the intent and purposes of this district. Determination on other permitted uses shall be made by the planning board (LPA).

b. ***Conditional uses.***

(1) Public riding stables. Facilities must be low intensity (four or fewer horses). Buildings shall have a maximum FAR of 0.11 in APZ-1 and 0.22 in APZ-2.

(2) Public utility and service structures, excluding communication towers.

c. ***Prohibited uses.***

(1) Permanent outside storage.
(2) Auto sales, new or used.
(3) Restaurants, bars, nightclubs or any eating or drinking establishment.
(4) Any use that may produce electronic interference, attract large concentrations of birds, have explosive characteristics, or produce air pollution or potential glare.
(5) No use that concentrates, within a structure on a regular basis, more than 25 people per acre is allowed in AIPD-1. This limitation applies to: sports stadiums, amphitheaters, auditoriums, churches, schools, hospitals, assisted living and other medical facilities, hotels and motels, restaurants and other eating and drinking establishments built to such a scale that gatherings of more than 25 people per acre would be expected on a regular basis. All such facilities must meet this density requirement or have a FAR of 0.11 in APZ-1 and Area "A" and 0.22 in APZ-2 and Area "B", whichever is less. (See section 11.02.00 for height limitations.)

9. ***ID-CP, industrial commerce park district.*** Where the underlying zoning is ID-CP, the permitted and conditional uses are as follows.

a. ***Permitted uses.*** Any use permitted in the preceding C-2 district, except as provided in subsection D., below.

b. ***Conditional uses:***

(1) Any conditional use allowed in preceding districts.
(2) Commercial businesses with outside storage when such storage is adequately screened and/or buffered in accordance with section 7.01.06.E.
(3) Borrow pits and reclamation activities thereof (subject to local permit and development review requirements per Escambia County Code of Ordinances, Part I, Chapter 42, Article VIII, and performance standards in Part III, the Land Development Code, Article 7).
(4) Solid waste transfer stations, collection points and/or processing facilities.
(5) Junkyards, salvage yards, and waste tire processing facilities.

c. ***Prohibited uses.***

(1) Residential uses.
(2) New and used car sales, mobile home and motorcycle sales and mechanical services.
(3) Restaurants, bars, nightclubs or any eating or drinking establishment.
(4) No use is allowed in AIPD-1 that concentrates more than 25 people per acre within a structure on a regular basis. This limitation applies to: sports stadiums, amphitheaters, auditoriums, churches, schools, hospitals, assisted living and other medical

facilities, hotels and motels, restaurants and other eating and drinking establishments built to such a scale that gatherings of more than 25 people per acre would be expected on a regular basis. All such facilities must meet this density requirement or have a FAR of 0.11 in APZ-1 and Area "A" and 0.22 in APZ-2 and Area "B", whichever is less. (See section 11.02.00 for height limitations.)

d. ***Performance standards.***

(1) All work and/or operations must be conducted within buildings except temporary outside storage may be allowed if adequately buffered and screened from adjacent uses. All waste material must be stored while on the property in a screened enclosure.

(2) Any process that creates smoke shall meet all standards as required by the Florida Department of Environmental Protection and the U.S. Environmental Protection Agency.

(3) Operations creating excessive noise, vibration, dust, smoke or fumes which are a nuisance to persons off of the lot or parcel are not permitted.

(4) Operations creating glare shall be shielded.

(5) Disposal of industrial or other wastes, gaseous, liquid or solid, must be approved by any applicable federal or state regulatory entities.

10. ***ID-1, industrial district****.* Where the underlying zoning is ID-1, the permitted and conditional uses are as follows.

a. ***Permitted uses****.*

(1) Any nonresidential use permitted in the preceding district.

(2) Research and development operations, commercial communication towers 150 feet or less in height (see section 11.02.02.A.3), light manufacturing, processing or fabricating uses, enclosed storage structures and accessory structures. All activities are subject to the performance standards in sections 7.03.00 and 7.06.00.

(3) Commercial businesses with outside storage when such storage is adequately screened and/or buffered in accordance with section 7.01.06.E.

(4) Permitted industrial uses are production of lumber and wood products, furniture and fixtures, paper and allied products, printing and publishing and allied industries in both APZ-1 and APZ-2. Maximum FAR of 0.28 in APZ-1 and 0.56 in APZ-2.

(5) Uses permitted in APZ-2 but not permitted in APZ-1 are production of food and kindred products, textile mill products, stone, clay and glass products, primary metal products and fabricated metal products. Maximum FAR of 0.56.

b. ***Conditional uses****.* Any conditional use allowed in preceding districts.

c. ***Prohibited uses****.*

(1) Residential uses.
(2) New and used car sales, mobile home and motorcycle sales and mechanical services.
(3) Restaurants, bars, nightclubs or any eating or drinking establishment.
(4) No use is allowed in AIPD-1 that concentrates, within a structure on a regular basis, more than 25 people per acre. This limitation applies to: sports stadiums, amphitheaters, auditoriums, churches, schools, hospitals, assisted living and other medical facilities, hotels and motels, restaurants and other eating and drinking establishments built to such a scale that gatherings of more than 25 people per acre would be expected on a regular basis. All such facilities must meet this density requirement or have a FAR of 0.11 in APZ-1 and Area "A" and 0.22 in APZ-2 and Area "B", whichever is less. (See section 11.02.00 for height limitations.)

d. ***Performance standards.***

(1) All work and/or operations must be conducted within buildings except temporary outside storage may be allowed if adequately buffered and screened from adjacent uses. All waste material must be stored while on the property in a screened enclosure.
(2) Any process that creates smoke shall meet all standards as required by the Florida Department of Environmental Protection and the U.S. Environmental Protection Agency.
(3) Operations creating excessive noise, vibration, dust, smoke or fumes which are a nuisance to persons off of the lot or parcel are not permitted.
(4) Operations creating glare shall be shielded.
(5) Disposal of industrial or other wastes, gaseous, liquid or solid, must be approved by any applicable federal or state regulatory entities.

D. ***Density limitations****.* In all areas of AIPD-1, except for Area "B", density limits are absolute, meaning that the minimum lot size is established as the inverse of the maximum density for each overlay zone, exclusive of any required infrastructure. For example, when the maximum density is three dwelling units per acre, the minimum lot size is one-third acre. When the maximum density is two dwelling units per acre, the minimum lot size is one-half acre. Clustering of residential lots or dwellings, whether by density transfers, planned unit development or other means, is prohibited on-site in AIPD-1. Density limits in AIPD-1 Area "B" are not absolute, meaning clustering, planned unit development and density transfers, when such a program is developed, are permitted. Density limits in AIPD-1 are as follows:

CZ (Clear Zone)	0 d.u./acre
APZ-1 (NASP)	0 d.u./acre
APZ-1 (All Others)	1 d.u./2.5 acres
AIPD-1 Area "A" (NASP Only)	0 d.u./acre
AIPD-1 Area "B"	3 d.u./acre

APZ-2 (NASP)	2 d.u./acre
APZ-2 (All Others)	3 d.u./acre

11.02.03. *AIPD-2*

A. ***AIPD-2 regulations.*** AIPD-2 requirements are the same for all airfields and installations.

B. ***Density***. Densities are controlled by the underlying zoning category. Density limits in AIPD-2 are not absolute, meaning clustering, planned unit development and density transfers, when such a program is developed, are permitted. There are no additional regulations regarding density except the following:

Rezoning is allowed only to a zoning district that allows three d.u./acre or less. An alternative mixed-use zoning category that allows commercial uses and limits density to three d.u./acre is offered in place of the current high density commercial zoning districts. (See Article 6, Zoning Districts--AMU-1 and AMU-2.) Properties that currently have density of less than three d.u./acre can apply for an up-zoning to AMU-1, AMU-2 or V-2A, which have a maximum density of three d.u./acre.

(Ord. No. 2006-30, § 4, 4-6-2006; Ord. No. 2007-70, § 1, 11-1-2007)

11.03.00. Pensacola Regional Airport Planning District (PNSPD).

A. ***PNSPD regulations***. The Pensacola Regional Airport Planning District is defined as the area within the unincorporated portion of Escambia County that lies within the noise zones, educational facility restriction zone, or real estate disclosure area of Pensacola Regional Airport. Due to the close proximity of these lands to the Pensacola Regional Airport, they are subject to additional restrictions on development. The area is depicted on the "Pensacola Regional Airport Planning District" map which is adopted by reference, located in the Department of Planning and Zoning offices, and is available for review during normal business hours. A generalized map of the Pensacola Regional Airport Planning District is depicted in Figure 1; however, it is not the official zoning map and should be used only for preliminary determination of the applicability of the PNSPD.

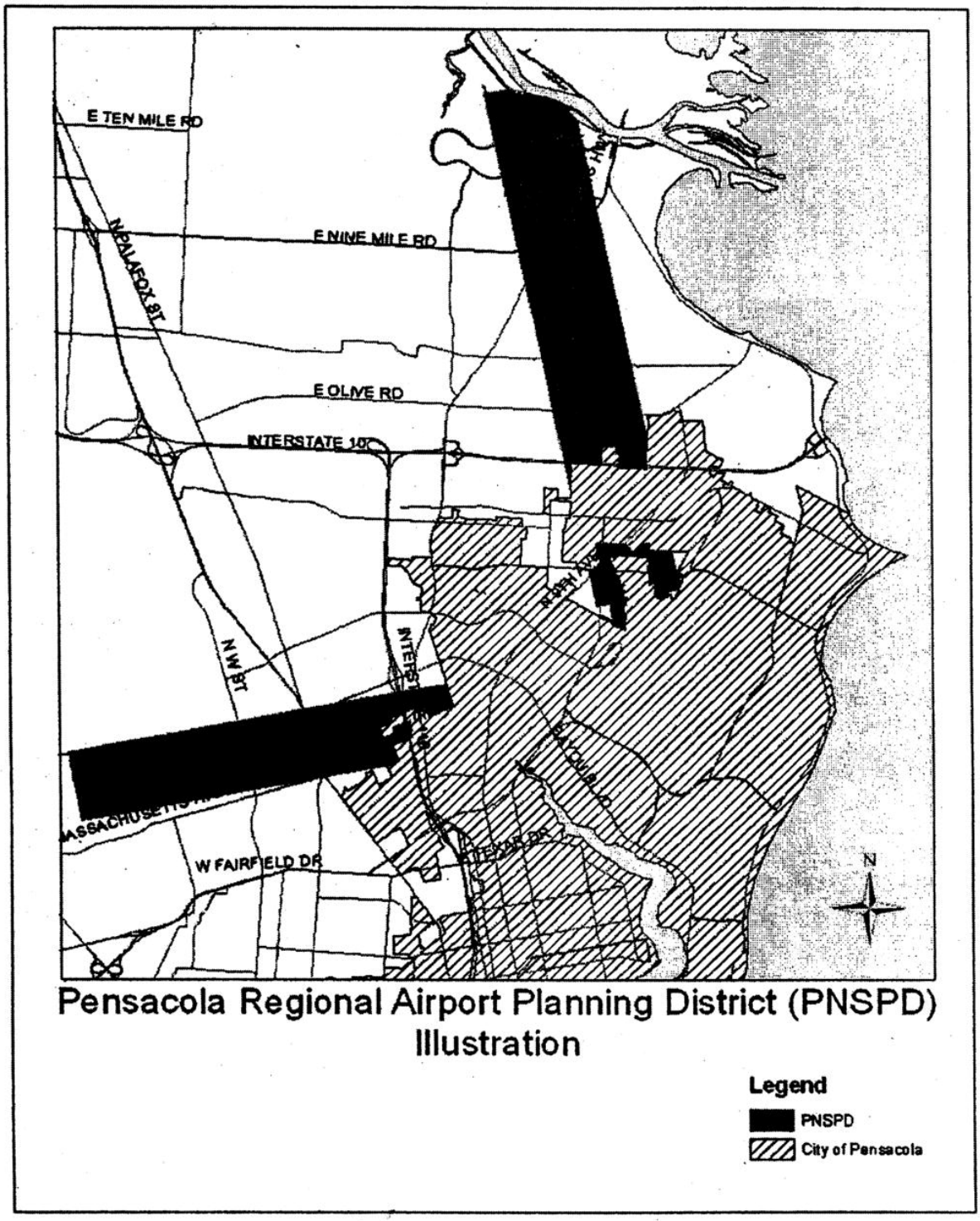
B. ***Density***. Densities are controlled by the underlying zoning category. Density limits in PNSPD are not absolute, meaning clustering, planned unit development and density transfers, when such a program is developed, are permitted.

C. ***Educational Restriction Zone***. No educational facilities of public or private schools as described in F.S. § 333.03(3), or of kindergartens as defined in Article 3 of this Code, may be constructed within the educational facility restriction zone for Pensacola Regional Airport. The construction of child care centers and family day care homes are not restricted. Exceptions to this provision shall only be granted when the planning board makes specific findings detailing how the public policy reasons for allowing construction of an educational facility outweigh health and safety concerns prohibiting such a location. The planning board's findings shall be forwarded by recommendation to the board of county commissioners for a final determination. However, this provision shall not be construed to require the removal, alteration, sound conditioning, or other change

or to interfere with the continued use or adjacent expansion of any educational structure or site in existence on July 1, 1993.

The educational facility restriction zone includes all parcels in the unincorporated portion of Escambia County within an area that extends five miles in a direct line along the centerline of each runway and has a width measuring one-half the length of the runway, and all parcels within noise zone C. The area is depicted on the "Pensacola Regional Airport Educational Facility Restriction Zone" map which is adopted by reference, located in the department of planning and zoning offices, and is available for review during normal business hours.

Figure 1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W FAIRFIELD DR
N
Pensacola Regional Airport Planning District (PNSPD)
Illustration
Legend
PNSPD
City of Pensacola

D. ***Noise zones and sound attenuation.*** All new buildings shall be constructed with sound protection based on the level of noise exposure, which can be determined by the location of the building within the adopted noise contour maps. Sound attenuation is not required if the site is located outside the 65 Ldn noise contour.

1. ***Pensacola Regional Airport established noise zones****.* There are hereby created and established three noise zones for the Pensacola Regional Airport: zone A, zone B and zone C. Noise zones for Pensacola Regional Airport are based on the Airport FAR Part 150 Study, adopted by the City of Pensacola in 1990. Such zones are shown on the Pensacola Regional Airport Noise Zones map which is adopted by reference, located in the department of planning and zoning offices, and is available for review during normal business hours. Airport noise zones, as defined by day-night average sound level (Ldn) noise exposure, are hereby established as follows:

Ldn Values	**Noise Zone**
65--70	A
70--75	B
75+	C

For Pensacola Regional Airport noise zones and for the land use objective and limitations applicable thereto within the corporate boundaries of the City of Pensacola, refer to City of Pensacola Ordinance No. 43-82, or an approved successor, known as the Comprehensive Airport Ordinance.

2. ***Noise reduction standards, methods and construction list****.* The provisions of this subsection shall apply to new construction and the moving of buildings (including mobile homes/manufactured homes) into noise zones A, B and C located within the PNSPD. Nothing in this subsection shall be construed to require the removal, alteration, sound conditioning or other change, or to interfere with the continued use or adjacent expansion of any educational facility or site in existence on July 1, 1993. Noise reduction standards, construction and methods are specified in Appendix G of the Airport FAR Part 150 Study adopted by the City of Pensacola in 1990, which is available for review in the county building inspections office and the planning and zoning department.

a. ***Noise Zone A****.* Appendix G of the Part 150 Study recommends a sound reduction of 25 decibels (dB) for residential construction or construction of an educational facility within the 65-70 Ldn noise contour. The standards specified in Appendix G for a reduction of 25 dB are recommended in Noise Zone A.

b. ***Noise Zone B****.* Appendix G of the Part 150 Study recommends a sound reduction of 30 dB for residential construction or construction of an educational facility within the 70--75 Ldn noise contour. The standards specified in Appendix G for a reduction of 30 dB are required in Noise Zone B.

c. ***Noise Zone C****.* Residential or educational facility construction is prohibited in Noise Zone C. Note: As of September 13, 2005, Noise Zone C is located entirely within the boundary of the Pensacola Regional Airport.

3. ***Existing residences.*** Any existing residence may be added to, structurally altered, or repaired without conforming to the referenced specifications provided the property owner signs a waiver that he/she was notified of said specifications.

4. ***Mobile homes/manufactured homes****.* Where state or federal law preempts the imposition of the noise attenuation construction standards of this section, mobile homes/manufactured homes not conforming to the referenced specifications, but meeting all other Land Development Code requirements, are allowed provided the property owner signs a waiver that he/she was notified of said specifications.

5. ***Enforcement****.* It shall be the duty of the building official to administer and enforce the noise reduction standards, construction and methods specified in Appendix G of the Part 150 Study.

E. ***Real Estate Disclosure Area.*** All real estate transactions within the Pensacola Regional Airport Real Estate Disclosure Area shall include a form disclosing the proximity of the site to the airport. The form shall be affixed to all listing agreements, sales and rental contracts, subdivision plats, and marketing materials provided to prospective buyers and lessees. However, the form need not be included in advertisements directed to the public at large. Disclosure is required as soon as practicable, but must be before the execution of a contract, i.e., before the making or acceptance of an offer.

The Pensacola Regional Airport Real Estate Disclosure Area shall be comprised of all properties abutting the Pensacola Regional Airport and all properties within Noise Zone A, B, or C. The area is depicted on the Pensacola Regional Airport Real Estate Disclosure Area map which is adopted by reference, located in the department of planning and zoning offices, and is available for review during normal business hours.

F. ***Split parcels*****.** For purposes of regulating parcels split by PNSPD lines, only that portion of a parcel that falls within the PNSPD shall be subject to the conditions of the PNSPD. For parcels located within more than one noise zone inside PNSPD, the more stringent requirements shall apply to the entire parcel.

(Ord. No. 2006-30, § 4, 4-6-2006; Ord. No. 2007-70, § 2, 11-1-2007)

(Ord. No. 2006-30, § 4, 4-6-2006)

11.04.00. Airport/airfield height limitations.

In order to carry out the height limitation provisions of this Code, there are hereby created and established certain airport/airfield zones and surfaces. When a lot is divided into sections, the more restrictive height limitations shall apply. An area located in more than one of the described zones and surfaces is considered to be only in the zone and surface with the more restrictive height limitation. Note: Per F.S. § 193.501, the owner may apply to the property appraiser for the sending parcel's tax assessment to be based

on the restricted use and not the potential use. Except as otherwise provided, no structure shall be constructed or altered in such a way as to exceed the height limitations established herein, unless a variance is first obtained in accordance with the requirements of section 11.01.03.

11.04.01. ***General height restrictions.***

A. ***Hazards to air navigation prohibited.*** In addition to the height limitations imposed in this Code, no structure or obstruction shall be constructed or altered in such a way as to cause a minimum obstruction clearance altitude, a minimum descent altitude or a decision height to be raised, or be considered a hazard to air navigation by a Federal Aviation Administration aeronautical study (7460-1) or conflict with Title 14 of the Code of Federal Regulations Part 77.

B. ***Structures in excess of 200 feet AGL.*** Any new structure or obstruction in excess of 200 feet above ground level shall receive an airspace evaluation from the FAA prior to development approval, by filing an FAA Form 7640-1. (See Federal Aviation Administration (FAA) Advisory Circular 70/7460-1 and Federal Aviation Regulations (FARs) Parts 71, 77, 93, 95, 152, and 157 for further information on FAA structure permits.)
To determine height limits in all environs, surfaces and zones set forth in this Code, the datum shall be above mean sea level elevation (AMSL) or above airport/airfield elevation, as the case may be, unless otherwise specified in this article.

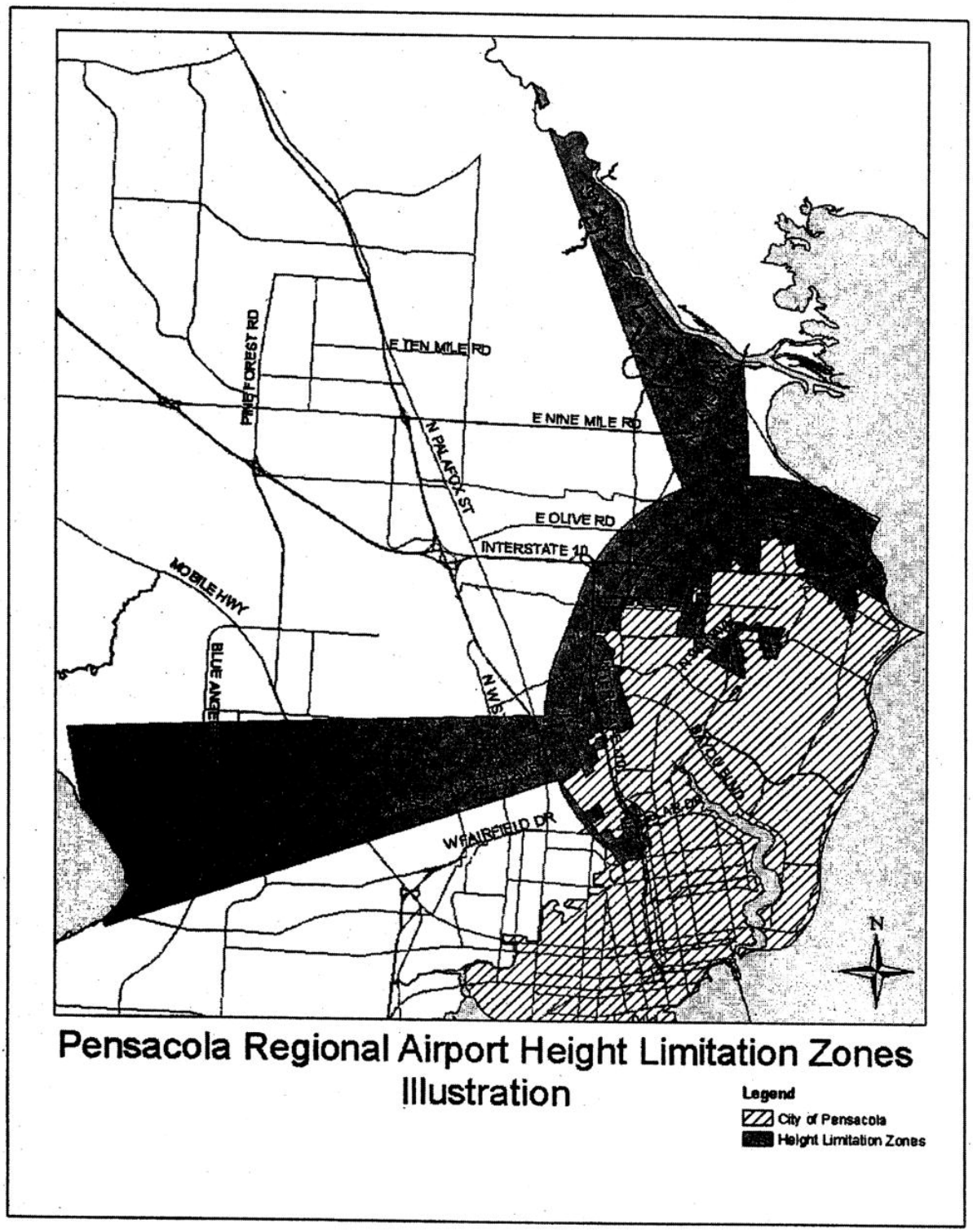
11.04.02. ***Public civil airports.*** The various zone, surfaces and height limitations are hereby established for public civil airports.

A. ***Pensacola Regional Airport.***

1. ***Airspace height limitation zones.*** There are hereby created and established airspace height limitation zones that include all areas of land lying beneath aircraft navigational routes applicable to Pensacola Regional Airport. Such zones are shown on the Pensacola Regional Airport Height Limitation Zones map which is adopted by reference, located in the Department of Planning and Zoning offices, and is available for review during normal business hours. Existing structures depicted on the Pensacola Regional Airport Height Limitation Zones map may be utilized as a controlling obstacle. In the event of an existing controlling obstacle (original), a structure may be placed within a 300 foot radius at the same elevation or a lower height. Only the original structure can dictate the 300-foot radius.

A generalized map of the Pensacola Regional Airport height limitation zones is depicted in Figure 2; however, it is not the official map and should be used only for preliminary determination of the applicability of the height limitation zones.

Figure 2


PINE FOREST RD
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N
Pensacola Regional Airport Height Limitation Zones
Illustration
Legend
City of Pensacola
Height Limitation Zones

2. ***Notification requirement surface****.* Any proposed structure or obstruction, or any alteration of an existing structure or obstruction that would exceed the height of an imaginary surface, the slope of which is one foot vertically for every 100 feet horizontally, measured from the nearest point of the nearest runway at Pensacola Regional Airport, shall notify the FAA of the proposed action by filing an FAA Form 7640-1.

B. ***Coastal and Ferguson Airports.***

1. ***Primary surface****.* An area 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. When the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at the end of the runway. The width of the primary surface of a runway will be that width prescribed for the most precise approach existing or planned for that runway end. Except as provided in the permitted use sections, no structure of obstruction will be permitted within the primary surface, that is not part of the landing and take-off area, and is of a greater height than the surface measured at the nearest point on the runway centerline. The width of the primary surface is 250 feet.

2. ***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 airport's runway and connecting the adjacent arcs by lines tangent to those arcs. No structure or obstruction will be permitted in the horizontal surface that has a height greater than 150 feet above the airport elevation. The radius of each arc is 5,000 feet.

3. ***Conical surface****.* The area extending outward from the periphery of the horizontal surface for a distance of 4,000 feet. Height limitations for structures in the conical surface are 150 feet above airport elevation at the inner boundary with permitted elevation increasing one foot vertically for every 20 feet of horizontal distance measured outward from the inner boundary to a height of 350 feet above airport height at the outer boundary.

4. ***Approach surface.*** An area longitudinally centered on the extended runway centerline and extending outward from each end of the primary surface. An approach surface is designated for each runway based upon the type of approach available or planned for that runway end. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of 1,250 feet. The approach surface extends for a horizontal distance of 5,000 feet. 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. Permitted height within the approach surfaces is the same as the inner edge and increases with horizontal distance outward from the inner edge; permitted height increases one foot vertically for every 20 feet of horizontal distance for all utility and visual runways. The slope starts at the runway ends.

5. ***Transitional surface.*** The area extending outward from the sides of the primary surfaces and approach surfaces connecting them to the horizontal

surface. Height limits of the transitional surface are the same as the primary surface or approach surface at the boundary line where it adjoins and increases at a rate of one foot vertically for every seven feet horizontally, with the horizontal distance measured at right angles to the runway centerline and extended centerline, until the height matches the height of the horizontal surface or conical surface or for a horizontal distance of 5,000 feet from the side of the part of the precision approach surface that extends beyond the conical surface.

11.04.03. Military airfields. The various zones, surfaces and height limitations are hereby established for military airfields.

A. ***NAS Pensacola.*** Runways 07L/25R 07R/25L and 01/19.

1. ***Primary surface.*** The area located on the ground or water, longitudinally centered on each runway extending 200 feet beyond the runway end and 1,500 feet wide (750 feet each side of the runway centerline). No structure or obstruction that is not part of the landing and takeoff area is permitted in the primary surface.

2. ***Clear zone.*** A fan shaped area extending outward 3,000 feet from the end of each runway. The inner boundary is the same width as the primary surface and commencing 200 feet from the threshold, expands at an angle of 7 degrees 58 minutes and 11 seconds to a width of 2,284 feet. The Type I clear zone is the first 1,000 feet adjacent to the end of runway. The Type II clear zone is 500 feet wide and extends outward from the Type I clear zone on the extended centerline. The Type III clear zone is laterally adjacent to the Type II clear zone. Except as provided for in the permitted use sections contained herein, no structure or obstruction that is not a part of the landing and takeoff area is permitted in the Type I, Type II, or Type III clear zones.

3. ***Inner horizontal surface.*** The area encompassing the runways, primary surface and clear zone with an outer perimeter formed by swinging arcs 18,000 feet (3.4 miles) radius about the centerline at the end of each runway and connecting adjacent arcs by lines tangent to these arcs. No structure or obstruction within the boundaries of the inner horizontal surface will exceed 200 feet. Any structure that is either:

a. Less than 18,000 feet from the end of any runway at NAS Pensacola, which is between 100 and 200 feet in height above airport elevation; or

b. In the region from 18,000 and 35,000 feet from the end of any runway at NAS Pensacola, which is up to 100 feet greater in height than the height of the conical surface, but not to exceed a height of 500 feet,

requires conditional use approval, including NAS Pensacola review which shall be an additional criterion considered by the board of adjustment in determining whether to issue a conditional use permit.

4. ***Conical surface.*** The area extending outward from the periphery of the inner horizontal surface for a distance of 24,000 feet (4.6 miles). Height limits in the conical surface commence at a height of 100 feet above airfield elevation at the inner boundary and increase at a rate of one foot vertically for every 60 feet horizontally until it reaches a height of 500 feet above airfield elevation at the outer boundary.

5. ***Outer horizontal surface.*** The area extending outward from the outer periphery of the conical surface for a distance of 2,500 feet. The height limit within the outer horizontal surface is 500 feet above airport elevation.

6. ***Approach surface****.* The area longitudinally centered on each runway extended centerline, with an inner boundary 200 feet out from the end of the runway and the same width as the primary surface then extending outward for a distance of 50,000 feet expanding uniformly in width to 16,000 feet at the outer boundary. Height limits within the approach clearance surfaces commence at the height of the runway end and increase at the rate of one foot vertically for every 50 feet horizontally for a distance of 25,000 feet at which point it remains level at 500 feet above airfield elevation to the outer boundary.

7. ***Transitional surface****.* The area with an inner boundary formed by the side of the primary surface and the approach surface then extending outward at a right angle to the centerline and extended centerline until the height matches the adjoining inner horizontal surface, conical surface and outer horizontal surface height limit. The height limit at the inner boundary is the same as the height limit of the adjoining surface and increases at the rate of one foot vertically for every seven feet horizontally to the outer boundary of the transitional surface, where it again matches the height of the adjoining surface. Transitional surface for those portions of the 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.

B. ***Navy Outlying Landing Field (NOLF) Saufley****.* Runways 5/23 and 14/32.

1. ***Primary surface****.* The area located on the ground or water, longitudinally centered on each runway and extending 200 feet beyond the runway end, with a width of 1,000 feet. Except as provided for in the permitted use sections contained herein, no structure of obstruction that is not a part of the landing and takeoff area is permitted in the primary surface.

2. ***Clear zone****.* The area adjacent to the runway end extending outward for 3,000 feet with a width of 1,000 feet centered on the extended runway centerline. The Type I clear zone is the first 1,000 feet adjacent to the end of the runway. The Type III clear zone is the same width, and extends outward 2,000 feet from the Type I clear zone on the extended centerline. Except as provided for in the permitted use sections contained herein, no structure or obstruction that is not a part of the landing and takeoff area is permitted in the Type I clear zone. Except as provided for in the permitted use sections contained herein, no structure or obstruction shall penetrate the approach departure surface in the Type III clear zone.

3. ***Inner horizontal surface****.* The area encompassing the runways and primary surface, and clear zones with an outer perimeter formed by swinging arcs 7,500 feet radius about the centerline at the end of each runway and connecting adjacent arcs by lines tangent to these arcs. No structure or obstruction will be permitted in the inner horizontal surface of a greater height than 150 feet above the airport elevation.

4. ***Conical surface****.* The area extending from the periphery of the inner horizontal surface outward and upward at a slope of one foot vertically for every 20 feet for a horizontal distance of 7,000 feet to a height of 500 feet above airport elevation.

5. ***Outer horizontal surface****.* The area extending outward from the outer periphery of the conical surface for a distance of 30,000 feet. The height limits within the outer horizontal surface is 500 feet above airport elevation.

6. ***Approach surface****.* The area longitudinally centered on each runway extended centerline with an inner boundary 200 feet out from the end of the runway and the same width as the primary surface, then extending outward for a distance of 50,000 feet expanding uniformly in width to 16,000 feet at the outer boundary. Height limits within the approach surface commence at the height of the runway end and increase at the rate of one foot vertically for every 50 feet horizontally for a distance of 25,000 feet at which point it remains level at 500 feet above airport elevation to the outer boundary.

7. ***Transitional surface.*** The area with an inner boundary formed by the side of the primary surface and the approach surface then extending outward at a right angle to the centerline and extended centerline until the height matches the adjoining inner horizontal surface, conical surface and outer horizontal surface height limit. The height limit at the inner boundary is the same as the height limit of the adjoining surface and increases at the rate of one foot vertically for every seven feet horizontally to the outer boundary of the transitional surface, where it again matches the height of the adjoining surface. Transitional surface for those portions of the 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.

C. ***Navy Outlying Landing Field Site 8 (NOLF Site 8)****.* The various zone and surface height limitations are hereby established.

1. ***Primary surface****.* The area longitudinally centered on each helipad, 150 feet in width and 150 feet in length.

2. ***Approach surface.*** The area longitudinally centered on each helipad's extended centerline, which starts at the end of the heliport primary surface with the same width as the primary surface and expands to 500 feet at a distance of 4,000 feet. Height limits within the approach surface commence at the height of the established landing surface and increase at the rate of one foot vertically for every ten feet horizontally for a distance of 4,000 feet.

3. ***Clear zone****.* The first 400 feet of the approach surface. Except as provided for in the permitted use sections contained herein, structure or obstruction that is not a part of the landing and takeoff area is permitted.

4. ***Transitional surface****.* An area that connects the primary surface and the approach surface, upward and outward of the primary surface at a slope ratio of two feet vertically for every one foot horizontally for a distance of 250 feet from the centerline of the pad.

5. ***Helicopter traffic pattern airspace****.* No structure shall exceed 200 feet above airfield elevation in the traffic pattern airspace (Attachment D). The area protected around the helicopter NOLF is determined by the capacity limits of the NOLF. [Attachment D is not set out herein, but is available for inspection in the offices of the county.]

D. ***Navy hospital heliport.***

1. ***Heliport primary surface.*** The area longitudinally centered on the helipad, 150 feet in width and 150 feet in length.

2. ***Heliport approach surface****.* The area longitudinally centered on the helipad's extended centerline, which starts at the end of the heliport primary surface with the same width as the heliport primary surface and expands to 500 feet at a distance of 4,000 feet. Height limits within the heliport approach surface commence at the height of the established landing surface and increase at the rate of one foot vertically for every ten feet horizontally for a distance of 4,000 feet.

3. ***Clear zone****.* The first 400 feet of the approach surface. Except as provided for in the permitted use section contained herein, no structure or obstruction that is not a part of the landing and takeoff area is permitted.

4. ***Heliport transitional surface****.* An area that connects the heliport primary surface and the heliport approach surface, upward and outward of the heliport primary surface at a slope ratio of two feet vertically for every one foot horizontally for a distance of 250 feet from the centerline of the pad.

(Ord. No. 2006-30, § 4, 4-6-2006)

Appendix E
Terms & Definitions

Appendix E – Terms & Definitions

Acronyms

AC - Advisory Circular
AGL - Above Ground Level
ALP - Airport Layout Plan
AMSL - Above Mean Sea Level
APZ - Accident Potential Zone
ARP - Airport Reference Point
AICUZ - Air Installation Compatible Use Zone

CFR - Code of Federal Regulations
CZ - Clear Zone

DCA - Florida Department of Community Affairs
DNL - Day-Night Sound Level
DOD - Department of Defense
DOT - Department of Transportation

EA - Environmental Assessment
EIS - Environmental Impact Statement

FAA - Federal Aviation Administration
FAC - Florida Administrative Code
FAC - Florida Airports Council
FAR - Federal Aviation Regulation
FATO - Final Approach and Takeoff Area
FCC - Federal Communications Commission
FDOT - Florida Department of Transportation
F.S. - Florida Statute
FT - Feet

HUD - Department of Housing and Urban Development

INM - Integrated Noise Model

JULS - Joint Land Use Study

MDA - Minimum Descent Altitude
MSL - Mean Sea Level

NM - Nautical Mile
NPH - Notice of Presumed Hazard
NTSB - National Transportation Safety Board

OE - Obstruction Evaluation
OEA - Office of Economic Adjustment

OE/AAA - Obstruction Evaluation Airport Airspace Analysis

RPZ - Runway Protection Zone
SM - Statute Mile

TMP - Temporary Finding

Definitions

Accident Potential Zone (APZ) – The area on military airfields that extends 1,000 feet laterally to either side of the runway from the runway centerline. From the runway threshold, the APZ is divided into three separate subparts:

- The Clear Zone starts at the runway threshold and ends out 3,000 feet; at all points, the APZ is 3,000 feet wide.
- The APZ I starts at the end of the Clear Zone and extends from that point out another 5,000 feet.
- The APZ II starts at the end of the APZ I and extends out another 7,000 feet.

In total, starting at the runway threshold, the APZ extends out for a total of 15,000 feet at a width of 3,000 feet. The AICUZ process provides specific guidance for land uses and land use densities that are appropriate or inappropriate in each area of the APZ.

Advisory Circular (AC) – A series of FAA publications providing guidance and standards for the design, operation, and performance of aircraft and airport facilities.

Aeronautical Evaluation/Study – A study performed pursuant to FAR Part 77 "Objects Affecting Navigable Airspace" concerning the effect of proposed construction or alternation on the use of air navigation facilities or navigable airspace by aircraft. The conclusion of each study is normally a determination as to whether the specific proposal studied would be a hazard to air navigation and/or a determination for marking and/or lighting.

Air Installation Compatible Use Zone (AICUZ) – A program used by the military to protect the public's health, safety, and welfare and to prevent encroachment from degrading the operational capability of military air installations in meeting national security. The AICUZ program recommends land uses that will be compatible with noise levels, accident potential and obstruction clearance criteria associated with military airfield operations. An AICUZ is the military equivalent of a Part 150 study.

Aircraft Approach Category – A grouping of airplanes based on wingspan, per the following:

Category A - Speed less than 91 knots
Category B - Speed 91 knots or more, but less than 121 knots
Category C - Speed 121 knots or more, but less than 141 knots
Category D - Speed 141 knots or more, but less than 166 knots
Category E - Speed 166 knots or more.

Aircraft Operations − Airborne movements of aircraft at an airport including aircraft landings (arrivals) at and takeoffs (departures). These operations can be further defined by the following:

- *Local Operations* include those performed by aircraft that operate in the local traffic pattern or within sight of the airport; and/or are known to be departing for or arriving from a local practice area.
- *Itinerant Operations* are all others.

Aircraft Traffic Patterns – The standard path followed by aircraft when taking off or landing which is used for coordinating air traffic. Dimensions of the traffic pattern are determined by the approach speed of the aircraft performing the operation.

Airport Hazard – Any structure or tree or use of land which would exceed the federal

obstruction standards as contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, and 77.29 and which obstructs the airspace required for the flight of aircraft in taking off, maneuvering, or landing or is otherwise hazardous to such taking off, maneuvering, or landing of aircraft and for which no person has previously obtained a permit or variance pursuant to s. 333.025 or s. 333.07.

Airport Hazard Area − The area around a public-use airport or military airfield on-which a hazard may be erected.

Airport Notification Area – Established by FDOT Aviation Office, this is the general area around public-use airports or military airfields that should be considered by local government when development is proposed. A defined airport notification area helps determine if a land development proposal presents a potential conflict; and, therefore, greater evaluation of a development proposal may be required by federal or state regulations or law.

Airport Operational Area – The area that includes all areas designated and used for landing, taking off, or surface maneuvering of aircraft. The area includes ramps, aprons, runways and taxiways.

Airport Layout Plan (ALP) – A scaled drawing of existing and proposed land and facilities necessary for the operation and development of the airport. The ALP shows boundaries and proposed additions to all areas owned or controlled by the airport operator for airport purposes, the location and nature of existing and proposed airport facilities and structures, as well as the location of existing and proposed non-aviation areas and improvements on the airport.

Airport Master Plan – A standard planning document that presents a concept of the ultimate development of an airport, including the research and logic from which the plan was evolved, as well as the plan in graphic and written formats. An airport master plan is normally presented to the FAA for approval and would typically also be approved and adopted by the airport sponsor.

Airport Protection Zoning Ordinance – An ordinance establishing airport zoning regulations restricting the height of structures and objects of natural growth and otherwise regulating the use of property in the vicinity of an airport.

Airport Reference Point (ARP) – The latitude and longitude of the approximate center of the airport, based upon the runway facilities.

Airport Sponsor – A public agency that is authorized to own and operate an airport, to obtain property interests, to obtain funds, and to be legally, financially, and otherwise able to meet all applicable requirements of current laws and regulations.

Airspace – The area above the ground in which aircraft travel. It is divided into corridors, routes and restricted zones for the control and safety of aircraft operations.

Airspace Obstruction Permit – Required by Florida law, this permit must be obtained for any development that exceeds heights established by federal obstruction standards (Part 77). A permit is needed if development is within 10 nautical miles of a public-use airport or military airfield in an area not covered by airport zoning ordinance.

Approach Minimums – The altitude below which an aircraft may not descend while on an IFR approach unless the pilot has the runway in sight.

Approach Surface – An FAR Part 77 imaginary surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is designated for each runway based upon the type of approach available or planned for that runway end.

Aviation Office (FDOT Aviation Office) – Division of FDOT that promotes aviation in the state, licenses airports, and assists in the development of public airport projects.

Avigation Easement – A grant of a property interest in land over which a right of unobstructed flight in the airspace is established and which prohibits any structures, growth or other obstructions from penetrating the approach surface and provides a right of entry to remove, mark, or light any structure or any such obstruction.

Circling Approach – An instrument approach procedure in which an aircraft executes the published instrument approach to one runway, then maneuvers visually to land on a different runway. Circling approaches are also used at airports that have published instrument approaches with a final approach course that is not aligned within 30 degrees of any runway.

Clear Zone (CZ) – An area defined in an AICUZ program based on statistical analysis of military aircraft accidents throughout the United States. The CZ, the area closest to the runway end, is the most hazardous. The military generally acquires the land in the CZ through purchase or easement to prevent development.

Compatible Land Use – As defined in FAR PART 150: The use of land that is normally compatible with aircraft and airport operations, or sound insulated land uses that would otherwise be considered incompatible with aircraft and airports operations.

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.

Decibel – A measurement of sound.

Decision Height (DH) – During a precision approach, the height (or altitude) at which a decision must be made to either continue the approach or execute a missed approach.

Day-Night Sound Levels (DNL) – The system used by the FAA and the Department of Housing and Urban Development (HUD) to measure noise. Contours representing DNL levels are generated from the INM. The military also uses the DNL methodology to express noise impacts. Sound levels in the DNL contours are expressed in decibel units.

DOD Instruction 4165.57 – Rule that establishes the AICUZ program, which is similar to its civilian counterpart, the Part 150 program. Both programs use the DNL noise measurement system to identify noise impacted areas and to promote land use compatibility in the airport/airfield environs.

Easement – The legal right of one party to use a portion of the total rights in real estate owned by another party. This may include the right of passage over, on, or below the property; certain air rights above the property, including view rights; and the rights to any specified form of development or activity, as well as any other legal rights in the property that may be specified in the easement document.

Encroachment – The development on or entry into an area near an airport not previously occupied. Airport encroachment can be in the form of a structure that, due to its height, may create a potential hazard for aircraft; these encroachments are referred to as "tall structures" or land development that is not considered compatible, such as residential development.

Environmental Assessment (EA) – A document prepared to determine if a proposed action, or its alternatives, may have significant environmental effects. If significant effects occur, an EIS is prepared. If not, a Finding of No Significant Impact (FONSI) and Decision Notice are issued.

Environmental Impact Statement (EIS) – A document that provides a discussion of the significant environmental impacts which would occur as a result of a proposed project, and informs decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts. An EIS discloses significant issues and effects from the action and alternatives for public review.

Federal Airways –A part of the navigable airspace that the FAA designates as a Federal airway.

Federal Aviation Administration (FAA) – A branch of the U.S. Department of Transportation responsible for insuring the safe and efficient use of the nation's airspace, for fostering civil aeronautics and air commerce, and for supporting the requirements of national defense. In addition to regulating airports, aircraft manufacturing and parts certification, aircraft operation and pilot certification, the FAA operates Air Traffic Control Towers, purchases and maintains navigation equipment, certifies airports and aids airport development, among other activities. The FAA also administers the Airport Improvement Program (AIP) that supports airport development.

Federal Aviation Regulations (FARs) – The body of Federal regulations relating to civil aviation and aviation-related activities, published as Title 14 of the Code of Federal Regulations.

FAR Part 77 – Federal regulation covering objects affecting navigable airspace. Part 77 establishes standards for determining obstructions in navigable airspace; sets forth the requirements for notice to the FAA of certain proposed construction or alteration; provides for aeronautical studies of obstructions to air navigation to determine their effect on the safe and efficient use of airspace; provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and provides for establishing antenna farm areas. It provides for the establishment of "imaginary surfaces" on and around an airport to identify potential aeronautical hazards in order to prevent or minimize adverse impacts to the safe and efficient use of navigable airspace. Imaginary surfaces include the primary surface, approach surfaces, transitional surfaces, the horizontal surface, and the conical surface.

Part 77 Evaluation Metrics – Metrics considered by the FAA to help determine if an object constitutes a hazard to air navigation. Part 77 evaluation metrics are as follows:

- For runway lengths greater than 3,200 feet, the object is 200 above the ground elevation for the airport or the elevation of the airport up to 3 miles from the airport. The height of the threshold increases 100 feet for every one (1) mile in distance from the airport, up to a maximum of 500 feet at a distance of 6 miles from the airport reference point (ARP).
- The object is 500 feet or more above AGL at its site.
- The object penetrates one or more of the imaginary Part 77 surfaces.

- The object penetrates an area know as the terminal clearance area; this area includes approach and departure paths and circling approach areas.
- The object penetrates enroute obstacle areas which include turn and termination areas.

FAR Part 150 – Regulation pertaining to Airport Noise Compatibility Planning.

FAR Part 161 – Regulation pertaining to notice and approval of airport noise and airport access restrictions.

Fee Simple Acquisition – The outright purchase of land.

Final Approach – The part of an instrument approach procedure in which alignment and descent for landing are accomplished.

Finding of No Significant Impact (FONSI) – A document prepared and issued to the public when the results of an environmental assessment (EA) identify no significant impacts on the environment.

Flight Path – The line or course along which an aircraft is flying or is intended to be flown.

Florida Administrative Code (FAC) – Official compilation of the rules and regulations of Florida regulatory agencies.

General Aviation (GA) – All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remunerations or hire. Even a jet operated under FAR Part 91 can be classified as a general aviation aircraft.

General Aviation Airports – Those airports not classified as commercial service.

Ground Run Up – Type of noise that is generated by planes on the ground

Hazard to Air Navigation – See Airport Hazard.

Heliport – A landing facility to be used by helicopters only.

Horizontal Surface – The area around each civil airport with an outer boundary, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each airport's runway and connecting the adjacent arcs by lines tangent to those arcs.

Incompatible Land Use – Land development that is not considered compatible with airport operations.

Instrument Approach − A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to landing, or to a point from which a landing may be made visually.

Instrument Flight Rules (IFR) − Rules from Federal Aviation Regulations (14 CFR 91) that govern the procedures for conducting instrument flight. Pilots are required to follow these rules when operating in controlled airspace during instrument meteorological conditions (IFR) (i.e.

visibility of less than three miles and/or ceiling lower than 1,000 ft). These procedures may also be used under visual conditions and provide for positive control by Air Traffic Control (ATC).

Imaginary Surfaces − Specific areas around each airport or military airfield that should not contain any protruding objects from a height standpoint which may pose potential hazards to airports and/or air navigation as established by Part 77. Imaginary surfaces include the primary surface, approach surfaces, transitional surfaces, the horizontal surface, and the conical surface.

Incompatible Land Use − The use of land (defined by FAR Part 150) which is normally incompatible with the aircraft and airport operations.

Instrument Runway – A runway equipped with electronic and visual navigational aids for which a precision or non-precision approach procedure having straight-in landing minimums has been approved.

Integrated Noise Model (INM) − A computer model developed, updated, and maintained by the FAA to reflect the noise exposure generated by aircraft operations at an airport. The INM generates contours that show cumulative noise exposure over a 24-hour period, or the model can be programmed to show noise exposure at a pre-selected location in proximity to an airport.

Interlocal Agreement – An agreement among participants to set clear and reasonable criteria for appropriate development standards. Participants in the agreement could include a county, any adjacent city, affected fire districts, etc.

Joint Land Use Study (JULS) – A study which considers areas for compatible land use planning that extend beyond areas around military airfields and areas impacted by noise and included in an APZ.

Land Banking –The purchase of property to be held for future use and development or for resale for the development of compatible uses.

Landfill – A disposal facility for solid wastes.

Land Use Compatibility – The ability of land uses surrounding the airport to coexist with airport-related activities with minimum conflict.

Land Use Density – A measure of the number of residences per acre or hectare.

Mean Sea Level (MSL) – An elevation datum given in feet from mean sea level.

Military Airfield – An airport that provides basing and support for military aircraft.

Minimum Decent Altitude (MDA) – a specified altitude or height in a non-precision approach or circling approach below which descent must not be made without the required visual reference.

Navigable Airspace – Airspace at and above the minimum safe flight level, including airspace needed for safe takeoff and landing.

Noise Abatement − A measure or action that minimizes the amount of noise impact on the environs of an airport. Noise abatement measures include aircraft operating procedures and use or disuse of certain runways or flight tracks.

Noise Barriers – Noise abatement strategy to reduce aircraft ground noise on surrounding areas. The amount of noise reduction that a barrier achieves is dependent on the height of the barrier and frequency of the noise.

Noise Exposure Map (NEM) − A map representing average annual noise levels summarized by lines connecting points of equal noise exposure.

Noise Mitigation − Strategies to reduce aircraft noise impact.

Non-Precision Approach Procedure − A standard instrument approach procedure with only horizontal guidance or area-type navigational guidance for straight-in approaches; no electronic vertical guidance such as VOR, TACAN, NDB, or LOC (i.e. glideslope) is provided.

FAA Notice Criteria Tool – A computerized tool that can be used to determine whether or not a proposed structure meets FAR Part 77 requirements for notification of construction.

Notice of Presumed Hazard – Notice given by the FAA after conducting an aeronautical study that a structure is presumed to be a hazard to air navigation.

Notification – Providing an alert to a purchaser that the property is near an airport. This can be in the form of a buyer awareness program or disclosure agreements.

Obstruction to Air Navigation – An object of greater height than any of the heights or surfaces presented in Subpart C of Code of Federal Regulation (14 CFR), Part 77. Obstructions to air navigation are presumed to be hazards to air navigation until an FAA study has determined otherwise.

Obstruction Evaluation Airport Airspace Analysis (OE/AAA) – A web-based tool developed by the FAA to help defend against further encroachment of obstacles on navigable airspace. The web site allows anyone in the public to become familiar with any proposed construction that may affect airspace at an airport they are interested in.

Off-Airport Land Use Drawing – A depiction of the recommended zones and the compatibility of land uses in each zone in the vicinity of an airport This drawing assists a local government or county with the development of appropriate airport overlay zoning in order to protect the airport from incompatible development.

Operation – A take-off or landing of an aircraft. Every aircraft flight requires at least two operations, a take-off and landing.

Operational Procedures – A set of written instructions for operating aircraft, used to try to reduce noise exposure. Procedures may include restricting ground movements and engine run-ups, use of preferential runway ends, managing power and flap setting for the aircraft on take-off, limiting thrust reverse, and changing traffic patterns.

Ordinance – A law enacted by government.

Part 150 Noise Study – Also called an airport noise compatibility study, this study seeks to reduce the impacts of airport operations on neighborhoods surrounding the airport as outlined in Part 150 of the Federal Aviation Regulation (FAR). This study allows airport owners to voluntarily submit noise exposure maps (NEMs) and noise compatibility programs (NCPs) to the FAA for review and approval.

Piston Aircraft – An aircraft having one or more piston-powered engines connected to propeller(s) which provide thrust to move the aircraft on the ground and through the air. Piston-powered aircraft most commonly use 100 octane low-leaded fuel and fly at altitudes below 15,000 feet.

Primary Surface – An area longitudinally centered on a runway extending 200 feet beyond each end of that runway with a width so specified for each runway for the most precise approach existing or planned for either end of the runway. No structure or obstruction is permitted within the primary surface that is not part of the landing/takeoff area or that is of a height greater than the nearest point on the runway centerline. The primary surface surrounds and protects the landing area; the dimensions of the primary surface vary by type of landing area, weight of the landing aircraft, visibility, and the type of landing approach.

Precision Approach Procedure – A standard instrument approach procedure in which an electronic glide slope is provided.

Public Use Airport – An airport open to public use without prior permission. It may or may not be publicly owned.

Public Airport Site Approval Application – The application that must be completed and submitted to the Florida DOT for approval prior to site acquisition, construction, or establishment of a proposed airport.

Private-Use Airport – A privately-owned airport not open to the public or operated for public benefit.

Restrictive Covenants – Any written provision that places limitations or conditions on some aspect of property use, such as size, location or height of structures, materials to be used in structure exterior, activities carried out on the property, or restrictions on future subdivision or land development.

Rules and Regulations – Directions approved and enforced by an airport sponsor to protect public health, safety, interest, and welfare on the airport, as well as to augment any ordinances and resolutions pertaining to the airport.

Runway – A defined rectangular surface on an airport prepared or suitable for the landing or takeoff of airplanes.

Runway Clear Zone – An area which begins at the end of each primary surface defined in and extends with the width of each approach surface, to terminate directly below each approach surface slope at the point, or points, where the slope reaches a height of 50 feet above the elevation of the runway or 50 feet above the terrain at the outer extremity of the clear zone, whichever distance is shorter.

Runway Protection Zone (RPZ) – An area off the runway end to enhance the protection of people and property on the ground. The RPZ is a trapezoidal shape. Its dimensions are determined by the aircraft approach speed and runway approach type and minima.

Seaplane – An airplane equipped with floats for landing on or taking off from water.

Site Selection Study – A study that evaluates the aeronautical suitability of potential new airport sites and examines impacts of the proposed facility on the environment. Alternative sites are examined and compared. The complexity of a site selection study is dependent on the complexity of the proposed area where the airport will be located.

Soundproofing – A noise mitigation strategy to neutralize or reduce aircraft-related noise.

State Aviation Manager – The individual authorized to issue site approval orders and licenses; to accept registrations for airports subject to licensing and registration requirements of Section 330.30, Florida Statutes; and to enforce the provisions of Chapter 330, F.S. The State Aviation Manager is also authorized to issue airspace obstruction permits subject to the requirements of Section 333.025, F.S. and to enforce the provisions of Chapter 333, F.S.

Structure – An object, constructed or installed including, but not exclusive of buildings, towers, smokestacks, utility poles, and overhead transmission lines.

Tall Structure Approval Process – The development approval process that local governments should follow when they review an application for a tall structure to insure height compatible development. If the proposed development is 200 feet or more above ground level or if the development is within the 6, 3, or 1 mile airport notification area, the structure should be reviewed to determine if FAA and/or FDOT notification related to the proposed development is required.

Taxiway – A defined path established for the taxiing of aircraft from one part of an airport to another.

Terminal Clearance Area – The area that includes approach and departure paths and circling approach areas.

Title 14 CFR Part 77, Objects Affecting Navigable Airspace – See FAR Part 77.

Title 14 CFR Part 150, Airport Noise Compatibility Planning – See FAR Part 150.

Title 14 CFR Part 161, Notice and Approval of Airport Noise and Access Restrictions – See FAR Part 161.

Training Operations – Operations at an airport related to pilot training. These operations include “touch and go” operations, when an aircraft lands and departs on a runway without stopping or exiting the runway.

Transfer of Development Rights – A strategy typically outlined in a local zoning ordinance that that allows landowners to transfer the right to develop one parcel of land to a different parcel of land.

Transitional Surface – A surface area that surrounds and protects the lateral boundaries of the

primary and approach surfaces; this surface extends outward and upward at right angles to the runway centerline and the extended runway centerline at specified ratios. Height limits of the transitional surface are the same as the primary surface or approach surface at the boundary line where it adjoins and increases at a rate of one foot vertically for every seven feet horizontally. Horizontal distances are measured at right angles to the runway centerline and extended centerline, until the height matches the height of the horizontal surface or conical surface or for a horizontal distance of 5,000 feet from the side of the part of the precision approach surface that extends beyond the conical surface.

Turbojet Aircraft – An aircraft having a jet engine in which the energy of the jet operates a turbine which in turn operates the air compressor.

Turboprop Aircraft – An aircraft having a jet engine in which the energy of the jet operates a turbine which drives the propeller.

Ultralight Area – A designated area for takeoffs, landings, and training operations for ultralight aircraft. An ultralight aircraft is defined by the FAA as a vehicle that has only one seat, is used only for recreational or sport flying, does not have a U.S. or foreign airworthiness certificate, and falls under certain weight limits.

Variance Request – If a developer does not have the ability to meet or has a need to seek non-conformance to local or state zoning laws, a variance to a zoning ordinance is sought.

Visual Approach – An approach to a runway conducted with visual reference to the terrain.

Visual Flight Rules (VFR) – Flight rules that identify conditions when weather is adequate for aircraft to maintain safe separation by visual means. Under VFR conditions, safe separation between aircraft is the responsibility of the pilot.

Visual Runway – A runway without an existing or planned straight-in instrument approach.

Wildlife Attractants – Land uses such as water impoundments, garbage dumps, sanitary landfills, sewage treatment plants, and some types of agriculture that may attract birds or other wildlife.