2020 Airport Airspace and Land Use GUIDEBOOK

FDOT

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Executive Summary

The *2020 Airport Airspace and Land Use Guidebook* (*Guidebook*) provides local government planners with the information necessary to adopt airport zoning regulations compliant with state law and federal regulations that aim to protect people on the ground and in the air. This *Guidebook* addresses the importance of protecting airspace and the land surrounding civil and military airports; the roles for federal, state, and local government in providing a safe aviation environment; characteristics of incompatible development; and how to draft regulations. Additionally, the *Guidebook* provides an overview of the two main documents that regulate compatible land uses near airports in Florida:

1. 14 Code of Federal Regulations (CFR), Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace* (Part 77)
2. Chapter 333, Florida Statutes (FS), *Airport Zoning*

Local government planners need to understand six items when drafting airport zoning regulations that meet federal and state requirements. The contents of this *Guidebook* will help planners understand the laws and regulations underlying the following key points:

- ***All local governments (municipalities and counties) must adopt airport zoning regulations.*** Based on state statute—which states that political subdivisions with airport hazard areas must adopt airport zoning regulations—every local government (municipalities and counties) must adopt airport zoning regulations, as each one currently has an airport hazard area within it. More information about how to draft airport zoning regulations is provided in Chapter 1.

- ***Airport zoning regulations must address the:***

  1. ***Permitting process for obstructions.*** Obstructions, tall structures, and the permitting process are discussed in Chapter 1, Chapter 2, and Chapter 3.
  2. ***Prohibition of landfills near airports.*** Addressing the prohibition of landfills near airports is discussed in Chapter 1 and Chapter 3.
  3. ***Prohibition of certain land uses within noise contours surrounding airports.*** Addressing the prohibition of certain uses within noise contours surrounding airports is discussed in Chapter 1 and Chapter 3.
  4. ***Prohibition of certain land uses within runway protections zones (RPZs).*** Addressing the prohibition of certain uses within RPZs is discussed in Chapter 1 and in Chapter 3.
  5. ***Adoption of either an interlocal agreement or a joint airport protection zoning board with neighboring communities***. Interlocal agreements and joint airport protection zoning boards are discussed in Chapter 1 and Chapter 3.

The "Writing Airport Zoning Regulations" section at the end of Chapter 1 may be of particular interest to local government planners. This section provides Quick Notes, including required and suggested elements for airport zoning regulations and two model ordinances on which local government airport zoning regulations can be based. Appendices to this *Guidebook* include terms and definitions (***Appendix A***); the full text of Part 77 regulations (***Appendix B***) and Chapter 333, FS (***Appendix C***); instruction on how to use the FAA's Notice Criterial Tool (***Appendix D***); federal and state permit application instructions (***Appendices E and F***, respectively); the Part 150 land use restriction table (***Appendix G***). Appendix H contains Best Practices for ensuring local governments adopt compliant airport zoning requirements,

including an overview of all required components and resources and frequently asked questions. Finally, ***Appendices I through J*** include additional information and resources.

Chapter 1: Airport Zoning Regulations

Guidebook *Purpose*

Airports are an important component of Florida's connected and vibrant transportation system. Safe airport operations are necessary to protect the safety of people on the ground and in the air. Incompatible land uses around airports can adversely affect public safety and safe airport operations. *The Airport Airspace and Land Use Guidebook* (*Guidebook*) provides an overview of the federal and state laws and regulations established to protect airports and military airfields, airspace, and people and property in their vicinities while providing local governments with the tools to enact airport zoning regulations that enforce these laws.

Florida's extensive aviation system includes 20 commercial service airports, 109 public-use general aviation (GA) airports, and hundreds of private airports. Florida's public airport system is shown in ***Figure 1.*** These 129 public-use airports support Florida's diverse economy, including tourism, agriculture, aviation and aerospace, and manufacturing. They are a critical component of essential services such as medical transportation, law enforcement, search and rescue, and disaster response and recovery. In 2019, the Florida Department of Transportation (FDOT) published the *2019 Statewide Aviation Economic Impact Study*, which found that the 2017 impact of aviation in the state totaled $175 billion. The 129 public-use airports in the state serve as economic catalysts and support local, regional, and statewide economies.

Figure 1: Florida's Public Airport System

Since safe airport operations are necessary for public welfare and Florida's airports are key economic drivers, it is important that policies are established to support their continued operation and ability to accommodate existing and future demands. One way to support an airport's continued operation is by protecting it from the encroachment of land use types considered "incompatible" with aircraft operations.

When incompatible land uses exist, they can result in costly consequences for aviation users and nearby residents and businesses; impact the health and safety of nearby communities and residents; and limit current airport operations and an airport's ability to expand to meet changing demands. Local planners and zoning authorities have the responsibility to encourage and enforce compatible land use practices near their airport(s) to protect this critical transportation infrastructure as well as the safety and quality of life of residents and businesses.

This 2020 *Guidebook* is a product of FDOT and is an update to the former Guidebook published in 2012. Since the Guidebook was last published in 2012, changes have been made to the two primary laws governing airport land use compatibility in Florida:

- 14 Code of Federal Regulations (CFR), Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace* (Part 77)
- Chapter 333, Florida Statutes (FS), *Airport Zoning*

Definition

The Transportation Research Board (TRB) Airport Cooperative Research Program (ACRP) Report 27, "Enhancing Airport Land Use Compatibility," defines airport compatible land uses as *those uses that can coexist with a nearby airport without either constraining the safe and efficient operation of the airport or exposing people living or working nearby to unacceptable levels of noise or hazards*.

The icons above will appear throughout Chapter 1 when Part 77 (blue) or Chapter 333, FS (yellow) are relevant. The scope of the *Guidebook* was expanded to include compliance with and implementation of the latest Part 77 (2011) and Chapter 333, FS, (2016) language in the analysis of obstructions to air navigation and navigational and communication facilities, as well as the adoption, administration, and enforcement of airport zoning regulations. Because of the significant changes provided in Part 77 and Chapter 333, FS, users should only rely on the 2020 edition of the *Guidebook* to create or amend their regulations so that the most accurate and up-to-date airport zoning regulation information is used. In addition, it is highly recommended that users check for updates to applicable state and federal laws to maintain compliance with the latest available regulations.

It is not the intent of the *Guidebook* to be a comprehensive text explaining all aspects of airspace analysis, airport zoning, and land use compatibility. It is intended to provide focused guidance in the drafting, administration, and enforcement of airport zoning regulations and establishment of procedures and criteria for Airspace Obstruction Permitting that meet state and federal requirements. The *Guidebook* is not intended to constitute legal advice on the subject matters. If necessary, legal advice should be sought from your legal counsel. It is incumbent on the user to thoroughly familiarize themselves with the major resources on the subject when necessary.

Who is this Guidebook *Written For?*

Chapter 333, FS, requires that every municipality and county in the state with an airport hazard area must adopt airport zoning regulations. An airport hazard area is defined in Section 333.01(4), FS, as "any area of land or water upon which an airport hazard might be established." An airport hazard is defined in Section 333.01(3), FS, as "an obstruction to air navigation which affects the safe and efficient use of navigable airspace or the operation of planned or existing air navigation and communication facilities." As a result, almost every political subdivision (municipality or county) in the state has an airport hazard area within its boundaries. Chapter 333, FS, requires that each political subdivision that has an airport hazard area within its boundaries shall adopt, administer, and enforce airport zoning regulations for the airport hazard area.

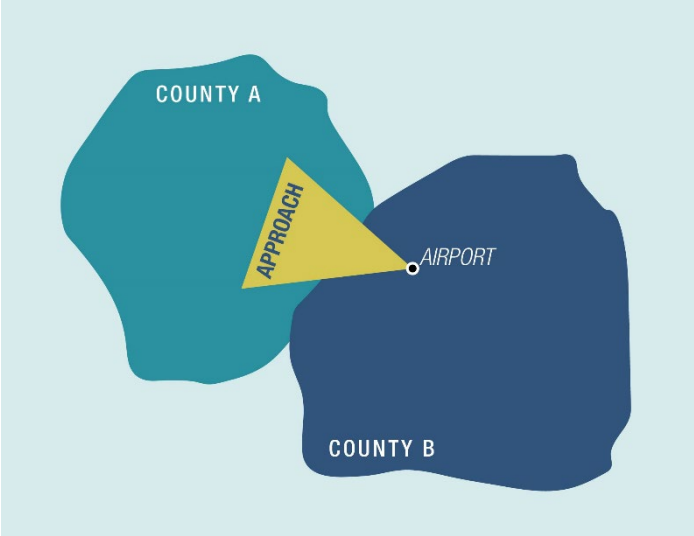


Figure 2: Airport Hazard Area in Neighboring Jurisdiction

It is important to note that airport hazard areas are not always confined to the same municipality in which a given airport is located: An airport hazard area may be present within an airport's neighboring municipality or county, as shown by the approach area in County A depicted in ***Figure 2***. In these cases, it may be necessary to enter into an interlocal agreement for the purpose of coordinating on airport zoning regulations. This *Guidebook* is meant to aid planners who have been tasked with addressing their airport zoning regulations by helping planners understand these regulations and implement them, whether it be drafting or amending a zoning ordinance or the policies of a comprehensive plan.

How will this Guidebook *Help You?*

The purpose of this *Guidebook* is to offer a framework for local government planners to develop and implement airport zoning regulations compliant with Chapter 333, FS and, in turn, Part 77. The *Guidebook* is written to be user-friendly for planners who may have little to no aviation planning experience. Local planners and administrators can use the information in the *Guidebook* as a tool to implement effective airport zoning regulations for each airport's surrounding communities.

Chapter 333, FS, has been recently updated and details how comprehensive plan policies or a zoning ordinance must address the state's most current airport zoning regulations. Planners and administrators will need to review their existing comprehensive plans and zoning ordinances to determine if either or both of these documents address airport zoning and land use requirements and if they meet the current state and federal requirements. It is likely that one of these local regulatory documents may need to be amended to address the most current airport zoning regulations. After determining which local regulatory document should be updated, new or amended airport zoning regulations should be enacted. This chapter includes

three elements to help planners and administrators understand how to use the *Guidebook* and amend their policies and/or regulations:

- Brief overview of airport planning including federal and state requirements, as well as different characteristics of incompatible land uses surrounding airports
- Quick Notes, a checklist of required and suggested components of airport zoning regulations, which are intended to be used by planners and administrators to draft communication documents, as well as communicate in-person with appointed and elected officials regarding how local regulations will need to be updated to achieve compliance with the regulations included in Chapter 333, FS
- Model Airport Zoning Ordinances that planners can use as templates to develop and adopt community-specific airport zoning regulations

Timely consideration and preparation (or amendment) of airport zoning regulations are important to protect public-use airports and military airfields from encroachment of incompatible land uses. Please note that FDOT does not require a comment period during the period when the local government is drafting or adopting their regulations; however, it is a requirement to submit new or amended airport zoning regulations to FDOT after adoption. Addressing federal, state, and local statutes related to development at and around an airport is required by law and will help responsible local governments avoid legal liability.

Roles for Providing a Safe Aviation Environment

The responsibility for protecting airports from incompatible uses is shared between federal, state, and local governments. Each level of government has different regulatory and enforcement power: The federal government primarily has an advisory role, the state has a regulatory role, and the local government has an enforcement role, as shown in ***Figure 3***. While the federal government may encourage certain land use restrictions, they ultimately do not have the power to enforce land use regulations. However, the federal government may be able to influence zoning issues though funding or airspace decisions. Florida state law grants such regulatory power to local governments. Therefore, it is critical that the federal government, state government, and local governments work together to promote compatible land uses near airports. The following sections describe the role of each level of government in achieving this goal.

Figure 3: Governmental Roles

Federal

The Federal Aviation Authority (FAA) is the primary authority on aviation-related issues, and yet their role in compatible land use planning is largely an advisory one. The FAA can make recommendations to help support and guide local planners, but the agency has no authority in defining development allowed near airports. The FAA uses Federal Aviation Regulations (FAR), Orders, and Advisory Circulars (AC) as tools to assist in preserving, protecting, managing, and growing the national airport system.

The FAA's primary regulation in overseeing airport compatible land use is Part 77. Part 77, Subpart C establishes a series of "imaginary surfaces" around the runways at every airport, which are depicted in ***Figure 4***. The primary function of these imaginary surfaces is to regulate obstructions to the navigable airspace surrounding airports. The FAA Part 77 Subpart B establishes notice criteria based on heights and imaginary surfaces; users wishing to develop near an airport in a manner that may exceed a height or imaginary surface of Subpart B must notify the FAA.[1]

FAA Notice Criteria Tool

The FAA must be notified of development near airports that may exceed a height or penetrate an imaginary surface of Part 77, Subpart B. The Notice Criteria Tool can be used to determine if the proposed development exceeds these standards. This online tool is available at: https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm

The FAA's Notice Criteria Tool can be used to determine if proposed development exceeds the standards of Part 77 , Subpart B and requires notice to the FAA:

https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm.

Appendix D provides a copy of the Notice Criteria Tool—Desk Reference Guide.

Potential development that exceeds Part 77, Subpart B standards is then reviewed by the FAA in accordance with FAA Form 7460-1 to determine from a height standpoint if the proposed development is a "hazard" to safe air navigation. However, even if development is found to be a "hazard," the FAA cannot prohibit its construction. State and local governments do have the ability to prohibit such development. More information on the federal regulations in Part 77 is provided in Chapter 2.

[1] See Chapter 2 for detailed information about the FAA's Notice criteria and associated requirements.

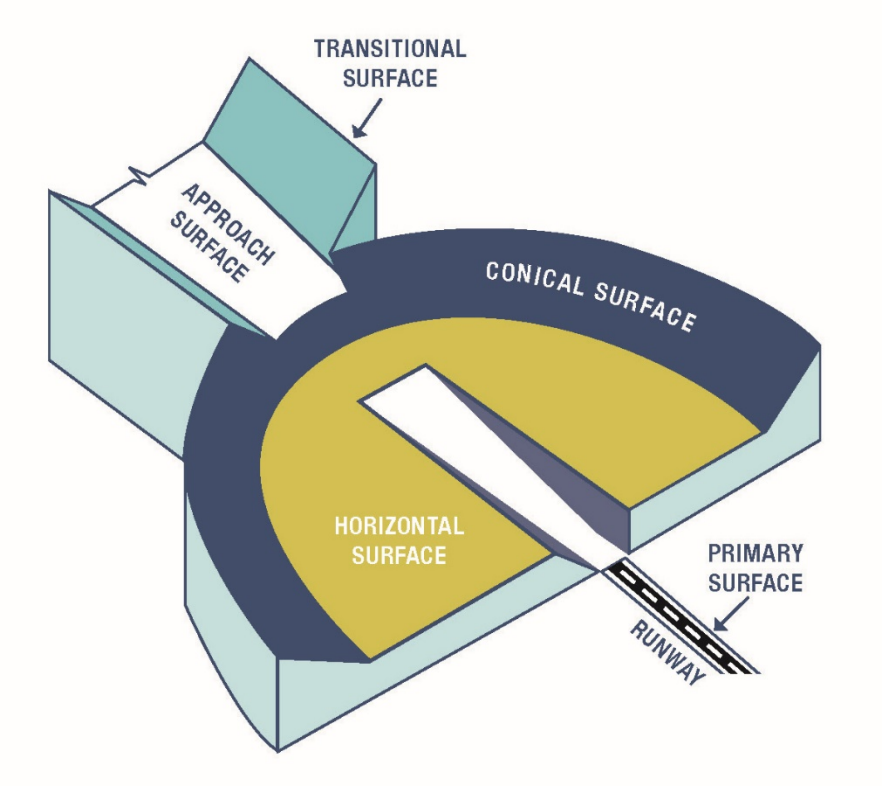


Figure 4: Airport Imaginary Surfaces

In addition to promoting compatible land use through Part 77, the FAA also facilitates compatible uses and development by requiring airports to agree to special conditions when they accept FAA funding to complete projects such as runway extensions, navigational aids installations, and terminal improvements. These conditions are called grant assurances. Some grant assurances specifically relate to protecting the airport environment from encroachment of incompatible uses. Airports can use FAA funding to help achieve compatibility through land acquisition, noise abatement, master planning, and more. For more information on grant assurances, please see https://www.faa.gov/airports/aip/grant_assurances/.

Key Terms

Someone proposing the construction of a potential obstruction and/or submitting an FAA Form 7460-1 is referred to as a "**development sponsor**."

An "**airport sponsor**" refers to the owner of an airport.

A "**user**" refers to the reader of this *Guidebook*.

State

The State of Florida has the authority to implement laws and rules for the operation and regulation of its airports. As previously mentioned, Florida accomplishes this through Chapter 333, FS, which establishes zoning requirements for each political subdivision that has an airport hazard area within its jurisdiction. Chapter 333, FS, enforces these regulations by requiring a permit for building inside the airport hazard area if the development has been deemed an obstruction by the FAA. Moreover, the statute requires the adoption of airport zoning regulations for a number of triggering factors, as described later in this chapter. More information on the state regulations in Chapter 333, FS, is provided in Chapter 3, as well as the Quick Notes section later in this chapter.

Local

The local governmental authority is responsible for adopting, administering, and enforcing airport zoning regulations as mandated by state law. Effective coordination between local government officials and airport sponsors is vital to properly codify, implement, and enforce airport zoning regulations required by Chapter 333, FS. To the extent reasonable, local governments should engage in the process of planning for airport-compatible land uses and be well informed on the consequences of allowing incompatible land uses at or near their local airports. Consequences include an unsafe aviation environment which is dangerous for people on the ground and in the air and is detrimental to the safe and efficient operation of the airport. Local enforcement of land use requirements is exercised through two primary sources:

- Comprehensive plan
- Zoning ordinances

In both cases local planners can incorporate both state law (Chapter 333, FS) and federal guidance such as Part 77. ***Local planners should note that Chapter 333, FS, includes several components that must be addressed as part of their airport zoning regulations, including:***

- Permitting process for obstructions (Section 333.025, FS)
- Permit requirements for the construction or alteration of any obstruction (Section 333.03(1)(c)(1), FS)
- Obstruction marking and lighting requirements (Section 333.03(1)(c)(2), FS)
- Documentation showing compliance with the federal requirement for notification of proposed construction or alteration of structures and a valid aeronautical study submitted by each person applying for a permit (Section 333.03(1)(c)(3), FS)
- Consideration of statutory criteria when determining whether to issue or deny a permit (Section 333.03(1)(c)(4), FS)
- Approval of a permit cannot be based solely on the Determination by the FAA that the proposed structure is not an airport hazard (Section 333.03(1)(c)(5), FS)
- Prohibition of new landfills and the restriction of existing landfills within 5,000 feet from the nearest point of any runway used by non-turbine aircraft (***Figure 5***), within 10,000 feet from the nearest point of any runway used by turbine aircraft (***Figure 6***), and within all airport imaginary surfaces (Section 333.03(2)(a), FS)

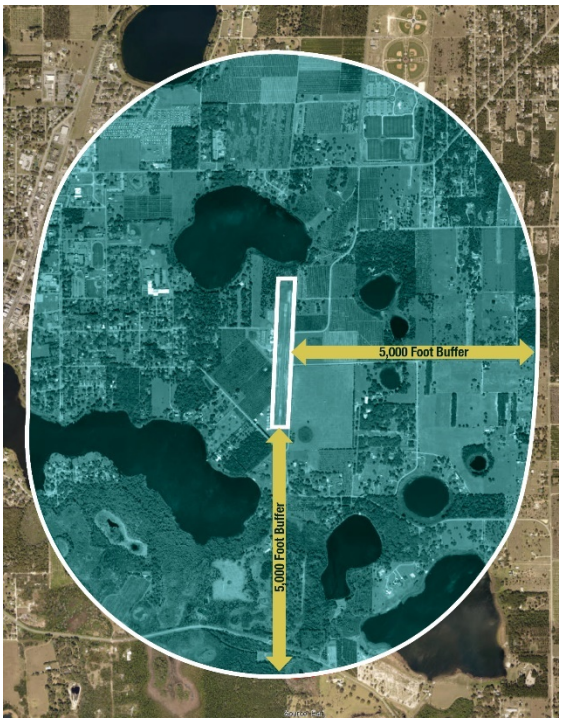


Figure 5: Landfill Buffers for Runways Used by Non-turbine Aircraft

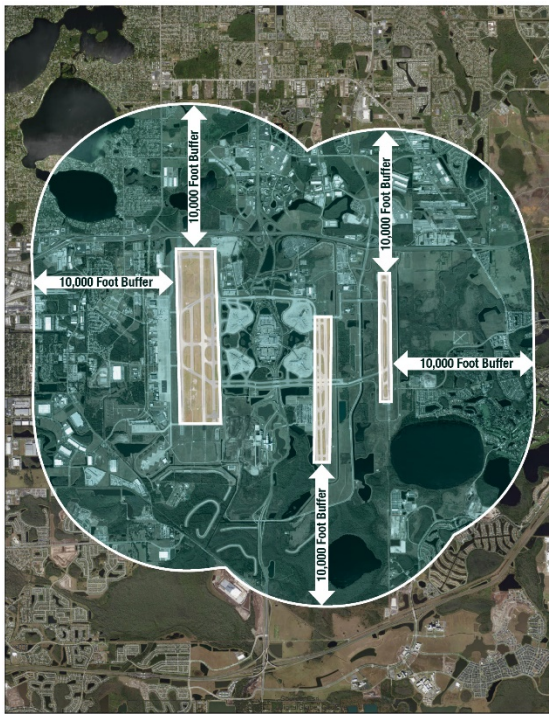


Figure 6: Landfill Buffers for Runways Used by Turbine Aircraft

- Operators of any landfill that attracts wildlife into or across runways or within the approach and departure patterns of aircraft are required to minimize hazards to aircraft based on bird management requirements (Section 333.03(2)(b), FS)
- Prohibition of incompatible uses as established by a federally compliant noise study, including within the noise contours surrounding an airport if an airport authority or governing body has conducted a noise study in accordance with 14 CFR, Part 150 (Section 333.03(2)(c). ***Figure 7*** depicts an example of noise contours at an airport that has conducted a Part 150 noise study. As depicted in this figure, the outer edges of these noise contours represent the extent to which certain incompatible land uses are impermissible.
- Prohibition of residential construction and any educational facility, with the exception of aviation school facilities, within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline, if an airport authority or governing body has not conducted a federally compliant noise study (Section 333.03(2)(d), FS). ***Figure 8*** depicts an example of noise contours at an airport that has not conducted a federal noise study.

Figure 7: Contours for an Airport with a Part 150 Noise Study

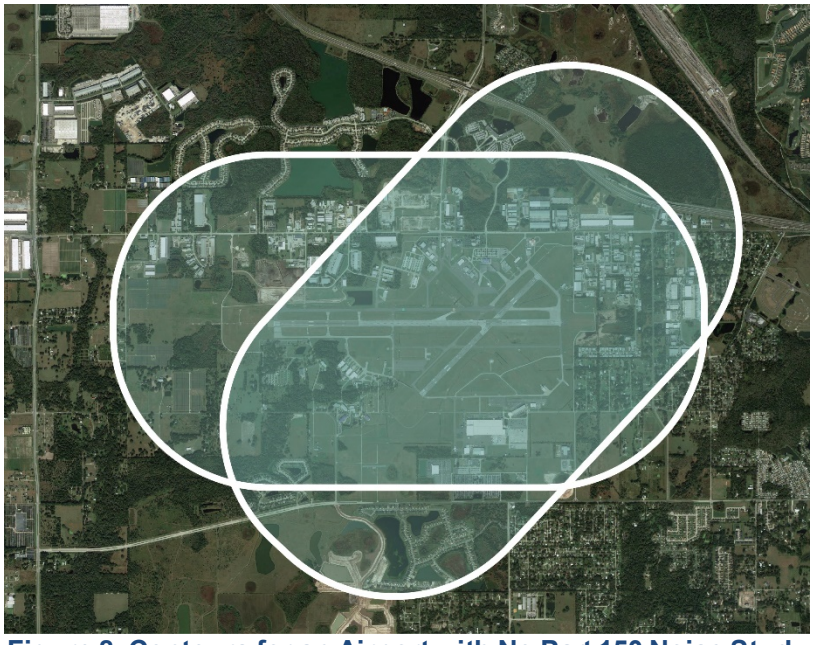


Figure 8: Contours for an Airport with No Part 150 Noise Study

Restriction of new incompatible uses, activities, or substantial modifications to existing incompatible uses within Runway Protection Zones (RPZs) (Section 333.03(2)(e), FS). An RPZ is defined as "an area at ground level beyond the runway end to enhance the safety and protection of people and property on the ground." Example RPZs are shown in ***Figure 9***. The RPZs depicted in this figure represent areas that should be kept free of incompatible development, such as roads, buildings, or dense vegetation.

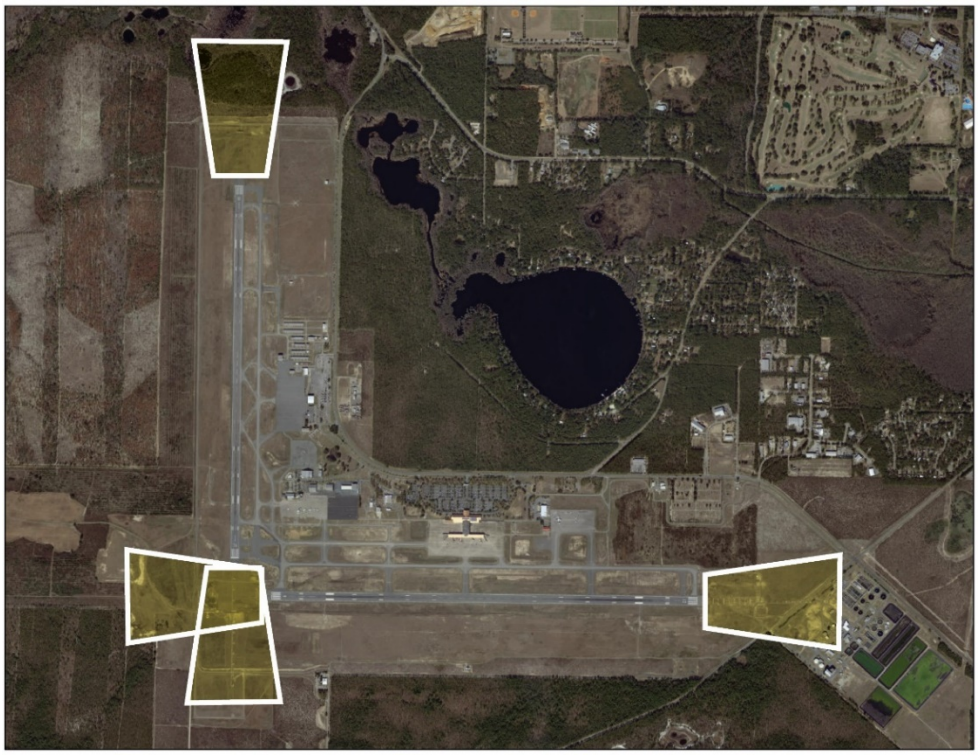


Figure 9: Runway Protection Zones (RPZs)

Characteristics of Incompatible Development

To understand the impacts of incompatible land uses near airports, local planners need to be able to recognize the types of land uses and associated characteristics deemed incompatible with airports and surrounding areas. This section presents the main characteristics of development commonly found to be incompatible around airports. ACRP Report 27, "Enhancing Airport Land Use Compatibility, Volume 1: Land Use Fundamentals and Implementation Resources," defines compatible land uses as those that can coexist with a nearby airport without either constraining the safe and efficient operation of the airport or exposing people living and working nearby to unacceptable levels of noise or hazards. The following graphics reflect the primary characteristics of incompatible development, each of which is discussed in more detail in the following subsections.


Tall Structures


Visual Obstructions


Population Density


Wildlife Attractants


Noise

Tall Structures

Tall structures may be the most obvious type of incompatible development one could think of when considering development near an airport. While a high-rise building may be the first thing that comes to mind when thinking of tall structures, there are many other tall structures that can create incompatibility issues. Power lines, tall trees, high terrain, and even temporary objects such as cranes can be hazardous in some circumstances.

When visibility is poor or cloud ceilings are low, aircraft operate under instrument flight rules (IFRs), which means they are guided by a strict set of procedures that allow pilots to operate with minimal visibility of the runway. These procedures are established based on a number of factors and are greatly impacted by the height of objects along the routes that aircraft use to operate into and out of the airport (referred to as an approach). If a new structure high enough to impact approach conditions is built in this area, then procedures must be changed to compensate for the change in slope that an aircraft must use in descent. Even in clear conditions when an aircraft is not operating under IFRs, tall structures in an approach area can cause issues if aircraft must circle or fly over obstructions to access the runway. Even small changes to the slope of an approach can result in a need to alter the runway to move the landing point further down the runway, which gives aircraft less distance to stop before reaching the end of the runway. Tall structures even considerable distances from airports can pose hazards, particularly for helicopter, military, and agricultural spraying operations. Because these operations generally occur at lower altitudes, the hazards of power lines, wind turbines, tall buildings, and more are particularly impactful. Discouraging tall structures within airport approach and departure areas is particularly critical to maintaining compatibility.

Key Takeaway: Tall Structures

Chapter 333, FS, requires airport zoning regulations to address tall structures. Airport zoning regulations must include a permitting process for obstructions, potentially including tall structures.

Part 77, Subpart C, CFR, is intended to identify and limit the development of uses that are tall and penetrate imaginary surfaces.

As previously discussed, Part 77, Subpart C is intended to identify and limit the development of uses that are tall and penetrate imaginary surfaces. Chapter 333, FS, requires airport zoning regulations to address tall structures through permit requirements. The Quick Notes included at the end of this chapter details recommended language to comply with state permitting regulations. Part 77 is discussed in more detail in Chapter 2.

Visual Obstructions

Visual obstructions encompass a variety of different characteristics that can impact airport operations and pose a safety hazard to people and property on the ground and in the air. A key to safe aircraft operations is maintaining an unobstructed view for pilots, particularly when operations occur without navigational aids to assist pilots in navigating safely around airports. Clear visibility is essential to safe operations, and land uses that hinder visibility should be limited where possible. ACRP Report 27 lists the following factors as having the potential to cause visual obstructions:

- ***Dust.*** Certain climates, particularly desert areas, can be prone to dust storms that greatly impact visibility for low-level flight operations, as well as during takeoff and descent. In addition, activities such as farming and construction can create excessive dirt and dust particles to be kicked-up into the air and can limit pilots' visibility when located near airports.
- ***Glare***. Reflective surfaces such as glass buildings and water can impede visibility during low-level flight operations.
- ***Light Emissions.*** Lights can cause visual obstructions for pilots when they shine upward into a flight path. Additionally, differentiating between runway lighting and other light emissions during low-level flying operations, particularly during evening hours and times of reduced visibility (weather incidents, storms, fog, etc.), can be challenging and pose safety hazards.
- ***Smoke, Steam, and Fog.*** While industrial land uses are generally compatible near airports because of lesser noise impacts and less population density, the emission of smoke, steam, or fog can impact pilots' visibility when located near airports.

Note: Visual Obstructions

While visual obstructions are not specifically referenced in Part 77 or Chapter 333, FS, these factors can be included when developing airport zoning regulations to further promote safe navigation to and from Florida's airports.

While some of these land uses are challenging to mitigate, particularly those created by natural or existing conditions, it is important that local government authorities and planning staff consider the characteristics of proposed land uses that have the potential to create unnecessary visual obstructions near airports. Depending on the type of land use, mitigation techniques like down-shielding lighting, placement of lights in non-linear patterns, and use of non-reflective building materials can help lessen associated impacts.

Population Density

Limiting uses that attract higher concentrations of people near airports helps reduce the potential impacts of aircraft accidents should they occur. Uses that attract higher concentrations of people include:

- High-Density Residential Development
- Sport Stadiums
- Concert Arenas
- Hospital Complexes
- Retirement Communities
- Education Institutions
- Malls

Limiting such uses can reduce the number of people potentially impacted in aircraft incidents should they occur. Note that many of these uses have other characteristics rendering them incompatible in addition to population density (like tall structures).

As with any incompatible characteristic, existing uses can be very challenging to mitigate. As such, implementing population density restrictions for future development near airports is critically important. Despite the risks associated with high population density, there is little guidance available to airports and local communities on how to mitigate these concerns. The FAA has established criteria to keep RPZs clear of any development.

Chapter 333, FS places some restrictions on new developments if an airport has not completed a noise impact study. Local governments should consult the Quick Notes at the end of this chapter to determine the applicability of these development restrictions around the airport(s) in their jurisdiction.

Key Takeaway: Population Density

Chapter 333, FS, requires population density factors to be addressed in airport zoning regulations. Airport zoning regulations must address the prohibition of residential construction and any educational facility except for aviation school facilities within airport noise contours.

Wildlife Attractants

Wildlife is a concern for safe airport operations due largely to collisions. According to the FAA, there were approximately 14,400 wildlife strikes at 700 U.S. airports in 2017. Wildlife strikes can be a risk to human health and safety, with 287 human fatalities globally and 311 human injuries in the U.S. attributed to wildlife strikes between 1988 and 2017. In addition, wildlife strikes have destroyed 263 civil aircraft during that the same time period. The majority of wildlife strikes are from birds, although animals on the ground and potentially crossing the runway, such as deer, foxes, or coyotes, can also cause wildlife strikes. It is critical to monitor wildlife activity and habitats on and near airports to determine areas of hazard.

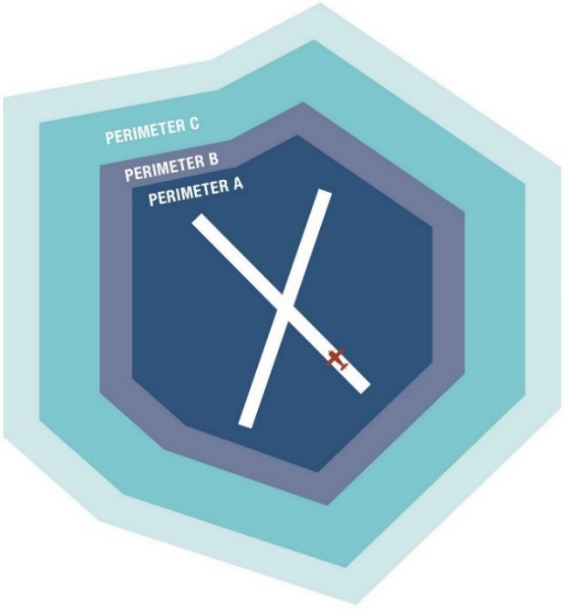


Figure 10. FAA Separation Thresholds for Potential Wildlife Attractions

Wildlife attractants are any human-made structure, land-use practices, or human-made or natural geographic feature that can attract or sustain hazardous wildlife within the landing or departure airspace or the airport's Airport Operations Area (AOA). The AOA is the area that includes all areas designated and used for landing, taking-off, or surface maneuvering of aircraft. The FAA provides guidance on separation criteria for potential wildlife hazard attractants within FAA AC 150/5200-33B, *Hazardous Wildlife Attractants on or near Airports*. This AC

identifies a 5,000-foot separation distance from the operation area for an airport serving piston-powered aircraft (perimeter A in ***Figure 10***) and a 10,000-foot separation distance from the operation area for an airport serving turbine-powered aircraft (perimeter B in ***Figure 10***). The FAA also recommends a five-mile separation radius for approach, departure, and circling aircraft (perimeter C in ***Figure 10***). Hazardous wildlife attractants should be avoided, eliminated, or mitigated within these separation distances. Depending on the type of wildlife concern, mitigation techniques like fence installation, elimination of standing water, prohibition of crops and other vegetation known to be attractive to wildlife, and more can be implemented to reduce the potential for wildlife incidents.

Chapter 333, FS, includes language pertaining to landfills as a wildlife attractant. This language is required to be considered during the development of airport zoning regulations. The Quick Notes at the end of this chapter details this language. Chapter 3 provides more information on state requirements regarding wildlife attractants.

Key Takeaway: Wildlife Attractants

Chapter 333, FS, requires some wildlife attractant factors be addressed in airport zoning regulations by prohibiting landfills near airports. Other uses besides landfills can attract wildlife but are not specifically required to be addressed in airport zoning regulations per state statute. Still, it is encouraged that local zoning ordinances consider the potential for new development to attract wildlife to promote safe airspace navigation.

Noise

Noise from airports is one of the most significant concerns relating to incompatibility and is often considered the primary factor that can impact airport operations. Aircraft operations can generate significant noise, creating nuisances for surrounding communities that can adversely affect quality of life. Besides the commonly perceived annoyance factor that may interrupt conversation, work, study, sleep, and other normal activities, aircraft noise can also produce vibration and other impacts that can adversely affect the daily life of people living and working near an airport.

Key Takeaway: Noise

Noise must be addressed in airport zoning regulations. Airport zoning regulations must address the prohibition of certain uses within the noise contours around airports, as shown in ***Figure 8*** and ***Figure 7.***

Potential impacts and noise levels differ based on the type of airport and the operations occurring there; therefore noise abatement and mitigation strategies are dependent on community needs, airport type, and other site-specific factors. Moreover, the type of development surrounding an airport can affect the impacts caused by noise disturbance, as some developments are more noise sensitive than others. For example, a school or place of learning is more sensitive to sound disturbances than an industrial park. In addition to prohibiting or minimizing the development of noise-sensitive uses near airports, other mitigation techniques include modified building codes to require sound insultation features.

Noise disturbance is addressed in Chapter 333, FS, and needs to be addressed in airport zoning regulations. The Quick Notes included at the end of this Chapter details this language. Chapter 3 provides more information on the state requirements regarding noise.

Requirements of Comprehensive Plans

Many local governments elect to adopt airport zoning regulations as part of their local comprehensive plan. In accordance with Chapter 163, FS, all 67 counties and 400+ municipalities in Florida are required to adopt a comprehensive plan. If a local government has adopted land development regulations (LDRs), they must address airport zoning consistent with the provisions of Chapter 333, FS. The provisions of Chapter 163, FS, that relate to airports are discussed later in this section.

This section provides the requirements of Chapter 163, FS, *Intergovernmental Programs*. This statute includes provisions related to county and municipal planning, including comprehensive planning. Airport master plans and airport zoning regulations must operate within and be compatible with their respective comprehensive plans. As such, understanding these laws is crucial for maintaining cohesive plans and regulations. This section provides relevant information about comprehensive plans, airport master plans, and how to integrate the two.

Purpose of Comprehensive Plans

The local government comprehensive plan is a policy document. 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 protecting the environment, health, and welfare of the community.

When a development or redevelopment is proposed in a community, it must be consistent with the goals, objectives, and policies contained in the local government comprehensive plan. In addition to the future land use element of a comprehensive plan, there are other elements that help identify infrastructure improvements needed to accommodate growth, including those needs related to all forms of transportation.

Inclusion of Airports in Comprehensive Plans

Although airport master plans and airport layout plans (ALPs) may be included in comprehensive plans, it is not required that aviation projects be included in the five-year capital improvements plan and the capital improvements element. There are multiple elements in a comprehensive plan required by Section 163.3177, FS. Airports are most frequently included and addressed in one or more of the following elements:

- Transportation element
- Future land use element
- Intergovernmental coordination element
- Capital improvements element

As described in further detail below, each of these elements contains requirements intended to increase protection for airports and airspace from encroachment of incompatible development. This *Guidebook* can be utilized as an information source to help provide consistency with the requirements of Chapter 163, FS.

> **Note**
>
> A Metropolitan Planning Organization (MPO) is an organization responsible for carrying out transportation planning and programming.

Transportation Element

According to Section 163.3177(6)(b)2.b., FS, the transportation element of a comprehensive plan prepared for a local government within a metropolitan planning area designated as an MPO (pursuant to Section 339.175, FS) must address aviation, rail, and seaport facilities; intermodal terminals; and access to those facilities. Additionally, Section 163.3177(6)(b)2.d., FS, requires that the transportation element address airports, projected airports and aviation development, and land use compatibility around airports. In areas with a population less than 50,000, airports are only required to address transportation circulation, per Section 163.3177(6)(b)2.b., FS.

Section 163.3177(6)(b)4., FS, 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 Section 333.06, FS, may be incorporated into the local comprehensive plan. This section further specifies that amendments to all comprehensive plans shall address land use compatibility for airports in a fashion that is consistent with Chapter 333, FS. The transportation element of a comprehensive plan also requires the mapping of both existing and proposed transportation system features.

Future Land Use Element

According to Section 163.3177(6)(a)2.g., FS, the required future land use element must be based upon surveys, studies, and data regarding the area, including the compatibility of uses on lands adjacent to an airport as defined in Section 330.35, FS, and consistent with Section 333.02, FS. Additionally, Section 163.3177(6)(a)3.b., FS, requires that the future land use element include criteria that will be used to achieve land use compatibility of areas adjacent to an airport, as defined in Section 330.35, FS, and consistent with Section 333.02, FS.

Intergovernmental Coordination Element

Section 163.3177(6)(h)c., FS, requires that the intergovernmental coordination element provide for interlocal agreements pursuant to Section 333.03(1)(b), FS, to address an airport hazard area located wholly or partially within a political subdivision different than the political subdivision of the airport location. For more information about interlocal agreements and joint zoning boards, please see Chapter 3.

Capital Improvements Element

Section 163.3177(3)(a)4., FS, requires that the capital improvements element include a schedule of capital improvements, including any publicly funded federal, state or local government projects. The schedule of capital improvements may also include privately funded projects for which the local government does not have fiscal responsibility. The schedule must be consistent with the MPO's transportation improvement program and long-range transportation plan and must cover at least a five-year period.

Purpose of an Airport Master Plan

According to the *FDOT Guidebook for Airport Master Planning*, the overall purpose of an airport master plan is to provide the framework to guide future airport development that will meet existing and future aviation demands in a safe and cost-effective manner. The master plan further considers environmental, socioeconomic, and community development factors; other modes of transportation; and other airports. An airport master plan typically addresses future development at an airport, as well as infrastructure and access needs required for its future success.

An airport master plan should definitively support a community's comprehensive plan, recognizing that the airport is one of the community's most valuable assets. A master plan differs from a comprehensive plan in that a master plan identifies more detailed information regarding existing airport conditions and forecasted activity. An airport master plan also provides a future development plan to support the aviation needs of the facility. A comprehensive plan may address similar needs for an entire community–not just aviation infrastructure and facility development needs.

Integration Between Airport Master Plans and Comprehensive Plans

The *FDOT Airport Guidebook for Airport Master Planning* identifies the need for integration and collaboration between comprehensive and master planning efforts. Generally, various representatives from local municipalities may be jointly involved in these types of planning efforts, sometimes concurrently. The sharing and collaboration of information–especially strategic coordination such as the establishment of a mission, vision, or long-term objectives–is critically important to ensure that the efforts of the master plan support the municipality/region's comprehensive plan. This collaboration provides cities, counties, and regional planning agencies with an opportunity to discuss and evaluate development options for an airport. This input can be particularly important when considering how the existing airport environs can support that development or cause concern for potential future mitigation efforts. For comprehensive plans and airport master plans to be explicitly integrated, a local government can either:

- Include a statement in the comprehensive plan that explicitly adopts the airport master plan(s) of the airport(s) within its jurisdiction and provide reference to that airport master plan(s), or
- Copy the text of the airport master plan(s) into the comprehensive plan itself

Given that airport master plans are typically updated every five to seven years, the development of local comprehensive plans and master plans may not always coincide. It is still important that coordination between local city, county, and regional representatives begins at the inception of either study. This ensures that the most current information is reviewed by all representatives and efforts are designed to support other plans already in place. Implementation of a previous plan could already be underway (for example, infrastructure design for a future roadway access project near an airport) that may be very important to identifying opportunities or constraints for future airport development.

Key Takeaway: Collaboration

Collaboration between the airport and local government staff is a great way for the airport to plan and construct transportation access improvements to and from the airport or other supporting facilities.

Writing Airport Zoning Regulations

The subsections below can be used to develop local government airport zoning regulations that follow federal and state requirements. First is a Quick Notes section that provides a brief overview of airport zoning requirements and highlights the different components discussed throughout this document in an outline format. ***Appendix H***, Best Practices, also includes an overview of Quick Notes. Model ordinances that local governments can use as a template when developing airport zoning regulations pursuant to federal and state requirements are provided at the end of the chapter. Considerations for different community types are listed so that regulations can align with the needs of the community they are intended to serve.

Quick Notes

This following section is a checklist that outlines the components that should be addressed in local government airport zoning regulations per Chapter 333, FS. Local governments that do not have airport zoning regulations can use this section to assist with drafting staff reports and other analytical documents or presentations. This section can also be helpful as a quick reference during meetings with appointed and elected officials and/or other departments and agencies regarding upcoming changes. Local governments with existing airport zoning regulations can use this section to evaluate if their regulations are up-to-date or require an amendment to be consistent with current state requirements.

Required Components

The following components should be addressed in local government airport zoning regulations per Chapter 333, FS:

1. Permit process for potential obstructions which includes the following components (per Section 333.03(1)(c)1.-5):
    - A permit for the construction or alteration of any obstruction
    - Obstruction marking and lighting
    - Documentation showing compliance with the federal requirement for Notification of proposed construction or alteration of structures and a valid aeronautical study submitted by each person applying for a permit
    - Consideration of the following criteria:
        - Safety of persons on the ground and in the air
        - Safe and efficient use of navigable airspace
        - Nature of the terrain and height of existing structures
        - Effect of the construction or alteration of an obstruction on the state licensing standards for a public-use airport
        - Character of existing and planned flight operations and developments at public-use airports
        - Federal airways, visual flight rules, flyways and corridors, and instrument approaches as designated by the FAA
        - Effect of the construction or alteration of an obstruction on the minimum descent altitude or the decision height at the affected airport
        - Cumulative effects on navigable airspace of all existing obstructions and all known proposed obstructions in the area
    - That approval of a permit not be based solely on the Determination by the FAA that the proposed structure is not an airport hazard

2. Regulations must, at a minimum, address the prohibition of new landfills and the restriction of existing landfills within the following areas (per Section 333.03(2)(a)):
    - Within 10,000 feet from the nearest point of any runway used or planned to be used by turbine aircraft
    - Within 5,000 feet from the nearest point of any runways used by only non-turbine aircraft
    - Outside the perimeters defined in the previous two bullet points, but still within the lateral limits of the civil imaginary surfaces defined in Part 77. Case-by-case review of such landfills is advised.
3. Per Section 333.03(2)(b), regulations must, at a minimum, address any instances where any landfill is located and constructed in a manner that attracts or sustains hazardous bird movements from feeding, water, or roosting areas into or across the runways or approach and departure patterns of aircraft. The landfill operator must incorporate bird management techniques or other practices to minimize bird hazards to airborne aircraft.
4. Per Section 333.03(2)(c), where an airport authority or other governing body operating a public-use airport has conducted a Part 150 noise study, or where a public-use airport owner has established noise contours pursuant to another public study approved by the FAA, regulations must, at a minimum, address the prohibition of incompatible uses within the noise contours established by any of these studies, except if such uses are specifically contemplated by such study with appropriate mitigation or similar techniques described in the study.
5. Per Section 333.03(2)(d), where an airport authority or other governing body operating a public-use airport has not conducted a noise study, regulations must, at a minimum, address the prohibition of residential construction and any educational facility, with the exception of aviation school facilities, within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline.
6. Per Section 333.03(2)(e), regulations must, at a minimum, address the restriction of new incompatible uses, activities, or substantial modifications to existing incompatible uses within RPZs.
7. Per Section 333.03(1)(b), if an airport is owned or controlled by local government "A" (a political subdivision) and if local government "B" has land upon which an obstruction may be constructed or altered which underlies any surface of the airport as provided in Part 77, the local government "A" shall either:
    - By interlocal agreement, adopt, administer, and enforce a set of airport protection zoning regulations, or
    - By ordinance, regulation, or resolution duly adopted, create a joint airport protection zoning board that shall adopt, administer, and enforce a set of airport protection zoning regulations. The joint airport protection zoning board shall have as voting members two representatives appointed by each participating political subdivision and a chair elected by a majority of the members so appointed. The airport manager or a representative of each airport in the affected participating political subdivisions shall serve on the board in a nonvoting capacity.

Suggested Components

The following components are recommended to be addressed in local government airport zoning regulations. These items are recommended to enhance understanding of federal regulations and as based on ACRP Report 27. Please note that Chapter 333, FS allows for more restrictive airport zoning regulations than just those prescribed by statute, if necessary, to protect the health, safety, and welfare of the public on the ground and in the air.

1. Explanation of imaginary surfaces
    - The avoidance of the following objects, developments, and uses within imaginary surfaces including:
        - 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 identify an airport.
        - Any object or development that would create or cause glare that would interfere with airport operations
        - Any use that would attract birds or other wildlife, thereby creating hazards either on the ground or in the air
2. Explanation of other types of development that are a concern within imaginary surfaces per ACRP guidance
3. Information concerning the FAA's Notice Criteria Tool
4. Instructions on how to use the FAA's Notice Criteria Tool
5. Information concerning wildlife hazard attractants and the wildlife separation criteria
6. Address the prohibition of the following within the FAA's wildlife separation criteria:
    - Trash transfer stations
    - Golf courses with bodies of water
    - Sanitary sewer systems
    - Stormwater management facilities
    - Wetlands
    - Agricultural areas that provide a source of food for wildlife
    - Parks, natural resources, and natural areas
    - Landscaping
    - Renewable energy facilities

Model Ordinances

Two model ordinances (one for a small community and one for a medium-sized community) are provided below to assist local governments in drafting airport zoning regulations. For the purposes of these ordinances, a "small community" is a community with either no airports or one airport within their municipal boundaries. A "medium-sized community" is a community with more than one airport within their municipal boundaries. An ordinance for a "large community" is not provided; local government planners from large communities should use the model ordinance for a medium-sized community and add elements best suited to their community. The medium-sized community model ordinance has the same elements as the small community model ordinance with additional elements to best address the needs of a community with more than one airport. Local planners in all communities are encouraged to consider these additional elements to assess whether they apply to their communities.

Note

Communities with no airports within their municipal boundaries must still adopt airport zoning ordinances, as every municipality and county within Florida has an airport hazard area(s) within their municipal boundaries.

Communities with no airports should use the model ordinance for small communities.

Local governments are encouraged to use these model ordinances to guide the language and content of newly adopted and/or amended airport zoning regulations. Local governments should also note that the model ordinances include language that will need to be customized to their specific community, including the name of the municipality and figure references. Local governments are reminded that there are required elements to airport zoning regulations as outlined in the previous section. However, state law allows local governments to add other elements to their airport zoning regulations to protect the health, safety, and welfare of their citizens.

Local governments must submit a copy of their adopted airport zoning regulations to the FDOT at the following address:

Aviation Office
Florida Department of Transportation
605 Suwannee Street, MS 46
Tallahassee, FL 32399-0450
Attention: Airspace and Land Use Manager

The model airport zoning regulation ordinances are on the following pages.

Note

Users should note that while they are encouraged to use the model ordinance that best suits their community, airport zoning regulations can include additional elements not included in these model ordinances. State law allows additional components in airport zoning regulations if such components improve the health, safety, and welfare of residents in the community. Some of these additional considerations are noted in the “Characteristics of Incompatible Development” section above.

Community Types

Small

Disclaimer: This model ordinance is for illustration purposes only. Local governments are ultimately responsible for complying with all federal, state, and local requirements. Please ensure your airport zoning regulations comply with the most up-to-date federal, state, and local requirements.

THE (NAME OF POLITICAL SUBDIVISION) AIRPORT ZONING ORDINANCE

1. TITLE

These regulations shall be known as the (Name of Political Subdivision) Airport Zoning Regulations.

2. PURPOSE AND INTENT

The purpose of this overlay district is to facilitate proper land use planning and zoning compatibility with airport operations in the (Name of Political Subdivision). Airports may produce noise levels that are not compatible with residential and educational uses and certain commercial and industrial uses. Airport hazards reduce the size of the area available for the landing, takeoff, and maneuvering of aircraft, which impairs the viability of the airport. In the interest of public health, safety, and welfare, it is appropriate to establish regulations to prevent or minimize the creation of airport hazards and the placement of inappropriate land uses in the vicinity of existing airports and to ensure that future airports are not incompatible with existing land uses and structures.

The Airport Overlay Zoning District (AO) is comprised of two primary components: the category of airport and the adopted standards for noise compatibility. Additional standards may be required for those lands and uses located in proximity to the airport within the surfaces as defined below. Section (4) of these regulations generally applies to land use and noise considerations ("Noise") including the airport surfaces as defined herein and the (Name of Political Subdivision) zoning regulations. Additional standards and provisions in and around the airport may be found in Title 14 Code of Federal Regulations (CFR), Part 77, and Chapter 333, Florida Statutes (FS).

3. DEFINITIONS

As used in these regulations, unless the context otherwise requires:

A. AIRPORT - any area of land or water designed and set aside for the landing and taking-off of aircraft and used or to be used in the interest of the public for such purpose.
B. AIRPORT ELEVATION – the highest point of the Airport usable landing area measured in feet above mean sea level.
C. AIRPORT HAZARD – an obstruction to air navigation that affects the safe and efficient use of navigable airspace or the operation of planned or existing air navigation and communication facilities.
D. AIRPORT HAZARD AREA – any area of land or water upon which an airport hazard might be established.
E. AIRPORT LAND USE COMPATIBILITY ZONING – defined in Chapter 333, FS, as airport zoning regulations governing the use of land on, adjacent to, or in the immediate vicinity of airports.

F. AIRPORT LAYOUT PLAN – a set of scaled drawings that provide a graphic representation of the existing and future development plan for the airport and demonstrate the preservation and continuity of safety, utility, and efficiency of the airport.
G. AIRPORT PROTECTION ZONING REGULATIONS – defined in Chapter 333, FS, as airport zoning regulations governing airport hazards.
H. AIRSPACE DRAWINGS – Federal Aviation Administration (FAA)-approved Airport Layout Plan Set drawings depicting the airport imaginary surfaces and the application of the Federal obstruction standards contained in 14 CFR, ss. 77.13, 77.17, 77.19, 77.21, and 77.23, to the conditions at the Airport.
I. APPROACH SURFACE - a surface longitudinally centered on the extended runway centerline, extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.
J. APPROACH, TRANSITIONAL, HORIZONTAL, AND CONICAL ZONES - these zones are set forth in Section (4) of these regulations.
K. 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.
L. DEPARTMENT – the Florida Department of Transportation as created under FS 20.23.
M. DEVELOPMENT PERMIT (OR PERMIT) - any building permit, zoning permit, subdivision approval, rezoning, certification, special exception, variance, or any other official action of Local Government issued in accordance with its land development regulations adopted pursuant to s. 163.3202, FS, and having the effect of permitting the development of land.
N. EDUCATIONAL FACILITY – any structure, land, or use that includes a public or private kindergarten through 12th grade school, charter school, magnet school, college campus, or university campus. The term does not include space used for educational purposes within a multi-tenant building or flight schools.
O. HEIGHT - for the purpose of determining the height limits in all zones set forth in this regulation and shown on the zoning map.
P. HORIZONTAL SURFACE - a horizontal plane 150 feet above the established Airport Elevation, the perimeter of which in plan coincides with the perimeter of the horizontal zone.
Q. LANDFILL - has the same meaning as provided in s. 403.703, FS.
R. LOCAL GOVERNMENT - The county or municipality exercising land use jurisdiction under s. 163.3171, FS, as to the use and development of lands within its territorial limits. For purposes of these airport zoning regulations the Local Government shall be the (Name of Political Subdivision).
S. MAPS - as referenced below in (4), a graphic or series of graphics illustrating the respective airport surfaces and or zones surrounding the Airport. Maps are maintained within the (insert local government office) for viewing.
T. NONCONFORMING USE - any pre-existing structure, object of natural growth, or use of land which lawfully exists at a specific height at the time these regulations were adopted, but which existence or height is inconsistent with these regulations in their present form.
U. NONPRECISION INSTRUMENT RUNWAY - any runway having an instrument approach procedure utilizing air navigational 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.
V. OBSTRUCTION – may also be referred to as Airport Obstruction; means any object of natural growth or terrain, or permanent or temporary construction or alteration, including equipment or materials used and any permanent or temporary apparatus, or alteration of any permanent or

temporary existing structure by a change in its height, including appurtenances, or lateral dimensions, including equipment or material used therein, existing or proposed which exceeds the federal obstruction standards contained in 14 CFR, Part 77, Subpart C.

W. PERSON - an individual, firm, copartnership, corporation, company, association, joint stock association, or body politic, and includes any trustee, receiver, assignee, or other similar representative thereof.

X. PRECISION INSTRUMENT RUNWAY - any runway having an existing instrument approach procedure utilizing an Instrument Landing System, or a Precision Approach Radar, or any runway for which a precision approach system is planned and is so indicated by an FAA approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document, or military service military airport planning document.

Y. PRIMARY SURFACE - a surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.

Z. PUBLIC-USE AIRPORT – an airport, publicly or privately owned, licensed by the state, which is open for use by the public without a requirement for prior approval of the airport owner or operator.

AA. RUNWAY(S) - those defined area on an airport prepared for landing and takeoff of aircraft along its length.

BB. RUNWAY PROTECTION ZONE – an area at ground level beyond the runway end to enhance the safety and protection of people and property on the ground. The Runway Protection Zone (RPZ) is trapezoidal in shape and centered about the extended runway center lines of each of the runways, and begins 200 feet beyond the end of the area suitable for takeoff and landing.

CC. STRUCTURE - any object constructed, erected, altered, or installed including, but not limited to buildings, towers, smoke-stacks, utility poles, power generation equipment, and overhead transmission lines.

DD. SUBSTANTIAL MODIFICATION - any repair, reconstruction, rehabilitation, or improvement of a structure, the actual cost of which equals or exceeds 50 percent of the market value of the structure.

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

FF. 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.

GG. 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 designation indicated on an FAA-approved airport layout plan, a military service approved military airport layout plan, or by any planning document submitted to the FAA by competent authority.

4. AIRPORT ZONES OF INFLUENCE

Lands adjacent to and surrounding (Name of Airport) as identified below and referenced in maps within the (Type of Political Subdivision) defined herein are subject to the following standards; lands located within

the surfaces and zones below but not within the (Type of Political Subdivision) are regulated by (appropriate authority).

A. CIVIL AIRPORT IMAGINARY SURFACES

Airspace Height Limitations. Buildings, structures or similar shall not be permitted within the surfaces identified below except as may be permitted below.

a. Civil Airport Imaginary Surfaces. Criteria apply to all sites lying beneath the primary, approach, transitional, horizontal, and conical surfaces. The various surfaces and height restrictions are as follows and are generally depicted on the drawing designated as Figure 31-300.1, "Civil Airport Imaginary Surface."

b. Primary Surface. A surface located at each end of a runway which is longitudinally centered on each runway, extending two hundred (200) feet beyond each end of that specially prepared hard surface runway with the width specified for the most precise approach existing or planned for either end of that runway. The primary surface ends at each runway end for all runways without a specially prepared hard surface. The width of each primary surface is as follows:

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

(2) 500 feet for utility runways having non-precision instrument approaches.

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

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

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

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

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

c. Horizontal Surface. A plane around each airport, at a fixed elevation of one-hundred and fifty (150) feet above ground level with an outer boundary the perimeter of which is constructed by swinging arcs or specified radii from the center of each end of the primary surface of the airport's runways and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is: (1) five thousand (5,000) feet for all runways designated as utility or visual and (2) ten thousand (10,000) feet for all other runways. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface. The airport elevation is based on information obtained from the Florida Aviation Database which is subject to periodic adjustment.

d. Conical Surface. A surface extending outward from the periphery of the airport's horizontal surface at a slope of 20 to 1 for a distance of four thousand (4,000) feet.

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

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

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

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

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

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

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

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

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

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

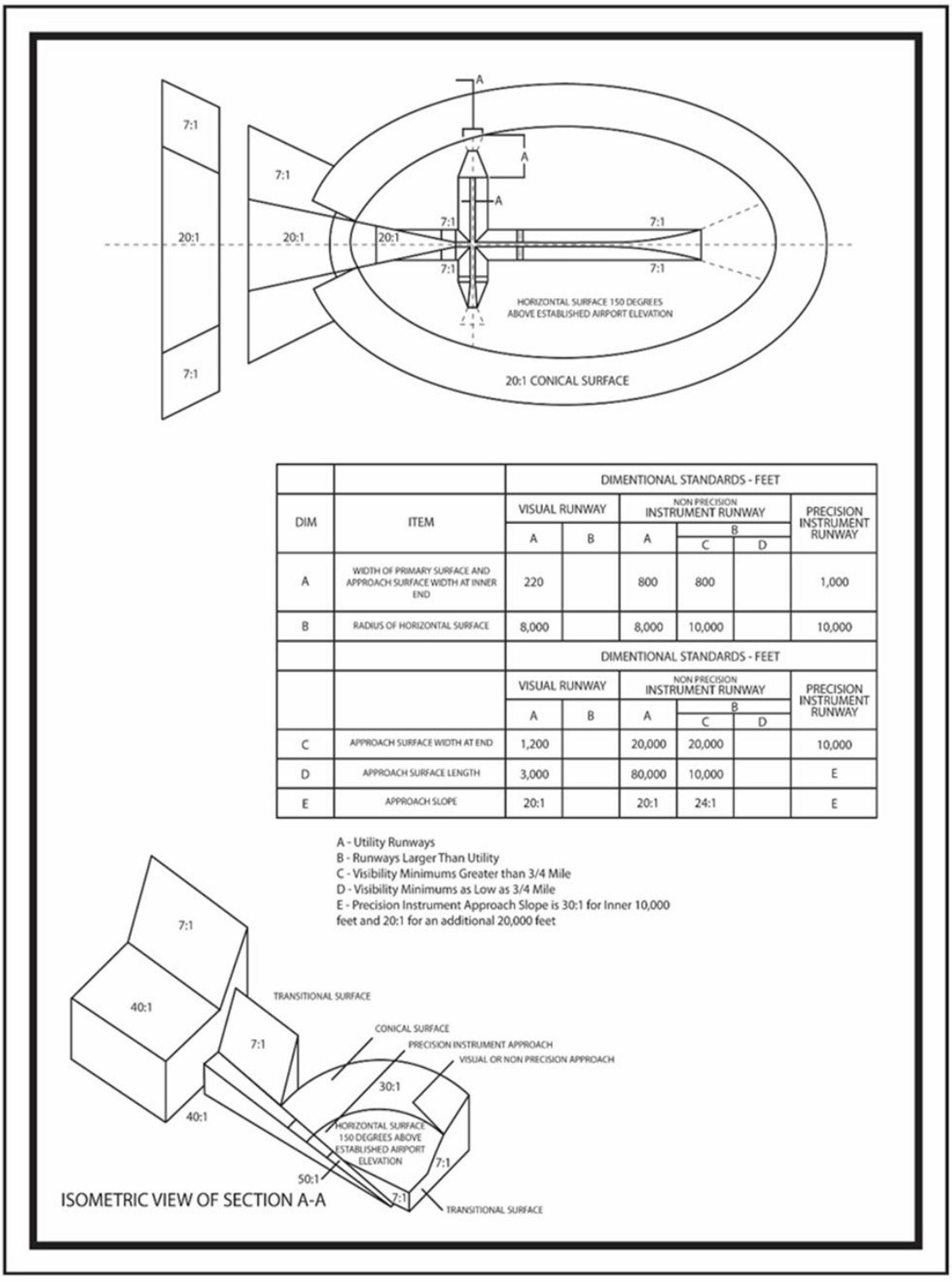
(ii) 10,000 feet at a slope of 34 to 1 for all non-precision instrument runways other than utility; and

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

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

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

g. Height Limitations. No structure or obstruction, including, without being limited to, wireless communications tower or antenna, shall be erected to a height which would affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities.



		DIMENTIONAL STANDARDS - FEET					
DIM	ITEM	VISUAL RUNWAY		NON PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B C	B D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	220		800	800		1,000
B	RADIUS OF HORIZONTAL SURFACE	8,000		8,000	10,000		10,000
		DIMENTIONAL STANDARDS - FEET					
		VISUAL RUNWAY		NON PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B C	B D	
C	APPROACH SURFACE WIDTH AT END	1,200		20,000	20,000		10,000
D	APPROACH SURFACE LENGTH	3,000		80,000	10,000		E
E	APPROACH SLOPE	20:1		20:1	24:1		E

A - Utility Runways
B - Runways Larger Than Utility
C - Visibility Minimums Greater than 3/4 Mile
D - Visibility Minimums as Low as 3/4 Mile
E - Precision Instrument Approach Slope is 30:1 for Inner 10,000 feet and 20:1 for an additional 20,000 feet

Figure XX: Civil Airport Imaginary Surface

B. LAND USE

Land Use and Noise are understood to include regulations based on the potential impacts from noise and land use compatibility on lands adjacent to the airport.

a. Notwithstanding any other provisions of the overlay, no use may be made of land or water within any zone established by this Code in such a manner as to create electrical interference with navigational signals or radio communication between the Airport and aircraft, make it difficult for pilots to distinguish between Airport lights and others, result in glare in the eyes of pilots using the Airport, impair visibility in the vicinity of the Airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the Airport.

Except as otherwise provided herein, the following land uses, structures, and activities shall be prohibited:

i. Sanitary landfill that is located:

a) within 10,000 feet from the nearest point of any runway used or planned to be used by turbine aircraft at the Airport;

b) within 5,000 feet from the nearest point of any runway used only by non-turbine aircraft;

c) outside the perimeters defined in subparagraphs i.(a) and i.(b) above but still within the lateral limits of the civil airport imaginary surfaces defined in 14 CFR, s. 77.19;

d) more than 10,000 feet from the nearest point of any runway at the Airport, but still within the lateral limits of the civil airport imaginary surfaces depicted in the Airspace Drawings; or

e) so that it attracts or sustains hazardous bird movements from feeding, water, or roosting areas into or across the runways or approach and departure patterns of aircraft. The operator of such landfill must be required to incorporate bird management techniques or other practices to minimize bird hazards to airborne aircraft.

ii. Restricting new incompatible uses, activities, or substantial modifications to existing incompatible uses within the Airport's Runway Protection Zones.

iii. Non-compatible land uses, except where such land use is specifically contemplated therein, with appropriate mitigation or similar techniques described therein.

iv. Residential use and any educational use, with the exception of aviation school facilities, within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline.

This standard 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 facility or site in existence on July 1, 1993.

C. PERMITS REQUIRED

a. Permits shall be required from the FDOT Aviation Office, or (Name of Political Subdivision), as may be applicable.

Airport Zoning Permit Applications submitted to (Political Subdivision) for development shall be provided to the Department's Aviation Office in accordance with s. 333.025(4), Florida Statutes. The address for the Aviation Office is:

Aviation Office, Airspace and Land Use Manager

Florida Department of Transportation

605 Suwannee Street, MS 46

Tallahassee, FL 32399-0450

i. A person proposing to construct, alter, or allow an airport obstruction in an airport hazard area must apply for a permit. A permit may not be issued if it will allow the establishment or creation of an airport hazard or if it will permit a nonconforming obstruction to become a greater hazard to air navigation than it was when the applicable airport protection zoning regulation was adopted which allowed the establishment or creation of the obstruction, or than it is when the application for a permit is made.

ii. Each application for a permit shall indicate the purpose for which the permit is desired, with sufficient particularity to determine whether the resulting use, structure, or tree would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted. Vertical height shall be measured from the highest point on the ground along the periphery of the structure or tree to the highest point on the structure or tree.

iii. If it is determined that a nonconforming obstruction has been abandoned or is more than 80 percent torn down, destroyed, deteriorated, or decayed, a permit may not be granted if it would allow the obstruction to exceed the applicable height limit or otherwise deviate from the airport protection zoning regulations. Whether or not an application is made for a permit under this subsection, the owner of the nonconforming obstruction may be required, at his or her own expense, to lower, remove, reconstruct, alter, or equip such obstruction as may be necessary to conform to the current airport protection zoning regulations. If the owner of the nonconforming obstruction neglects or refuses to comply with such requirement for 10 days after Notice, the administrative agency, including but not limited to FAA and/or FDOT, may report the violation to the (Type of Political Subdivision), as applicable.

iv. Owner(s) of the obstruction shall be required to install, operate, and maintain thereon, at the owner's expense, marking and lighting in conformance with the specific standards established by the FAA.

b. Consideration of Issuing Permits. The following items shall be taken into consideration during the review, including subsequent approval and or denial, of any permits within the AO Airport Overlay Zoning District. Review and approval of an application may be deferred or denied pending information from the Applicant and from FDOT and or FAA, as may be applicable, and shall consider the following in its review:

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

ii. The safe and efficient use of navigable airspace.

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

iv. The effect of the construction or alteration on the state licensing standards for a public-use airport contained in Chapter 330, FS, and regulations adopted thereunder.

v. The character of existing and planned flight operations and developments at public-use airports.

vi. Federal airways, visual flight rules, flyways and corridors, and instrument approaches as designated by the FAA.

vii. The effect of the construction or alteration of the proposed structure on the minimum descent altitude or the decision height at the affected airport.

viii. The cumulative effects on navigable airspace of all existing structures and all other known proposed structures in the area.

ix. Additional requirements as may be adopted within these regulations pertinent to the evaluation and protection of airspace and airport operations.

c. Appeals of permits shall be heard by the Board of Adjustment. An appeal shall be filed and subsequently heard consistent with the provisions defined in s. 333.09, FS, and consistent with the (Name of Political Subdivision) Zoning Code.

5. JUDICIAL REVIEW

a. Any person, political subdivision, or joint airport zoning board affected by a decision of (Name of Political Subdivision) or its administrative agency may apply for judicial relief to the circuit court in the judicial circuit where the political subdivision is located within 30 days after rendition of the decision. Review shall be by petition for writ of certiorari, which shall be governed by the Florida Rules of Appellate Procedure.

b. The court has exclusive jurisdiction to affirm, reverse, or modify the decision on the permit or other Determination from which the appeal is taken and, if appropriate, to order further proceedings by (Name of Political Subdivision) or its administrative agency. The findings of fact by (Name of Political Subdivision) or its administrative agency, if supported by substantial evidence, shall be accepted by the court as conclusive, and an objection to a decision of (Name of Political Subdivision) or its administrative agency may not be considered by the court unless such objection was raised in the underlying proceeding.

c. If airport zoning regulations adopted under this chapter are held by a court to interfere with the use and enjoyment of a particular structure or parcel of land to such an extent, or to be so onerous in their application to such a structure or parcel of land, as to constitute a taking or deprivation of that property in violation of the State Constitution or the Constitution of the United States, such holding shall not affect the application of such regulations to other structures and parcels of land, or such regulations as are not involved in the particular decision.

d. A judicial appeal to any court may not be permitted under this section until the appellant has exhausted all of its remedies through application for local government permits, exceptions, and appeals.

6. ACQUISITION OF AIR RIGHTS

If a nonconforming obstruction is determined to be an airport hazard and the owner will not remove, lower, or otherwise eliminate it; the approach protection necessary cannot, because of constitutional limitations, be provided by airport zoning regulations under Chapter 333, *FS*; or it appears advisable that the necessary

approach protection be provided by acquisition of property rights rather than by airport zoning regulations, the political subdivision within which the property or nonconforming obstruction is located, or the political subdivision owning or operating the airport or being served by it, may acquire, by purchase, grant, or condemnation in the manner provided by Chapter 73, FS, such property, air right, avigation easement, or other estate, portion, or interest in the property or nonconforming obstruction or such interest in the air above such property, in question, as may be necessary to effectuate the purposes of this chapter, and in so doing, if by condemnation, to have the right to take immediate possession of the property, interest in property, air right, or other right sought to be condemned, at the time, and in the manner and form, and as authorized by Chapter 74, FS. In the case of the purchase of any property, easement, or estate or interest therein or the acquisition of the same by the power of eminent domain, the political subdivision making such purchase or exercising such power shall, in addition to the damages for the taking, injury, or destruction of property, also pay the cost of the removal and relocation of any structure or any public utility that is required to be moved to a new location.

7 ENFORCEMENT AND REMEDIES

a. Each violation of Chapter 333, FS, or of any airport zoning regulations, orders, or rulings adopted or made pursuant to Chapter 333, FS, shall constitute a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083, and each day a violation continues to exist shall constitute a separate offense.

b. In addition, (Name of Political Subdivision) may institute in any court of competent jurisdiction an action to prevent, restrain, correct, or abate any violation of Chapter 333, FS, or of airport zoning regulations adopted under Chapter 333, FS, or of any order or ruling made in connection with their administration or enforcement, and the court shall adjudge to the plaintiff such relief, by way of injunction, which may be mandatory, or otherwise, as may be proper under all the facts and circumstances of the case in order to fully effectuate the purposes of this chapter and of the regulations adopted and orders and rulings made pursuant thereto.

c. The Department may institute a civil action for injunctive relief in the appropriate circuit court to prevent violation of any provision of this chapter.

Medium

Disclaimer: This model ordinance is for illustration purposes only. Local governments are ultimately responsible for complying with all federal, state, and local requirements. Please ensure your airport zoning regulations comply with the most up-to-date federal, state, and local requirements.

THE (NAME OF POLITICAL SUBDIVISION) AIRPORT ZONING ORDINANCE

1. TITLE

These regulations shall be known as the (Name of Political Subdivision) Airport Zoning Regulations.

2. PURPOSE AND INTENT

The purpose of these airport zoning regulations is to provide both airspace protection and land use compatibility in relation to the normal operation of the (Number of Airports in Political Subdivision) airport(s) licensed for public-use by the State of Florida Department of Transportation (FDOT) in (Name of Political Subdivision), Florida. These facilities include (Name(s) of Airport(s)).

These regulations, through the establishment of airport zones and corresponding regulations, provide for the independent review of development proposals in order to promote the public interest in safety, health, and general welfare within the territorial limits over which (Name of Political Subdivision) has jurisdiction, and to ensure that all airports licensed for public-use in the (Type of Political Subdivision) can effectively function.

Therefore, (Name of Political Subdivision) deems it necessary to regulate the uses of land located around said airports relative to the:

- height of structures and objects of natural growth on such land;
- uses of land in areas subject to airport noise;
- uses of land in areas subject to aircraft overflight potential;
- establishment of residential use or educational facilities of public and private schools on such land;
- uses of land which result in the generation of in-flight visual or electronic interference; and
- uses of land which result in aircraft bird strike hazards.

There is hereby adopted and established these airport zoning regulations pursuant to the authority conferred on (Name of Political Subdivision) by Chapters 163 and 333, Florida Statutes (FS), as they may be amended from time to time.

3. DEFINITIONS

As used in these regulations, unless the context otherwise requires:

A. AERONAUTICAL STUDY - a Federal Aviation Administration (FAA) study, conducted in accordance with the standards of 14 CFR, Part 77, Subpart C, and FAA policy and guidance, on the effect of proposed construction or alteration upon the operation of air navigation facilities and the safe and efficient use of navigable airspace.

B. AIRPORT - any area of land or water designed and set aside for the landing and taking-off of aircraft and used or to be used, in the interest of the public for such purpose.

C. AIRPORT HAZARD – an obstruction to air navigation which affects the safe and efficient use of navigable airspace or the operation of planned or existing air navigation and communication facilities.
D. AIRPORT HAZARD AREA – any area of land or water upon which an airport hazard might be established.
E. AIRPORT LAND USE COMPATIBILITY ZONING – defined in Chapter 333, FS, as airport zoning regulations governing the use of land on, adjacent to, or in the immediate vicinity of airports.
F. AIRPORT LAYOUT PLAN – a set of scaled drawings that provide a graphic representation of the existing and future development plan for the airport and demonstrate the preservation and continuity of safety, utility, and efficiency of the airport.
G. AIRPORT MASTER PLAN - a comprehensive plan of an airport which typically describes current and future plans for airport development designed to support existing and future aviation demand.
H. AIRPORT PROTECTION ZONING REGULATIONS - defined in Chapter 333, FS, as airport zoning regulations governing airport hazards.
I. AIRPORT REFERENCE POINT - the approximate geometric center of the runways of an airport, expressed by its latitude and longitude, as shown on the approved airport layout plan of each publicly owned airport, and identified as the "future airport reference point."
J. AIRPORT ZONING ADMINISTRATOR - the person designated by the (Name of Political Subdivision) to administer and enforce the requirements of these regulations. (Note, may also serve as the Municipal Planning Director, Zoning Manager, or similar.)
K. AVERAGE SOUND LEVEL – the level, in decibels, of the mean-square, A-weighted sound pressure during a specified period, with reference to the square of the standard reference sound pressure of 20 micropascals.
L. AVIGATION EASEMENT - the assignment of a right to an airport proprietor to a portion of the total benefits of the ownership of real property.
M. DAY/NIGHT AVERAGE SOUND LEVEL (DNL) - the 24-hour average sound level, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between midnight and 7:00 a.m., and between 10:00 p.m., and midnight, local time. The symbol for DNL is Ldn.
N. DEPARTMENT – the Florida Department of Transportation as created under Section 20.23, FS.
O. EDUCATIONAL FACILITY – any structure, land, or use that includes a public or private kindergarten through 12th grade school, charter school, magnet school, college campus, or university campus. The term does not include space used for educational purposes within a multi-tenant building.
P. LANDFILL - any solid waste land disposal area for which a permit, other than a general permit, is required by Section 403.707, FS, and which receives solid waste for disposal in or upon land. The term does not include a land-spreading site, an injection well, a surface impoundment, or a facility for the disposal of construction and demolition debris.
Q. NOISE LEVEL REDUCTION – the amount of noise level reduction in decibels achieved through incorporation of noise attenuation (between outdoor and indoor levels) in the design and construction of a structure.
R. NONCONFORMING USE - any existing structure, object of natural growth, or use of land that is inconsistent with the provisions of these regulations at its time of adoption.
S. NONPRECISION INSTRUMENT RUNWAY - any runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area-type navigation equipment, for which a straight-in nonprecision instrument approach procedure has been

approved or planned, and for which no precision approach facilities are planned or indicated on an FAA planning document or military service military airport planning document.

T. OBJECT OF NATURAL GROWTH - any organism of the plant kingdom, including trees.

U. OBSTRUCTION – any existing or proposed object or structure construction or alteration that exceeds the federal obstruction standards contained in 14 CFR, Part 77, Subpart C. The term includes:
   i. Any object of natural growth or terrain;
   ii. Permanent or temporary construction or alteration, including equipment or materials used and any permanent or temporary apparatus; or
   iii. Alteration of any permanent or temporary existing structure by a change in the structure's height, including appurtenances, lateral dimensions, and equipment or materials used in the structure.

V. OCCUPIED ROOMS - rooms within enclosed structures that are, or may reasonably be expected to be, used for human activities including, but not limited to, sound communications, education or instruction, sleeping, eating, entertainment, or the use of telephones and other audio devices. See “Occupied Structure.”

W. OCCUPIED STRUCTURE - a structure with at least one (1) occupied room. See "Occupied Rooms."

X. OTHER-THAN-UTILITY RUNWAY - any existing or planned runway that is constructed for, and intended to be used by, all types of aircraft, including those having gross weights greater than 12,500 pounds. See “Runway.”

Y. PERSON - an individual, firm, copartnership, corporation, company, association, joint stock association, or body politic and includes any trustee, receiver, assignee, or other similar representative thereof.

Z. POLITICAL SUBDIVISION - the local government of any county, municipality, town, village, or other subdivision or agency thereof, or any district or special district, port commission, port authority, or other such agency authorized to establish or operate airports in the state.

AA. PRECISION INSTRUMENT RUNWAY - any runway having an existing instrument approach procedure utilizing an Instrument Landing System, or a Precision Approach Radar, or any runway for which a precision approach system is planned and is so indicated by an FAA-approved airport layout plan; a military service approved military airport layout plan; any other FAA planning document; or military service military airport planning document.

BB. PUBLIC-USE AIRPORT – an airport, publicly or privately owned, licensed by the state, which is open for use by the public.

CC. QUALIFIED ACOUSTICAL CONSULTANT - a person having sufficient training and experience in the science and technology of acoustics so as to be qualified to evaluate the adequacy of acoustical designs, materials, and methods of construction for the attenuation of noise.

DD. RUNWAY(S) - those existing or planned portions of each airport prepared for the landing and takeoff of aircraft, as shown on the approved airport layout plan of each publicly-owned airport, or those portions of each privately-owned airport prepared for the landing and takeoff of aircraft and identified as such by the Department. See “Nonprecision Instrument Runway,” “Precision Instrument Runway,” “Utility Runway,” “Other-Than-Utility Runway, “Visual Runway,” and “Runway End Elevation.”

EE. RUNWAY END ELEVATION - the elevation at each runway end centerline, expressed in "feet Above Mean Sea Level (AMSL)," as shown on the approved airport layout plan of each publicly-owned airport. For each airport runway, the runway end elevation is that value reported by the

Florida Department of Transportation for each respective runway. This term has no application for runways of public-use seaplane bases. See "Runway."

FF. RUNWAY PROTECTION ZONE – an area at ground level beyond the runway end to enhance the safety and protection of people and property on the ground.

GG. SEAPLANE BASE – an airport only if its sea lanes are outlined by visual markers.

HH. SOUND EXPOSURE LEVEL – the level, in decibels, of the time integral of squared A-weighted sound pressure during a specified period or event, with reference to the square of the standard reference sound pressure of 20 micropascals and a duration of one second.

II. SOUND LEVEL - the quantity, in decibels, must be measured or analyzed with equipment having the "A" frequency weighting, filter characteristics, and the "slow response" characteristics as defined in International Electrotechnical Commission (IEC) Publication No. 179, d "Precision Sound Level Meters" as incorporated by reference in Part 150 under Section 150.11, FS. For purposes of this part, the tolerances allowed for general purpose, type 2 sound level meters in IEU 179 are acceptable.

JJ. STRUCTURE - any object constructed, erected, altered, or installed including, but not limited to buildings, towers, smoke stacks, utility poles, power generation equipment, and overhead transmission lines.

KK. SUBSTANTIAL MODIFICATION - any repair, reconstruction, rehabilitation, or improvement of a structure when the actual cost of the repair, reconstruction, rehabilitation, or improvement of the structure equals or exceeds 50 percent of the market value of the structure.

LL. UTILITY RUNWAY - any existing or planned runway that is constructed for and intended to be used by propeller-driven aircraft of 12,500 pounds maximum gross weight and less.

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

NN. YEARLY DAY-NIGHT AVERAGE SOUND LEVEL (YDNL) - the 365-day average, in decibels, day-night average sound level. The symbol for YDNL is also Ldn.

4. AIRPORT ZONES OF INFLUENCE

The (Name of Political Subdivision) hereby establishes two (2) airport zones of influence. Said zones are established to regulate land development in relation to the airports in the (Type of Political Subdivision) licensed for public use. The location of these airport zones of influence and restrictions on the use of land within said zones, are hereby established by these regulations. The boundaries of said zones and restrictions on the use of land within said zones, shall be changed only through the amendment of these regulations by the (Type of Political Subdivision and amending body).

Any application for land development within these airport zones of influence shall comply with these regulations, any applicable state or federal regulations, and any applicable requirements of the land development regulations of the (Name of Political Subdivision). The airport zones of influence established in these regulations include:

- the Airport Height Notification Zone; and
- the Airport Overflight Zone.

A) AIRPORT HEIGHT NOTIFICATION ZONES AND REGULATIONS

(A)1. ESTABLISHMENT OF ZONE

For each public-use airport in (Name of Political Subdivision), the boundary of the Airport Height Notification Zone established in these regulations is based on the runway configuration which is planned and documented as such in its approved airport layout plan, which is defined as the airport layout plan submitted by the owner of each such airport to the FAA for approval.

An Airport Height Notification Zoning Map series shall be maintained by (Name of Political Subdivision) based on an application of the boundaries set forth herein. This map shall be updated as necessary to reflect any changes in the documentation of the runway configuration on which said zone is based. The dimensions of the Airport Height Notification Zone boundaries as prescribed in these regulations shall serve as the authoritative source for said boundaries.

In the event a discrepancy arises between an Airport Height Notification Zone boundary depicted on the map and the boundary located by application of the definition of said boundary as set forth in these regulations, the boundary as prescribed by the latter shall prevail.

There is hereby established the Airport Height Notification Zone as an airport zone of influence. The Airport Height Notification Zone is established to regulate the height of structures and objects of natural growth in areas lying beneath the primary, approach, transitional, horizontal, and conical surfaces around each public use airport in the (Type of Political Subdivision). A site located in more than one of the described surfaces shall apply the most restrictive height limitation. The various surfaces are hereby established in Part 77 and defined as follows:

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

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

The conical surface is 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.

The primary surface is longitudinally centered on a runway. When the runway has a specially prepared hard surface (paved), the primary surface extends 200 feet beyond each end of that runway; but when the runway has no specially prepared hard surface (turf and water), the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway. The width of the primary surface is:

- 250 feet for utility runways having only visual approaches.

- 500 feet for utility runways having non-precision instrument approaches.
- For other than utility runways, the width is:
    - 500 feet for visual runways having only visual approaches.
    - 500 feet for non-precision instrument runways having visibility minimums greater than three-fourths statute mile.
    - 1,000 feet for a non-precision instrument runway having a non-precision instrument approach with visibility minimums as low as three-fourths of a statute mile and for precision instrument runways.
    - The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.

The approach surface, as defined by 14 CFR, Part 77.19(d), is a surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to each end of each runway based upon the type of approach available or planned for that runway end.

- 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 for that end of a utility runway with only visual approaches;
    - 1,500 feet for that end of a runway other than a utility runway with only visual approaches;
    - 2,000 feet for that end of a utility runway with a non-precision instrument approach;
    - 3,500 feet for that end of a non-precision instrument runway other than utility, having visibility minimums greater that three-fourths of a statute mile;
    - 4,000 feet for that end of a non-precision instrument runway, other than utility, having a non-precision instrument approach with visibility minimums as low as three-fourths statute mile; and
    - 16,000 feet for precision instrument runways.
- The approach surface extends for a horizontal distance of:
    - 5,000 feet at a slope of 20 to 1 for all utility and visual runways;
    - 10,000 feet at a slope of 34 to 1 for all non-precision instrument runways other than utility; and
    - 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.
- 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.

The transitional surface, as defined by 14 CFR, Part 77.19(e), extends outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface, and at right angles to the runway centerline.

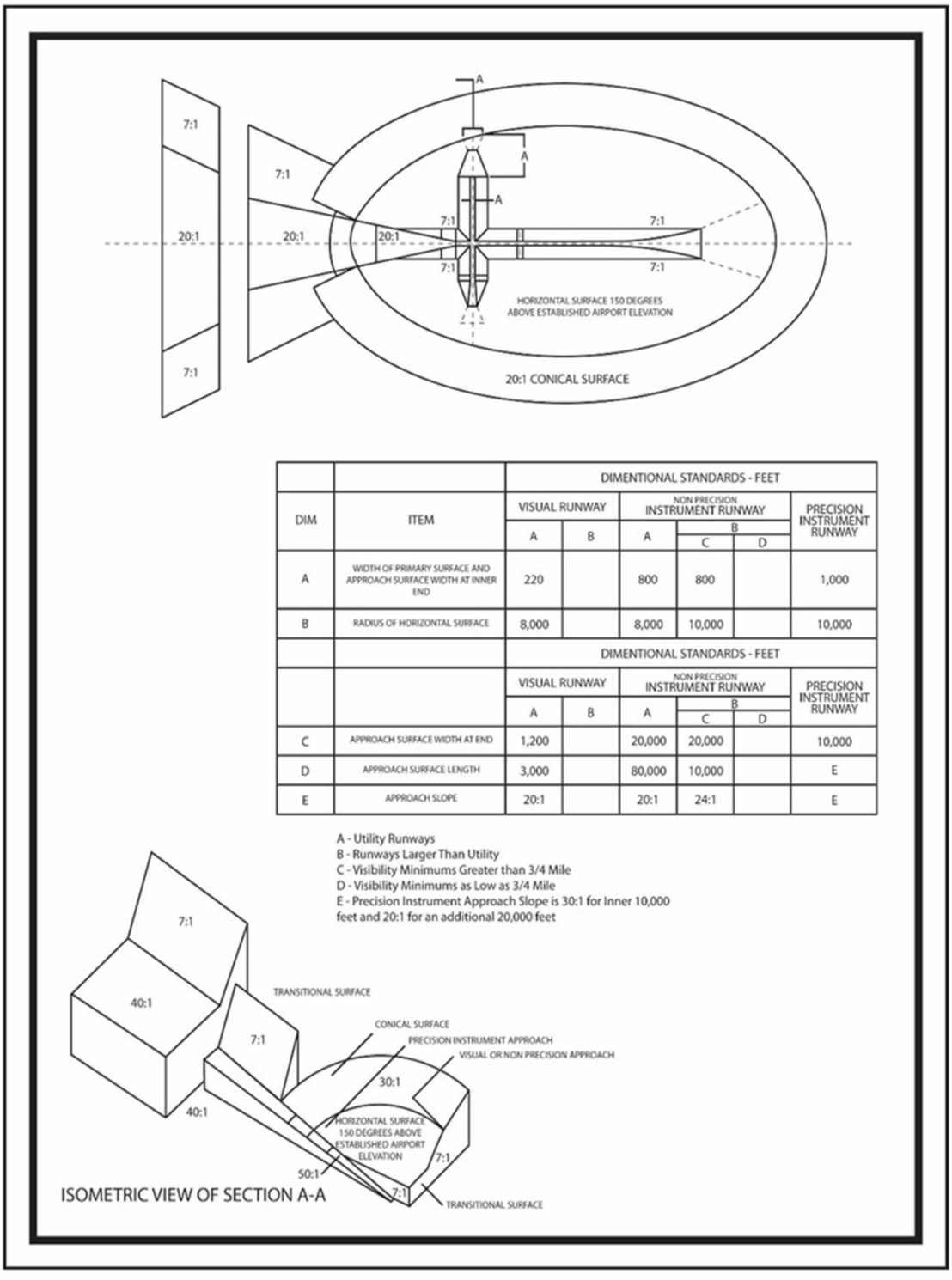
In addition to the above surfaces, Part 77.9 also provides for Notice of Proposed Construction or Alteration to be filed to the FAA if any of the following types of construction or alteration are proposed:

- Any construction or alteration that is more than 200 feet above ground level at its site.

- Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:
    - 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport with its longest runway more than 3,200 feet in actual length, excluding heliports.
    - 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport with its longest runway no more than 3,200 feet in actual length, excluding heliports.
    - 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport
- Any highway, railroad, or other traverseway for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance; 15 feet for any other public roadway; 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road; 23 feet for a railroad; and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of this section.
- Any construction or alteration on any of the following airports and heliports:
    - A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;
    - A military airport under construction or an airport under construction that will be available for public use;
    - An airport operated by a federal agency or the Department of Defense (DOD).
    - An airport or heliport with at least one FAA-approved instrument approach procedure.
- Notice is not required for construction or alteration of:
    - Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;
    - Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;
    - Any construction or alteration for which Notice is required by any other FAA regulation.
    - Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

(A)2. CONCEPTUAL AIRPORT SURFACES

The various surfaces and height restrictions are generally depicted on the drawing below labeled as Civil Airport Imaginary Surfaces:



DIM	ITEM	DIMENTIONAL STANDARDS - FEET					
		VISUAL RUNWAY		NON PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B C	B D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	220		800	800		1,000
B	RADIUS OF HORIZONTAL SURFACE	8,000		8,000	10,000		10,000
		DIMENTIONAL STANDARDS - FEET					
		VISUAL RUNWAY		NON PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B C	B D	
C	APPROACH SURFACE WIDTH AT END	1,200		20,000	20,000		10,000
D	APPROACH SURFACE LENGTH	3,000		80,000	10,000		E
E	APPROACH SLOPE	20:1		20:1	24:1		E

A - Utility Runways
B - Runways Larger Than Utility
C - Visibility Minimums Greater than 3/4 Mile
D - Visibility Minimums as Low as 3/4 Mile
E - Precision Instrument Approach Slope is 30:1 for Inner 10,000 feet and 20:1 for an additional 20,000 feet

Figure XX: Civil Airport Imaginary Surfaces

(A)3. AIRPORT HEIGHT NOTIFICATION REGULATIONS

All development proposals for land lying within an Airport Height Notification Zone shall be reviewed for conformance with the federal obstruction standards contained in 14 CFR, Part 77, for civil airports.

Relative to all (Name of Political Subdivision) public-use airports, any proposed land development shall be considered a "potential airport obstruction," if the proposed land development would result in a structure or object of natural growth having a height which would exceed the previously prescribed standards.

Any person that is planning to sponsor construction or alterations which may affect navigable airspace, must file a Notice of Proposed Construction or Alteration (FAA Form 7460-1) either electronically or manually with the FAA. No land development proposal determined to result in a structure or object of natural growth that constitutes a “potential airport obstruction” shall be approved for construction unless an Airport Obstruction Permit is issued by the Airport Zoning Administrator and has been coordinated through the FAA.

B) AIRPORT OVERFLIGHT ZONES AND REGULATIONS

(B)1. ESTABLISHMENT OF ZONE

There is hereby established the Airport Overflight Zone as an airport zone of influence. The Airport Overflight Zone is established to regulate the uses of land lying in specified areas above which aircraft must routinely operate at low altitudes and climb from or descend to the runways of public-use airports. Within an Airport Overflight Zone, certain land uses are restricted or prohibited due to land use characteristics which could result in further death, injury, and property damage in the event of an aircraft accident, as such areas are more likely, statistically, to be exposed to accidents involving aircraft climbing from or descending to the runway at low altitudes.

The Airport Overflight Zone includes the area over which aircraft routinely operate at low altitudes of and includes protections against:

- Development within runway protection zones
- Development within airport noise zones
    - Development of educational or residential land uses
    - Development within FAA approved noise studies
- Development of landfills

For each publicly owned, public-use airport in (Name of Political Subdivision), the boundary of the Airport Overflight Zone established in these regulations is based on the runway configuration documented in its approved airport layout plan, which is defined as the airport layout plan submitted by the owner of each such airport to the FAA for approval. For each privately owned, public-use airport in (Name of Political Subdivision), the boundary of the Airport Overflight Zone established in this section is based on the existing runway configuration documented by the Department.

An Airport Overflight Zoning Map series shall be maintained by (Name of Political Subdivision) based on an application of the boundaries set forth herein. These maps shall be updated as necessary to reflect any changes in the documentation of the runway configuration on which said zone is based. The Airport Overflight Zone boundaries as prescribed in these regulations shall serve as the authoritative source for said boundaries.

In the event a discrepancy arises between an Airport Overflight Zone boundary depicted on the maps and the boundary located by application of the definition of said boundary as set forth in these regulations, the boundary as prescribed by the latter shall prevail.

(B)2. AIRPORT OVERFLIGHT ZONE REGULATIONS

(B)2.a. PROHIBITED LAND USES

The following types of land uses shall be prohibited within the established Airport Overflight Zone:

- Development within runway protection zones
  - The restriction of new incompatible uses, activities, or substantial modifications to existing incompatible uses within runway protection zones
  - To the extent feasible, land within the runway protection zones should be owned by the airport and should be clear of all objects, both man-made and natural
- Development within airport noise zones
  - An Airport Noise Zone has been established around each public-use airport in the (Type of Political Subdivision) to regulate land uses sensitive to sound levels generated by the routine operation of each such airport. Within the Airport Noise Zone, land uses restrictions and special construction standards are established to minimize impacts of airport-generated noise as following:
    - Development of educational or residential land uses
    - For the public-use airports that have not conducted a noise study, residential construction and any educational facility is prohibited, with the exception of aviation school facilities, within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline. This may 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 facility or site in existence on July 1, 1993.
    - Development within the contours of FAA approved noise studies
  - Where a public-use airport has conducted a noise study in accordance with 14 CFR, Part 150, or where a public-use airport has established noise contours pursuant to another noise study approved by the FAA, the prohibition of incompatible uses, as established in the noise study in 14 CFR, Part 150, or as a part of an alternative FAA-approved public study, within the noise contours established by any of these studies, except if such uses are specifically contemplated by such study with appropriate mitigation or similar techniques described in the study.
  - To determine the extent of the noise impact around an airport, airports must develop YDNL contours. Continuous contours must be developed for levels of 65, 70, and 75 (additional contours may be developed and depicted when appropriate). In those areas where YDNL values are 65 YDNL or greater, the airport operator shall identify land uses and determine land use compatibility in accordance with the standards and procedures of 14 CFR, Part 150. [2]

[2] **Appendix G** contains the current land use restriction table provided in 14 CFR, Part 150. This table provides the maximum yearly day-night average sound level for various types of land uses in categories including residential, public-use, commercial use, and manufacturing and industry.

- An Airport Noise Zone map series shall be maintained for (Name of Political Subdivision) based on the application of the boundaries set forth herein. These maps shall be updated as necessary to reflect any changes in the documentation of forecast day/night average sound levels on which said zone is based, including changes based on an official 14 CFR Part 150 Study. The Airport Noise Zone boundaries as prescribed in these regulations shall serve as the authoritative source for said boundaries.
- The Airport Zoning Administrator may approve any method of construction consistent with the provisions of these regulations, and assure that the proposed design is satisfactory, and that it complies with the applicable sound level reduction requirements.
- The Airport 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 and materials.
- Prior to the granting of final approval of any finished structure, the Airport Zoning Administrator may require, at the expense of the owner, a field test by a qualified acoustical consultant to verify that the sound level reduction performance of said structure meets any applicable sound level reduction requirements.

- Development of landfills
  - The prohibition of new landfills and the restriction of existing landfills within the following areas:
    - Within 10,000 feet from the nearest point of any runway used or planned to be used by turbine aircraft.
    - Within 5,000 feet from the nearest point of any runway used by only non-turbine aircraft.
    - Outside the perimeters defined above, but still within the lateral limits of the civil airport imaginary surfaces defined in 14 CFR, s. 77.19. Case-by-case review of such landfills is advised.

C) DETERMINATION OF BOUNDARIES

In determining the location of airport zone boundaries, the following rules shall apply:

- 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 airport zone boundary;
- Where boundaries are shown to enter or cross platted lots, property lines of lots as they exist at the time of adoption of these regulations shall be the airport zone boundary;
- Notwithstanding the above, where boundaries are shown on any platted lot, provisions of the more restrictive airport zone shall apply;
- Where boundaries are shown on unsubdivided property of less than five (5) acres in area, provisions of the more restrictive airport zone shall apply; and
- Where boundaries are shown on unsubdivided property of five (5) or more acres in area, the location shall be determined by the Airport Noise Zone boundary the Airport Height Notification Zone or Airport Overflight Zone boundary located by application of the definition of said zone boundaries set forth in these regulations.

D) NONCONFORMING USES

No land use may be permitted in any airport zone of influence unless it conforms to the specific limitations set forth in these regulations. The requirements of these regulations shall not be construed to necessitate

the removal, lowering, alteration, or other change of any nonconforming use. Nothing in these regulations should be construed to require sound conditioning or other alteration of any nonconforming use.

If a nonconforming obstruction has been abandoned or is more than 80 percent torn down, destroyed, deteriorated, or decayed, a permit may not be granted if it would allow the obstruction to exceed the applicable height limit or otherwise deviate from the Airport Zoning Regulations. Whether or not an application is made for a permit, the owner of the nonconforming obstruction may be required, at his or her own expense, to lower, remove, reconstruct, alter, or equip such obstruction as may be necessary to conform to the current Airport Zoning Regulations. If the owner of the nonconforming obstruction neglects or refuses to comply with such requirement for 10 days after Notice, the (Type of Political Subdivision) may proceed to have the obstruction so lowered, removed, reconstructed, altered, or equipped and assess the cost and expense thereof upon the owner of the obstruction or the land whereon it is or was located.

If a nonconforming obstruction is determined to be an airport hazard and the owner will not remove, lower, or otherwise eliminate it; the approach protection necessary cannot, because of constitutional limitations, be provided by the (Name of Political Subdivision) Airport Zoning Regulations; or it appears advisable that the necessary approach protection be provided by acquisition of property rights rather than by the (Name of Political Subdivision) Airport Zoning Regulations, the (type of Political Subdivision) within which the property or nonconforming obstruction is located, or the (type of Political Subdivision) owning or operating the airport or being served by it, may acquire , by purchase, grant, or condemnation in the manner provide by Chapter 73 and 74, FS.

5. ADMINISTRATION AND ENFORCEMENT

A) DUTIES OF THE AIRPORT ZONING ADMINISTRATOR

It shall be the duty of the Airport Zoning Administrator to administer and enforce the regulations prescribed herein. Permits shall be requested through the submission of an application to the Airport Zoning Administrator.

Temporary or conditional permits pending completion of review, comment, or approval by any other local, state, or federal agency shall not be issued.

B) PERMITS

Any applicant receiving a "Notice of Potential Airport Obstruction" may apply to the Airport Zoning Administrator for an Airport Obstruction Permit.

Procedures for Requesting an Airport Obstruction Permit

The applicant shall submit a completed Airport Obstruction Permit application, as provided by the Airport Zoning Administrator, to include the final written Determination of the "Notice of Proposed Construction or Alteration" issued by the FAA.

Upon receipt of a complete permit application, the (Type of Political Subdivision) shall provide a copy of the application to the FDOT Aviation Office by certified mail, return receipt requested, or by a delivery service that provides a receipt evidencing delivery. To evaluate technical consistency, FDOT shall have a 15-day review period following receipt of the application, which shall run concurrently with the (Type of Political Subdivision) permitting process. Cranes, construction equipment, and other temporary structures in use or

in place for a period not to exceed 18 consecutive months are exempt from the FDOT's review, unless such review is requested by FDOT. The FDOT shall, within 30 days after receipt of an application for a permit, issue or deny a permit for the construction or alteration of an obstruction. The Department shall review permit applications for issuance by the Department in conformity with Section 120.60, FS.

Criteria for Granting an Airport Obstruction Permit

In determining whether to issue or deny a permit, the following shall be considered:

1. The safety of persons on the ground and in the air;
2. The safe and efficient use of navigable airspace;
3. The nature of the terrain and height of existing structures;
4. The effect of the construction or alteration on the state licensing standards for a public-use airport contained in Chapter 330, FS, and rules adopted thereunder;
5. The character of existing and planned flight operations and developments at public-use airports;
6. Federal airways, visual flight rules, flyways and corridors, and instrument approaches as designated by the FAA;
7. The effect of the construction or alteration of the proposed structure on the minimum descent altitude or the decision height at the affected airport;
8. The cumulative effects on navigable airspace of all existing structures and all other known proposed structures in the area; and
9. The (Type of Political Subdivision) shall require the owner of the obstruction to install, operate, and maintain thereon, at his or her own expense, marking and lighting in conformance with the specific standards established by the FAA.

Where the FAA has reviewed a proposed development and determined it would not affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities, the Airport Zoning Administrator may grant an Airport Obstruction Permit for a proposed development, provided that conditions are attached to said permit to ensure the installation, operation, and maintenance of appropriate obstruction marking, lighting, and/or flagging, if such obstruction marking, lighting, and/or flagging is required in its written Determination. No Airport Obstruction Permit shall be issued after the expiration date indicated on the FAA's written Determination. Each Airport Obstruction Permit issued shall specify a reasonable expiration date as a condition.

Where the FAA has reviewed a proposed land development request and determined it would affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities for civil airports, or the establishment of a "Hazard to Air Navigation," or both, no Airport Obstruction Permit shall be granted by the Airport Zoning Administrator.

(C) NOTIFICATION REQUIREMENTS

(C)1. NOTIFICATION OF AIRPORT NOISE POTENTIAL

The following notification requirement shall apply to property lying within any Airport Noise Zone defined in these regulations.

Constructive knowledge shall be made available to all purchasers of property located in any Airport Noise Zone defined in these regulations, as provided for in Section 498.037, FS, and Public Law 96 163 (49 United States Code [USC] 2107), as they may be amended from time to time.

- Public notice, via maps depicting said zones, shall be made available by the (Name of Political Subdivision).
- A disclosure statement shall be completed upon the sale of all residential property located in any such zone and shall be filed with the property deed.

(C)2. NOTIFICATION OF AIRCRAFT OVERFLIGHT POTENTIAL

The following notification requirement shall apply to property lying within any Airport Overflight Zone defined in these regulations.

Constructive knowledge shall be made available to all purchasers and users of property in any Airport Overflight Zone defined in these regulations, as provided for in Section 498.037, FS, and Public Law 96-163 (49 USC 2107), as they may be amended from time to time.

- Constructive knowledge shall be accomplished in the manner and form prescribed in Section (5)(c)1 of these regulations.
- When the end user of any property located in any Airport Overflight Zone defined in these regulations is not the purchaser, the purchaser shall convey the notification condition to the user. Such notification shall be in writing, shall be acknowledged by user's signature, and shall be accomplished prior to the user occupying or making any type of legally binding obligation to occupy said property. A copy of the user's acknowledgment shall be filed with the property deed.

When said property also lies partially or entirely within any Airport Noise Zone defined in these regulations, notification shall include specific reference to both airport noise and aircraft overflight potential.

6. JUDICIAL REVIEW

a. Any person, political subdivision, or joint airport zoning board affected by a decision of (Name of Political Subdivision) or its administrative agency may apply for judicial relief to the circuit court in the judicial circuit where the political subdivision is located within 30 days after rendition of the decision. Review shall be by petition for writ of certiorari, which shall be governed by the Florida Rules of Appellate Procedure.

b. The court has exclusive jurisdiction to affirm, reverse, or modify the decision on the permit or other Determination from which the appeal is taken and, if appropriate, to order further proceedings by (Name of Political Subdivision) or its administrative agency. The findings of fact by (Name of Political Subdivision) or its administrative agency, if supported by substantial evidence, shall be accepted by the court as conclusive, and an objection to a decision of (Name of Political Subdivision) or its administrative agency may not be considered by the court unless such objection was raised in the underlying proceeding.

c. If airport zoning regulations adopted under this chapter are held by a court to interfere with the use and enjoyment of a particular structure or parcel of land to such an extent, or to be so onerous in their application to such a structure or parcel of land, as to constitute a taking or deprivation of that property in violation of the State Constitution or the Constitution of the United States, such holding shall not affect the application of such regulations to other structures and parcels of land, or such regulations as are not involved in the particular decision.

d. A judicial appeal to any court may not be permitted under this section until the appellant has exhausted all of its remedies through application for local government permits, exceptions, and appeals.

7. ACQUISITION OF AIR RIGHTS

If a nonconforming obstruction is determined to be an airport hazard and the owner will not remove, lower, or otherwise eliminate it; the approach protection necessary cannot, because of constitutional limitations, be provided by airport zoning regulations under Chapter 333, FS; or it appears advisable that the necessary approach protection be provided by acquisition of property rights rather than by airport zoning regulations, the political subdivision within which the property or nonconforming obstruction is located, or the political subdivision owning or operating the airport or being served by it, may acquire, by purchase, grant, or condemnation in the manner provided by Chapter 73, FS, such property, air right, avigation easement, or other estate, portion, or interest in the property or nonconforming obstruction or such interest in the air above such property in question as may be necessary to effectuate the purposes of this chapter, and in so doing, if by condemnation, to have the right to take immediate possession of the property, interest in property, air right, or other right sought to be condemned, at the time, and in the manner and form, and as authorized by Chapter 74, FS. In the case of the purchase of any property, easement, or estate or interest therein or the acquisition of the same by the power of eminent domain, the political subdivision making such purchase or exercising such power shall, in addition to the damages for the taking, injury, or destruction of property, also pay the cost of the removal and relocation of any structure or any public utility that is required to be moved to a new location.

8 ENFORCEMENT AND REMEDIES

a. Each violation of Chapter 333, FS, or of any airport zoning regulations, orders, or rulings adopted or made pursuant to Chapter 333, FS, shall constitute a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083, and each day a violation continues to exist shall constitute a separate offense.

b. In addition, (Name of Political Subdivision) may institute in any court of competent jurisdiction an action to prevent, restrain, correct, or abate any violation of Chapter 333, FS, or of airport zoning regulations adopted under Chapter 333, FS, or of any order or ruling made in connection with their administration or enforcement, and the court shall adjudge to the plaintiff such relief, by way of injunction, which may be mandatory, or otherwise, as may be proper under all the facts and circumstances of the case in order to fully effectuate the purposes of this chapter and of the regulations adopted and orders and rulings made pursuant thereto.

c. The Department may institute a civil action for injunctive relief in the appropriate circuit court to prevent violation of any provision of this chapter.

APPENDICES

APPENDIX 1: AIRPORT NOISE ZONE LAND-USE COMPATIBILITY

(Insert Land Use Compatibility Matrix If Study Has Been Performed)

Chapter 2: Title 14 Code of Federal Regulations, Part 77—*Safe, Efficient Use, and Preservation of the Navigable Airspace*

Introduction to Part 77

The Federal Aviation Act of 1958 (Act) was an act of the United States (U.S.) Congress during the Eisenhower administration that created the Federal Aviation Agency (FAA). The Act empowered the newly created agency to oversee and regulate airline industry safety and the use of U.S. airspace by both military and civilian aircraft. The FAA then established the NAS to protect persons and property on the ground and provide a safe and efficient airspace environment for civil, commercial, and military aviation.

Florida's airspace has high-traffic capacity due to its multiple major commercial service and numerous general aviation (GA) airports. Resulting from high tourism demands, daily commercial traffic across the state is a large contributor to the high volume of overall air traffic. At the same time, there is substantial number of permanent and temporary structures being constructed in proximity to public-use and military airports. These projects require compliance with federal regulatory restrictions to identify potential impacts on the safe and efficient use of navigable airspace and air navigation facilities or equipment.

Definition: National Airspace System (NAS)

The common network of U.S. Airspace, including air navigation facilities, airports, and landing areas, aeronautical charts and information, associated rules, regulations and procedures, technical information, personnel, and material. System components shared jointly with military are also included.

To regulate the NAS, the FAA enacted 14 Code of Federal Regulations (CFR), Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace* (Part 77). Part 77 is designed to preserve and protect the national navigable airspace by evaluating and regulating the presence and effects of airspace obstructions. Part 77 provides the standards and procedures to evaluate the effect of proposed construction or alteration on safety in air commerce and the efficient use and preservation of the navigable airspace. A complete copy of 14 CFR, Part 77 is found in ***Appendix B.*** Section 77.1 established the:

- Requirements to provide Notice to the FAA of certain proposed construction or the alteration of existing structures[3]
- Standards used to determine obstructions to air navigation and navigational and communication facilities
- Process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace and air navigation facilities or equipment

[3] Providing "Notice to the FAA" means to submit Form 7460-1 to the FAA.

- Process to petition the FAA for discretionary review of Determinations, revisions, and extensions of Determinations

Note

Compliance with Part 77 is a prerequisite in the process for obtaining an airport zoning regulation permit for construction or alteration of a structure on or in the vicinity of a military or public-use airport per state law. Notwithstanding any permitting requirements of a political subdivision in accordance with Chapter 333, Florida Statutes (FS), developers must comply with Part 77 requirements. Due to the time required to obtain, submit, and process the information and documentation for an aeronautical study under Part 77, the necessary information and documentation should be obtained and submitted before or concurrently with any local government permit process to facilitate a timely response from the FAA.

There are five sub-parts to Part 77 which will be further addressed in this chapter of the *Guidebook*. Some sections, which pertain to obtaining a Determination, will be described in more detail.

- ***Subpart A – General.*** Establishes the requirement to notify the FAA of certain proposed construction or the alteration of existing structures.
- ***Subpart B – Notice Requirements.*** Establishes the requirement to file FAA Form 7460-1*, Notice of Proposed Construction or Alteration* (Notice), if requested by the FAA or if certain types of construction or alteration are proposed. This involves utilizing the standards and procedures in Subpart B and the Notice Criteria Tool. The Notice Criteria Tool is not referenced in Part 77 but is found at the FAA Obstruction Evaluation website (see Chapter 1 and ***Appendix D*** for additional details about the Notice Criteria Tool).
- ***Subpart C – Standards for Determining Obstructions to Air Navigation or Navigational Aids or Facilities.*** Describes the federal obstruction standards used for determining obstructions to air navigation, navigational aids, or navigational facilities that may affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities. Objects that are considered obstructions under these standards are presumed hazards to air navigation unless further aeronautical study—based on information from the Notice, Subpart C standards, and FAA policy and guidance material—concludes that the object is not a hazard. Subpart C establishes obstruction standards and civil airport imaginary surfaces in relation to the airport and each runway.
- ***Subpart D – Aeronautical Studies and Determinations.*** Establishes the purpose, effect, and period of an aeronautical study and Determination concerning whether proposed construction or alteration would be a hazard to air navigation.
- ***Subpart E – Petitions for Discretionary Review.*** Procedures for discretionary review, revision, or extension of a Determination.

Subpart A – General

Subpart A (specifically Section 77.1) provides a general description of the requirements, standards, and processes that are involved in notifying the FAA and completing an aeronautical study. Subpart A also provides certain definitions relative to Part 77. This part specifically establishes the:

- Requirements to provide Notice to the FAA of certain proposed construction or the alteration of existing structures
- Standards used to determine obstructions to air navigation and navigational and communication facilities
- Process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities, or equipment
- Process to petition the FAA for discretionary review of Determinations, revisions, and extensions of Determinations.

Recent Amendments

Users should be aware that both Part 77 and Chapter 333, FS, have been recently amended, which impacts their implementation and utilization. The FAA issued a final rule for Part 77 in 2010, which became effective on January 18, 2011. The majority of the amendments implemented by the new rule simplify existing regulations.

However, the Part 77 amendment addressing the time of notice may have a significant impact on applicants required to submit at Notice. Part 77 requires an applicant to submit the required notification at least 45 days prior to the start of the proposed construction or alteration. Given the time required to conduct an aeronautical study, the FAA recommends a 45- to 60-day advance notification to accommodate the extensive review process and allow timely issuance of the FAA determination letter. However, ***given the recent significant increase in requests for determinations and possible delays in the FAA's response time, applicants are encouraged to provide Notice no later than 60 days prior to the start of proposed construction or alteration or the date an application for a construction permit is filed, whichever is earlier.***

As a result, if a local government's airport zoning regulations (established in accordance with Chapter 333, FS) were adopted prior to the 2011 amendment of Part 77, the airport zoning regulations would be inconsistent with current Part 77 requirements. FDOT review has shown that many political subdivisions have not updated their airport zoning regulations since the amendment of Part 77 and Chapter 333, FS. ***Failure to timely implement and comply with these amendments may adversely impact the validity of any permit issued in accordance with airport zoning regulations under the former Part 77 or Chapter 333, FS.***

Part 77 also establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for:

- Evaluating the effects of the construction or alteration on operating procedures
- Determining the potential hazardous effects of the proposed construction on air navigation
- Identifying mitigating measures to enhance safe air navigation
- Charting of new objects

Notification enables the FAA to identify potential aeronautical hazards in advance, thus preventing or minimizing any adverse impacts to the safe and efficient use of navigable airspace. This process will also alert sponsors of any issues with the proposed project in a timely manner.

Subpart B – Notice Requirements

Subpart B provides that anyone who proposes construction or alteration described in Section 77.9 must provide adequate Notice to the FAA. As previously noted, compliance with Subpart B is the first step in a process to obtain a Determination whether proposed construction or alteration is a hazard. Subpart B contains the following sections:

- Applicability
- Form and Time of Notice
- Construction or Alteration Requiring Notice
- Supplemental Notice Requirements

Section 77.5 provides the outline of when a project requires Notice be given to the FAA, as well as how the FAA uses the information it receives. The standards for determining whether such Notice is required are set forth in Part 77, Subpart B. Although not mentioned in Part 77, the FAA has provided a site on the main FAA website known as the Notice Criteria Tool. The Notice Criteria Tool uses the criteria in Section 77.9 to calculate whether Notice is required. Note that the Notice Criteria Tool does not itself provide Notice to the FAA. If users determine that Notice is required by using the Notice Criteria Tool, they must take separate steps to provide this Notice. Section 77.7 provides the form and timing of this Notice.

Section 77.9 specifies the types of construction or alteration that requires filing Notice with the FAA. In lieu of the standards in Section 77.9, the Notice Criteria Tool should be used to determine whether Notice must be provided to the FAA.

Key Takeaways

Since state law (Chapter 333, FS) prohibits the issuance of a local permit if it would allow the establishment or creation of an airport hazard, it is essential from a business and economic standpoint to determine if a proposed construction or alteration project constitutes a hazard to air navigation, navigational aids, or navigational facilities as soon as possible.

Adequate notice involves providing the FAA with timely, accurate, and precise information, as discussed in a later section.

Definition

Someone proposing the construction of a structure and/or submitting an FAA Form 7460-1 is referred to as a "**sponsor**".

Readers will note in Section 77.9 or through using the Notice Criteria Tool that consideration of traverseways must be given. Traverseways are any infrastructure by which vehicles move, such as a highway, railroad, or waterway. Although traverseways are typically at ground level (roadway, railroad tracks, etc.) they are periodically traversed by mobile objects (cars, trucks, trains, vessels, etc.) which may have sufficient height to constitute an obstruction. This would establish an "actual height" for the traverseway consisting of the height of the traverseway plus the height of the mobile object, as shown in ***Figure 11***. The "actual height" of the traverse way is subject to the standards of Section 77.9, paragraphs (a) and (b), as below.

Figure 11: Traverseway "Actual Heights"

Note

Throughout this chapter, language from 14 CFR, Part 77, will be provided in pop-out boxes titled with the section number the language comes from. Exact language is provided for users to become familiar with Part 77 and how it affects airport zoning regulations

Section 77.9

If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file Notice with the FAA of:

a. Any construction or alteration that is more than 200 ft. AGL at its site.

b. Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

   1. 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.

   2. 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.

   3. 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.

c. Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the

Section 77.9

highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.

d. Any construction or alteration on any of the following airports and heliports:
   1. A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;
   2. A military airport under construction, or an airport under construction that will be available for public use;
   3. An airport operated by a Federal agency or the DOD.
   4. An airport or heliport with at least one FAA-approved instrument approach procedure.

e. You do not need to file Notice for construction or alteration of:
   1. Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;
   2. Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;
   3. Any construction or alteration for which Notice is required by any other FAA regulation.
   4. Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

Source: 14 CFR, Part 77

Note

Some political subdivisions have incorporated the imaginary surfaces in Section 77.9(b) as a standard for a limitation on the height of proposed structures, which is not the intent of the standard. Such a standard will result in a significantly limited height standard for proposed structures. However, political subdivisions have authority under Chapter 333, FS, to establish airport zoning regulations more restrictive than those allowed in accordance with Chapter 333, FS; Part 77; or an FAA Determination to protect the health, safety, and welfare of the public in the air and on the ground. Therefore, the political subdivision should be cautious in how these standards may be used in their airport zoning regulations to avoid unintended consequences

Permanent Versus Temporary Obstructions

All obstructions, whether permanent or temporary, are subject to the same Notice requirements outlined in Part 77. Sponsors of construction and alterations should ensure that all such obstructions timely comply with these requirements *prior to* commencement of the work (construction). The person responsible for the design of the obstruction may not be the person responsible for construction of the obstruction. Large objects such as hangars and work areas may require multiple submittals of "points" of interest to adequately characterize the object. Listed below are some typical examples of permanent and temporary objects. These lists are not all-inclusive of potential objects that may require notification; instead, these are examples of types of on-airport or airport-related development. Readers should note that both off-airport and non-airport-related development can be obstructions.

Permanent construction or alterations:

- Antennas
- Automated Weather Observation Station (AWOS) / Automated Surface Observation Station (ASOS)
- Buildings / structures
- Elevated signs
- Fences
- Light fixtures
- Navigational aids (NAVAIDs), including those owned or managed by the FAA
- National Weather Service Facilities
- Power and cable lines
- Radio towers
- Roadways
- Storage tanks
- Air traffic control towers (ATCTs)

Temporary construction or alterations:

- Batch plants
- Construction equipment (single point and areas)
- Crane boom trucks
- Concrete pumps
- Drilling rigs
- Haul routes
- Staging areas
- Stock piles
- Temporary lights

Notice Criteria Tool

The proposed construction or alteration of buildings, bridges, light poles, utility poles, cell phone towers, or any other tall structures which lie in an airport hazard area (Section 333.01(4), FS, see Chapter 3 of the *Guidebook*) have the potential to be an obstruction. To determine whether a proposed structure requires Notice to the FAA (Part 77, Subpart B) the sponsor can use the FAA's Notice Criteria Tool, found at https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm.

As previously noted, the Notice Criteria Tool should be used to determine whether Notice must be provided to the FAA in accordance with Part 77, Subpart B. The FAA developed the Notice Criteria Tool to streamline the process of determining if the FAA needs to be notified of a proposed construction or alteration. The Notice Criteria Tool may be the most expeditious, accurate, and economical means to make such a determination. In addition, the Notice Criteria Tool is designed to identify obstructions to navigational and communication facilities which would not otherwise be disclosed by utilizing the standards in Section 77.9 and other FAA information. Since navigation and communication facilities exist throughout the state, making such a determination without using the Notice Criteria Tool would be complex, time-consuming, costly, and likely deficient. Section 77.9 provides that a Notice must be filed with the FAA "if requested by the FAA" or if certain types of construction or alteration are being proposed. The Notice Criteria Tool determines if the FAA requires that a Notice be filed and why.

The FAA has developed a Desk Reference Guide that provides step-by-step guidance to use the Notice Criteria Tool. The Desk Reference link is found in the upper left-hand corner of the Notice Criteria Tool page. A copy of the Desk Reference is found in ***Appendix D***. A sample copy of the Results of a Notice Criteria Tool is found in ***Figure 12***. The Notice Criteria Tool requires input of the following data:

- ***Latitude and Longitude.*** Enter data in degrees, minutes and seconds. Seconds should be in the hundreds (e.g. 59.94).
- ***Horizontal Datum.*** North American Datum of 1983 (NAD 83) is preferred but other relevant datum may be utilized but may affect the accuracy of the results.
- ***Site Elevation (SE).*** Enter the SE to the nearest foot.
- ***Structure Height.*** Enter the proposed structure height to the nearest foot.
- ***Traverseway.*** Indicate whether the structure constitutes a traverseways (interstate highway, private road, public road, railroad, waterway or other traverseway) so that the Notice Criteria Tool can calculate the impact of moving objects on the respective traverseway.
- ***Location.*** Enter yes or no to indicate if the structure is located on airport.

Notes

- A definition and explanation of imaginary surfaces is provided later in this chapter.
- The more precise the input data to the Notice Criteria Tool, the more accurate the results. The less precise the input data the more likely the results will exceed the Part 77.9 standards and require filing a Notice.

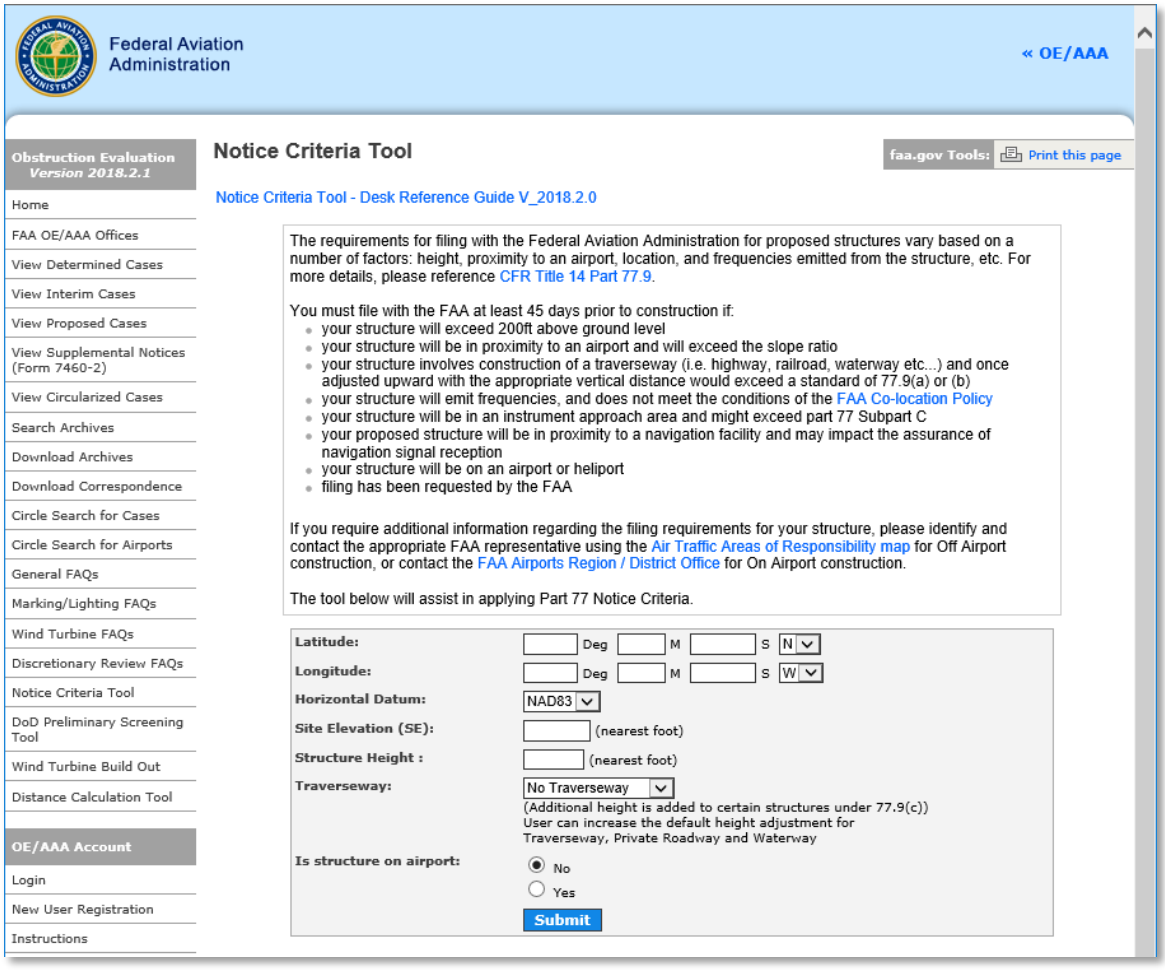


Figure 12: Notice Criteria Tool

Once the relevant data has been input, users must select "submit" for the result. The result will advise if the development "exceeds" the Notice standards of Section 77.9, requiring the user to file Notice with the FAA. ***Figure 13*** shows an example of the Notice Criteria Tool with the required information entered and the result provided after the required information is submitted. In this example, the result indicates, "You exceed the following Notice criteria" and the "FAA requests that you file." The "request" is mandatory. In order to comply with this federal regulation, the user must file FAA Form 7460-1 in a timely manner. Note that this result only indicates the proposed construction exceeds the Subpart B standards (Section 77.7), which do not determine the structure to be an obstruction. That determination will be made in the aeronautical study

Note

Persons failing to comply with the provisions of Part 77 are subject to Civil Penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a).

and documented in the FAA's Determination. That process relies on the federal obstruction standards established in Subpart C. The aeronautical study is initiated by submission of the FAA Form 7460-1 in accordance with the Notice Criteria Tool Result.

Due to the capabilities of the Notice Criteria Tool and the number of airports in Florida, it is highly likely that an inquiry regarding a specific proposed structure or alteration in Florida will result in the FAA requesting a Form 7460-1.

Preparing and Filing FAA Form 7460-1, "Notice of Proposed Construction or Alteration"

If the Notice Criteria Tool indicates that the slope calculation does not exceed Part 77 Notice criteria, users are not required to file a Form 7460-1 "Notice of Proposed Construction or Alteration." However, if the proposed construction or alteration is found to exceed the Notice criteria standards *or* if the Notice Criteria Tool indicates that the user is required to file, then the user must file Form 7460-1. Upon receipt of the Form 7460-1, the FAA will conduct an obstruction evaluation study (aeronautical study) to determine if the proposed construction or alteration constitutes an obstruction to air navigation that may affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communications facilities. Part 77, Subpart C describes standards used to determine obstructions to air navigation that may affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities. Objects considered obstructions under the standards of Subpart C are presumed hazards to air navigation unless further aeronautical study concludes the object is not a hazard. The FAA uses the standards in Subpart C along with FAA policy and guidance material to determine if the object is a hazard to air navigation. The FAA also applies these standards to existing airport facilities and airport proposals received by the FAA or the appropriate military service before it issues a final Determination.

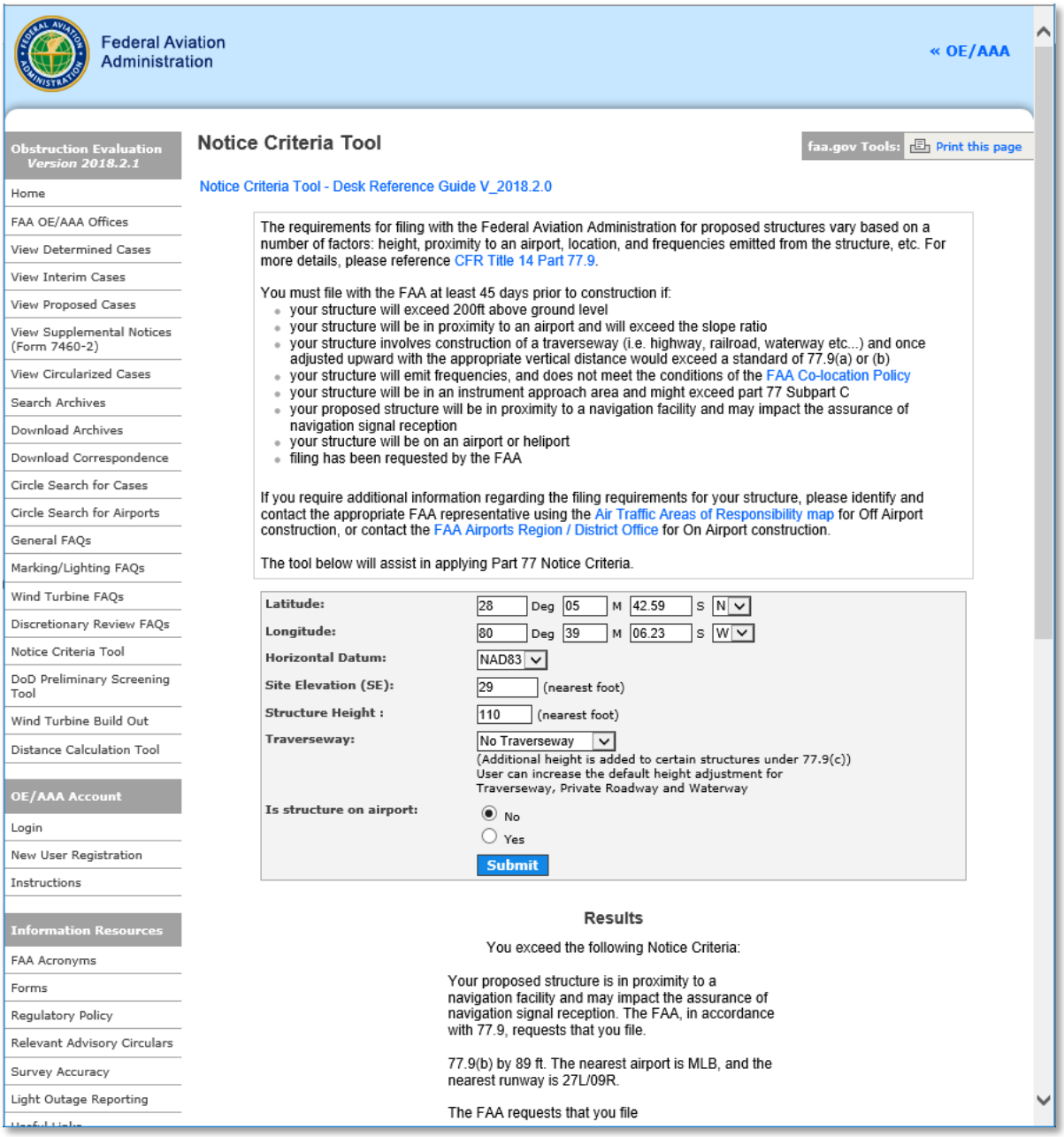


Figure 13: Notice Criteria Tool Sample Result

Section 77.7 - Form and Time of Notice

a. If you are required to file Notice under § 77.9, you must submit to the FAA a completed FAA Form 7460-1, Notice of Proposed Construction or Alteration. FAA Form 7460-1 is available at FAA regional offices and on the Internet.

Section 77.7 - Form and Time of Notice

b. You must submit this form at least 45 days before the start date of the proposed construction or alteration or the date an application for a construction permit is filed, whichever is earliest.
   - **Note:** Due to recent developments the FAA is suggesting a submittal date 45-60 days before the start date.

c. If you propose construction or alteration that is also subject to the licensing requirements of the Federal Communications Commission (FCC), you must submit Notice to the FAA on or before the date that the application is filed with the FCC.

d. If you propose construction or alteration to an existing structure that exceeds 2,000 ft. in height above ground level (AGL), the FAA presumes it to be a hazard to air navigation that results in an inefficient use of airspace. You must include details explaining both why the proposal would not constitute a hazard to air navigation and why it would not cause an inefficient use of airspace.

e. The 45-day advance Notice requirement is waived if immediate construction or alteration is required because of an emergency involving essential public services, public health, or public safety. You may provide Notice to the FAA by any available, expeditious means. You must file a completed FAA Form 7460-1 within 5 days of the initial Notice to the FAA. Outside normal business hours, the nearest flight service station will accept emergency Notices.
   - **Note:** Advanced Notice is rarely waived.

Source: 14 CFR, Part 77

FAA Form 7460-1 Preparation Resources

The FAA will use the information submitted on Form 7460-1 (shown in ***Figure 14*** and provided in ***Appendix E***) to conduct an aeronautical study to determine if a proposed construction or alteration is a hazard to air safety and the efficient use of the navigable airspace. The requested information is generally self-explanatory and very similar to the information required for the Notice Criteria Tool and a local government airport zoning permit application.

The FAA prefers that you e-file your form using the website at https://oeaaa.faa.gov/oeaaa/external/portal.jsp. E-filing your form is preferred by the FAA because:

- It is the fastest, most accurate method to submit to the FAA and immediately assigns an aeronautical study number to your case.
- It establishes an electronic communications link with FAA and allows you to obtain project status and notifications directly from this site

Instructions for completing FAA Form 7460-1 are provided in ***Appendix E***. As In certain instances, precise data or documents are requested, such as a specific degree of accuracy for a survey of specific points of construction or alteration. Compliance with such details is necessary to prevent errors or excesses which could adversely impact the results and findings of the aeronautical study and the FAA's final Determination.

In addition to completing the Form 7460-1, pertinent information and documentation concerning construction or alteration, including appropriate attachments showing the type and location of the alteration, must also be submitted. This information will provide the FAA with an overview of the project to better evaluate the potential impact of the construction or alteration on navigable airspace. The FAA may also

request additional information or documentation. Supplemental information or documentation needed for FAA review may include the following items:

- Drawing (preferably scaled) showing the location of the object in relation to the nearest active runway(s). This may be a marked-up airport layout plan (ALP) or Terminal Area sheet.
- Perpendicular distance of the proposed object to the nearest active runway centerlines.
- Distance along centerline (actual or extended) from runway end to the perpendicular intercept point
- Ground elevation at the site of the proposed object
- Height of the proposed object including antennas or other appurtenances
- Accurate geodetic coordinates conforming to NAD 83 coordinates
- Sketches, drawings, etc. showing the type of construction or alteration being proposed

Note

Additional guidance on preparing and submitting a Form 7460-1 can be found at the FAA Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) webpage under "Instructions" at https://oeaaa.faa.gov/oeaaa/external/content/instructions.jsp.

Please Type or Print on This Form

Form Approved OMB No.2120-0001
Expiration Date: 10/31/2017

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-Medium Intensity ☐ Dual - Red and high Intensity
☐ White -High Intensity ☐ Other

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

9. Latitude: 0 , , "

10. Longitude: 0 , ,

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 (5/17) Supersedes Previous Edition

NSN: 0052-00-012-0009

Figure 14: FAA Form 7460-1

Section 77.11 - Supplemental Notice Requirements

a. You must file supplemental Notice with the FAA when:

   1. The construction or alteration is more than 200 feet in height AGL at its site; or

   2. Requested by the FAA.

b. You must file supplemental Notice on a prescribed FAA form to be received within the time limits specified in the FAA Determination. If no time limit has been specified, you must submit supplemental Notice of construction to the FAA within 5 days after the structure reaches its greatest height.

c. If you abandon a construction or alteration proposal that requires supplemental Notice, you must submit Notice to the FAA within 5 days after the project is abandoned.

d. If the construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Source: 14 CFR, Part 77

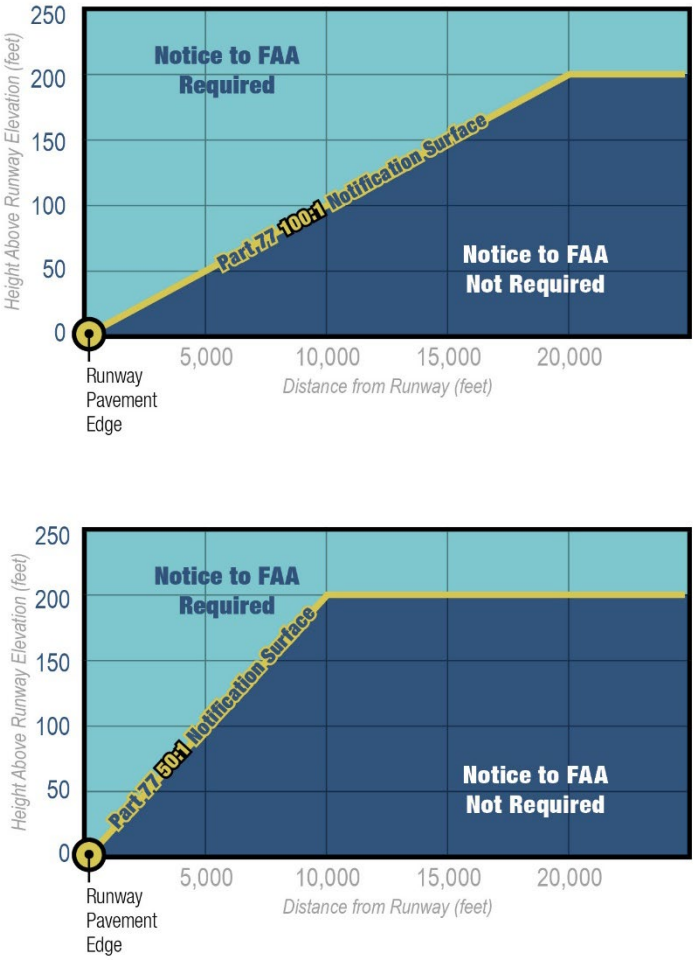


Figure 15: Obstruction Notification

If a structure exceeds Notice criteria and no further action is taken, including filing a Form 7460-1, the sponsor, who is knowingly and willingly violating the Notice requirements of Part 77, is subject to a civil penalty of $1,000 per day until the Notice is received, pursuant to *49 U.S.C., Section 46301(a)*.

In addition to using the Notice Criteria Tool, sponsors of potential obstructions should also become familiar with the Section 77.9 imaginary surfaces which extend outward from the runway pavement edge of public-use airports and military airfields and the notification standards these imaginary surfaces may require. ***Figure 15*** provides general guidelines for whether notification is required for a structure built on or near an airport. Local jurisdictions may want to adopt a similar graphical depiction in their airport zoning regulations; it is an easy to understand reference for developers and property owners.

Summary of Notice Requirements

Subpart B is integral to understanding Part 77 as a whole. The information provided in the Subpart and using the Notice Criteria Tool will instruct sponsors of their next steps. If a developer is proposing a potential obstruction, Subpart B gives a helpful overview of the process for notifying the FAA of proposed construction or alteration that will affect land uses at and around airports. It is important that the sponsor understands the necessity of checking the Notice Criteria Tool to determine if a project requires notifying the FAA. Not providing notification when necessary may result in a Part 77 violation, which in turn can lead to projects being severely delayed or abandoned, as well as legal action against the sponsor.

Subpart C – Standards for Determining Obstructions to Air Navigation or Navigational Aids or Facilities

Part 77, Subpart C describes the standards used for determining obstructions to air navigation, navigational aids, or navigational facilities. Objects that are considered obstructions under the standards described in Subpart C are presumed hazards to air navigation unless further aeronautical study concludes that the object is not a hazard (Section 77.15(b)). The scope of Subpart C is as follows:

Section 77.15 - Scope

a. This subpart describes standards used to determine obstructions to air navigation that may affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities. Such facilities include air navigation aids, communication equipment, airports, Federal airways, instrument approach or departure procedures, and approved off-airway routes.

b. Objects that are considered obstructions under the standards described in this subpart are presumed hazards to air navigation unless further aeronautical study concludes that the object is not a hazard. Once further aeronautical study has been initiated, the FAA will use the standards in this subpart, along with FAA policy and guidance material, to determine if the object is a hazard to air navigation.

c. The FAA will apply these standards with reference to an existing airport facility, and airport proposals received by the FAA, or the appropriate military service, before it issues a final Determination.

d. For airports having defined runways with specially prepared hard surfaces, the primary surface for each runway extends 200 feet beyond each end of the runway. For airports having defined strips or pathways used regularly for aircraft takeoffs and landings, and designated runways, without specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for aircraft takeoffs and landings, a determination must be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those determined pathways must be considered runways, and an appropriate primary surface as defined in § 77.19 will be considered as longitudinally centered on each such runway. Each end of that primary surface must coincide with the corresponding end of that runway.

Section 77.15 - Scope

e. The standards in this subpart apply to construction or alteration proposals on an airport (including heliports and seaplane bases with marked lanes) if that airport is one of the following before the issuance of the final Determination:

1. Available for public use and is listed in the Airport/Facility Directory, Supplement Alaska, or Supplement Pacific of the U.S. Government Flight Information Publications; or
2. A planned or proposed airport or an airport under construction of which the FAA has received actual Notice, except DOD airports, where there is a clear indication the airport will be available for public use; or,
3. An airport operated by a Federal agency or the DOD; or,
4. An airport that has at least one FAA-approved instrument approach.

Source: 14 CFR, Part 77

An existing or future fixed or mobile object is an obstruction to air navigation if it is higher than the heights or surfaces defined in Section 77.17, *Obstruction Standards*, or Section 77.19, *Civil Airport Imaginary Surfaces*. An "obstruction" is an important concept to understand when analyzing airspace and the impact of structure height at and surrounding airports. The size of each imaginary surface is based on each runway category in terms of the type of approach available or planned for that runway. Generally, airports that

Note

Every federally obligated airport is required to have an ALP. The ALP includes an airport airspace sheet that illustrates the various obstructions and objects located within the Part 77 areas.

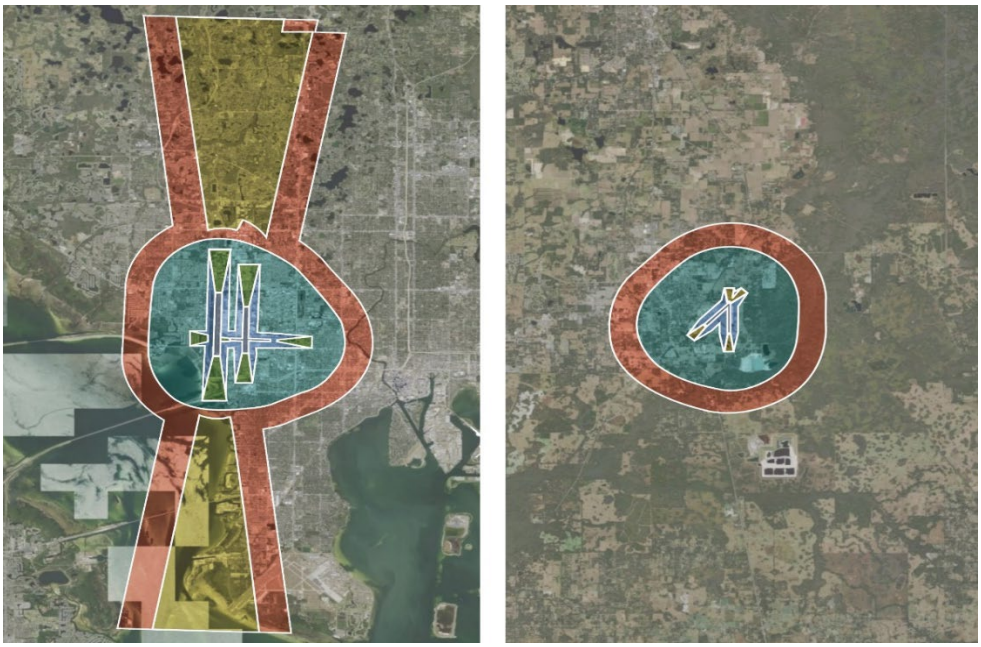


Figure 16: Imaginary Surfaces at a Large (Left) versus Small (Right) Airport

accommodate larger aircraft, such as commercial service airports, have more restrictive imaginary surfaces, while smaller airports that primarily handle GA aircraft have less restrictive surfaces, as shown in ***Figure 16***. Airports that accommodate operations by larger, more demanding aircraft typically have instrumentation that allow for operations at night and during times of inclement weather. This instrumentation is accompanied by larger Part 77 surfaces. Airports with only visual approaches typically have smaller Part 77 surfaces. The FAA establishes standards for the size of each Part 77 surface applicable to each airport runway end and uses those in their airspace evaluation.

Imaginary surfaces exist primarily to regulate existing or proposed manmade objects, objects of natural growth, or terrain from exceeding obstruction standards that would constitute an obstruction subject to an aeronautical study. Therefore, imaginary surfaces are important to understand for compliance with state and federal laws and regulations. Part 77, Subpart C, defines standards for determining obstructions to air navigation. Objects that exceed obstruction standards (Part 77, Subpart C) are considered obstructions. Section 77.17 provides the obstruction standards for existing, mobile, and future objects.

Section 77.17 – Obstruction Standards

a. An existing object, including a mobile object, is, and a future object would be an obstruction to air navigation if it is of greater height than any of the following heights or surfaces:
   1. A height of 499 feet AGL at the site of the object.
   2. A height that is 200 feet AGL, or above the established airport elevation, whichever is higher within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet.
   3. A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.
   4. A height within an enroute obstacle clearance area, including turn and termination areas, of a Federal Airway or approved off-airway route, that would include the minimum obstacle clearance altitude.
   5. The surface of a takeoff and landing area of an airport or any imaginary surface established under § 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

b. Except for traverse ways on or near an airport with an operative ground traffic control service furnished by an airport traffic control tower or by the airport management and coordinated with the air traffic control service, the standards of paragraph (a) of this section apply to traverse ways used or to be used for the passage of mobile objects only after the heights of these traverse ways are increased by:
   1. 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance.
   2. 15 feet for any other public roadway.

Section 77.17 – Obstruction Standards

3. 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.
4. 23 feet for a railroad.
5. For a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it.

Source: 14 CFR, Part 77

Civil Airport Imaginary Surfaces

Section 77.19 establishes civil airport imaginary surfaces in relation to the airport and each runway. Set forth in this section are the various dimensions and slopes of these existing or planned surfaces.

Section 77.19 – Civil Airport Imaginary Surfaces

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

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

    1. 5,000 feet for all runways designated as utility or visual;
    2. 10,000 feet for all other runways. The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

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

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

    1. 250 feet for utility runways having only visual approaches.
    2. 500 feet for utility runways having non-precision instrument approaches.
    3. For other than utility runways, the width is:
        - i. 500 feet for visual runways having only visual approaches.
        - ii. 500 feet for non-precision instrument runways having visibility minimums greater than three-fourths statue mile.
        - iii. 1,000 feet for a non-precision instrument runway having a non-precision instrument approach with visibility minimums as low as three-fourths of a statute mile, and for precision instrument runways.
        - iv. The width of the primary surface of a runway will be that width prescribed in this section for the most precise approach existing or planned for either end of that runway.

d. Approach surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is

Section 77.19 – Civil Airport Imaginary Surfaces

applied to each end of each runway based upon the type of approach available or planned for that runway end.

1. The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:
    i. 1,250 feet for that end of a utility runway with only visual approaches;
    ii. 1,500 feet for that end of a runway other than a utility runway with only visual approaches;
    iii. 2,000 feet for that end of a utility runway with a non-precision instrument approach;
    iv. 3,500 feet for that end of a non-precision instrument runway other than utility, having visibility minimums greater that three-fourths of a statute mile;
    v. 4,000 feet for that end of a non-precision instrument runway, other than utility, having a non-precision instrument approach with visibility minimums as low as three-fourths statute mile; and
    vi. 16,000 feet for precision instrument runways.
2. The approach surface extends for a horizontal distance of:
    i. 5,000 feet at a slope of 20 to 1 for all utility and visual runways;
    ii. 10,000 feet at a slope of 34 to 1 for all non-precision instrument runways other than utility; and
    iii. 10,000 feet at a slope of 50 to 1 with an additional 40,000 feet at a slope of 40 to 1 for all precision instrument runways.
3. The outer width of an approach surface to an end of a runway will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.

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

Source: 14 CFR, Part 77

The dimensions and interrelationship of the various surfaces to each other are complex and difficult to visualize. To assist readers visualize the civil airport Part 77 surfaces, ***Table 1*** summarizes the dimensional standards of the civil imaginary surfaces and the following ***Figure 17*** illustrates these imaginary surfaces.

Table 1: Civil Imaginary Surfaces Dimensional Standards

Surface	Dimensional Standards (Feet)					
	Visual Runway		Non-Precision Instrument Runway			Precision Instrument Runway**
	A	B	A	C	D	
Width of primary surface and approach surface width at inner end	250	500	500	500	1,000	1,000
Radius of horizontal surface	5,000	5,000	5,000	10,000	10,000	10,000
Approach surface width at end	1,250	1,500	2,000	3,500	4,000	16,000
Approach surface length	5,000	5,000	5,000	10,000	10,000	*
Approach slope	20:1	20:1	20:1	34:1	34:1	*
Conical surface slope	20:1	20:1	20:1	20:1	20:1	20:1
Width of conical surface	4,000	4,000	4,000	4,000	4,000	4,000
Transitional surface slope	7:1	7:1	7:1	7:1	7:1	7:1**

** Precision Instrument Approach Slope is 50:1 For Inner 10,000 Feet And 40:1 for an additional 40,000 Feet*

*** Transitional surfaces for those portions of the precision approach surface which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline.*

Source: https://www.ngs.noaa.gov/AERO/oisspec.html, FAR Part 77 Objects Affecting Navigable Airspace

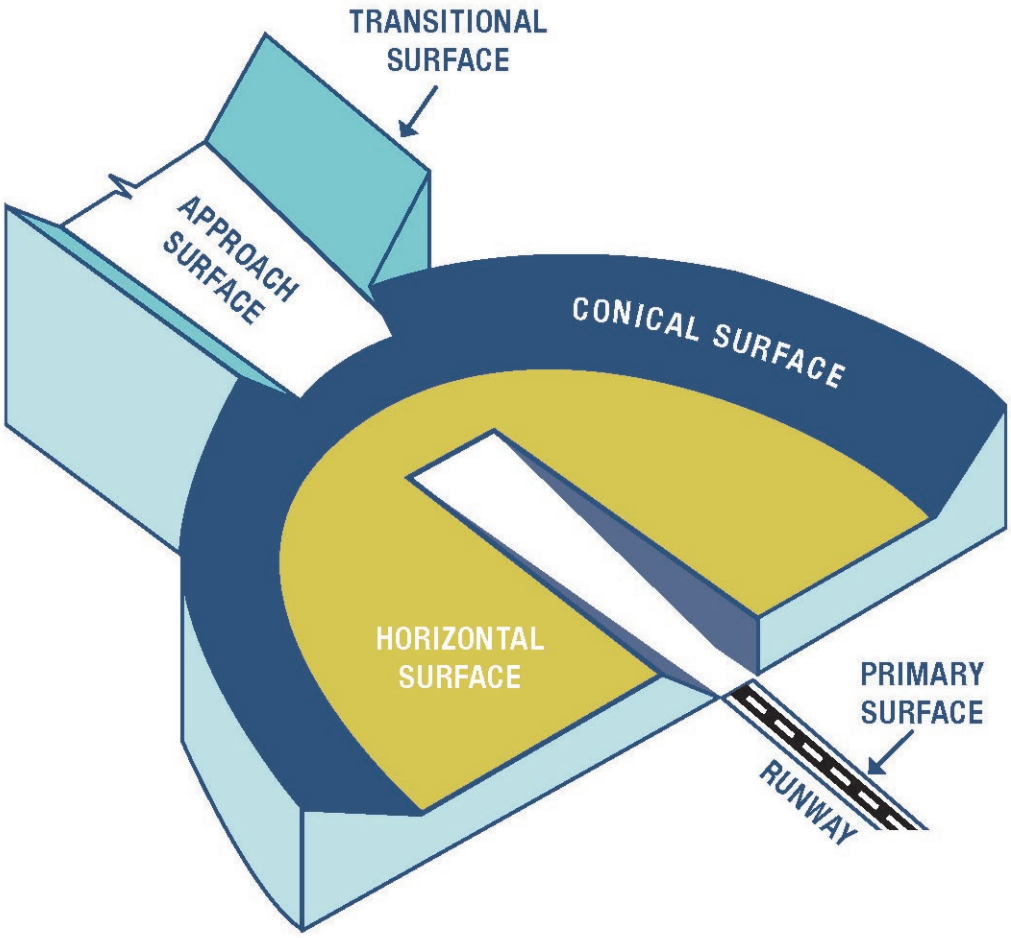


Figure 17: Civil Airport Imaginary Surfaces

United States Department of Defense Airport Imaginary Surfaces

Similar to public-use airport imaginary surfaces, military airports have a set of criteria used by the FAA to evaluate potential impacts of a proposed development. Since Florida has a number of military airports, information and pertinent regulations regarding the DOD's imaginary surfaces are provided below.

Section 77.21 – DOD Airport Imaginary Surfaces

a. Related to airport reference points. These surfaces apply to all military airports. For the purposes of this section, a military airport is any airport operated by the DOD.

   1. Inner horizontal surface. A plane that is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.
   2. Conical surface. A surface extending from the periphery of the inner horizontal surface outward and upward at a slope of 20 to 1 for a horizontal distance of 7,000 feet to a height of 500 feet above the established airfield elevation.
   3. Outer horizontal surface. A plane, located 500 feet above the established airfield elevation, extending outward from the outer periphery of the conical surface for a horizontal distance of 30,000 feet.

b. Related to runways. These surfaces apply to all military airports.

   1. Primary surface. A surface located on the ground or water longitudinally centered on each runway with the same length as the runway. The width of the primary surface for runways is 2,000 feet. However, at established bases where substantial construction has taken place in accordance with a previous lateral clearance criteria, the 2,000-foot width may be reduced to the former criteria.
   2. Clear zone surface. A surface located on the ground or water at each end of the primary surface, with a length of 1,000 feet and the same width as the primary surface.
   3. Approach clearance surface. An inclined plane, symmetrical about the runway centerline extended, beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end and extending for 50,000 feet. The slope of the approach clearance surface is 50 to 1 along the runway centerline extended until it reaches an elevation of 500 feet above the established airport elevation. It then continues horizontally at this elevation to a point 50,000 feet from the point of beginning. The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.
   4. Transitional surfaces. These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces. The slope of the transitional surface is 7 to 1 outward and upward at right angles to the runway centerline.

Source: 14 CFR, Part 77

The dimensions and interrelationship of the various surfaces to each other are complex and difficult to visualize. To assist readers in visualizing the military airport Part 77 surfaces, ***Table 2*** summarizes the dimensional standards of the military imaginary surfaces and ***Figure 18*** illustrates these imaginary surfaces.

Table 2: Military Imaginary Surfaces Dimensional Standards

Description	Dimension (Feet)	Notes
Primary surface width	2,000	
Primary surface length	Runway length	
Clear zone surface width	2,000	Same width as primary surface
Clear zone surface length	1,000	
Start of approach clearance surface	200	Beginning 200 feet beyond each end of the primary surface at the centerline elevation of the runway end
Length of approach clearance surface	50,000	
Slope of approach clearance surface	50:1	Until it reaches an elevation of 500 feet above the established airport elevation
Length of sloped portion of approach surface	25,000	
Start of horizontal portion of approach clearance surface	25,000	
Length of horizontal portion of approach clearance surface	25,000	Continues horizontally at 500 feet above the established airport elevation to a point 50,000 feet from the point of beginning
Width of approach clearance surface at start	2,000	Same as the primary surface
Width of approach clearance surface at end of horizontal portion	16,000	The width of this surface at the runway end is the same as the primary surface, it flares uniformly, and the width at 50,000 is 16,000 feet.
Radius of inner horizontal surface	7,500	The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents.
Elevation of inner horizontal surface	150	Above the established airfield
Horizontal width of conical surface	7,000	A surface extending from the periphery of the inner horizontal surface outward and upward
Slope of conical surface	20:1	Slope ratio is horizontal: vertical
Elevation of conical surface at end of slope	500	Above the established airfield elevation
Elevation of outer horizontal surface	500	Above the established airfield elevation
Width of outer horizontal surface	30,000	Extending outward from the outer periphery of the conical surface

Description	Dimension (Feet)	Notes
Slope of transitional surfaces	7:1	The slope of the transitional surface is 7:1 outward and upward at right angles to the runway centerline.
Start of transitional surfaces	1,000 from centerline of runway	These surfaces connect the primary surfaces, the first 200 feet of the clear zone surfaces, and the approach clearance surfaces to the inner horizontal surface, conical surface, outer horizontal surface or other transitional surfaces
End of transitional surfaces	See notes	The transitional surface ends at the inner horizontal surfaces, conical surface, outer horizontal surfaces, or at an elevation of 150 feet

Source: 14 CFR Part 77

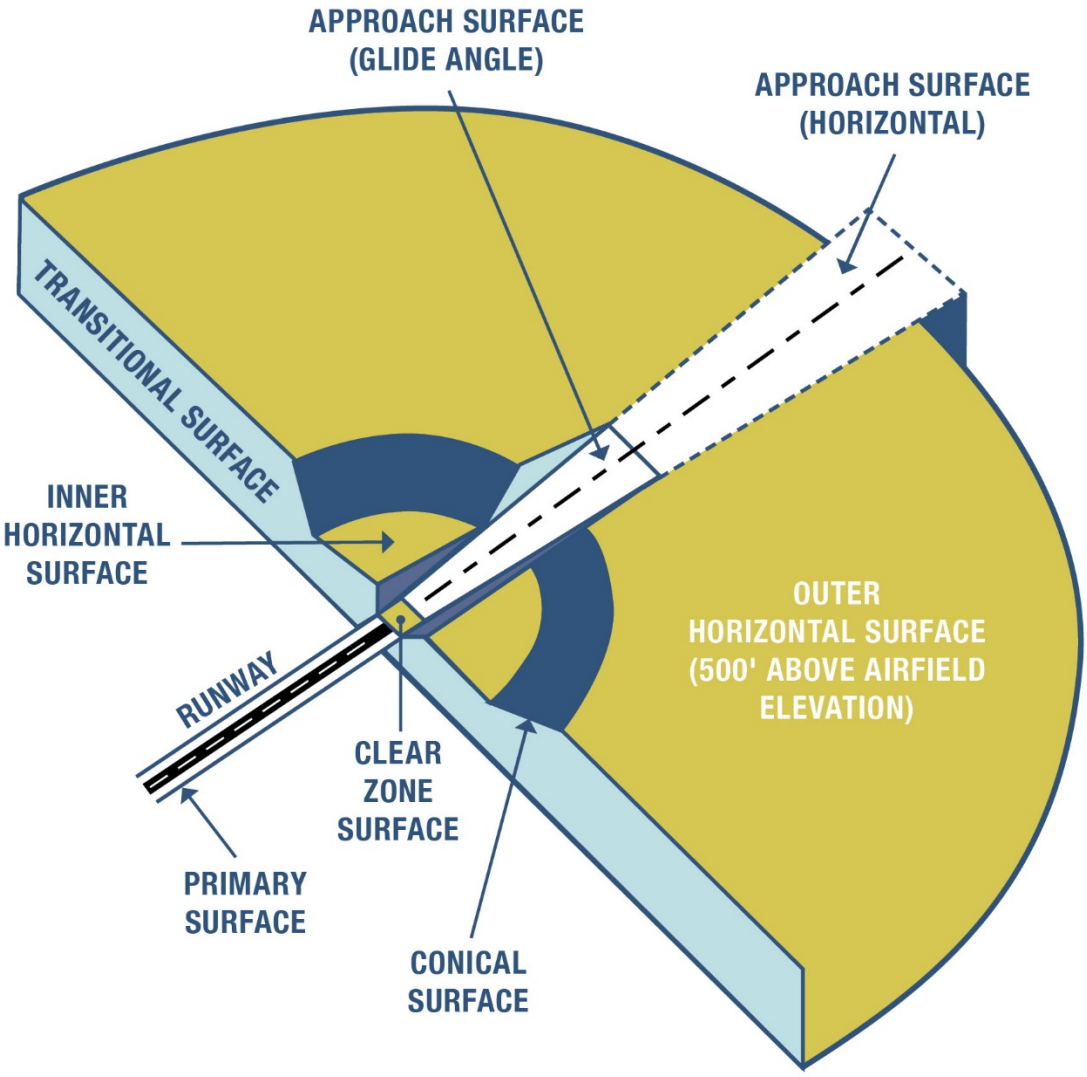


Figure 18: Military Airport Imaginary Surfaces

Heliport Imaginary Surfaces

Similar to public-use airport imaginary surfaces, heliports have a set of criteria used by the FAA to evaluate potential impacts of a proposed development. Since Florida has a number of heliports, information and pertinent regulations regarding heliport imaginary surfaces are provided below.

Section 77.23 – Heliport Airport Imaginary Surfaces

a. Primary surface. The area of the primary surface coincides in size and shape with the designated takeoff and landing area. This surface is a horizontal plane at the elevation of the established heliport elevation.

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

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

Source: 14 CFR, Part 77

The dimensions and interrelationship of the various surfaces to each other are complex and difficult to visualize. ***Figure 19*** is provided to assist readers visualize heliport Part 77 surfaces.'

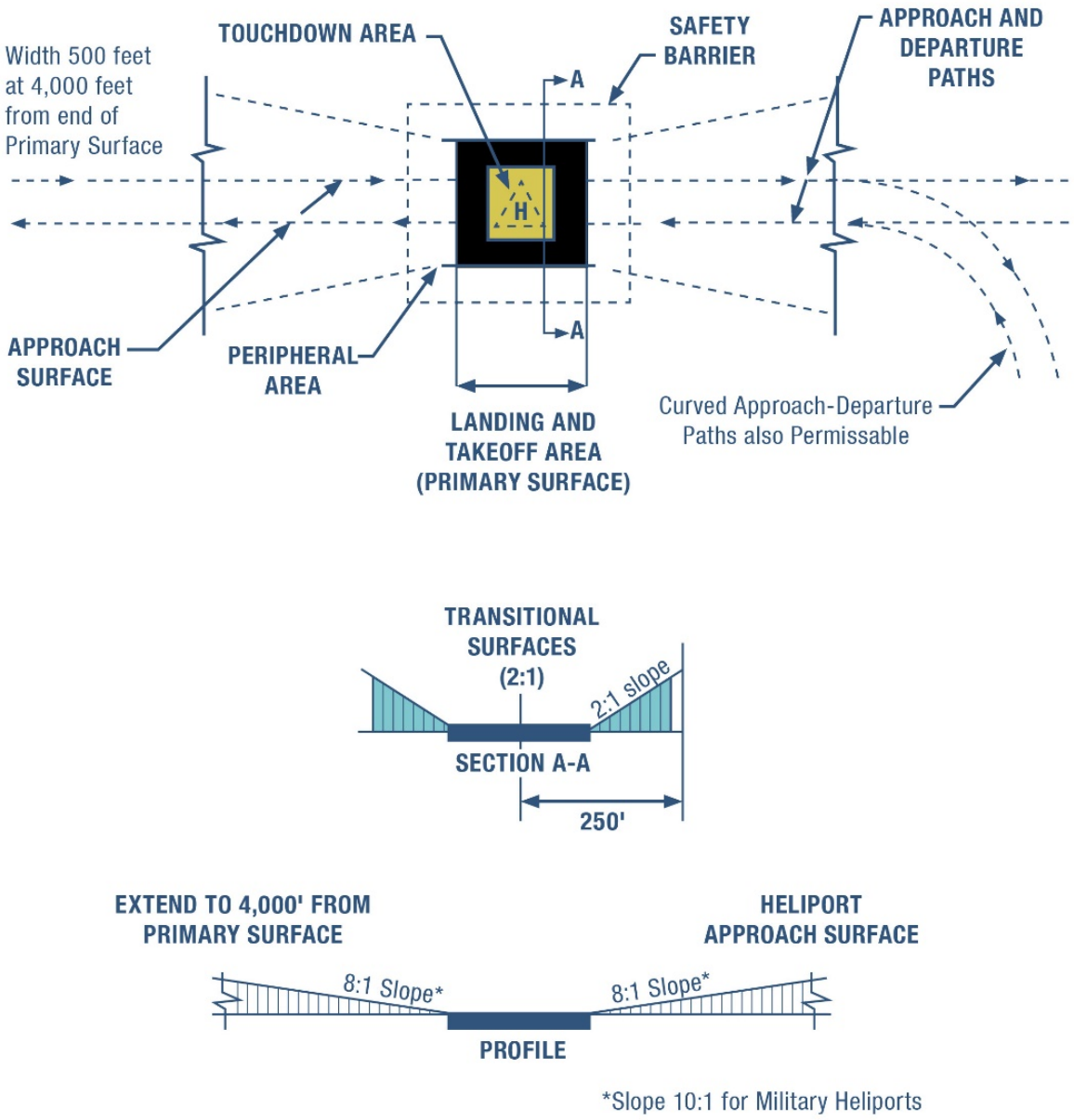


Figure 19: Heliport Imaginary Surfaces

Imaginary Surfaces Example

Although they are in place for every public-use airport and military airfield, imaginary surfaces can be difficult to visualize. To illustrate the scope and shape of actual imaginary surfaces, ***Figure 22*** provides a real-world example of all Part 77 imaginary surfaces, including primary, transitional, horizontal, conical, and approach surfaces at a public-use airport. As shown, the surfaces of this airport extend far beyond the boundaries of the runway. Any development within these boundaries needs to be aware of the requisite notification standards and potential applicable federal and state standards. For example, residential and commercial development is located within the airport's imaginary surfaces to the southeast of the airport in ***Figure 20***. Although property owners within these developments may not realize they are within these zones, they would have to notify the FAA if they planned to modify the height of structures on their property or construct a new tall structure. This example provides context for how airports affect not just the land and airspace immediately surrounding their property, but also land and airspace for a substantial distance around the facility, depending on the airport and runway type. This example also provides context for how much land and airspace can affect safe airport operations. If land is developed in a non-compatible manner, operations at the airport could be limited due to a lessening of available landing area on a runway, and the safety of people on the ground and in the air could be jeopardized.

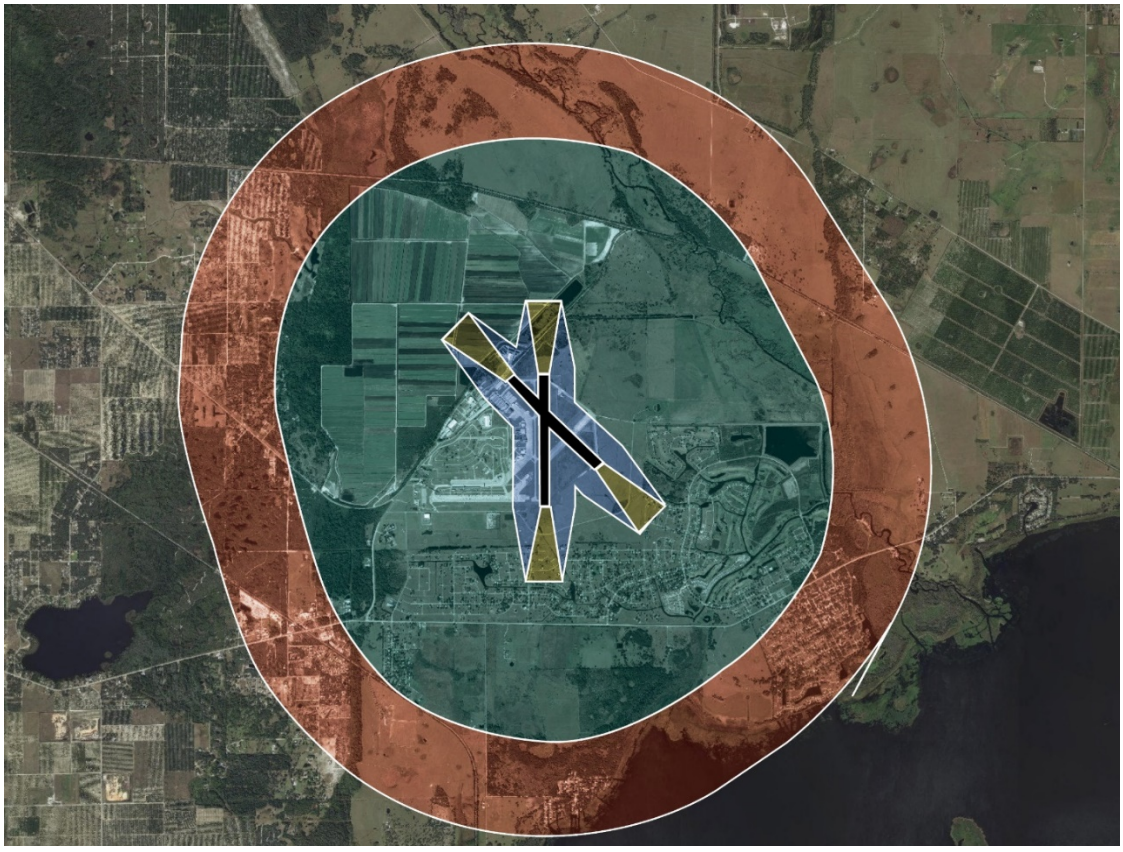


Figure 20: Imaginary Surfaces Example

Summary of Standards for Determining Obstructions to Air Navigation or Navigational Aids or Facilities

This section has explained obstructions to air navigation, navigational aids, communications equipment and facilities, including:

- What is considered an obstruction
- Standards for classifying obstructions
- Imaginary surfaces for civil airports, military airports, and heliports

Imaginary surfaces can be a difficult concept to grasp, but the visuals provided in this section are beneficial guide to understanding the concept. It is crucial to be mindful of obstructions to air navigation while planning a project around an airport, as any structure considered an obstruction may result in the project being delayed, sponsors incurring unnecessary and unplanned for expenses, and, in some cases, the project being abandoned entirely.

Subpart D – Aeronautical Studies and Determinations

The primary concern when building a structure near an airport is whether the new structure will pose a hazard that will affect safe and efficient air travel. Subpart D outlines aeronautical studies conducted by the FAA, which are used to determine if an object is an obstruction that will negatively affect air the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities. The following sections provide the reader with an understanding of the following points:

- Types of proposed construction or alteration for which Notice is required
- When these studies are necessary
- What is examined during the studies
- Options a user has after the FAA has made a final Determination concerning their application

Section 77.25 – Applicability

a. This subpart applies to any aeronautical study of a proposed construction or alteration for which Notice to the FAA is required under § 77.9.

b. The purpose of an aeronautical study is to determine whether the aeronautical effects of the specific proposal and, where appropriate, the cumulative impact resulting from the proposed construction or alteration when combined with the effects of other existing or proposed structures, would constitute a hazard to air navigation.

c. The obstruction standards in subpart C of this part are supplemented by other manuals and directives used in determining the effect on the navigable airspace of a proposed construction or alteration. When the FAA needs additional information, it may circulate a study to interested parties for comment.

Section 77.27 – Initiation of Studies

The FAA will conduct an aeronautical study when:

a. Requested by the sponsor of any proposed construction or alteration for which a Notice is submitted; or

b. The FAA determines a study is necessary.

Source: 14 CFR, Part 77

Section 77.29 provides an in-depth summary of precisely what the FAA examines when assessing a structure, as well as what happens if a user withdraws or revises their proposal.

Section 77.29 – Evaluating Aeronautical Effect

a. The FAA conducts an aeronautical study to determine the impact of a proposed structure, an existing structure that has not yet been studied by the FAA, or an alteration of an existing structure on aeronautical operations, procedures, and the safety of flight. These studies include evaluating:

   1. The impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules;
   2. The impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules;
   3. The impact on existing and planned public use airports;
   4. Airport traffic capacity of existing public use airports and public use airport development plans received before the issuance of the final Determination;
   5. Minimum obstacle clearance altitudes, minimum instrument flight rules altitudes, approved or planned instrument approach procedures, and departure procedures;
   6. The potential effect on ATC radar, direction finders, ATC tower line of sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems;
   7. The aeronautical effects resulting from the cumulative impact of a proposed construction or alteration of a structure when combined with the effects of other existing or proposed structures.

b. If you withdraw the proposed construction or alteration or revise it so that it is no longer identified as an obstruction, or if no further aeronautical study is necessary, the FAA may terminate the study.

Source: 14 CFR, Part 77

Section 77.31 covers the possible Determinations the FAA will issue regarding an aeronautical study and clarifies what these results mean to the user.

Section 77.31 – Determinations

a. The FAA will issue a Determination stating whether the proposed construction or alteration would be a hazard to air navigation, and will advise all known interested persons.

b. The FAA will make Determinations based on the aeronautical study findings and will identify the following:

   1. The effects on VFR/IFR aeronautical departure/arrival operations, air traffic procedures, minimum flight altitudes, and existing, planned, or proposed airports listed in § 77.15(e) of which the FAA has received actual Notice prior to issuance of a final Determination.

   2. The extent of the physical and/or electromagnetic effect on the operation of existing or proposed air navigation facilities, communication aids, or surveillance systems.

c. The FAA will issue a Determination of Hazard to Air Navigation when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard and would have a substantial aeronautical impact.

d. A Determination of No Hazard to Air Navigation will be issued when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation. A Determination of No Hazard to Air Navigation may include the following:

   1. Conditional provisions of a Determination.

   2. Limitations necessary to minimize potential problems, such as the use of temporary construction equipment.

   3. Supplemental Notice requirements, when required.

   4. Marking and lighting requirements, when required.

e. The FAA will issue a Determination of No Hazard to Air Navigation when a proposed structure does not exceed any of the obstruction standards and would not be a hazard to air navigation.

Source: 14 CFR, Part 77

The informative aspects of Section 77.31 are:

- A **Determination of Hazard to Air Navigation** will be issued when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard and would have a substantial aeronautical impact.
- A **Determination of No Hazard to Air Navigation** will be issued when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation.
- A Determination of No Hazard to Air Navigation may include the following:
  - Conditional provisions of a Determination
  - Limitations necessary to minimize potential problems, such as the use of temporary construction equipment

Note

A zoning authority may consider making the foregoing requirements a component of their obstruction permit to ensure compliance.

- Supplemental Notice requirements, when required
- Marking and lighting recommendations, as appropriate

Although a proposed structure may not exceed obstruction standards, it must also not have a substantial aeronautical impact in order to receive a Determination of No Hazard.

The following Sections 77.33 and 77.35 provide information considering the effective dates of the Determinations, how long the Determinations are in-effect, and what to do if a sponsor wishes to challenge the FAA's decision.

Note

A proponent must be aware of the requirements for extensions, terminations, revisions and corrections so as not to have their determination expire or terminate.

Section 77.33 – Effective Period of Determinations

a. The effective date of a Determination not subject to discretionary review under 77.37(b) is the date of issuance. The effective date of all other Determinations for a proposed or existing structure is 40 days from the date of issuance, provided a valid petition for review has not been received by the FAA. If a valid petition for review is filed, the Determination will not become final, pending disposition of the petition.

b. Unless extended, revised, or terminated, each Determination of No Hazard to Air Navigation issued under this subpart expires 18 months after the effective date of the Determination, or on the date the proposed construction or alteration is abandoned, whichever is earlier.

c. A Determination of Hazard to Air Navigation has no expiration date. [Doc. No. FAA-2006-25002, 75 FR 42303, July 21, 2010, as amended by Amendment 77-13-A, 76 FR 2802, Jan. 18, 2011]

Source: 14 CFR, Part 77

Section 77.35 – Extensions, Terminations, Revisions and Corrections

a. You may petition the FAA official that issued the Determination of No Hazard to Air Navigation to revise or reconsider the Determination based on new facts or to extend the effective period of the Determination, provided that:

   1. Actual structural work of the proposed construction or alteration, such as the laying of a foundation, but not including excavation, has not been started; and

   2. The petition is submitted at least 15 days before the expiration date of the Determination of No Hazard to Air Navigation.

b. A Determination of No Hazard to Air Navigation issued for those construction or alteration proposals not requiring an FCC construction permit may be extended by the FAA one time for a period not to exceed 18 months.

Section 77.35 – Extensions, Terminations, Revisions and Corrections

c. A Determination of No Hazard to Air Navigation issued for a proposal requiring an FCC construction permit may be granted extensions for up to 18 months, provided that:

1. You submit evidence that an application for a construction permit/license was filed with the FCC for the associated site within 6 months of issuance of the Determination; and
2. You submit evidence that additional time is warranted because of FCC requirements; and
3. Where the FCC issues a construction permit, a final Determination of No Hazard to Air Navigation is effective until the date prescribed by the FCC for completion of the construction. If an extension of the original FCC completion date is needed, an extension of the FAA Determination must be requested from the Obstruction Evaluation Service (OES).
4. If the Commission refuses to issue a construction permit, the final Determination expires on the date of its refusal.

Source: 14 CFR, Part 77

Summary of Aeronautical Studies and Determinations

Subpart D is an incredibly important concept for planners to understand when working on a project that may pose as a risk to safe and efficient use of an airport(s). This subpart explores a wide range of important information concerning FAA aeronautical studies to determine:

- Why and when studies are conducted
- What will be expected from the sponsor
- What the FAA will determine and how to interpret these responses
- Time constraints that both the sponsor and FAA will be held to
- What to do if the sponsor needs to alter their application as to make the FAA reconsider their decision based on events or circumstances unforeseen at the time of initial application

Aeronautical studies are a fundamental aspect of Part 77, and it is essential that sponsors are familiar with the concept. Following the guidelines set forth in this subpart will facilitate a more streamlined experience when working with the FAA on an aerospace study.

Subpart E – Petitions for Discretionary Review

Subpart E is particularly beneficial for sponsors who receive a Determination of Hazard to Air Navigation following an aeronautical study. This subpart outlines how a user may appeal for discretionary review and how a sponsor can petition the FAA to reconsider their Determination if the user feels pertinent information was not included in the original aeronautical study. The following sections provide a great deal of detail on the process including what constitutes grounds for a petition, when a petition may be filed, what must be included on a petition, and the possible outcomes of a petition.

Section 77.37 – General

a. If you are the sponsor, provided a substantive aeronautical comment on a proposal in an aeronautical study, or have a substantive aeronautical comment on the proposal but were not given an opportunity to state it, you may petition the FAA for a discretionary review of a Determination, revision, or extension of a Determination issued by the FAA.

b. You may not file a petition for discretionary review for a Determination of No Hazard that is issued for a temporary structure, marking and lighting recommendation, or when a proposed structure or alteration does not exceed obstruction standards contained in subpart C of this part.

Section 77.379 – Contents of Petition

a. You must file a petition for discretionary review in writing and it must be received by the FAA within 30 days after the issuance of a Determination under § 77.31, or a revision or extension of the Determination under § 77.35.

b. The petition must contain a full statement of the aeronautical basis on which the petition is made, and must include new information or facts not previously considered or presented during the aeronautical study, including valid aeronautical reasons why the Determination, revisions, or extension made by the FAA should be reviewed.

c. In the event that the last day of the 30-day filing period falls on a weekend or a day the Federal government is closed, the last day of the filing period is the next day that the government is open.

d. The FAA will inform the petitioner or sponsor (if other than the petitioner) and the FCC (whenever an FCC-related proposal is involved) of the filing of the petition and that the Determination is not final pending disposition of the petition.

Section 77.41 – Discretionary Review Results

a. If discretionary review is granted, the FAA will inform the petitioner and the sponsor (if other than the petitioner) of the issues to be studied and reviewed. The review may include a request for comments and a review of all records from the initial aeronautical study.

b. If discretionary review is denied, the FAA will notify the petitioner and the sponsor (if other than the petitioner), and the FCC, whenever a FCC-related proposal is involved, of the basis for the denial along with a statement that the Determination is final.

c. After concluding the discretionary review process, the FAA will revise, affirm, or reverse the Determination.

Source: 14 CFR, Part 77

Summary of Petitions for Discretionary Review

The above sections provide the reader with a general understanding of the FAA's discretionary review process. Users should understand that they have the right to a FAA discretionary review, which can be a tremendous benefit for the user. It is of the utmost importance that the user follows these steps exactly as outlined when petitioning the FAA to streamline the process. Note that if the petition is denied, the Determination is final.

Summary of Part 77

Part 77 sets forth a process that is fundamental to planning the construction or alteration of structures by private developers and governmental entities. Planners need to understand these requirements when building on and around public-use airports, military airfields, and heliports. Not only is a Part 77 violation punishable by law but building anything that hinders safe and efficient use of airports can have a far-reaching detrimental impact on the community as a whole. Chapter 2 provides detailed requirements for complying with Part 77, including how to understand Notice requirements, standards for determining obstructions to air navigation or navigational aids or facilities, aeronautical studies and Determinations, and petitions for discretionary review. The FAA provides users with tools to help determine if a project exceeds federal Notice criteria. Being mindful of Part 77 requirements throughout the planning process will allow for more efficient and punctual project completion.

Chapter 3: Chapter 333, Florida Statutes—Airport Zoning

Introduction

Chapter 3 primarily addresses the state requirements regarding airspace protection, including permitting and addressing airspace protection in airport zoning regulations as well as land use compatibility in accordance with Chapter 333, Florida Statutes (FS), *Airport Zoning*. Chapter 333, FS, provides a framework for adopting, administering, and enforcing airport zoning regulations.

Chapter 3 provides the actual language of the statute. Some sections are presented out of sequence to better convey the requirements for airport zoning regulations and to facilitate an understanding of their adoption, administration, and enforcement. This chapter is primarily devoted to explaining the requirements of Chapter 333, FS, and its involvement with 14 Code of Federal Regulations (CFR) Part 77. The language of the relevant sections of the statute are provided to allow readers to for consider actual statutory language.

It is important to note that that the statutory language of Chapter 333, FS, may be amended on an annual basis and the current statute should be reviewed for any changes. Chapter 333, FS, could be amended before this *Guidebook* is updated. Local governments should monitor proposed or adopted legislative changes to Chapter 333, FS, or changes to this Airport Airspace and Land Use Guidebook (*Guidebook)*. Any changes to the *Guidebook* subsequent to initial publication will be noted on the title sheet.

This chapter is intended to help local government officials and zoning authorities comply with the statutory requirements of Chapter 333, FS. While local governments are responsible for drafting, administering, and enforcing airport zoning regulations, this chapter provides key guidance to comply with applicable state laws. The chapter firsts presents the impacts of 2016 amendment of Chapter 333, FS, then provides guidance in promulgating airport zoning regulations in accordance with state law.

Impact of 2016 Amendment of Chapter 333, FS

Users should be aware that Chapter 333, FS, was amended in 2016 (effective July 1, 2016). Regulations existing prior to July 1, 2016 need to be amended to conform with the requirements of Chapter 333, FS (effective July 1, 2016), and any subsequent amendments and filed with the Florida Department of Transportation (FDOT) Aviation Office within 30 days thereafter. Since the July 1, 2016 deadline has passed as of the writing of this *Guidebook*, it is vitally important that local governments submit their airport zoning regulations as soon as possible. Any subsequent amendments to the airport zoning regulations must be filed with the FDOT Aviation Office within 30 days after adoption in accordance with Section 333.03(3), FS.

Airspace Obstruction Permitting

The purpose of this section is to provide an explanation of the different components of Airspace Obstruction Permitting, including the process for obtaining an Airspace Obstruction Permit, exemptions to an FDOT Airspace Obstruction Permit, local government permitting processes, and submitting an FDOT Airspace Obstruction Permit application.

Note

It is important to note that Section 333.13, FS, provides for criminal and civil penalties for violations of Chapter 333, FS, or any airport zoning regulations, orders, or rulings adopted or made pursuant to Chapter 333, FS. Therefore, it is essential that zoning authorities ensure their jurisdiction's airport zoning regulations and procedures comply with the requirements of the applicable version of current Chapter 333, FS, to avoid criminal and civil penalties as well as the revocation of an airspace obstruction permit issued by the local government. The amended Chapter 333, FS (2016) may be found in ***Appendix C*** and on **Online Sunshine** at leg.state.fl.us, an online portal to access the most updated versions of all state statutes. The 2016 changes to Chapter 333, FS, may be found in House Bill (HB) 7061, passed in 2016.

Process for Obtaining an Airspace Obstruction Permit

Airport zoning regulations must establish the process for obtaining an Airspace Obstruction Permit. Section 333.07, FS, outlines specific steps that must be included in a local government's airport zoning regulation regarding the Airspace Obstruction Permitting process. Local governments are the permitting authority if they comply with Sections 333.025 and 333.03, FS. Local governments must fashion their permitting processes based on the requirements outlined in their airport zoning regulations as required by statute.

To determine whether or not a structure requires Notice and potentially an Airspace Obstruction Permit, users may refer to the FAA's Notice Criteria Tool, as described in more detail in Chapter 2 of this *Guidebook*.

An Airspace Obstruction Permit is automatically required for a structure that exceeds federal obstruction standards (Part 77.17) if it is within an airport hazard area. An airport hazard area is an area of land or water upon which an airport hazard might be established (see Chapter 1 for additional details about airport hazard areas).

Note

A determination that a structure is not an obstruction does not necessarily mean that an airspace obstruction permit is not required.

Further, It is important to remember that state statute does not prohibit local governments from adopting airport zoning regulations that are more restrictive than provided in statute. Therefore, permits may be required in certain jurisdictions that have adopted airport zoning regulations more stringent standards than simply not exceeding federal obstruction standards.

For a structure in a local government without airport zoning regulations, an FDOT permit is subject to the following provisions:

Section 333.07(1)(b)

If the political subdivision or its administrative agency determines that a nonconforming obstruction has been abandoned or is more than 80 percent torn down, destroyed, deteriorated, or decayed, a permit may not be granted if it would allow the obstruction to exceed the applicable height limit or otherwise deviate from the airport protection zoning regulations. Whether or not an application is made for a permit under this subsection, the owner of the nonconforming obstruction may be required, at his or her own expense, to lower, remove, reconstruct, alter, or equip such obstruction as may be necessary to conform to the current airport protection zoning regulations. If the owner of the nonconforming obstruction neglects or refuses to comply with such requirement for 10 days after Notice, the administrative agency may report the violation to the political subdivision involved, which subdivision, through its appropriate agency, may proceed to have the obstruction so lowered, removed, reconstructed, altered, or equipped and assess the cost and expense thereof upon the owner of the obstruction or the land whereon it is or was located.

Source: Chapter 333, FS

FDOT Airspace Obstruction Permit Application

FDOT requires submittal of FDOT Form 725-04-11, "Airspace Obstruction Permit Application" for any proposed structure that meets the criteria outlined in Section 333.025(1), FS. To apply for an FDOT airspace obstruction permit, the sponsor or representative proposing the construction or alteration must submit a FDOT an Airspace Obstruction Permit application to:

Aviation Office
Florida Department of Transportation,
605 Suwannee Street, MS 46,
Tallahassee, FL 32399-0450,
Attention: Airspace and Land Use Manager

Note

Throughout this chapter, language from Chapter 333, FS will be provided in pop-out boxes titled with the section number the language comes from. Exact language is provided for users to become familiar with Chapter 333.

A copy of a FDOT Airspace Obstruction Permit application and instructions are provided in ***Appendix F***. Once a complete application is received, FDOT has 30 days to review the application and issue or deny the Airspace Obstruction Permit. The application must be accompanied by the following information:

- A copy of Federal Aviation Administration (FAA) Form 7460-1, *Notice of Proposed Construction or Alteration* (Notice), filed with FAA if applicable
- An aeronautical study or FAA document showing the Determination issued in response to your Notice.
- A United States Geological Survey (USGS) 7.5-minute Quadrangle Map with the precise site marked and any certified survey conducted
- A scaled construction diagram showing the size and dimensions of the proposed construction

- Zoning statement from the appropriate zoning agency showing the proposal will comply with local zoning regulations and any conditions which must be accomplished for such compliance
- If the applicant is not the landowner, attach a copy of the authorization to construct upon or lease the land involved

FDOT comprehensively reviews each Airspace Obstruction Permit application. FDOT may issue an airspace obstruction permit if the FDOT review determines:

- The proposed construction or alteration of an obstruction does not adversely impact the factors outlined in Section 333.025(6), FS *and*
- The applicant submits documentation showing both compliance with federal requirement for notification of proposed construction or alteration and a valid aeronautical study

If FDOT determines that it cannot issue the Airspace Obstruction Permit because the proposed construction or alteration adversely impacts the criteria listed in Section 333.025(6), FS, or the FAA determines the proposed construction or alternation is a hazard, FDOT will work with the applicant to determine how the applicant can alter the proposed construction or alteration to resolve the adverse impacts and/or hazard determination. However, if these adverse impacts or the hazard determination cannot be satisfactorily resolved, the Airspace Obstruction Permit will not be issued, and constructing the proposed structure would violate Chapter 333, FS, and Part 77. A permit may not be approved solely on the basis that the FAA determined that the proposed construction or alteration of an obstruction is not an airport hazard, per Section 333.025(8),F.S.

When issuing a permit under this section, FDOT shall require the owner of the obstruction to install, operate, and maintain, at the owner's expense, marking and lighting in conformance with the specific standards established by the FAA, per Section 333.025(7), F.S.

Lastly, as a state agency, FDOT's decisions rendered on Airspace Obstruction Permits are subject to administrative review proceedings as provided in Chapter 120, FS, in accordance with Section 333.07(9), FS.

Local Government Permitting Process

Local governments are the permitting authority if they meet the following requirements:

- Adequate airport protection zoning regulations are adopted.

  Please note that adequate is not defined in Chapter 333, FS, so the adequacy of the regulations could be challenged by a third-person opposing the permitting of proposed construction or alteration. However, FDOT generally considers "adequate" regulations as those which, at a minimum, address each component of Chapter 333, FS.

- Regulations are on file with FDOT.

  The regulations submitted for filing should be complete, including any applicable interlocal agreements, attachments, or amendments. FDOT will acknowledge receipt of the regulations submitted; however, acknowledging receipt does not constitute FDOT determining that regulations are complete or adequate.

- A permitting process is established.

Local governments must adopt airport zoning regulations that define the permitting process and provide users with sufficient details to successfully complete the process. The permitting process should reasonably allow an individual to submit a completed application for an Airspace Obstruction Permit, including information it deems necessary for the applicant to comply with:

- Section 333.03(1)(c)3, FS, see below for the statute's full text
- Federal requirement for Notice and a valid aeronautical study.

Note

The lack of details in the airport zoning permit process is found to be a frequent deficiency in local government airport zoning regulations.

The local government should establish a permitting process to include a permitting application which should require information and/or documents similar to that required by 1) FDOT Form 725-04-11 "Airspace Obstruction Permit Application," 2) the Notice Criteria Tool, and 3) FAA Form 7460-1, including but not limited to:

- Name, address, and contact information of the applicant, including an email address
- Name, address, and contact information of the authorized representative (if different), including an email address
- Location of the proposed structure (address/plat information, etc.)
- Type of the proposed structure (e.g., tower, antenna, power pole, building, roadway, etc.)
- Coordinates of the proposed structure (latitude/longitude in degrees, minutes, and seconds to the nearest hundredth of a second).
- Site elevation at the structure site and the proposed structure's ultimate height above ground level (AGL), including all appurtenances. If the proposed structure is multi-dimensional (e.g., building), the coordinates and elevation/height information should be submitted for the tallest point(s) on the building, as well as for each individual building corner. In a situation where a structure may be located close to a critical airspace surface, a lower yet closer point may have greater impact on navigable airspace than a higher point further away. The precision of locations and heights should be in accordance with appropriate survey accuracies required by the FAA.

The state statute does not specify a time limit for local governments on issuing or denying an Airspace Obstruction Permit. Therefore, each jurisdiction may utilize the existing local permitting procedures and zoning time limits for Airspace Obstruction Permit issuance. The local government should take into consideration the FDOT 15-day review period of technical consistency of the Airspace Obstruction Permit application as part of these review timelines. That review runs concurrently with the local government permitting process.

FDOT Airspace Obstruction Permit Criteria

As stated earlier, FDOT must consider several criteria when reviewing Airspace Obstruction Permit applications. Keeping these eight factors in mind, it may be helpful for Airspace Obstruction Permit applicants to pre-evaluate their own applications to ensure that the application aligns with the criteria. Additionally, users who are creating their own permitting processes in their airport zoning regulations should adopt identical or similar criteria found in s. 330.07(2), FS for reviewing Airspace Obstruction Permits.

Section 333.025(6)

In determining whether to issue or deny a permit, the department shall consider:

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

b. The safe and efficient use of navigable airspace

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

d. The effect of the construction or alteration of an obstruction on the state licensing standards for a public-use airport contained in Chapter 330 and rules adopted thereunder

e. The character of existing and planned flight operations and developments at public-use airports

f. Federal airways, visual flight rules, flyways and corridors, and instrument approaches as designated by the Federal Aviation Administration

g. The effect of the construction or alteration of an obstruction on the minimum descent altitude or the decision height at the affected airport

h. The cumulative effects on navigable airspace of all existing obstructions and all known proposed obstructions in the area

Source: Chapter 333, FS

FDOT Airspace Obstruction Permit – Marking and Lighting

Marking and lighting recommendations may be made by the FAA as a part of an aeronautical study to enhance a pilot's visual awareness of the structure's presence and location. In accordance with Chapter 333, FS, all Airspace Obstruction Permits should contain provisions that require obstruction marking and lighting if the structure exceeds federal obstruction standards (see Section 333.03(1)(c)2., FS).

During its review, FDOT will require Airspace Obstruction Permit applicants to augment their obstruction with lighting and marking to follow state regulatory requirements. In addition to this requirement, when the FAA issues a Determination of No Hazard to Air Navigation, the Determination may include language to address a Part 77 need for marking and lighting.

Section 333.025(7)

When issuing a permit under this section, the department shall require the owner of the obstruction to install, operate, and maintain, at the owner's expense, marking and lighting in conformance with the specific standards established by the FAA.

Source: Chapter 333, FS

Local governments are required to include directions concerning who will be responsible for performing and paying for these marking and lighting requirements in airport zoning regulations, specifically in the permitting process (see Section 333.025(7), FS). This will ensure that local governments are compliant with Chapter 333, FS, and Part 77.

FDOT Airspace Obstruction Permit – Federal Compliance

According to Section 333.025(8), FS, FDOT may not approve an Airspace Obstruction Permit unless the applicant submits documentation showing both compliance with the federal requirement for notification of proposed construction or alteration (Part 77, Subpart B) and a valid aeronautical study (Part 77, Subpart C). Note FDOT is not required to approve an application based *solely* on the fact that the FAA determined the construction or alteration of the obstruction is not an airport hazard. If Notice to the FAA is not required for a structure, FDOT still requires documentation showing that such Notice was not required. A screenshot or copy of the Notice Criteria Tool result can be provided as documentation.

Exemptions to an FDOT Permit

There are circumstances where an obstruction does not warrant an FDOT Airspace Obstruction Permit. Section 333.025, FS discusses criteria that exempts obstructions from requiring an Airspace Obstruction Permit. These scenarios are further described below.

Section 333.025(5)
A permit is not required for existing structures that received construction permits from the Federal Communications Commission for structures exceeding federal obstruction standards before May 20, 1975; a permit is not required for any necessary replacement or repairs to such existing structures if the height and location are unchanged.
Section 333.025(4)
If political subdivisions have, in compliance with this chapter, adopted adequate airport protection zoning regulations, placed such regulations on file with the department's aviation office, and established a permitting process, a permit for the construction or alteration of an obstruction is not required from the department.

Source: Chapter 333, FS

Airport Zoning Regulations

The intent of this section is to provide users with the tools necessary to draft and approve compliant airport zoning regulations including airspace requirements, land use requirements, prohibitions related to landfills (Section 333.03(2)(a-b), FS), prohibitions related to noise (Section 333.03(2)(c), FS), and prohibitions related to runway protection zones (RPZs) (Section 333.03(2)(e), FS). Airport zoning regulations, as defined in Chapter 333, FS, consist of two components:

- Airport *protection* zoning regulations, defined as airport zoning regulations governing airport hazards (Section 333.01(8), FS)
- Airport land use *compatibility* zoning regulations, defined as airport zoning regulations governing the use of land on, adjacent to, or in the immediate vicinity of airports (Section 333.019(5), FS)

An airport hazard is defined as an obstruction to air navigation which affects the safety and efficient use of navigable airspace or the operation of planned or existing air navigation and communication facilities (Section 333.01(3), FS). An obstruction is defined as any existing or proposed object, terrain, or structure construction or alteration that exceeds the federal obstruction standards contained in 14 CFR, Part 77,

Subpart C. Chapter 333, FS, requires the establishment of standards for both types of regulations in the development of airport zoning regulations for use in the permitting of obstructions and land uses. The purpose of establishing these standards is to prevent airport hazards and incompatible land uses. Therefore, as statutorily defined, airport zoning regulations must address "airport protection zoning regulations," which are regulations governing airport hazards, and "airport land use compatibility zoning," which are regulations governing the use of land on, adjacent to, or in the immediate vicinity of airports. All political subdivisions which have an airport hazard area within their territorial limits *must* adopt airport zoning regulations. The statutory definition (Section 333.01(3), FS) of a political subdivision is:

> *The local government of any country, municipality, town, village, or other subdivision or agency thereof, or any district or special district, port commission, port authority, or other such agency authorized to establish or operate airports in the state.*

Political subdivisions have been referred to as "local governments" in this *Guidebook*.

The statutory definition (Section 333.01(4), FS of an "airport hazard area" is:

> *Any area of land or water upon which an airport hazard might be established.*

As a result of this broad definition of airport hazard area almost all lands and waters of political subdivisions will constitute an airport hazard area. ***Given the scope of these statutory definitions, all political subdivisions in Florida must adopt airport protection zoning regulations.***

Airport Zoning Regulations – Airspace Requirements

Note

According to state statute, airspace obstructions and the land uses in and adjacent to airports that are incompatible with the interest of public health, public safety, and general welfare must be regulated through airport zoning regulations. Up-to-date airport zoning regulations are vital for protecting Florida's communities because they ensure airports can function safely, efficiently, and as intended.

Airport zoning regulations by a political subdivision must, at a minimum, include the following information and documentation:

Section 333. 03(1)(c)

Airport protection zoning regulations adopted under paragraph (a) must, at a minimum, require:

1. A permit for the construction or alteration of any obstruction;
2. Obstruction marking and lighting for obstructions;
3. Documentation showing compliance with the federal requirement for notification of proposed construction or alteration of structures and a valid aeronautical study submitted by each person applying for a permit;

Section 333. 03(1)(c)

4. Consideration of the criteria in s. 333.025(6), when determining whether to issue or deny a permit; and
5. That approval of a permit not be based solely on the determination by the Federal Aviation Administration that the proposed structure is not an airport hazard.

Source: Chapter 333, FS

Users should also note that FDOT is statutorily obligated to provide assistance to local governments regarding federal obstruction standards (Section 333.03(1)(d), FS. Although the local government may assume responsibility for issuing or denying aerospace obstruction permits, such local government must still provide a copy of each permit application it receives to the FDOT for evaluation of technical consistency with Section 333.025(4), FS within 15 days of receipt.

Airport Zoning Regulations – Land Use Requirements

As described in Section 333.03(2), FS, airport zoning regulations must include land use regulations and include specific land use requirements that *minimally* must be addressed. However, depending upon an airport's specific circumstances, consideration should be given to additional land use issues in the regulations to maintain the viability of the airport.

It is important to note that Section 333.03(02) now provides that land use regulations must, minimally *address* the land use requirements outlined below. Prior to the 2016 amendment, this same statute stated that the following land use regulations must be *considered*. The change from *consider* to *address* is assumed to be intentional and meaningful, as it was suggested by the working group who prepared the amended draft version of Chapter 333, FS. Furthermore, the intent of changing the word from *consider* to *address* is not disclosed by the language of the statute, but the use of the word *address* seems to imply that the local government writing the airport zoning regulations must take some type of action or decision regarding the following prohibitions. Therefore, when considering the following prohibitions, users should keep in mind that statute instructs them to explicitly address the prohibitions in their airport zoning regulations.

Prohibitions Related to Landfills

The tall structures, vegetation, or terrain addressed by Part 77 are not the only types of potential hazards to airports and air navigation. Chapter 333, FS, intends to protect not only the safety of the flying public, but also the safety and welfare of the public on the ground. Therefore, the statute requires that several minimum criteria be addressed by airport zoning regulations regarding landfills and birds, airport noise impacts, and development within the airport's RPZs.

Landfills should be prohibited or restricted in the vicinity of airports because they attract birds, which pose a danger to the safe operation of aircraft. While bird strikes are hazardous to all flying aircraft, they pose a particularly high threat to aircraft at low altitude, whether taking off, landing, or transitioning.

Statute directs airport zoning regulations to explicitly address the prohibition of *new* landfills and the restriction of *existing* landfills that attract or sustain hazardous bird movements from feeding, water, or roosting areas into or across the runways or approach and departure patterns of aircraft within the following

areas. In the event of such an existing landfill, the landfill operator must incorporate bird management techniques or other practices to minimize bird hazards to airborne aircraft. Additionally, local government regulations should require such mitigate techniques be incorporated into all landfill operating procedures as a condition of the landfill approval.

Section 333. 03(2)(a)

Airport land use compatibility zoning regulations shall, at a minimum, address the following:

a. The prohibition of new landfills and the restriction of existing landfills within the following areas:
   1. Within 10,000 feet from the nearest point of any runway used or planned to be used by turbine aircraft.
   2. Within 5,000 feet from the nearest point of any runway used by only nonturbine aircraft.
   3. Outside the perimeter defined in subparagraphs 1 and 2, but still within the lateral limits of the civil airport imaginary surfaces defined in 14 C.F.R. s. 77.19. Case-by-case review of such landfills is advised.

Source: Chapter 333, FS

When selecting the perimeter dimensional criteria, the airport master plan or airport layout plan (ALP) should be consulted to identify the planned (or existing, if it is the same category) design aircraft for the runway. As airports have no ability to actively control the type of aircraft that may occasionally use the runway (as that is at the pilot's discretion), airport planning documents should be used to determine the dimensions of the area that may be subject to landfill restrictions. ***Figure 21*** shows buffer criteria for an airport used by turbine aircraft and buffer criteria for an airport used by non-turbine aircraft.

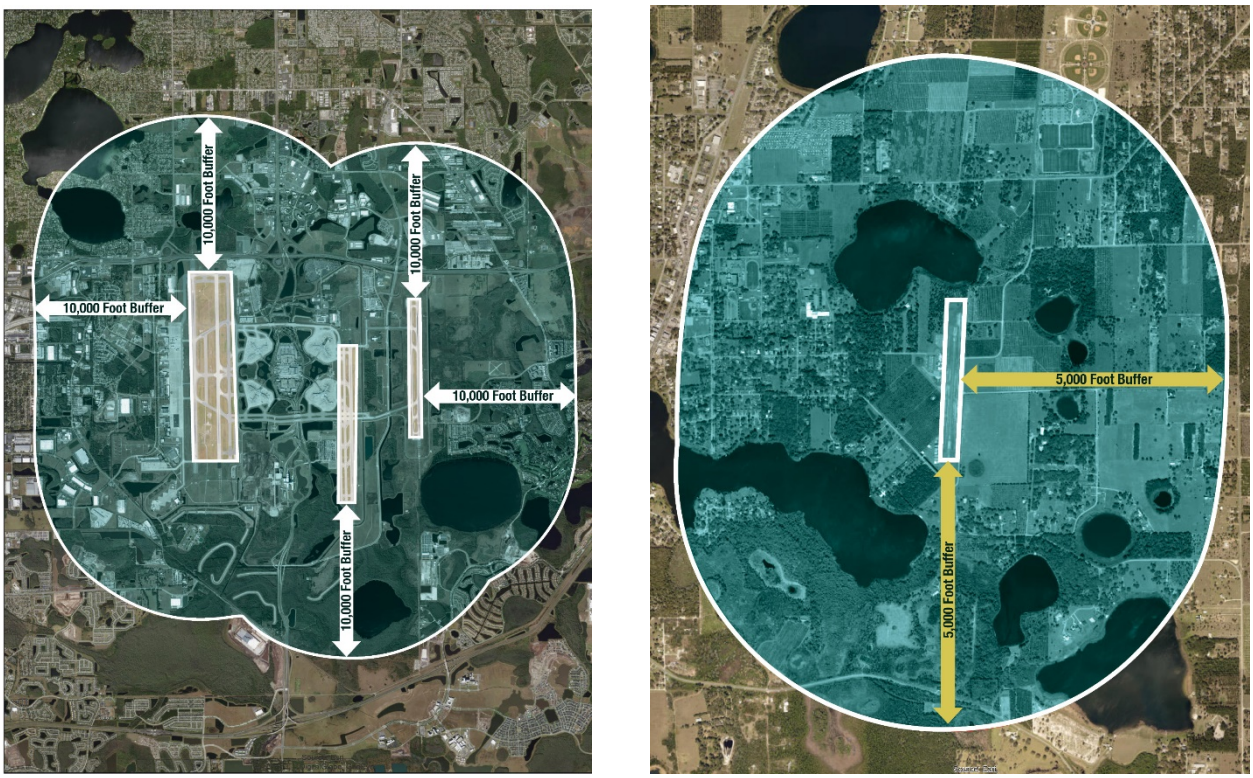


Figure 21: Landfill Buffer for Runways Used by Turbine Aircraft (Left) and Non-turbine Aircraft (Right)

Prohibitions Related to Noise

Aircraft noise is considered a public nuisance and a potential health and welfare concern for the impacted public. While aircraft engines have grown more efficient and quieter over the years, airports and airport operations continue to remain an inherently noisy type of land use. Thus, both federal and state aviation entities seek to promote the welfare of the public that spends extended periods of time (whether at home, school, or work) near airports by requiring consideration of noise impacts and restriction of uses incompatible with certain levels of aircraft noise through land use planning and airport protection zoning measures.

Airport zoning regulations should enforce land use restrictions within the specific contours specified by an airport's noise study (if completed) or within the general noise contours around an airport without a noise study, as stated in Section 333.03(2)(c) and (d). Airport zoning regulations may want to replicate these noise contours and land use restriction table, as outlined in Title 14 CFR, Part 150, *Airport Noise Compatibility Planning*. The FAA continues to support this goal through the implementation of noise exposure evaluation and airport noise compatibility program implementation in accordance with Title 14 CFR, Part 150. The findings of the noise study can result in certain uses being restricted or outright prohibited within the incompatible noise contours. The particular use types must be outlined and specified in the airport's Part 150 study or a land-use element of the alternative FAA-approved study. Exceptions may be made for locating specific uses in a particular noise contour, if such uses are specifically contemplated by the study with appropriate noise mitigation techniques stipulated by the study. Noise contours for an airport that has completed a Part 150 noise study is shown in ***Figure 22***.

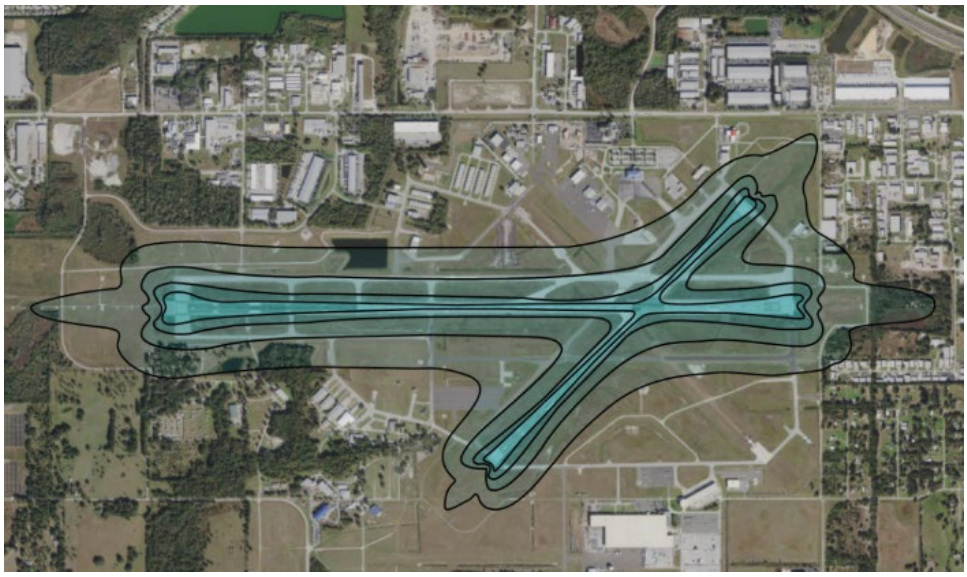


Figure 22: Part 150 Noise Study Contours

Section 333.03(2)(d), FS, also stipulates public welfare protection measures where an airport sponsor has not conducted a Part 150 or other FAA-approved noise study. In such cases, the airport protection zoning ordinance must prohibit residential uses and any educational facility (except for aviation school facilities) within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline. Noise contours for an airport that has not completed a noise study are shown in ***Figure 23***.

The listed noise compatibility requirements do not require the removal, alteration, sound conditioning, or other change to any educational facility in existence on or before July 1, 1993. Those noise compatibility measures are also not to interfere with the continued use or adjacent expansion of any educational facility or site in existence on prior to the same date.

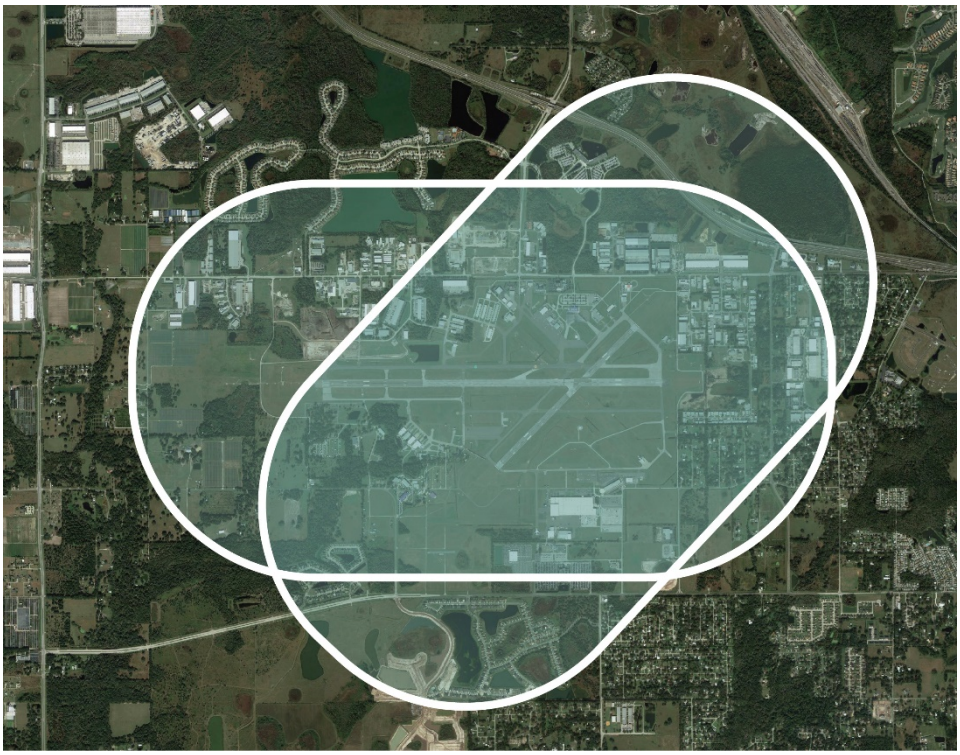


Figure 23: No Part 150 Noise Study Contours

Prohibitions Related to RPZs

RPZs are intended to protect the safety and welfare of public and property by protecting the area immediately off each runway end. RPZs restrict uses that result in congregations of people, may attract birds, produce visual interference (e.g., glare), or contain materials that may exacerbate the effects of an aviation mishap (e.g., fuel/chemical storage facilities). RPZs are a trapezoidal area that underlie a portion of the approach closest to the airport, as shown in ***Figure 24***. Chapter 333, FS, requires airport zoning regulations to include provisions that restrict incompatible land uses and activities (or substantial modifications to existing uses) in RPZs to promote public safety. The FAA has previously provided guidance regarding RPZ restrictions from use types that include:

- Buildings and structures such as residences, schools, churches, medical facilities, office/manufacturing buildings, sports fields or other places of public assembly
- Transportation facilities such as rail facilities, public roadways, or parking facilities
- Fuel or hazardous material storage facilities
- Wastewater treatment plants or other public utilities that may result in bird attraction and/or glare

Airport zoning regulations established by local governments should include locally implementable measures that accomplish the following:

- Avoid introduction of aforementioned incompatible land uses within the RPZ
- Minimize the impact of a proposed or existing incompatible use within the RPZ (e.g., moving the use further away from the runway end, reducing the density/intensity of the proposed use, etc.)
- Mitigate the risk to the public or property on the ground through physical or operational measures

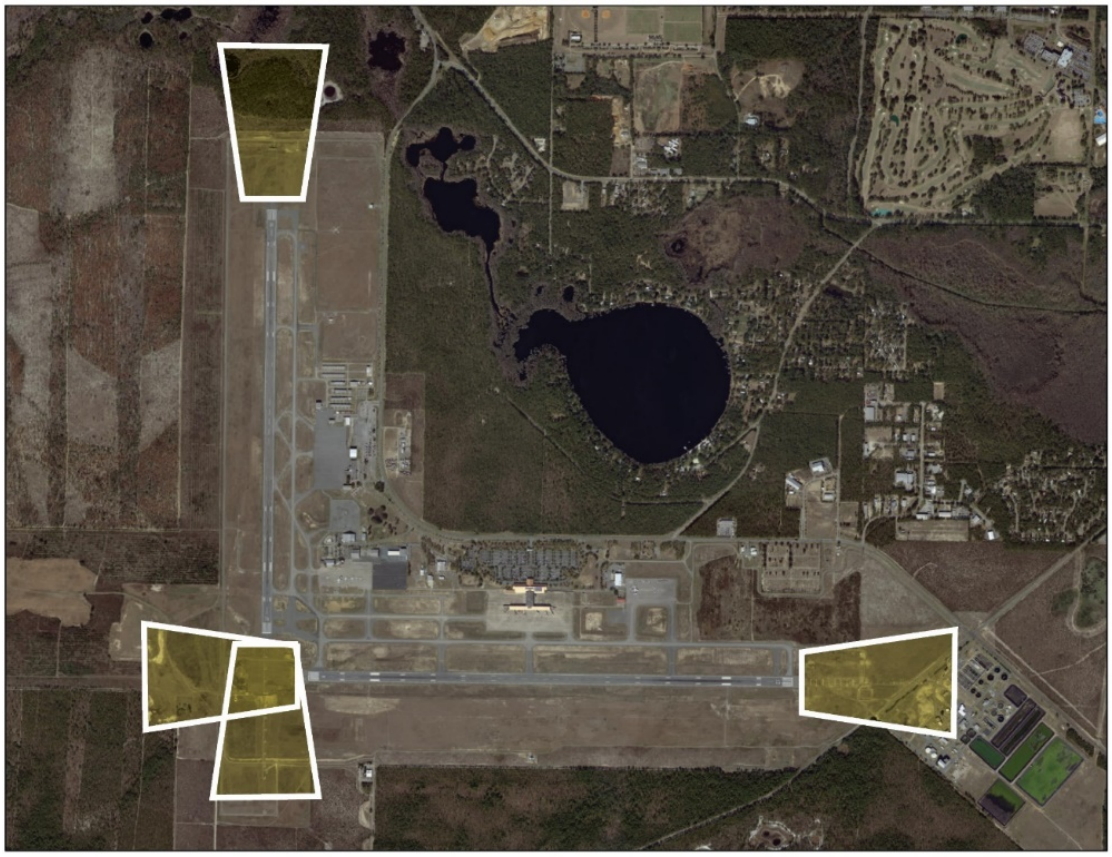


Figure 24: Example RPZs

Local governments are encouraged to examine and implement the full range of available measures such as transfer of development rights mechanisms, easements, use restrictions, and physical measures to reduce bird attraction, glare, or light emissions to achieve the goals listed above. Airport zoning regulations should explicitly address the prohibition of the above land uses in RPZs, as well as provide for the minimization and/or mitigation of incompatible land uses in the RPZ as needed.

Requirement for Interlocal Agreement / Joint Zoning Board

Interlocal agreements between local governments with regards to airports and airspace is vitally important because an airport's imaginary surface(s) may extend beyond the territorial limits of one jurisdiction, as shown in ***Figure 25***. In this scenario, an adjacent political subdivision has land upon which an obstruction could be constructed or altered that underlies one or more of the airport's imaginary surfaces. Imaginary surface(s) crossing into another jurisdiction creates a potential conflict between local governments in terms of whom has zoning authority.

Note

In general, an interlocal agreement is a collaborative contract between public bodies for providing services or having a uniform standard for action.

To mitigate this potential conflict, Section 333.03(1)(b), FS, requires local governments to enter into an interlocal agreement or joint zoning board to adopt, administer, and enforce airport protection zoning regulations for the adjacent political subdivision land. In other words, when crafting airport zoning regulations, local governments must enter into an interlocal agreement or joint zoning board with surrounding local governments with whom they share airspace.[4]

Section 333. 03(1)(b)

If an airport is owned or controlled by a political subdivision and if any other political subdivision has land upon which an obstruction may be constructed or altered which underlies any surface of the airport as provided in 14 C.F.R. part 77, subpart C, the political subdivisions shall either:

1. By interlocal agreement, adopt, administer, and enforce a set of airport protection zoning regulations; or
2. By ordinance, regulation, or resolution duly adopted, create a joint airport protection zoning board that shall adopt, administer, and enforce a set of airport protection zoning regulations. The joint airport protection zoning board shall have as voting members two representatives appointed by each participating political subdivision and a chair elected by a majority of the members so appointed. The airport manager or a representative of each airport in the affected participating political subdivisions shall serve on the board in a nonvoting capacity."

Source: Chapter 333, FS

As noted above, ***Figure 25*** illustrates a scenario where an interlocal agreement is required:

- Within its jurisdiction, City A (dark green area) has an airport with a single north-south runway (white vertical strip)
- City A is surrounded by County B (light green area)
- The runway has an approach surface that extends north and south which overlies portions of land in City A (yellow area) and County B (red area).

If County B wants to build a tall structure within any portion of the red area, City A's airport may be adversely impacted. County B will contend that it has zoning jurisdiction within the red area because it is within the boundaries of County B. City A will contend that construction in the red area will adversely impact the airport. Therefore, City A and County B need a process to resolve this potential conflict.

Section 333.03(1)(b), FS, specifically addresses this situation by the requirement to adopt interlocal agreements. Using the example from ***Figure 25*** in the statute, the statute would read as follows:

> (b) If an airport (*white vertical strip*) is owned or controlled by a political subdivision (*City A*) and if any other political subdivision (*County B*) has land (*red area*) upon which an obstruction (*structure*) may be constructed or altered which underlies any surface of the airport (*approach surface*) as provided in 14 CFR, Part 77, Subpart C, the political subdivisions shall either:

[4] **Appendices I and J** provide data tables on Florida counties and municipalities within 10 nautical miles (NM) of an airport and Florida counties and municipalities adjacent to another airport. This information can help users determinate in interlocal agreement may be necessary in their jurisdiction.

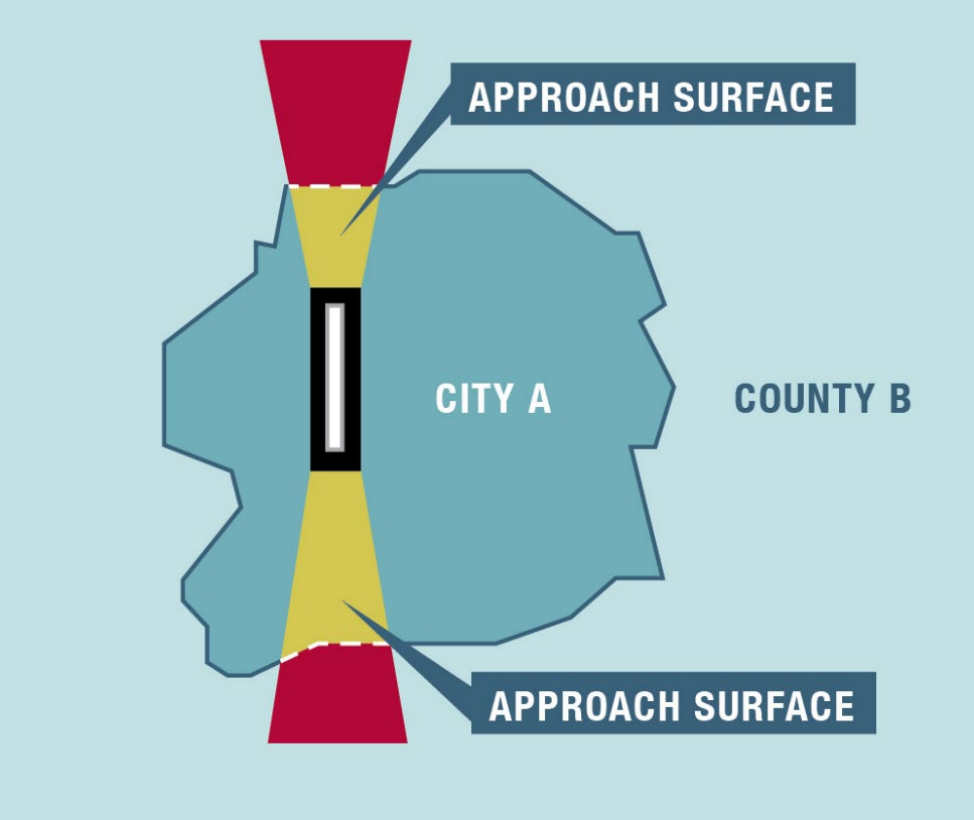


Figure 25: Interlocal Agreement Example Scenario

1. By interlocal agreement, adopt, administer, and enforce a set of airport protection zoning regulations; or
2. By ordinance, regulation, or resolution duly adopted, create a joint airport protection zoning board that shall adopt, administer, and enforce a set of airport protection zoning regulations

The most important language in the statue is that the interlocal agreement *shall* adopt a ***set*** of airport protection zoning regulations. The intent and requirement of this section is to require City A and County B to agree by interlocal agreement to a set of regulations that governs the zoning of the portion of land in question prior to a controversy arising. The two local governments can tailor their regulations to suit their interests in this portion, including accommodating the existing or planned size of the airport surface, whichever is greater.

The inclusion—or lack thereof—of interlocal agreements in airport zoning regulations has become an issue, and the statute has led to a misunderstanding among those drafting airport zoning regulations. For instance, interlocal agreements submitted to FDOT since the 2016 amendment of Chapter 333, FS, have arguably been deficient for failing to include an interlocal agreement with a "set of airport protection zoning regulations." In several cases interlocal agreements have consisted of "agreements to agree or cooperate," which does not appear to meet the requirement "to adopt a ***set*** of airport protection zoning regulations."

Further Information Regarding Airport Zoning Regulations

Chapter 333, FS, has several sections providing additional provisions regarding airport zoning regulations, comprehensive zoning regulations, the procedure for adoption of airport zoning regulations, adoption of an airport master plan, administration of airport protection zoning regulations, acquisition of air rights, enforcement and remedies, and transition provisions. The following sections provide statutory language related to these provisions, as well as commentary where needed.

Comprehensive Zoning Regulations

Section 333.04, FS, states if there is a discrepancy or conflict between political subdivisions, the most stringent regulations prevail.

Section 333.04

1. INCORPORATION. In the event that a political subdivision has adopted, or hereafter adopts, a comprehensive plan or policy regulating, among other things, the height of buildings, structures, and natural objects, and uses of property, any airport zoning regulations applicable to the same area or portion thereof may be incorporated in and made a part of such comprehensive plan or policy, and be administered and enforced in connection therewith.
2. CONFLICT. In the event of conflict between any airport zoning regulations adopted under this chapter and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or vegetation, the use of land, or any other matter, and whether such regulations were adopted by the political subdivision that adopted the airport zoning regulations or by some other political subdivision, the more stringent limitation or requirement shall govern and prevail.

Source: Chapter 333, FS

Procedure for Adoption of Airport Zoning Regulations

Section 333.05(1), FS, provides provisions addressing the adoption, amendment, or repeal of airport zoning regulations and notes that a hearing must be held to provide interested parties and citizens with the opportunity to provide comments. Notice of this hearing must be published at least once a week for two consecutive weeks in advance of the hearing.

Section 333.05(1)

NOTICE AND HEARING. Airport zoning regulations may not be adopted, amended, or repealed under this chapter except by action of the legislative body of the political subdivision or affected subdivisions, or the joint board provided in Ch. 333.03(1)(b)2. by the political subdivisions therein provided and set forth, after a public hearing in relation thereto, at which parties in interest and citizens shall have an opportunity to be heard. Notice of the hearing shall be published at least once a week for 2 consecutive weeks in a newspaper of general circulation in the political subdivision or subdivisions where the airport zoning regulations are to be adopted, amended, or repealed.

Source: Chapter 333, FS

Airport Zoning Commission

This section refers to the initial zoning of an airport area. In many cases, local governments have already created airport zoning regulations, which only need to be modified to conform with the 2016 revisions of Chapter 333, FS. In these cases, this airport zoning commission process may not be required, as the initial zoning process has previously been conducted. However, some local government have not adopted airport zoning regulations. These local governments are therefore required to comply with Section 333.05(2), FS.

Section 333.05(2)

AIRPORT ZONING COMMISSION. Before the initial zoning of any airport area under this chapter, the political subdivision or joint airport zoning board that is to adopt, administer, and enforce the regulations must appoint a commission, to be known as the airport zoning commission, to recommend the boundaries of the various zones to be established and the regulations to be adopted therefor. Such commission shall make a preliminary report and hold public hearings thereon before submitting its final report, and the legislative body of the political subdivision or the joint airport zoning board may not hold its public hearings or take any action until it has received the final report of such commission, and at least 15 days shall elapse between the receipt of the final report of the commission and the hearing to be held by the latter board. If a planning commission, an airport commission, or a comprehensive zoning commission already exists, it may be appointed as the airport zoning commission.

Source: Chapter 333, FS

Reasonableness

Section 333.06(1), FS, directs local governments to consider certain factors when crafting airport zoning regulations, while not being excessively restrictive.

Section 333.06(1)

REASONABLENESS. All airport zoning regulations adopted under this chapter shall be reasonable and may not impose any requirement or restriction which is not reasonably necessary to effectuate the purposes of this chapter. In determining what regulations it may adopt, each political subdivision and joint airport zoning board shall consider, among other things, the character of the flying operations expected to be conducted at the airport, the nature of the terrain within the airport hazard area and runway protection zones, the character of the neighborhood, the uses to which the property to be zoned is put and adaptable, and the impact of any new use, activity, or construction on the airport's operating capability and capacity.

Source: Chapter 333, FS

Independent Justification

Airport zoning regulations adopted to provide airspace protection and land use compatibility with airport operations should explicitly specify the independent justification for the zoning regulations is to promote the public interest and safety, health, and general welfare.

Section 333.06(2)

INDEPENDENT JUSTIFICATION. The purpose of all airport zoning regulations adopted under this chapter is to provide both airspace protection and land uses compatible with airport operations. Each aspect of this purpose requires independent justification in order to promote the public interest in safety, health, and general welfare. Specifically, construction in a runway protection zone which does not exceed airspace height restrictions is not conclusive that such use, activity, or construction is compatible with airport operations.

Source: Chapter 333, FS

Nonconforming Uses

Section 333.06(3), FS addresses how airport protection zoning regulations should address nonconforming uses.

Section 333.06(3)

NONCONFORMING USES. An airport protection zoning regulation adopted under this chapter may not require the removal, lowering, or other change or alteration of any obstruction not conforming to the regulation when adopted or amended, or otherwise interfere with the continuance of any nonconforming use, except as provided in s. 333.07(1) and (3).

Source: Chapter 333, FS

Adoption of Airport Master Plan and Notice to Affected Local Governments

An airport master plan must be prepared for each publicly owned and operated airport 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 the document must be forwarded by certified mail to all affected local governments. This requirement of Section 33306(3), FS, applies to the entity having jurisdiction over the airport plus any other local government within two miles of the airport boundary. While the completion and approval of an airport master plan update is often considered the public notification of the airport's future development and expansion plans, the airport should also be proactive in the master planning process to engage the public for their input. After the conclusion of the master plan update, the airport should take steps to disseminate the plan out tO ensure the community is informed of any proposed future development long before any projects begin.

There is currently no requirement for intergovernmental review or coordination of the airport master plan with surrounding communities, or for the master plan to be incorporated into appropriate comprehensive plans or local zoning considerations. To fulfill federal and state grant assurances, however, the airport and its sponsor/owner have responsibility to ensure that the airport and its need for surrounding compatible land uses and development are fully communicated to surrounding local government(s).

Section 333.06(4)

ADOPTION OF AIRPORT MASTER PLAN AND NOTICE TO AFFECTED LOCAL GOVERNMENTS. An airport master plan shall be prepared by each public-use airport licensed by the department under

Section 333.06(4)

chapter 330. The authorized entity having responsibility for governing the operation of the airport, when either requesting from or submitting to a state or federal governmental agency with funding or approval jurisdiction a "finding of no significant impact," an environmental assessment, a site-selection study, an airport master plan, or any amendment to an airport master plan, shall submit simultaneously a copy of said request, submittal, assessment, study, plan, or amendments by certified mail to all affected local governments. As used in this subsection, the term "affected local government" is defined as any municipality or county having jurisdiction over the airport and any municipality or county located within 2 miles of the boundaries of the land subject to the airport master plan.

Source: Chapter 333, FS

The owner of the airport should recall that the dimensions of the airport imaginary surfaces depend upon the category of the planned or future runway(s) as set forth in the master plan and/or ALP. Upgrading the planned or future runway(s) may likely adversely impact the airport's airspace by increasing the number of obstructions.

Administration of Airport Protection Zoning Regulations

Section 333.09(1-2), FS, requires that airport zoning regulations include provisions for administration and enforcement, local government processes, and appeals. The duties of any administrative agency must include hearing and deciding all permits under Section 333.07, FS, and all other matters under Chapter 333, FS. In FDOT's review of submitted airport zoning regulations, such duties have been found to be spread among several groups.

Section 333.09(1)

ADMINISTRATION. All airport protection zoning regulations adopted under this chapter shall provide for the administration and enforcement of such regulations by the political subdivision or its administrative agency. The duties of any administrative agency designated pursuant to this chapter must include that of hearing and deciding all permits under s. 333.07, as they pertain to such agency, and all other matters under this chapter applying to said agency.

Source: Chapter 333, FS

Local governments may choose to administer and enforce airport zoning regulations in one of two ways. If a zoning board or a permitting body already exists within the local government, that body may be designated to implement the provisions of the regulations related to permitting and appeals. Alternatively, the local government may choose to create an administrative body that processes permit applications and enforces the conditions of issued or denied permits. The process should specify the timeframes for submitting and processing applications including amendments and modifications.

Section 333.09(2)

LOCAL GOVERNMENT PROCESS.

Section 333.09(2)

a. A political subdivision required to adopt airport zoning regulations under this chapter shall provide a process to:

   1. Issue or deny permits consistent with s. 333.07.
   2. Provide the department with a copy of a complete application consistent with s. 333.025(4).
   3. Enforce the issuance or denial of a permit or other Determination made by the administrative agency with respect to airport zoning regulations.

b. If a zoning board or permitting body already exists within a political subdivision, the zoning board or permitting body may implement the airport zoning regulation permitting and appeals processes.

Source: Chapter 333, FS

Appeals

All decisions made by the permitting authority may be subject to an appeal by any person, political subdivision or its administrative agency, or a joint airport zoning board. Many local governments have a formal appeals process in place to address potential grievances related to the application of local rules and regulations. If any person, local government or its administrative agency, or a joint airport zoning board believe that the airport zoning regulations were applied or interpreted incorrectly in the process of permit issuance or denial, the aggrieved party may utilize that local government appeals process to address the grievance. All permit determination appeals must be submitted within a reasonable time as explicitly provided by the permitting authority, which can be accomplished by filing the appeal with the local jurisdiction. The filing must clearly state the nature of and the grounds for the appeal.

The filing must result in the delay of any proposed action or development that is being appealed. However, the appealing entity may request immediate action on the proposal if it can certify that any delay in action would cause imminent peril to life or property. The local government hearing the appeal may deny that request for a good cause, and the order must notify the appellant of the delay and of the nature of its cause.

During the appeal, any interested party may appear in-person or via representing agent or attorney. The local jurisdiction with permitting authority may either affirm, reverse, or modify the decision on the permit or other Determination in accordance with the provisions of the airport protection zoning ordinance. The procedures for appeal should be written in the regulations with details as to time periods, the procedures for submitting evidence and argument, filing of documents, making objections to evidence or argument, and issuance of decisions. In addition, the local government should indicate whether there are any further procedures, remedies, or processes that must be followed before a party may take this appeal to the circuit court. When the appeals process does not satisfy the appellant, the statute provides for another form of relief. Any person, political subdivision, or a joint airport zoning board may apply for judicial relief to the circuit court in the judicial circuit where the local government is located.

Section 333.09(3)

APPEALS.

a. A person, a political subdivision or its administrative agency, or a joint airport zoning board that contends a decision made by a political subdivision or its administrative agency is an improper application of airport zoning regulations may use the process established for an appeal.

b. All appeals taken under this section must be taken within a reasonable time, as provided by the political subdivision or its administrative agency, by filing with the entity from which the appeal is taken a Notice of appeal specifying the grounds for appeal.

c. An appeal shall stay all proceedings in the underlying action appealed from, unless the entity from which the appeal is taken certifies pursuant to the rules for appeal that by reason of the facts stated in the certificate a stay would, in its opinion, cause imminent peril to life or property. In such cases, proceedings may not be stayed except by order of the political subdivision or its administrative agency on Notice to the entity from which the appeal is taken and for good cause shown.

d. The political subdivision or its administrative agency shall set a reasonable time for the hearing of appeals, give public notice and due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing, any party may appear in person, by agent, or by attorney.

e. The political subdivision or its administrative agency may, in conformity with this chapter, affirm, reverse, or modify the decision on the permit or other Determination from which the appeal is taken.

Source: Chapter 333, FS

Judicial review

Section 333.11, FS, also outlines the provisions for and limitations to judicial relief procedures under airport protection zoning.

Section 333.11

1. Any person, political subdivision, or joint airport zoning board affected by a decision of a political subdivision or its administrative agency may apply for judicial relief to the circuit court in the judicial circuit where the political subdivision is located within 30 days after rendition of the decision. Review shall be by petition for writ of certiorari, which shall be governed by the Florida Rules of Appellate Procedure.
2. The court has exclusive jurisdiction to affirm, reverse, or modify the decision on the permit or other Determination from which the appeal is taken and, if appropriate, to order further proceedings by the political subdivision or its administrative agency. The findings of fact by the political subdivision or its administrative agency, if supported by substantial evidence, shall be accepted by the court as conclusive, and an objection to a decision of the political subdivision or its administrative agency may not be considered by the court unless such objection was raised in the underlying proceeding.

Source: Chapter 333, FS

Users should note that the word *rendition* has a specific meaning within the Florida Rules of Appellate Procedure. The *rendition* starts the 30-day period; therefore, users should ensure timely compliance with this 30-day period so that a request for appellate relief is not waived by failing to file in a timely manner.

Section 333.11

3. If airport zoning regulations adopted under this chapter are held by a court to interfere with the use and enjoyment of a particular structure or parcel of land to such an extent, or to be so onerous in their application to such a structure or parcel of land, as to constitute a taking or deprivation of that property in violation of the State Constitution or the Constitution of the United States, such holding shall not affect the application of such regulations to other structures and parcels of land, or such regulations as are not involved in the particular decision.
4. A judicial appeal to any court may not be permitted under this section until the appellant has exhausted all of its remedies through application for local government permits, exceptions, and appeals.

Source: Chapter 333, FS

Users should further note that Section 333.11(4), FS, can be a stumbling block for one seeking judicial review. The zoning authority may have its own internal remedial process that may need to be complied with before seeking judicial review. This question should be raised during the permit application process so that no remedial deadline is missed.

Acquisition of Air Rights

Under certain circumstances, a nonconforming use or an obstruction can cause a substantial adverse effect that cannot be addressed through permitting or otherwise mitigated. In such cases, the local government may choose to seek acquisition of a property right (avigation easement) over the property. In the event the FAA is unable to modify the airport or airspace requirements or the instrument approach procedures to ensure flight safety, the local government may choose to acquire an avigation easement. It may also be deemed necessary from a legal standpoint to provide for the protection for the airport through avigation easement acquisition rather than through the airport protection zoning.

The subject property, air rights, avigation easement, or other interest in the property may be acquired via a fee simple purchase, grant, or condemnation in the manner provided by Chapter 73, FS, *Proceedings Supplemental to Eminent Domain*, which outline the regulatory framework for eminent domain proceedings in Florida.

If the acquisition is accomplished via condemnation, the local government has the right to take immediate possession of the subject property or interest therein. As provided in Section 333.12, FS, if the rights for the property were acquired via a fee simple purchase or eminent domain, the jurisdiction taking the action must pay for the removal and relocation of any structure or public utility. Those costs are paid in addition to payments for the damages resulting from the taking, injury, or destruction of property as prescribed in Chapter 74, FS.

Section 333.12

If a nonconforming obstruction is determined to be an airport hazard and the owner will not remove, lower, or otherwise eliminate it; the approach protection necessary cannot, because of constitutional limitations, be provided by airport zoning regulations under this chapter; or it appears advisable that the necessary approach protection be provided by acquisition of property rights rather than by airport zoning regulations, the political subdivision within which the property or nonconforming obstruction is

Section 333.12

located, or the political subdivision owning or operating the airport or being served by it, may acquire, by purchase, grant, or condemnation in the manner provided by chapter 73, such property, air right, avigation easement, or other estate, portion, or interest in the property or nonconforming obstruction or such interest in the air above such property, in question, as may be necessary to effectuate the purposes of this chapter, and in so doing, if by condemnation, to have the right to take immediate possession of the property, interest in property, air right, or other right sought to be condemned, at the time, and in the manner and form, and as authorized by chapter 74. In the case of the purchase of any property, easement, or estate or interest therein or the acquisition of the same by the power of eminent domain, the political subdivision making such purchase or exercising such power shall, in addition to the damages for the taking, injury, or destruction of property, also pay the cost of the removal and relocation of any structure or any public utility that is required to be moved to a new location.

Source: Chapter 333, FS

Enforcement and Remedies

Violating Chapter 333, FS, or any associated regulations is contrary to the Florida Legislature's goal of protecting the safety and efficiency of the state's aviation system. Therefore, the statute includes a set of provisions that specify penalties for violating the statute or rules and permit ordinances adopted per its provisions.

However, Section 333, FS, lacks a definition of a "violation." Legal counsel should be sought regarding determining whether a "violation" has occurred. Chapter 775, FS, should be reviewed for a definition of "violation," since this chapter contains the remedy. Violation of the statute or zoning ordinances adopted because of its provisions may lead not only to criminal penalties, but leave the party violating the statute open to additional litigation associated with any mishap that occurs because of the violation. However, these remedies may not be available if the local government has not fully complied with statutory requirements regarding airport zoning regulations.

Section 333.13

1. Each violation of this chapter or of any airport zoning regulations, orders, or rulings adopted or made pursuant to this chapter shall constitute a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083, and each day a violation continues to exist shall constitute a separate offense.
2. In addition, the political subdivision or agency adopting the airport zoning regulations under this chapter may institute in any court of competent jurisdiction an action to prevent, restrain, correct, or abate any violation of this chapter or of airport zoning regulations adopted under this chapter or of any order or ruling made in connection with their administration or enforcement, and the court shall adjudge to the plaintiff such relief, by way of injunction, which may be mandatory, or otherwise, as may be proper under all the facts and circumstances of the case in order to fully effectuate the purposes of this chapter and of the regulations adopted and orders and rulings made pursuant thereto.

Section 333.13

3. The department may institute a civil action for injunctive relief in the appropriate circuit court to prevent violation of any provision of this chapter.

Source: Chapter 333, FS

Transition Provisions

Section 333.135, FS, has provided an effective date for the amendments to the statute and a deadline for making such amendments to existing or initial airport zoning regulations. Failure to comply fully with these deadlines and the requirements for adopting, administering, and enforcing airport zoning regulations may impact the validity of Airspace Obstruction Permits issued in accordance with existing airport zoning regulations.

Section 333.135

1. Any airport zoning regulation in effect on July 1, 2016, which includes provisions in conflict with this chapter shall be amended to conform to the requirements of this chapter by July 1, 2017.
2. Any political subdivision having an airport within its territorial limits which has not adopted airport zoning regulations shall, by July 1, 2017, adopt airport zoning regulations consistent with this chapter.
3. For those political subdivisions that have not yet adopted airport zoning regulations pursuant to this chapter, the department shall administer the permitting process as provided in s. 333.025.

Source: Chapter 333, FS

Summary of Chapter 333

Chapter 3 provided information on complying with state-mandated airspace regulations by addressing obstruction permitting; airport zoning regulations; requirements for an interlocal agreement / joint zoning board; and further information regarding the adoption, administration, and enforcement of airport zoning regulations. It is essential for airport zoning regulations to provide adequate guidance to prevent or mitigate incompatible land uses surrounding airports. This will minimize complications and financial burdens related to incompatible land uses.

Appendix A: Terms and Definitions

This *Guidebook* contains several terms and definitions that may be unfamiliar to users. This appendix provides a comprehensive overview of every acronym used in this *Guidebook*, as well as additional terms that may be helpful to users as they read this *Guidebook* and apply the information provided to local land use planning efforts.

Acronyms

AC	—	***Advisory Circular***
ACRP	—	***Airport Cooperative Research Program***
AGL	—	***Above Ground Level***
AIP	—	***Airport Improvement Program***
ALP	—	***Airport Layout Plan***
ALUCP	—	***Airport Land Use Compatibility Plan***
AO	—	***FDOT Aviation Office***
AOA	—	***Airport Operational Area***
ARP	—	***Airport Reference Point***
AEDT	—	***Aviation Environmental Design Tool***
CFR	—	***Code of Federal Regulations***
DNL	—	***Day-Night Sound Level***
DOD	—	***Department of Defense***
FAA	—	***Federal Aviation Administration***
FAC	—	***Florida Administrative Code***
FAR	—	***Federal Aviation Regulation***
FASP	—	***Florida Aviation System Plan***
FCC	—	***Federal Communications Commission***
FDOT	—	***Florida Department of Transportation (in this Guidebook, "FDOT" refers to the FDOT Aviation Office, unless otherwise specified)***
FS	—	***Florida Statute***
FT	—	***Feet***

GA	—	***General Aviation***
IFR	—	***Instrument Flight Rules***
INM	—	***Integrated Noise Model***
MPO	—	***Metropolitan Planning Organizations***
NAS	—	***National Airspace System***
NCP	—	***Noise Compatibility Program***
NEM	—	***Noise Exposure Map***
NM	—	***Nautical Mile***
OE	—	***Obstruction Evaluation***
OE/AAA	—	***Obstruction Evaluation Airport Airspace Analysis***
OES	—	***Obstruction Evaluation Service***
RPZ	—	***Runway Protection Zone***
SE	—	***Site Elevation***
TRB	—	***Transportation Research Board***
VFR	—	***Visual Flight Rules***
YDNL	—	***Yearly Day-Night Average Sound Level***

Definitions

Above Ground Level — The height an object is above the ground.

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 Federal Aviation Administration study, conducted in accordance with the standards of 14 CFR, Part 77, Subpart C, and FAA policy and guidance, on the effect of proposed construction or alteration upon the operation of air navigation facilities and the safe and efficient use of navigable airspace.

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 Hazard — An obstruction to air navigation which affects the safe and efficient use of navigable airspace or the operation of planned or existing air navigation and communication facilities.

Airport Hazard Area — Any area of land or water upon which an airport hazard might be established.

Aircraft Operations — Airborne movements of aircraft at an airport including aircraft landings (arrivals) 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.

Aircraft Hazard Area — The area around a public-use airport or military airfield on which a hazard may be erected.

Airport Cooperative Research Program (ACRP) — A research program established by the FAA intended to provide publications on aviation growth and development. It is sponsored by the FAA and is managed by the Transportation Research Board (TRB).

Airport Improvement Program (AIP) — A program that provides grants to public agencies and in some cases to private entities for the planning and development of public-use airports within the NPIAS. A public-use airport must meet current eligibility requirements for FAA funding.

Airport Land Use Compatibility Zoning — Airport zoning regulations governing the use of land on, adjacent to, or in the immediate vicinity of airports.

Airport Layout Plan (ALP) — A set of scaled drawings that provides a graphic representation of the existing and future development plan for the airport and demonstrates the preservation and continuity of safety, utility, and efficiency of the airport.

Airport Master Plan — A comprehensive plan of an airport which typically describes current and future plans for airport development designed to support existing and future aviation demand.

Airport Operational Area (AOA) — 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 Protection Zoning Ordinance — Airport zoning regulations governing airport hazards

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.

Airport Land Use Compatibility Plan (ALUCP) — A plan that provides guidance on how to limit the placement of incompatible land uses by involving multiple stakeholders, such as local government officials, planners, and citizens with guidance and information about compatibility issues with development near an airport.

Airspace Obstruction Permit — Permit required by Florida law for any proposed construction or alteration that exceeds federal obstruction standards (Part 77).

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 — A 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 Environmental Design Tool (AEDT) — A software system that models aircraft performance in space and time to estimate fuel consumption, emissions, air quality consequences, and most pertinently, noise.

Aviation Office (FDOT Aviation Office) — An office of FDOT intended to promote the development and improvement of Florida's airports, regulate airports, and protect airport approaches.

Avigation Easement — An agreement that compels property owners to surrender their property's air rights to the government.

Chapter 333, FS — A chapter of Florida Statute providing requirements and standards for airport zoning regulations and airspace obstruction permitting

Code of Federal Regulations (CFR) — The codification of the rules published in the Federal Register by the federal government.

Commercial Service — Commercial service airports are publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service.

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.

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.

Decibel — A measurement of sound.

Department of Defense (DOD) — A division of the federal government that manages all agencies related to national security.

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.

Educational Facility — Any structure, land, or use that includes a public or private kindergarten through 12th grade school, charter school, magnet school, college campus, or university campus. The term does not include space used for educational purposes within a multitenant building.

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.

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.

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.

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 (ATCT), 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.

Federal Communications Commission (FCC) — A non-governmental agency that monitors interstate communications such as radio, television, wire, satellite, and cable.

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.

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.

Florida Aviation System Plan (FASP) — FDOT's strategic 20-year plan for developing the state's public airports.

Florida Statutes (FS) — Statutory laws of Florida that provide the basis for all development within Florida.

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.

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 — 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).

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.

Land Banking — The purchase of property to be held for future use and development or for resale for the development of compatible uses.

Land Development Regulation — A land development regulation is any regulation that implements a jurisdiction's land development code or restrictions.

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.

Landfill — Any solid waste land disposal area for which a permit, other than a general permit, is required by s. 403.707 and which receives solid waste for disposal in or upon land. The term does not include a land-spreading site, an injection well, a surface impoundment, or a facility for the disposal of construction and demolition debris.

Metropolitan Planning Organization (MPO) — A local government within a metropolitan planning area responsible for carrying out transportation planning and programming.

Military Airfield — An airport that provides basing and support for military aircraft.

Municipal Solid Waste Landfills — An landfill that receives household waste.

National Airspace System (NAS) — Established by FAA to protect persons and property on the ground, and to establish a safe and efficient airspace environment for civil, commercial, and military aviation.

National Association of State Aviation Officials — An organization that represents the public interest in regards to aviation.

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 Compatibility Program (NCP) — A program that outlines various strategies that the airport may consider in order to reduce noise, assuming adverse noise impacts are identified through the Part 150 process.

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.

Notice Criteria Tool — A computerized tool offered by FAA 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 — Any existing or proposed object, terrain, or structure construction or alteration that exceeds the federal obstruction standards contained in 14 CFR, Part 77, Subpart C. The term includes:

- Any object of natural growth or terrain
- Permanent or temporary construction or alteration, including equipment or materials used and any permanent or temporary apparatus
- Alteration of any permanent or temporary existing structure by a change in the structure's height, including appurtenances, lateral dimensions, and equipment or materials used in the structure.

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 takeoff or landing of an aircraft. Every aircraft flight requires at least two operations, a takeoff 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.

Person — Any individual, firm, copartnership, corporation, company, association, joint-stock association, or body politic, and includes any trustee, receiver, assignee, or other similar representative thereof.

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.

Political Subdivision — The local government of any county, municipality, town, village, or other subdivision or agency thereof, or any district or special district, port commission, port authority, or other such agency authorized to establish or operate airports in the state.

Precision Approach Procedure — A standard instrument approach procedure in which an electronic glide slope is provided.

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.

Private-Use Airport — A privately-owned airport not open to the public or operated for public benefit.

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.

Public-Use Airport — An airport, publicly or privately owned, licensed by the state, which is open for use by the public.

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 Protection Zone (RPZ) — An area at ground level beyond the runway end to enhance the safety and protection of people and property on the ground.

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.

Sponsor — An individual applying for an Airspace Obstruction Permit from the FAA.

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 — Any object constructed, erected, altered, or installed, including, but not limited to, buildings, towers, smokestacks, utility poles, power generation equipment, and overhead transmission lines.

Substantial Modification — Any repair, reconstruction, rehabilitation, or improvement of a structure when the actual cost of the repair, reconstruction, rehabilitation, or improvement of the structure equals or exceeds 50 percent of the market value of the structure.

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.

Transportation Research Board (TRB) — A division within the National Research Council intended to use research to promote advancement in transportation.

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.

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.

Yearly Day-Night Average Sound Level (YDNL) — The average level of noise within a 24-hour timeframe.

Appendix B: Amended 14 Code of Federal Regulations (CFR), Part 77—*Safe, Efficient Use, and Preservation of the Navigable Airspace*

This appendix provides a copy of the most recent (as of July 2020) 14 CFR, Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace*. This document can also be accessed online at the following link: https://www.law.cornell.edu/cfr/text/14/part-77.

Subpart A—General

Subpart B—Notice Requirements

Subpart C—Standards for Determining Obstructions to Air Navigation or Navigational Aids or Facilities

Subpart D—Aeronautical Studies and Determinations

Subpart E—Petitions for Discretionary Review

Authority: 49 U.S.C. 106 (g), 40103, 40113-40114, 44502, 44701, 44718, 46101-46102, 46104.

Subpart A—General

77.1 Purpose.

This part establishes:

(a) The requirements to provide notice to the FAA of certain proposed construction, or the alteration of existing structures;

(b) The standards used to determine obstructions to air navigation, and navigational and communication facilities;

(c) The process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities or equipment; and

(d) The process to petition the FAA for discretionary review of determinations, revisions, and extensions of determinations.

77.3 Definitions.

For the purpose of this part:

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

Planned or proposed airport is an airport that is the subject of at least one of the following documents received by the FAA:

(1) Airport proposals submitted under 14 CFR part 157.

(2) Airport Improvement Program requests for aid.

(3) Notices of existing airports where prior notice of the airport construction or alteration was not provided as required by 14 CFR part 157.

(4) Airport layout plans.

(5) DOD proposals for airports used only by the U.S. Armed Forces.

(6) DOD proposals on joint-use (civil-military) airports.

(7) Completed airport site selection feasibility study.

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

Public use airport is an airport available for use by the general public without a requirement for prior approval of the airport owner or operator.

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

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

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

Subpart B—Notice Requirements

77.5 Applicability.

(a) If you propose any construction or alteration described in § 77.9, you must provide adequate notice to the FAA of that construction or alteration.

(b) If requested by the FAA, you must also file supplemental notice before the start date and upon completion of certain construction or alterations that are described in § 77.9.

(c) Notice received by the FAA under this subpart is used to:

(1) Evaluate the effect of the proposed construction or alteration on safety in air commerce and the efficient use and preservation of the navigable airspace and of airport traffic capacity at public use airports;

(2) Determine whether the effect of proposed construction or alteration is a hazard to air navigation;

(3) Determine appropriate marking and lighting recommendations, using FAA Advisory Circular 70/7460-1, Obstruction Marking and Lighting;

(4) Determine other appropriate measures to be applied for continued safety of air navigation; and

(5) Notify the aviation community of the construction or alteration of objects that affect the navigable airspace, including the revision of charts, when necessary.

77.7 Form and time of notice.

(a) If you are required to file notice under § 77.9, you must submit to the FAA a completed FAA Form 7460-1, Notice of Proposed Construction or Alteration. FAA Form 7460-1 is available at FAA regional offices and on the Internet.

(b) You must submit this form at least 45 days before the start date of the proposed construction or alteration or the date an application for a construction permit is filed, whichever is earliest.

(c) If you propose construction or alteration that is also subject to the licensing requirements of the Federal Communications Commission (FCC), you must submit notice to the FAA on or before the date that the application is filed with the FCC.

(d) If you propose construction or alteration to an existing structure that exceeds 2,000 ft. in height above ground level (AGL), the FAA presumes it to be a hazard to air navigation that results in an inefficient use of airspace. You must include details explaining both why the proposal would not constitute a hazard to air navigation and why it would not cause an inefficient use of airspace.

(e) The 45-day advance notice requirement is waived if immediate construction or alteration is required because of an emergency involving essential public services, public health, or public safety. You may provide notice to the FAA by any available, expeditious means. You must file a completed FAA Form 7460-1 within 5 days of the initial notice to the FAA. Outside normal business hours, the nearest flight service station will accept emergency notices.

77.9 Construction or alteration requiring notice.

If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file notice with the FAA of:

(a) Any construction or alteration that is more than 200 ft. AGL at its site.

(b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

(1) 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.

(2) 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.

(3) 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.

(c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where

overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.

(d) Any construction or alteration on any of the following airports and heliports:

(1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;

(2) A military airport under construction, or an airport under construction that will be available for public use;

(3) An airport operated by a Federal agency or the DOD.

(4) An airport or heliport with at least one FAA-approved instrument approach procedure.

(e) You do not need to file notice for construction or alteration of:

(1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;

(2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;

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

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

77.11 Supplemental notice requirements.

(a) You must file supplemental notice with the FAA when:

(1) The construction or alteration is more than 200 feet in height AGL at its site; or

(2) Requested by the FAA.

(b) You must file supplemental notice on a prescribed FAA form to be received within the time limits specified in the FAA determination. If no time limit has been specified, you must submit supplemental notice of construction to the FAA within 5 days after the structure reaches its greatest height.

(c) If you abandon a construction or alteration proposal that requires supplemental notice, you must submit notice to the FAA within 5 days after the project is abandoned.

(d) If the construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Subpart C—Standards for Determining Obstructions to Air Navigation or Navigational Aids or Facilities

77.13 Applicability.

This subpart describes the standards used for determining obstructions to air navigation, navigational aids, or navigational facilities. These standards apply to the following:

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

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

77.15 Scope.

(a) This subpart describes standards used to determine obstructions to air navigation that may affect the safe and efficient use of navigable airspace and the operation of planned or existing air navigation and communication facilities. Such facilities include air navigation aids, communication equipment, airports, Federal airways, instrument approach or departure procedures, and approved off-airway routes.

(b) Objects that are considered obstructions under the standards Start Printed Page 42305described in this subpart are presumed hazards to air navigation unless further aeronautical study concludes that the object is not a hazard. Once further aeronautical study has been initiated, the FAA will use the standards in this subpart, along with FAA policy and guidance material, to determine if the object is a hazard to air navigation.

(c) The FAA will apply these standards with reference to an existing airport facility, and airport proposals received by the FAA, or the appropriate military service, before it issues a final determination.

(d) For airports having defined runways with specially prepared hard surfaces, the primary surface for each runway extends 200 feet beyond each end of the runway. For airports having defined strips or pathways used regularly for aircraft takeoffs and landings, and designated runways, without specially prepared hard surfaces, each end of the primary surface for each such runway shall coincide with the corresponding end of the runway. At airports, excluding seaplane bases, having a defined landing and takeoff area with no defined pathways for aircraft takeoffs and landings, a determination must be made as to which portions of the landing and takeoff area are regularly used as landing and takeoff pathways. Those determined pathways must be considered runways, and an appropriate primary surface as defined in § 77.19 will be considered as longitudinally centered on each such runway. Each end of that primary surface must coincide with the corresponding end of that runway.

(e) The standards in this subpart apply to construction or alteration proposals on an airport (including heliports and seaplane bases with marked lanes) if that airport is one of the following before the issuance of the final determination:

(1) Available for public use and is listed in the Airport/Facility Directory, Supplement Alaska, or Supplement Pacific of the U.S. Government Flight Information Publications; or

(2) A planned or proposed airport or an airport under construction of which the FAA has received actual notice, except DOD airports, where there is a clear indication the airport will be available for public use; or,

(3) An airport operated by a Federal agency or the DOD; or,

(4) An airport that has at least one FAA-approved instrument approach.

77.17 Obstruction standards.

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

(1) A height of 499 feet AGL at the site of the object.

(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet.

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

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

(5) The surface of a takeoff and landing area of an airport or any imaginary surface established under § 77.19, 77.21, or 77.23. However, no part of the takeoff or landing area itself will be considered an obstruction.

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

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

(2) 15 feet for any other public roadway.

(3) 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road.

(4) 23 feet for a railroad.

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

77.19 Civil airport imaginary surfaces.

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

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

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

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

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

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

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

(2) 500 feet for utility runways having non-precision instrument approaches.

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

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

(ii) 500 feet for non-precision instrument runways having visibility minimums greater than three-fourths statue mile.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

77.21 Department of Defense (DOD) airport imaginary surfaces.

(a) Related to airport reference points. These surfaces apply to all military airports. For the purposes of this section, a military airport is any airport operated by the DOD.

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

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

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

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

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

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

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

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

77.23 Heliport imaginary surfaces.

(a) Primary surface. The area of the primary surface coincides in size and shape with the designated takeoff and landing area. This surface is a horizontal plane at the elevation of the established heliport elevation.

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

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

Subpart D—Aeronautical Studies and Determinations

77.25 Applicability.

(a) This subpart applies to any aeronautical study of a proposed construction or alteration for which notice to the FAA is required under § 77.9.

(b) The purpose of an aeronautical study is to determine whether the aeronautical effects of the specific proposal and, where appropriate, the cumulative impact resulting from the proposed construction or alteration when combined with the effects of other existing or proposed structures, would constitute a hazard to air navigation.

(c) The obstruction standards in Subpart C of this part are supplemented by other manuals and directives used in determining the effect on the navigable airspace of a proposed construction or alteration. When the FAA needs additional information, it may circulate a study to interested parties for comment.

77.27 Initiation of studies.

The FAA will conduct an aeronautical study when:

(a) Requested by the sponsor of any proposed construction or alteration for which a notice is submitted; or

(b) The FAA determines a study is necessary.

77.29 Evaluating aeronautical effect.

(a) The FAA conducts an aeronautical study to determine the impact of a proposed structure, an existing structure that has not yet been studied by the FAA, or an alteration of an existing structure on aeronautical operations, procedures, and the safety of flight. These studies include evaluating:

(1) The impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules;

(2) The impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules;

(3) The impact on existing and planned public use airports;

(4) Airport traffic capacity of existing public use airports and public use airport development plans received before the issuance of the final determination;

(5) Minimum obstacle clearance altitudes, minimum instrument flight rules altitudes, approved or planned instrument approach procedures, and departure procedures;

(6) The potential effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems;

(7) The aeronautical effects resulting from the cumulative impact of a proposed construction or alteration of a structure when combined with the effects of other existing or proposed structures.

(b) If you withdraw the proposed construction or alteration or revise it so that it is no longer identified as an obstruction, or if no further aeronautical study is necessary, the FAA may terminate the study.

77.31 Determinations.

(a) The FAA will issue a determination stating whether the proposed construction or alteration would be a hazard to air navigation, and will advise all known interested persons.

(b) The FAA will make determinations based on the aeronautical study findings and will identify the following:

(1) The effects on VFR/IFR aeronautical departure/arrival operations, air traffic procedures, minimum flight altitudes, and existing, planned, or proposed airports listed in § 77.15(e) of which the FAA has received actual notice prior to issuance of a final determination.

(2) The extent of the physical and/or electromagnetic effect on the operation of existing or proposed air navigation facilities, communication aids, or surveillance systems.

(c) The FAA will issue a Determination of Hazard to Air Navigation when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard and would have a substantial aeronautical impact.

(d) A Determination of No Hazard to Air Navigation will be issued when the aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation. A Determination of No Hazard to Air Navigation may include the following:

(1) Conditional provisions of a determination.

(2) Limitations necessary to minimize potential problems, such as the use of temporary construction equipment.

(3) Supplemental notice requirements, when required.

(4) Marking and lighting recommendations, as appropriate.

(e) The FAA will issue a Determination of No Hazard to Air Navigation when a proposed structure does not exceed any of the obstruction standards and would not be a hazard to air navigation.

77.33 Effective period of determinations.

(a) A determination issued under this subpart is effective 40 days after the date of issuance, unless a petition for discretionary review is received by the FAA within 30 days after issuance. The determination will not become final pending disposition of a petition for discretionary review.

(b) Unless extended, revised, or terminated, each Determination of No Hazard to Air Navigation issued under this subpart expires 18 months after the effective date of the determination, or on the date the proposed construction or alteration is abandoned, whichever is earlier.

(c) A Determination of Hazard to Air Navigation has no expiration date.

77.35 Extensions, terminations, revisions and corrections.

(a) You may petition the FAA official that issued the Determination of No Hazard to Air Navigation to revise or reconsider the determination based on new facts or to extend the effective period of the determination, provided that:

(1) Actual structural work of the proposed construction or alteration, such as the laying of a foundation, but not including excavation, has not been started; and

(2) The petition is submitted at least 15 days before the expiration date of the Determination of No Hazard to Air Navigation.

(b) A Determination of No Hazard to Air Navigation issued for those construction or alteration proposals not requiring an FCC construction permit may be extended by the FAA one time for a period not to exceed 18 months.

(c) A Determination of No Hazard to Air Navigation issued for a proposal requiring an FCC construction permit may be granted extensions for up to 18 months, provided that:

(1) You submit evidence that an application for a construction permit/license was filed with the FCC for the associated site within 6 months of issuance of the determination; and

(2) You submit evidence that additional time is warranted because of FCC requirements; and

(3) Where the FCC issues a construction permit, a final Determination of No Hazard to Air Navigation is effective until the date prescribed by the FCC for completion of the construction. If an extension of the original FCC completion date is needed, an extension of the FAA determination must be requested from the Obstruction Evaluation Service (OES).

(4) If the Commission refuses to issue a construction permit, the final determination expires on the date of its refusal.

Subpart E—Petitions for Discretionary Review

77.37 General.

(a) If you are the sponsor, provided a substantive aeronautical comment on a proposal in an aeronautical study, or have a substantive aeronautical comment on the proposal but were not given an opportunity to state it, you may petition the FAA for a discretionary review of a determination, revision, or extension of a determination issued by the FAA.

(b) You may not file a petition for discretionary review for a Determination of No Hazard that is issued for a temporary structure, marking and lighting recommendation, or when a proposed structure or alteration does not exceed obstruction standards contained in Subpart C of this part.

77.39 Contents of a petition.

(a) You must file a petition for discretionary review in writing and it must be received by the FAA within 30 days after the issuance of a determination under § 77.31, or a revision or extension of the determination under § 77.35.

(b) The petition must contain a full statement of the aeronautical basis on Start Printed Page 42308which the petition is made, and must include new information or facts not previously considered or presented during the aeronautical study, including valid aeronautical reasons why the determination, revisions, or extension made by the FAA should be reviewed.

(c) In the event that the last day of the 30-day filing period falls on a weekend or a day the Federal government is closed, the last day of the filing period is the next day that the government is open.

(d) The FAA will inform the petitioner or sponsor (if other than the petitioner) and the FCC (whenever an FCC-related proposal is involved) of the filing of the petition and that the determination is not final pending disposition of the petition.

77.41 Discretionary review results.

(a) If discretionary review is granted, the FAA will inform the petitioner and the sponsor (if other than the petitioner) of the issues to be studied and reviewed. The review may include a request for comments and a review of all records from the initial aeronautical study.

(b) If discretionary review is denied, the FAA will notify the petitioner and the sponsor (if other than the petitioner), and the FCC, whenever a FCC-related proposal is involved, of the basis for the denial along with a statement that the determination is final.

(c) After concluding the discretionary review process, the FAA will revise, affirm, or reverse the determination.

Issued in Washington, DC, on July 13, 2010.

J. Randolph Babbitt,

Administrator.

Appendix C: Amended Chapter 333, Florida Statutes (FS)—*Airport Zoning*

This appendix provides a copy of the most recent (as of July 2020) *Chapter 333, FS, Airport Zoning*. This document can also be accessed online at the following link: http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0300-0399/0333/0333.html.

333.01 Definitions. —As used in this chapter, the term:

(1) "Aeronautical study" means a Federal Aviation Administration study, conducted in accordance with the standards of 14 C.F.R. part 77, Subpart C, and Federal Aviation Administration policy and guidance, on the effect of proposed construction or alteration upon the operation of air navigation facilities and the safe and efficient use of navigable airspace.

(2) "Airport" means any area of land or water designed and set aside for the landing and taking off of aircraft and used or to be used in the interest of the public for such purpose.

(3) "Airport hazard" means an obstruction to air navigation which affects the safe and efficient use of navigable airspace or the operation of planned or existing air navigation and communication facilities.

(4) "Airport hazard area" means any area of land or water upon which an airport hazard might be established.

(5) "Airport land use compatibility zoning" means airport zoning regulations governing the use of land on, adjacent to, or in the immediate vicinity of airports.

(6) "Airport layout plan" means a set of scaled drawings that provides a graphic representation of the existing and future development plan for the airport and demonstrates the preservation and continuity of safety, utility, and efficiency of the airport.

(7) "Airport master plan" means a comprehensive plan of an airport which typically describes current and future plans for airport development designed to support existing and future aviation demand.

(8) "Airport protection zoning regulations" means airport zoning regulations governing airport hazards.

(9) "Department" means the Department of Transportation as created under s. 20.23.

(10) "Educational facility" means any structure, land, or use that includes a public or private kindergarten through 12th grade school, charter school, magnet school, college campus, or university campus. The term does not include space used for educational purposes within a multitenant building.

(11) "Landfill" has the same meaning as provided in s. 403.703.

(12) "Obstruction" means any existing or proposed object, terrain, or structure construction or alteration that exceeds the federal obstruction standards contained in 14 C.F.R. part 77, Subpart C. The term includes:

(a) Any object of natural growth or terrain;

(b) Permanent or temporary construction or alteration, including equipment or materials used and any permanent or temporary apparatus; or

(c) Alteration of any permanent or temporary existing structure by a change in the structure's height, including appurtenances, lateral dimensions, and equipment or materials used in the structure.

(13) "Person" means any individual, firm, copartnership, corporation, company, association, joint-stock association, or body politic, and includes any trustee, receiver, assignee, or other similar representative thereof.

(14) "Political subdivision" means the local government of any county, municipality, town, village, or other subdivision or agency thereof, or any district or special district, port commission, port authority, or other such agency authorized to establish or operate airports in the state.

(15) "Public-use airport" means an airport, publicly or privately owned, licensed by the state, which is open for use by the public.

(16) "Runway protection zone" means an area at ground level beyond the runway end to enhance the safety and protection of people and property on the ground.

(17) "Structure" means any object constructed, erected, altered, or installed, including, but not limited to, buildings, towers, smokestacks, utility poles, power generation equipment, and overhead transmission lines.

(18) "Substantial modification" means any repair, reconstruction, rehabilitation, or improvement of a structure when the actual cost of the repair, reconstruction, rehabilitation, or improvement of the structure equals or exceeds 50 percent of the market value of the structure.

History.—s. 1, ch. 23079, 1945; s. 2, ch. 75-16; s. 1, ch. 88-356; s. 70, ch. 90-136; s. 84, ch. 91-221; s. 482, ch. 95-148; s. 1, ch. 2016-209; s. 21, ch. 2016-239.

333.02 Airport hazards and uses of land in airport vicinities contrary to public interest.

(1) It is hereby found that an airport hazard endangers the lives and property of users of the airport and of occupants of land in its vicinity and also, if of the obstruction type, in effect reduces the size of the area available for the taking off, maneuvering, or landing of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein. It is further found that certain activities and uses of land in the immediate vicinity of airports as enumerated in s. 333.03(2) are not compatible with normal airport operations, and may, if not regulated, also endanger the lives of the participants, adversely affect their health, or otherwise limit the accomplishment of normal activities. Accordingly, it is hereby declared:

(a) That the creation or establishment of an airport hazard and the incompatible use of land in airport vicinities are public nuisances and injure the community served by the airport in question;

(b) That it is therefore necessary in the interest of the public health, public safety, and general welfare that the creation or establishment of airport hazards and incompatible land uses be prevented; and

(c) That this should be accomplished, to the extent legally possible, by the exercise of the police power, without compensation.

(2) It is further declared that the limitation of land uses incompatible with normal airport operations, the prevention of the creation or establishment of airport hazards, and the elimination, removal, alteration, mitigation, or marking and lighting of existing airport hazards are public purposes for which political subdivisions may raise and expend public funds and acquire land or property interests therein, or air rights thereover.

History.—s. 2, ch. 23079, 1945; s. 2, ch. 88-356; s. 71, ch. 90-136.

333.025 Permit required for obstructions.

(1) A person proposing the construction or alteration of an obstruction must obtain a permit from the department, subject to subsections (2), (3), and (4). However, permits from the department will be required only within an airport hazard area where federal obstruction standards are exceeded and if the proposed construction or alteration is within a 10-nautical-mile radius of the airport reference point, located at the approximate geometric center of all usable runways of a public-use airport or military airport.

(2) Existing, planned, and proposed facilities on public-use airports contained in an airport master plan, in an airport layout plan submitted to the Federal Aviation Administration, or in comparable military documents shall be protected from airport hazards.

(3) A permit is not required for existing structures that received construction permits from the Federal Communications Commission for structures exceeding federal obstruction standards before May 20, 1975;

a permit is not required for any necessary replacement or repairs to such existing structures if the height and location are unchanged.

(4) If political subdivisions have, in compliance with this chapter, adopted adequate airport protection zoning regulations, placed such regulations on file with the department's aviation office, and established a permitting process, a permit for the construction or alteration of an obstruction is not required from the department. Upon receipt of a complete permit application, the local government shall provide a copy of the application to the department's aviation office by certified mail, return receipt requested, or by a delivery service that provides a receipt evidencing delivery. To evaluate technical consistency with this subsection, the department shall have a 15-day review period following receipt of the application, which must run concurrently with the local government permitting process. Cranes, construction equipment, and other temporary structures in use or in place for a period not to exceed 18 consecutive months are exempt from the department's review, unless such review is requested by the department.

(5) The department shall, within 30 days after receipt of an application for a permit, issue or deny a permit for the construction or alteration of an obstruction. The department shall review permit applications in conformity with s. 120.60.

(6) In determining whether to issue or deny a permit, the department shall consider:

(a) The safety of persons on the ground and in the air.

(b) The safe and efficient use of navigable airspace.

(c) The nature of the terrain and height of existing structures.

(d) The effect of the construction or alteration of an obstruction on the state licensing standards for a public-use airport contained in chapter 330 and rules adopted thereunder.

(e) The character of existing and planned flight operations and developments at public-use airports.

(f) Federal airways, visual flight rules, flyways and corridors, and instrument approaches as designated by the Federal Aviation Administration.

(g) The effect of the construction or alteration of an obstruction on the minimum descent altitude or the decision height at the affected airport.

(h) The cumulative effects on navigable airspace of all existing obstructions and all known proposed obstructions in the area.

(7) When issuing a permit under this section, the department shall require the owner of the obstruction to install, operate, and maintain, at the owner's expense, marking and lighting in conformance with the specific standards established by the Federal Aviation Administration.

(8) The department may not approve a permit for the construction or alteration of an obstruction unless the applicant submits documentation showing both compliance with the federal requirement for notification of proposed construction or alteration and a valid aeronautical study. A permit may not be approved solely on the basis that the Federal Aviation Administration determined that the proposed construction or alteration of an obstruction was not an airport hazard.

(9) The denial of a permit under this section is subject to administrative review pursuant to chapter 120.

History.—s. 3, ch. 75-16; s. 3, ch. 88-356; s. 7, ch. 92-152; s. 2, ch. 2016-209; s. 22, ch. 2016-239.

333.03 Requirement to adopt airport zoning regulations.

(1)(a) Every political subdivision having an airport hazard area within its territorial limits shall adopt, administer, and enforce, under the police power and in the manner and upon the conditions prescribed in this section, airport protection zoning regulations for such airport hazard area.

(b) If an airport is owned or controlled by a political subdivision and if any other political subdivision has land upon which an obstruction may be constructed or altered which underlies any surface of the airport as provided in 14 C.F.R. part 77, Subpart C, the political subdivisions shall either:

1. By interlocal agreement, adopt, administer, and enforce a set of airport protection zoning regulations; or

2. By ordinance, regulation, or resolution duly adopted, create a joint airport protection zoning board that shall adopt, administer, and enforce a set of airport protection zoning regulations. The joint airport protection zoning board shall have as voting members two representatives appointed by each participating political subdivision and a chair elected by a majority of the members so appointed. The airport manager or a representative of each airport in the affected participating political subdivisions shall serve on the board in a nonvoting capacity.

(c) Airport protection zoning regulations adopted under paragraph (a) must, at a minimum, require:

1. A permit for the construction or alteration of any obstruction;

2. Obstruction marking and lighting for obstructions;

3. Documentation showing compliance with the federal requirement for notification of proposed construction or alteration of structures and a valid aeronautical study submitted by each person applying for a permit;

4. Consideration of the criteria in s. 333.025(6), when determining whether to issue or deny a permit; and

5. That approval of a permit not be based solely on the determination by the Federal Aviation Administration that the proposed structure is not an airport hazard.

(d) The department shall be available to provide assistance to political subdivisions regarding federal obstruction standards.

(2) In the manner provided in subsection (1), political subdivisions shall adopt, administer, and enforce airport land use compatibility zoning regulations. Airport land use compatibility zoning regulations shall, at a minimum, address the following:

(a) The prohibition of new landfills and the restriction of existing landfills within the following areas:

1. Within 10,000 feet from the nearest point of any runway used or planned to be used by turbine aircraft.

2. Within 5,000 feet from the nearest point of any runway used by only nonturbine aircraft.

3. Outside the perimeters defined in subparagraphs 1. and 2., but still within the lateral limits of the civil airport imaginary surfaces defined in 14 C.F.R. s. 77.19. Case-by-case review of such landfills is advised.

(b) Where any landfill is located and constructed in a manner that attracts or sustains hazardous bird movements from feeding, water, or roosting areas into, or across, the runways or approach and departure patterns of aircraft. The landfill operator must incorporate bird management techniques or other practices to minimize bird hazards to airborne aircraft.

(c) Where an airport authority or other governing body operating a public-use airport has conducted a noise study in accordance with 14 C.F.R. part 150, or where a public-use airport owner has established noise contours pursuant to another public study approved by the Federal Aviation Administration, the prohibition of incompatible uses, as established in the noise study in 14 C.F.R. part 150, Appendix A or as a part of an alternative Federal Aviation Administration-approved public study, within the noise contours established by any of these studies, except if such uses are specifically contemplated by such study with appropriate mitigation or similar techniques described in the study.

(d) Where an airport authority or other governing body operating a public-use airport has not conducted a noise study, the prohibition of residential construction and any educational facility, with the exception of aviation school facilities, within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline.

(e) The restriction of new incompatible uses, activities, or substantial modifications to existing incompatible uses within runway protection zones.

(3) Political subdivisions shall provide a copy of all airport protection zoning regulations and airport land use compatibility zoning regulations, and any related amendments, to the department's aviation office within 30 days after adoption.

(4) Subsection (2) may 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 facility or site in existence on July 1, 1993.

(5) This section does not prohibit an airport authority, a political subdivision or its administrative agency, or any other governing body operating a public-use airport from establishing airport zoning regulations more restrictive than prescribed in this section in order to protect the health, safety, and welfare of the public in the air and on the ground.

History.—s. 3, ch. 23079, 1945; s. 4, ch. 75-16; s. 4, ch. 88-356; s. 72, ch. 90-136; s. 8, ch. 92-152; s. 10, ch. 93-164; s. 1, ch. 94-201; s. 958, ch. 95-148; s. 971, ch. 2002-387; s. 3, ch. 2016-209; s. 23, ch. 2016-239.

333.04 Comprehensive zoning regulations; most stringent to prevail where conflicts occur.

(1) INCORPORATION.—In the event that a political subdivision has adopted, or hereafter adopts, a comprehensive plan or policy regulating, among other things, the height of buildings, structures, and natural objects, and uses of property, any airport zoning regulations applicable to the same area or portion thereof may be incorporated in and made a part of such comprehensive plan or policy, and be administered and enforced in connection therewith.

(2) CONFLICT.—In the event of conflict between any airport zoning regulations adopted under this chapter and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or vegetation, the use of land, or any other matter, and whether such regulations were adopted by the political subdivision that adopted the airport zoning regulations or by some other political subdivision, the more stringent limitation or requirement shall govern and prevail.

History.—s. 4, ch. 23079, 1945; s. 4, ch. 2016-209; s. 24, ch. 2016-239.

333.05 Procedure for adoption of airport zoning regulations.

(1) NOTICE AND HEARING.—Airport zoning regulations may not be adopted, amended, or repealed under this chapter except by action of the legislative body of the political subdivision or affected subdivisions, or the joint board provided in s. 333.03(1)(b)2. by the political subdivisions therein provided and set forth, after a public hearing in relation thereto, at which parties in interest and citizens shall have an opportunity to be heard. Notice of the hearing shall be published at least once a week for 2 consecutive weeks in a newspaper of general circulation in the political subdivision or subdivisions where the airport zoning regulations are to be adopted, amended, or repealed.

(2) AIRPORT ZONING COMMISSION.—Before the initial zoning of any airport area under this chapter, the political subdivision or joint airport zoning board that is to adopt, administer, and enforce the regulations must appoint a commission, to be known as the airport zoning commission, to recommend the boundaries of the various zones to be established and the regulations to be adopted therefor. Such commission shall make a preliminary report and hold public hearings thereon before submitting its final report, and the legislative body of the political subdivision or the joint airport zoning board may not hold its public hearings or take any action until it has received the final report of such commission, and at least 15 days shall elapse between the receipt of the final report of the commission and the hearing to be held by the latter board. If a planning commission, an airport commission, or a comprehensive zoning commission already exists, it may be appointed as the airport zoning commission.

History.—s. 5, ch. 23079, 1945; s. 74, ch. 90-136; s. 23, ch. 90-279; s. 39, ch. 95-143; s. 5, ch. 2016-209; s. 25, ch. 2016-239.

333.06 Airport zoning regulation requirements.

(1) REASONABLENESS.—All airport zoning regulations adopted under this chapter shall be reasonable and may not impose any requirement or restriction which is not reasonably necessary to effectuate the purposes of this chapter. In determining what regulations it may adopt, each political subdivision and joint airport zoning board shall consider, among other things, the character of the flying operations expected to be conducted at the airport, the nature of the terrain within the airport hazard area and runway protection zones, the character of the neighborhood, the uses to which the property to be zoned is put and adaptable, and the impact of any new use, activity, or construction on the airport's operating capability and capacity.

(2) INDEPENDENT JUSTIFICATION.—The purpose of all airport zoning regulations adopted under this chapter is to provide both airspace protection and land uses compatible with airport operations. Each aspect of this purpose requires independent justification in order to promote the public interest in safety, health, and general welfare. Specifically, construction in a runway protection zone which does not exceed airspace height restrictions is not conclusive that such use, activity, or construction is compatible with airport operations.

(3) NONCONFORMING USES.—An airport protection zoning regulation adopted under this chapter may not require the removal, lowering, or other change or alteration of any obstruction not conforming to the regulation when adopted or amended, or otherwise interfere with the continuance of any nonconforming use, except as provided in s. 333.07(1) and (3).

(4) ADOPTION OF AIRPORT MASTER PLAN AND NOTICE TO AFFECTED LOCAL GOVERNMENTS.—An airport master plan shall be prepared by each public-use airport licensed by the department under chapter 330. The authorized entity having responsibility for governing the operation of the airport, when either requesting from or submitting to a state or federal governmental agency with funding or approval jurisdiction a "finding of no significant impact," an environmental assessment, a site-selection study, an airport master plan, or any amendment to an airport master plan, shall submit simultaneously a copy of said request, submittal, assessment, study, plan, or amendments by certified mail to all affected local governments. As used in this subsection, the term "affected local government" is defined as any municipality or county having jurisdiction over the airport and any municipality or county located within 2 miles of the boundaries of the land subject to the airport master plan.

History.—s. 6, ch. 23079, 1945; s. 75, ch. 90-136; s. 76, ch. 2002-20; s. 6, ch. 2016-209; s. 26, ch. 2016-239.

333.07 Local government permitting of airspace obstructions.

(1) PERMITS.—

(a) A person proposing to construct, alter, or allow an airport obstruction in an airport hazard area in violation of the airport protection zoning regulations adopted under this chapter must apply for a permit. A permit may not be issued if it would allow the establishment or creation of an airport hazard or if it would permit a nonconforming obstruction to become a greater hazard to air navigation than it was when the applicable airport protection zoning regulation was adopted which allowed the establishment or creation of the obstruction, or than it is when the application for a permit is made.

(b) If the political subdivision or its administrative agency determines that a nonconforming obstruction has been abandoned or is more than 80 percent torn down, destroyed, deteriorated, or decayed, a permit may not be granted if it would allow the obstruction to exceed the applicable height limit or otherwise deviate from the airport protection zoning regulations. Whether or not an application is made for a permit under this subsection, the owner of the nonconforming obstruction may be required, at his or her own expense, to lower, remove, reconstruct, alter, or equip such obstruction as may be necessary to conform to the current airport protection zoning regulations. If the owner of the nonconforming obstruction neglects or refuses to comply with such requirement for 10 days after notice, the administrative agency may report the violation to the political subdivision involved, which subdivision, through its appropriate agency, may proceed to have the obstruction so lowered, removed, reconstructed, altered, or equipped and assess the cost and expense thereof upon the owner of the obstruction or the land whereon it is or was located.

(2) CONSIDERATIONS WHEN ISSUING OR DENYING PERMITS.—In determining whether to issue or deny a permit, the political subdivision or its administrative agency must consider the following, as applicable:

(a) The safety of persons on the ground and in the air.

(b) The safe and efficient use of navigable airspace.

(c) The nature of the terrain and height of existing structures.

(d) The effect of the construction or alteration on the state licensing standards for a public-use airport contained in chapter 330 and rules adopted thereunder.

(e) The character of existing and planned flight operations and developments at public-use airports.

(f) Federal airways, visual flight rules, flyways and corridors, and instrument approaches as designated by the Federal Aviation Administration.

(g) The effect of the construction or alteration of the proposed structure on the minimum descent altitude or the decision height at the affected airport.

(h) The cumulative effects on navigable airspace of all existing structures and all other known proposed structures in the area.

(i) Additional requirements adopted by the political subdivision or administrative agency pertinent to evaluation and protection of airspace and airport operations.

(3) OBSTRUCTION MARKING AND LIGHTING.—In issuing a permit under this section, the political subdivision or its administrative agency shall require the owner of the obstruction to install, operate, and maintain thereon, at his or her own expense, marking and lighting in conformance with the specific standards established by the Federal Aviation Administration.

History.—s. 7, ch. 23079, 1945; s. 5, ch. 88-356; s. 76, ch. 90-136; s. 483, ch. 95-148; s. 33, ch. 2016-10; s. 7, ch. 2016-209; s. 28, ch. 2016-239.

333.09 Administration of airport protection zoning regulations.

(1) ADMINISTRATION.—All airport protection zoning regulations adopted under this chapter shall provide for the administration and enforcement of such regulations by the political subdivision or its administrative agency. The duties of any administrative agency designated pursuant to this chapter must include that of hearing and deciding all permits under s. 333.07, as they pertain to such agency, and all other matters under this chapter applying to said agency.

(2) LOCAL GOVERNMENT PROCESS.—

(a) A political subdivision required to adopt airport zoning regulations under this chapter shall provide a process to:

1. Issue or deny permits consistent with s. 333.07.

2. Provide the department with a copy of a complete application consistent with s. 333.025(4).

3. Enforce the issuance or denial of a permit or other determination made by the administrative agency with respect to airport zoning regulations.

(b) If a zoning board or permitting body already exists within a political subdivision, the zoning board or permitting body may implement the airport zoning regulation permitting and appeals processes.

(3) APPEALS.—

(a) A person, a political subdivision or its administrative agency, or a joint airport zoning board that contends a decision made by a political subdivision or its administrative agency is an improper application of airport zoning regulations may use the process established for an appeal.

(b) All appeals taken under this section must be taken within a reasonable time, as provided by the political subdivision or its administrative agency, by filing with the entity from which the appeal is taken a notice of appeal specifying the grounds for appeal.

(c) An appeal shall stay all proceedings in the underlying action appealed from, unless the entity from which the appeal is taken certifies pursuant to the rules for appeal that by reason of the facts stated in the certificate a stay would, in its opinion, cause imminent peril to life or property. In such cases, proceedings may not be stayed except by order of the political subdivision or its administrative agency on notice to the entity from which the appeal is taken and for good cause shown.

(d) The political subdivision or its administrative agency shall set a reasonable time for the hearing of appeals, give public notice and due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing, any party may appear in person, by agent, or by attorney.

(e) The political subdivision or its administrative agency may, in conformity with this chapter, affirm, reverse, or modify the decision on the permit or other determination from which the appeal is taken.

History.—s. 9, ch. 23079, 1945; s. 8, ch. 2016-209; s. 30, ch. 2016-239.

333.11 Judicial review.

(1) Any person, political subdivision, or joint airport zoning board affected by a decision of a political subdivision or its administrative agency may apply for judicial relief to the circuit court in the judicial circuit where the political subdivision is located within 30 days after rendition of the decision. Review shall be by petition for writ of certiorari, which shall be governed by the Florida Rules of Appellate Procedure.

(2) The court has exclusive jurisdiction to affirm, reverse, or modify the decision on the permit or other determination from which the appeal is taken and, if appropriate, to order further proceedings by the political subdivision or its administrative agency. The findings of fact by the political subdivision or its administrative agency, if supported by substantial evidence, shall be accepted by the court as conclusive, and an objection to a decision of the political subdivision or its administrative agency may not be considered by the court unless such objection was raised in the underlying proceeding.

(3) If airport zoning regulations adopted under this chapter are held by a court to interfere with the use and enjoyment of a particular structure or parcel of land to such an extent, or to be so onerous in their application to such a structure or parcel of land, as to constitute a taking or deprivation of that property in violation of the State Constitution or the Constitution of the United States, such holding shall not affect the application of such regulations to other structures and parcels of land, or such regulations as are not involved in the particular decision.

(4) A judicial appeal to any court may not be permitted under this section until the appellant has exhausted all of its remedies through application for local government permits, exceptions, and appeals.

History.—s. 11, ch. 23079, 1945; s. 43, ch. 63-512; s. 7, ch. 88-356; s. 485, ch. 95-148; s. 9, ch. 2016-209; s. 32, ch. 2016-239.

333.12 Acquisition of air rights. —If a nonconforming obstruction is determined to be an airport hazard and the owner will not remove, lower, or otherwise eliminate it; the approach protection necessary cannot, because of constitutional limitations, be provided by airport zoning regulations under this chapter; or it appears advisable that the necessary approach protection be provided by acquisition of property rights rather than by airport zoning regulations, the political subdivision within which the property or nonconforming obstruction is located, or the political subdivision owning or operating the airport or being served by it, may acquire, by purchase, grant, or condemnation in the manner provided by chapter 73, such property, air right, avigation easement, or other estate, portion, or interest in the property or nonconforming obstruction or such interest in the air above such property, in question, as may be necessary to effectuate the purposes of this chapter, and in so doing, if by condemnation, to have the right to take immediate possession of the property, interest in property, air right, or other right sought to be condemned, at the time, and in the manner and form, and as authorized by chapter 74. In the case of the purchase of any property, easement, or estate or interest therein or the acquisition of the same by the power of eminent domain, the political subdivision making such purchase or exercising such power shall, in addition to the damages for the taking, injury, or destruction of property, also pay the cost of the removal and relocation of any structure or any public utility that is required to be moved to a new location.

History.—s. 12, ch. 23079, 1945; s. 10, ch. 2016-209; s. 33, ch. 2016-239.

333.13 Enforcement and remedies.

(1) Each violation of this chapter or of any airport zoning regulations, orders, or rulings adopted or made pursuant to this chapter shall constitute a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083, and each day a violation continues to exist shall constitute a separate offense.

(2) In addition, the political subdivision or agency adopting the airport zoning regulations under this chapter may institute in any court of competent jurisdiction an action to prevent, restrain, correct, or abate any violation of this chapter or of airport zoning regulations adopted under this chapter or of any order or ruling made in connection with their administration or enforcement, and the court shall adjudge to the plaintiff such relief, by way of injunction, which may be mandatory, or otherwise, as may be proper under all the facts and circumstances of the case in order to fully effectuate the purposes of this chapter and of the regulations adopted and orders and rulings made pursuant thereto.

(3) The department may institute a civil action for injunctive relief in the appropriate circuit court to prevent violation of any provision of this chapter.

History.—s. 13, ch. 23079, 1945; s. 232, ch. 71-136; s. 5, ch. 75-16; s. 11, ch. 2016-209; s. 34, ch. 2016-239.

333.135 Transition provisions.

(1) Any airport zoning regulation in effect on July 1, 2016, which includes provisions in conflict with this chapter shall be amended to conform to the requirements of this chapter by July 1, 2017.

(2) Any political subdivision having an airport within its territorial limits which has not adopted airport zoning regulations shall, by July 1, 2017, adopt airport zoning regulations consistent with this chapter.

(3) For those political subdivisions that have not yet adopted airport zoning regulations pursuant to this chapter, the department shall administer the permitting process as provided in s. 333.025.

History.—s. 12, ch. 2016-209; s. 35, ch. 2016-239.

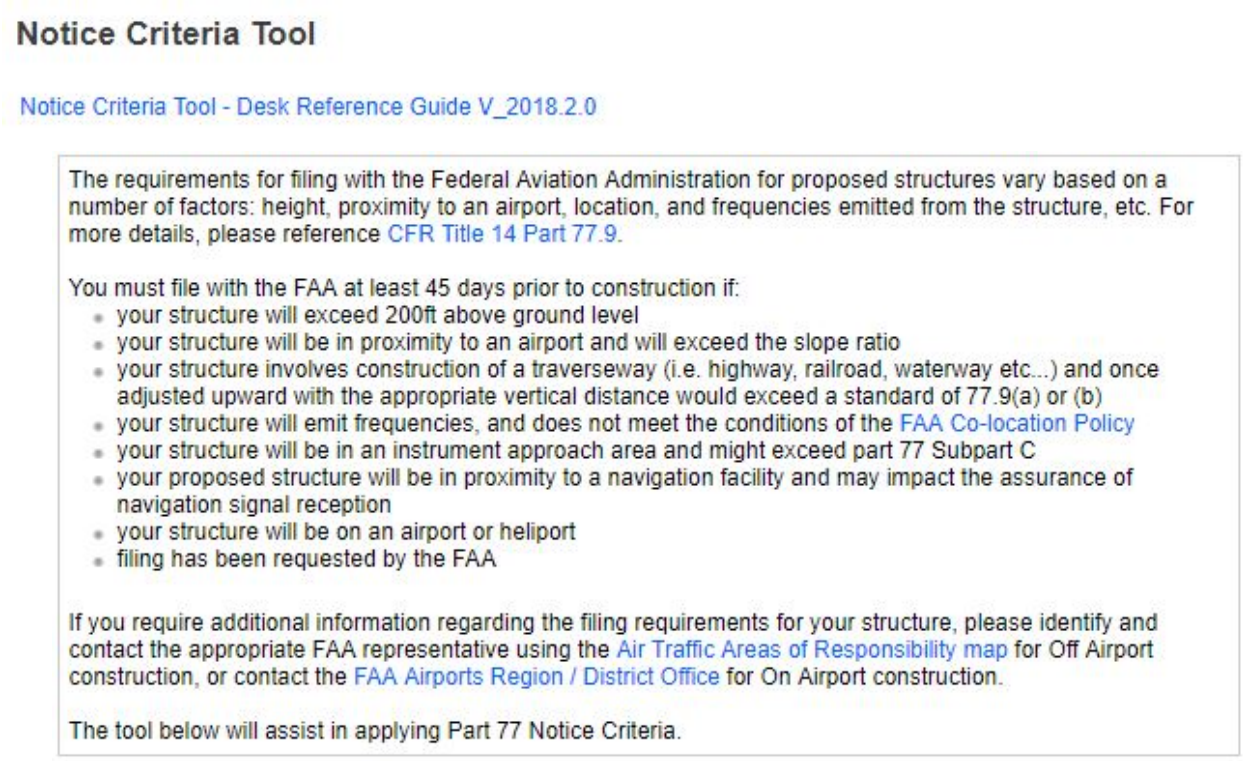
Appendix D: Notice Criteria Tool—Desk Reference Guide V 2018.2.0

Provided by the FAA, the Desk Reference Guide is a compilation of instructions for specific activities that may be completed by users of the Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) website. This appendix provides a copy of the latest (as of this *Guidebook* publish date) Desk Reference Guide, including how to access the Notice Criteria Tool page on the OE/AAA website. The Desk Reference Guide can also be accessed at the following link:

https://oeaaa.faa.gov/oeaaa/downloads/external/content/deskReferenceGuides/Notice%20Criteria%20Tool%20-%20Desk%20Reference%20Guide%20V_2018.2.0.pdf

Obstruction Evaluation *Version 2018.2.2*
Home
FAA OE/AAA Offices
View Determined Cases
View Interim Cases
View Proposed Cases
View Supplemental Notices (Form 7460-2)
View Circularized Cases
Search Archives
Download Archives
Download Correspondence
Circle Search for Cases
Circle Search for Airports
General FAQs
Marking/Lighting FAQs
Wind Turbine FAQs
Discretionary Review FAQs
Notice Criteria Tool
DoD Preliminary Screening Tool
Wind Turbine Build Out
Distance Calculation Tool

To access the Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) Notice Criteria screen, select the Notice Criteria Tool link located on the left sidebar of the website, under the gray Obstruction Evaluation header (as highlighted in the table above).



Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the FAA Co-location Policy
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

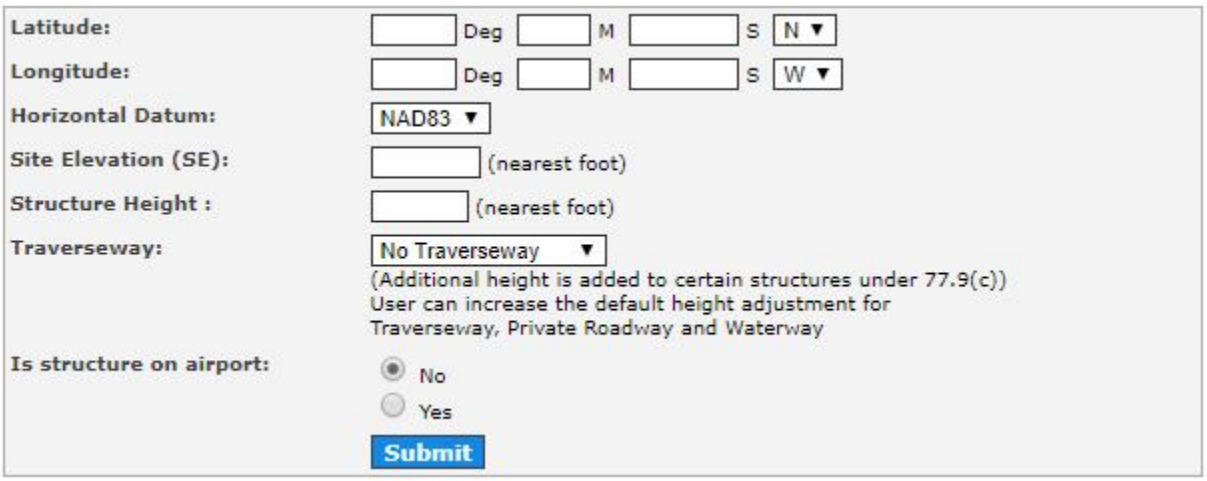
The tool below will assist in applying Part 77 Notice Criteria.

There is a ***CFR Title 14 Part 77.9*** link in the first paragraph on the website, as shown above. Selecting this link opens a new browser window where users can view text or PDF sections of the Part 77 regulation. Users must ensure that their proposal does not require Notice under any Notice Criteria prescribed in Part 77.9 (see Chapter 2 for additional details about submitted Notice to the Federal Aviation Administration (FAA). .

In the bulleted list shown on the website, there is a link to the ***FAA Co-location Policy***. In the following paragraph, there are links to access the ***Air Traffic Areas of Responsibility map*** and the ***FAA Airports Region / District Office*** website. These links provide contact information for individual to contact for additional assistance regarding off-airport construction and on-airport construction, respectively.

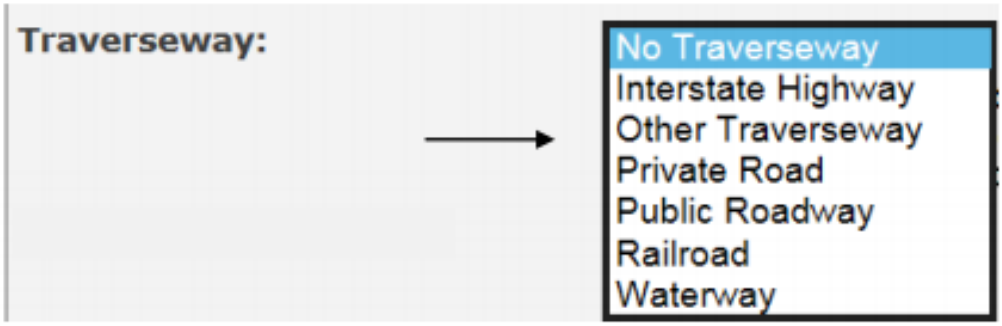
Users should use the Notice Criteria Tool to determine if their proposal exceeds the FAA slope ratio criteria. The Notice Criteria (slope calculation) tool is only provided to assist users in applying the appropriate calculation for Part 77.9.

Notice Criteria Tool



To fill out the Notice Criteria Tool, follow the following instructions:

1. Enter the proposed Latitude, Longitude, Horizontal Datum, Site Elevation (SE), and proposed Structure Height.
2. Use the default entry of "No Traverseway" in this Traverseway field unless structure is going to cross one of the dropdown entries.



3. Select whether the calculation is being run for a structure on an airport.
4. Click the [Submit] button.

The results will advise if the proposal exceeds the FAA's slope criteria requiring Notice to the FAA.

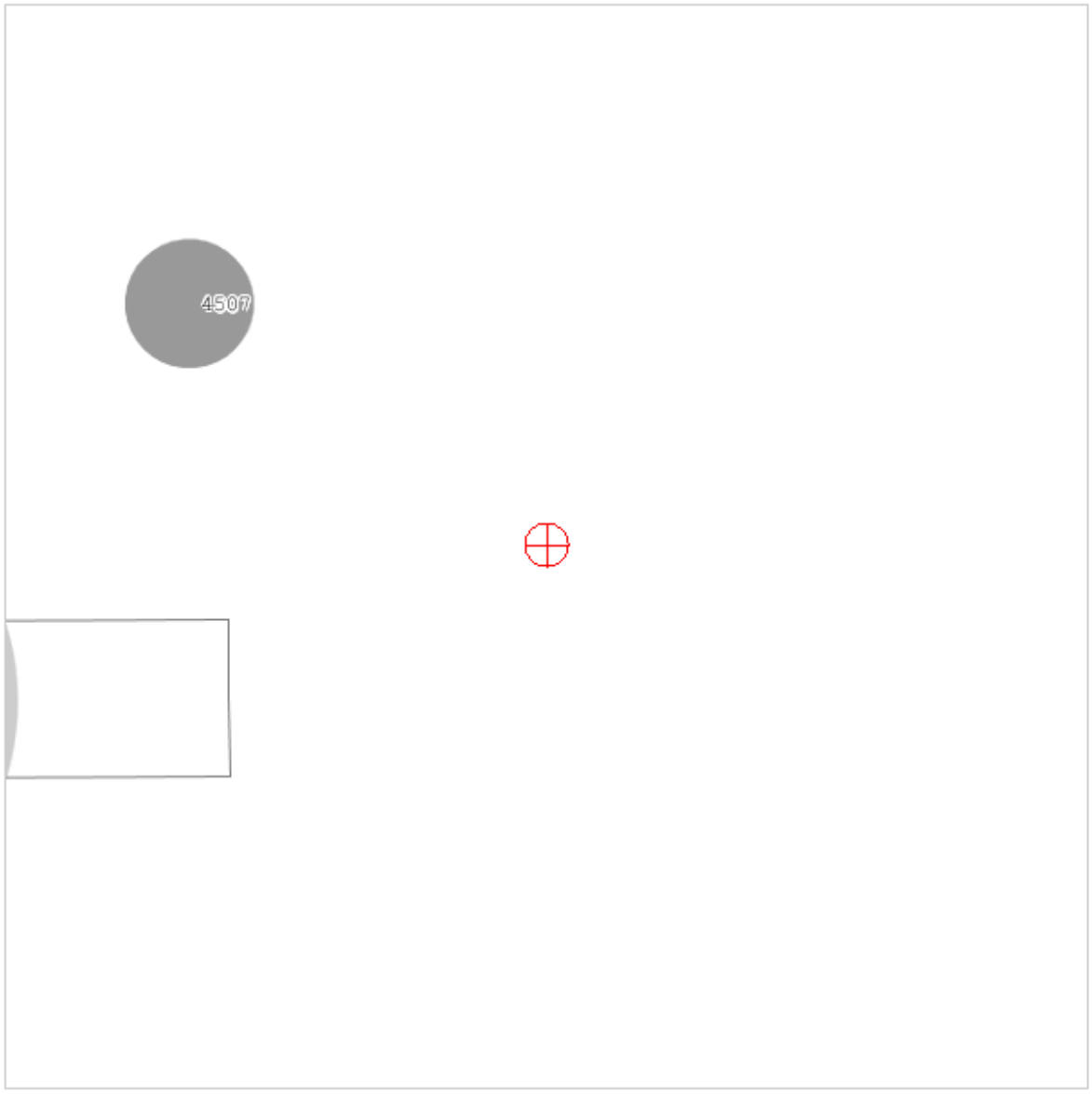
The following diagrams are examples of:

- Example 1: A structure that "does not exceed" Notice Criteria
- Example 2: An on-airport structure that "exceeds" Notice Criteria
- Example 3: An off-airport structure that "exceeds" Notice Criteria

Example 1: Does Not Exceed

Results

You do not exceed Notice Criteria.



Example 2: On-Airport Exceeds

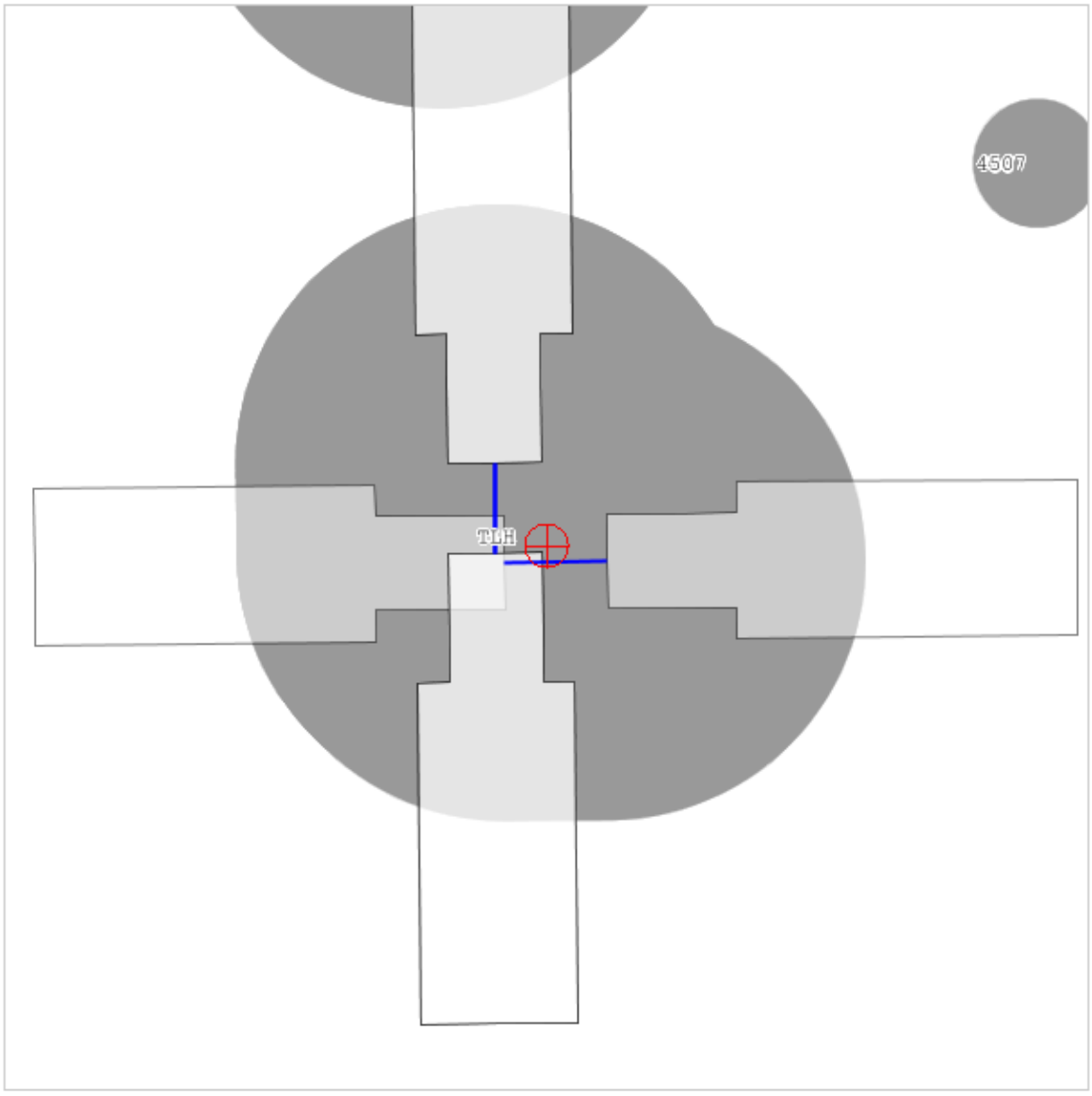
Results

You exceed the following Notice Criteria:

Your proposed structure is in proximity to a navigation facility and may impact the assurance of navigation signal reception. The FAA, in accordance with 77.9, requests that you file.

77.9(b) by 134 ft. The nearest airport is TLH, and the nearest runway is 09/27.

The FAA requests that you file



Example 3: Off-Airport Exceeds

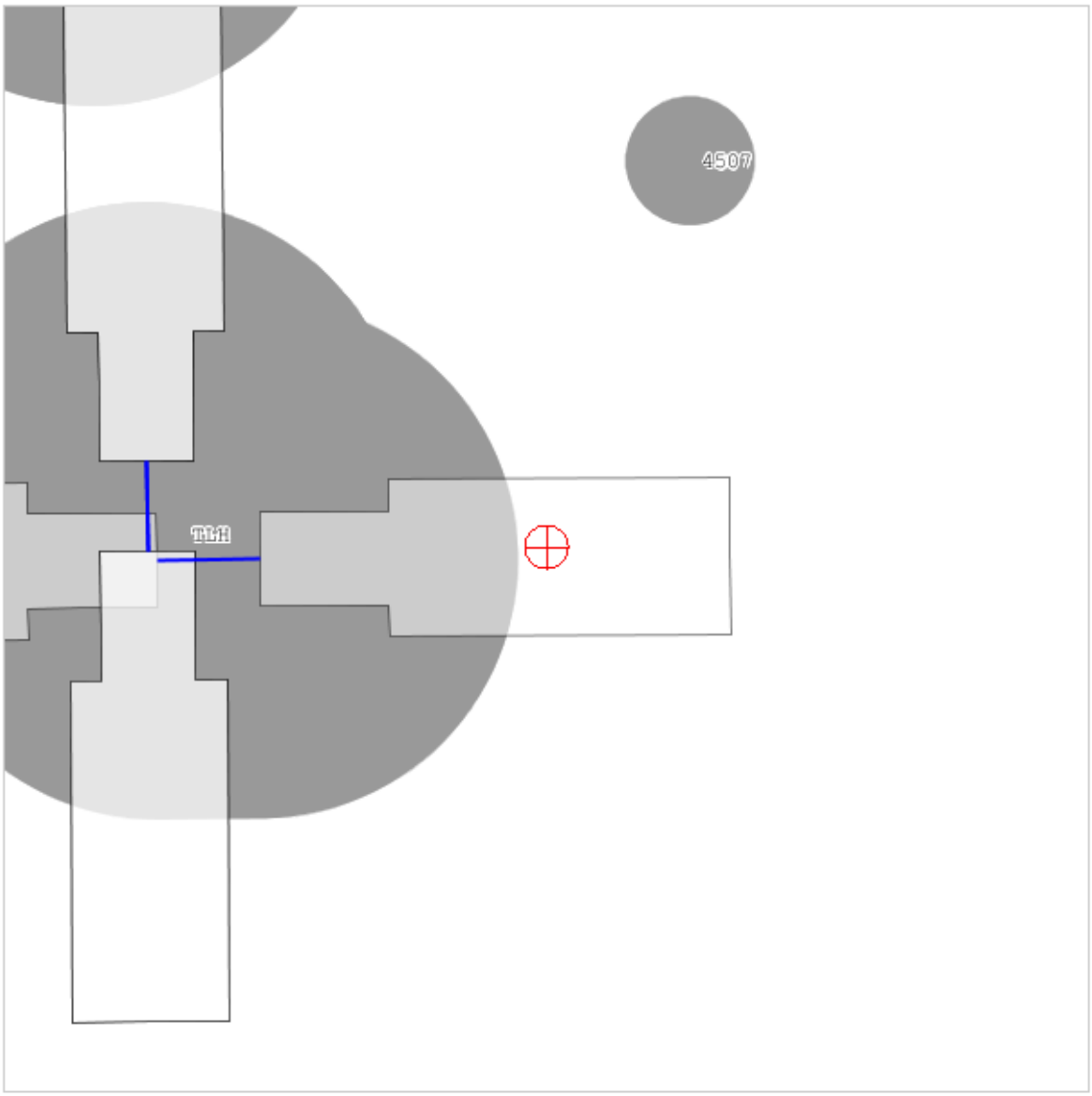
Results

You exceed the following Notice Criteria:

Your proposed structure exceeds an instrument approach area by 52 feet and aeronautical study is needed to determine if it will exceed a standard of subpart C of 14CFR Part 77. The FAA, in accordance with 77.9, requests that you file.

Your proposed structure is in proximity to a navigation facility and may impact the assurance of navigation signal reception. The FAA, in accordance with 77.9, requests that you file.

The FAA requests that you file



If requested to file Notice under Part 77.9, submit a completed FAA Form 7460-1, *Notice of Proposed Construction or Alteration*; refer to the applicable desk reference guides for additional details on how to complete this form for various types of on- and off-airport projects:

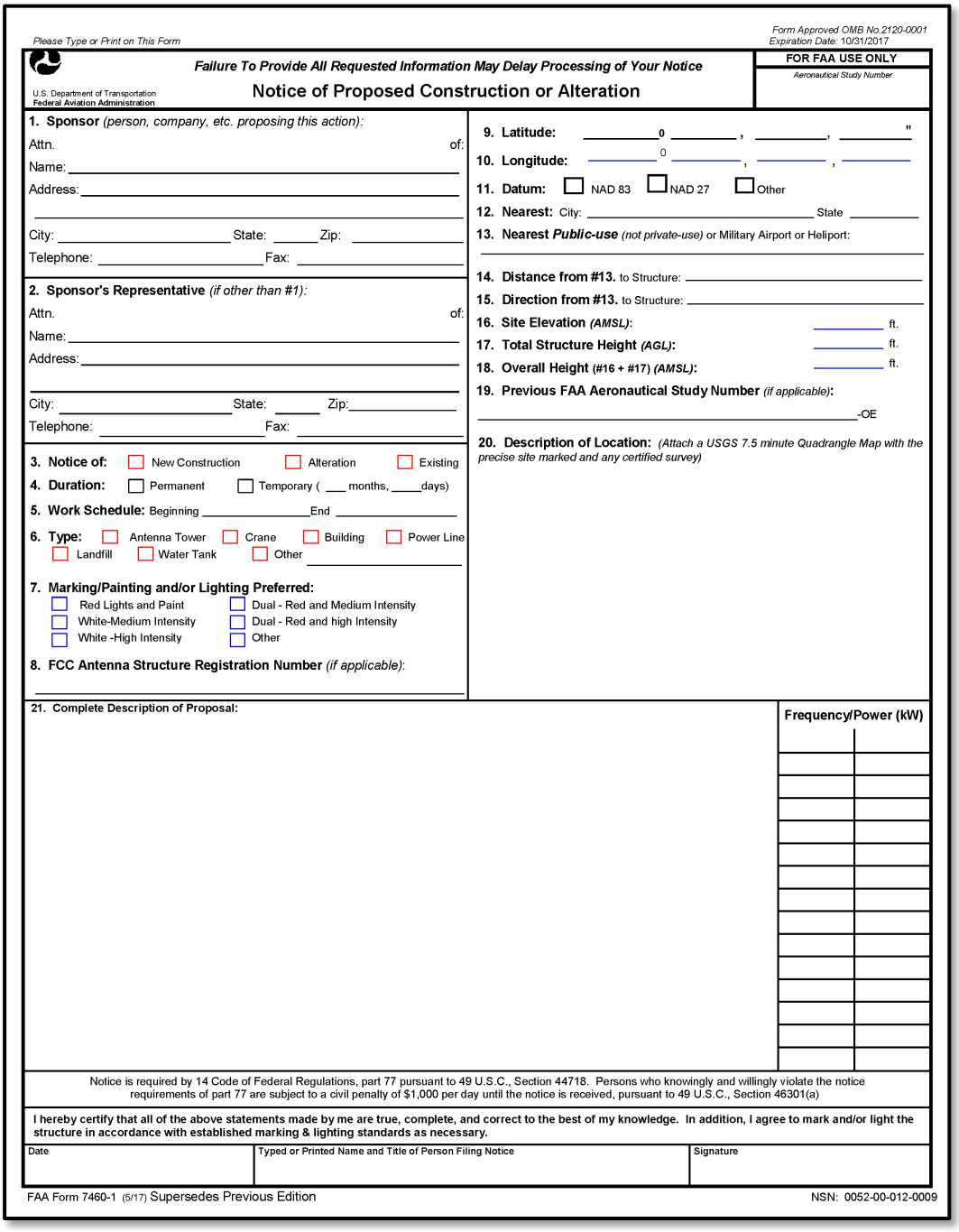
- Add a New Case Off-Airport
- Add New Case Off-Airport for Wind Turbines and MET Towers
- Add New Multiple Cases Off-Airport
- Add New Multiple Cases Off-Airport for Wind Turbines and MET Towers
- Add New Case On-Airport

If users require additional information regarding the filing requirements for a structure, that user can contact the appropriate FAA representative using the links provided on the OE/AAA website:

- *Air Traffic Areas of Responsibility map* for off-airport construction
- FAA Airports Region / District Office for on-airport construction

Appendix E: FAA Form 7460-1 and Instructions

This appendix provides a copy of the most current (as of this *Guidebook* publish date) version of the FAA Form 7460-1, "Notice of Proposed Construction or Alternation" (Notice). This form must be filled out by development sponsors who are required to file Notice under 14 Code of Federal Regulations (CFR), Part 77.9. The form and instructions to complete it can also be accessed at the following link: https://www.faa.gov/documentLibrary/media/Form/FAA_Form_7460-1_042023.pdf.



Please Type or Print on This Form

Form Approved OMB No.2120-0001
Expiration Date: 10/31/2017

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

U.S. Department of Transportation
Federal Aviation Administration

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-Medium Intensity Dual - Red and high Intensity
White -High Intensity Other
8. FCC Antenna Structure Registration Number *(if applicable)*:

9. Latitude: 0 , , "
10. Longitude: 0 , ,
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 (5/17) Supersedes Previous Edition NSN: 0052-00-012-0009

Instructions for Completion

Instructions to complete Form 7460-1 to file Notice with the FAA are provided below.

ITEM #1 Please include the name, address, and phone number of the specific contact person as well as the company name.

ITEM #2 Please include the name, address, and phone number of the specific contact person as well as the company name.

ITEM #3 **New Construction** is a structure that has not yet been built.

Alteration is a change to an existing structure such as the addition of a side-mounted antenna or a change to the marking and lighting, power and/or frequency, or height. The nature of the alteration shall be included in ITEM #21 "Complete Description of Proposal."

Existing is a correction to the latitude and/or longitude, a correction to the height, or if filing on an existing structure that has never been studied by the FAA. The reason for the Notice shall be included in ITEM #21 "Complete Description of Proposal."

ITEM #4 If **Permanent**, so indicate. If **Temporary**, such as a crane or drilling derrick, enter the estimated length of time the temporary structure will be up.

ITEM #5 Enter the date that construction is expected to start and the date that construction should be completed.

ITEM #6 Please indicate the type of structure. Do not leave blank.

ITEM #7 In the event that obstruction marking and lighting are required, please indicate the type desired. If no preference, check "other" and indicate "no preference." Do not leave blank.

High intensity lighting shall be used only for structures over 500 feet above ground level (AGL). In the absence of high intensity lighting for structures over 500 feet AGL, marking is also required.

ITEM #8 If this is an existing tower that has been registered with the Federal Communications Commission (FCC), enter the FCC Antenna Structure Registration number.

ITEMs #9/#10 Latitude and longitude must be geographic coordinates accurate to within the nearest second or hundredth of a second if known. Latitude and longitude derived solely from a hand-held Global Positioning System (GPS) instrument is not acceptable. A hand-held GPS is only accurate to within 100 meters (328 feet) 95 percent of the time. This data, when plotted, should match the site depiction submitted under ITEM #20.

ITEM #11 NAD 83 is preferred; however, latitude and longitude may be submitted in NAD 27. Also, in some geographic areas where NAD 27 and NAD 83 are not available other datum may be used. It is important to know which datum is used. Do not leave blank.

ITEM #12 Enter the name of the nearest city and state to the site. If the structure is or will be in a city, enter the name of that city and state.

ITEM #13 Enter the full name of the nearest public-use (not private-use) airport or heliport or military airport or heliport to the site.

ITEM #14 Enter the distance from the airport or heliport listed in ITEM #13 to the structure.

ITEM #15 Enter the direction from the airport or heliport listed in ITEM #13 to the structure.

ITEM #16 Enter the site elevation above mean sea level and expressed in whole feet rounded to the *nearest* foot (e.g. 17'3" [17 feet, 3 inches] rounds to 17' [17 feet]; 17'6" [17 feet, six inches] rounds to 18' [18 feet]). This data should match the ground contour elevations for site depiction submitted under ITEM #20.

ITEM #17 Enter the total structure height above ground level in whole feet rounded to the *next highest* foot (e.g. 17'3" [17 feet, three inches] rounds to 18' [18 feet]). The total structure height shall include anything mounted on top of the structure, such as antennas, obstruction lights, lightning rod, etc.

ITEM #18 Enter the overall height above mean sea level and expressed in whole feet. This will be the total of ITEM #16 and ITEM #17.

ITEM #19 If an FAA aeronautical study was previously conducted, enter the previous study number.

ITEM #20 Enter the relationship of the structure to roads, airports, prominent terrain, existing structures, etc. Attach an 8.5" x 11" non-reduced copy of the appropriate 7.5 minute U.S. Geological Survey (USGS) Quadrangle Map marked with a precise indication of the site location. To obtain maps, contact USGS at 1-888-275-8747 or via internet at http://store.usgs.gov. If available, attach a copy of a documented site survey with the surveyor's certification stating the amount of vertical and horizontal accuracy in feet.

ITEM #21 Following the instruction below based on the type of proposed construction or alteration:

- For transmitting stations, include maximum effective radiated power (ERP) and all frequencies.
- For antennas, include the type of antenna and center of radiation (Attach the antenna pattern, if available).
- For microwave, include azimuth relative to true north.
- For overhead wires or transmission lines, include size and configuration of wires and their supporting structures (attach depiction).
- For each pole/support, include coordinates, site elevation, and structure height AGL or water.
- For buildings, include site orientation, coordinates of each corner, dimensions, and construction materials.
- For alterations, explain the alteration thoroughly.
- For existing structures, thoroughly explain the reason for notifying the Federal Aviation Authority (FAA) (e.g. corrections, no record or previous study, etc.)

Filing this information with the FAA does not relieve the sponsor of this construction or alteration from complying with any other federal, state, or local rules or regulations. If you are not sure what other rules or regulations apply to your proposal, contact local/state aviation's and zoning authorities.

Appendix F: FDOT Airspace Obstruction Permit Application and Instructions

This appendix provides a copy of the most current (as of July 2020) version of the FDOT Airspace Obstruction Permit and instructions to complete it. This application must be filled out by development sponsors proposing the construction or alteration of an obstruction in a political subdivision that has not adopted adequate airport zoning regulations. .

Type or Print on this Form

OGC – 07/08
Page 1 of 2

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:_____
Address1:_____
Address2:_____
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:_____
Address1:_____
Address2:_____
City:_____State:_____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/

State of Florida
Department of Transportation
INSTRUCTIONS FOR
AIRSPACE OBSTRUCTION PERMIT APPLICATION

ITEM #1 Include the name, address, phone and fax number, and e-mail address of a personal contact point as well as the company name. ITEM #2. Include the name, address, phone and fax number, and e-mail address of a personal contact point as well as the company name. ITEM #3. Indicate the type of structure. DO NOT LEAVE BLANK.

ITEM #4 Indicate whether the proposed construction will be located within the geographical boundaries of a municipality. Indicate whether or not you have notified local officials of your proposal. In addition, please indicate if the city or county is requiring a building permit, as well as the name, address, phone and fax numbers, and e-mail address of the local official responsible for this application.

ITEM #5 Enter the site elevation above mean sea level expressed in whole feet rounded to the nearest foot (e.g. 17' 3" rounds to 17', 17'6" rounds to 18'). This data should match the ground contour elevations for site depiction submitted under ITEM #14(c).

ITEM #6 Enter the total structure height above ground level in whole feet rounded to the next highest foot (e.g. 17'3" rounds to 18'). The total structure height shall include any appurtenances mounted on top of the structure, such as antennas, obstruction lights, lightning rods, etc. If the structure will be constructed in close proximity to an airport or runway, this measurement should be the highest point of the structure and should match the data submitted to FAA on Form 7460-1.

ITEM #7 Enter the overall height above mean sea level, expressed in whole feet. This will be the total of ITEM #5 + ITEM #6.

ITEM #8 AND ITEM #9 Latitude and longitude must be geographic coordinates, accurate to within the nearest second or to the nearest hundredth of a second, if known. This data, when plotted, should match the site depiction submitted under ITEM 14(c). The coordinates should match those submitted to the FAA on Form 7460-1. If the coordinates provided on this application do not match those indicated on either FAA Form 7460-1 or the FAA Aeronautical Study, FDOT will not be able to process your application.

ITEM #10 NAD 83 is preferred; however, latitude/longitude may be submitted in NAD 27. Also, in some geographic areas where NAD 27 and NAD 83 are not available other datums may be used. It is important to know which datum is used. DO NOT LEAVE BLANK.

ITEM #11 Please indicate in which county the proposed structure will be constructed.

ITEM #12 Enter the name of all public-use airports (or heliports) or military airports (or heliports) within ten (10) nautical miles of the proposed site.

ITEM #13 Lists required attached documents needed to process the application.

a. Include a copy of FAA Form 7460-1, Notice of Proposed Construction or Alteration, filed with FAA.

b. Include an Aeronautical Study or FAA document showing the Determination issued in response to your Notice of Proposed Construction.

c. Attach an 8-1/2" X 11" non-reduced copy of the appropriate 7.5-minute U.S. Geological Survey (USGS) Quadrangle Map MARKED WITH A PRECISE INDICATION OF THE SITE LOCATION. To obtain maps, Contact USGC at 1-800-435-7627 or via Internet at "http://mapping.usgs.gov". If available, attach a copy of a documented site survey with the surveyor's certification stating the amount of vertical and horizontal accuracy in feet.

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 in the applicant's name.

g. If the structure is existing, and a FDOT Airspace Obstruction Permit has been previously issued, please include a copy of that permit.

Appendix G: 14 Code of Federal Regulations (CFR), Part 150, Land Use Restriction Table

This appendix provides a copy of the most recent (as of July 2020) 14 CFR, Part 150, *Airport Noise Compatibility Planning* land use restriction table. The designations contained in this table do not constitute a federal Determination that any use of land covered by the program is acceptable or unacceptable under federal, state, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. The FAA Determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

Land use	Yearly day-night average sound level (Ldn) in decibels (dB)					
	Below 65	65-70	70-75	75-80	80-85	Over 85
Residential						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
Public-Use						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
Commercial Use						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail - building materials, hardware and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade - general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
Manufacturing and Production						
Manufacturing, general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y

Land use	Yearly day-night average sound level (Ldn) in decibels (dB)					
	Below 65	65-70	70-75	75-80	80-85	Over 85
Recreational						
Outdoor sports arenas and spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N

Note: Numbers in parentheses refer to notes (provided below)

Key to Table

SLUCM = Standard Land Use Coding Manual

Y (Yes) = Land use and related structures compatible without restrictions.

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

NLR = Noise level reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.

25, 30, or 35 = Land use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

Notes for Table 1

1. Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor NLR of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB; thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year-round. However, the use of NLR criteria will not eliminate outdoor noise problems.

2. Measures to achieve NLR 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.

3. Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.

4. Measures to achieve NLR 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal level is low.

5. Land use compatible provided special sound reinforcement systems are installed.
6. Residential buildings require an NLR of 25.
7. Residential buildings require an NLR of 30.
8. Residential buildings not permitted.

Appendix H: Best Practices

In order to draft, adopt, and implement airport zoning regulations that are compliant with state law and federal regulations, local government planners should consider the following Best Practices. Best Practices provide the key takeaways and important resources from the *Guidebook*, including a checklist and overview of required and suggested components of airport zoning requirements, additional resources such as federal guidance and state sources that will help local government planners ensure that their airport zoning regulations are compliant, and guidance on unmanned aircraft systems (UAS), which may impact airport zoning regulations. The Best Practices are organized into the following sections:

- ***Quick Notes.*** This section provides a checklist of required and suggested components of airport zoning regulations, which are intended to be used by planners and administrators to draft communication documents, as well as communicate in-person with appointed and elected officials regarding how local regulations will need to be updated to achieve compliance with the regulations included in Chapter 333, Florida Statutes (FS).
- ***Resources for Ensuring Compliance.*** This section provides federal and state resources for ensuring compliance with airport, airspace, and land use compatibility. This includes federal and state laws, federal guidance, federal and state contact information, and federal and state forms. Note: many of the links contained within this appendix were not directly referenced in the body of the *Guidebook* but may be needed by users in order to draft airport zoning regulations.
- ***Unmanned Aircraft Systems (UAS) Guidance.*** This section provides current Florida Department of Transportation (FDOT) guidance and Federal Aviation Administration (FAA) requirements related to unmanned aircraft systems (UAS). Note: FDOT is not involved in the regulation, tracking, licensing, registration, or any other regulatory effort related to UAS. All regulation and management functions of UAS are strictly within the jurisdiction of the FAA.
- ***Frequently Asked Questions.*** This section provides guidance concerning frequently asked questions related to airport zoning regulations and land use compatibility.

Users should note that references to these items appear throughout the *Guidebook* where applicable and should refer to those sections for further information. This document also appears as Appendix H in the *Guidebook*.

Quick Notes

This following section is a checklist that outlines the components that should be addressed in local government airport zoning regulations per Chapter 333, FS. Local governments that do not have airport zoning regulations can use this section to assist with drafting staff reports and other analytical documents or presentations. This section can also be helpful as a quick reference during meetings with appointed and elected officials and/or other departments and agencies regarding upcoming changes. Local governments with existing airport zoning regulations can use this section to evaluate if their regulations are up-to-date or require an amendment to be consistent with current state requirements.

Required Components

The following components should be addressed in local government airport zoning regulations per Chapter 333, FS:

8. Permit process for potential obstructions which includes the following components (per Section 333.03(1)(c)1.-5):
    - A permit for the construction or alteration of any obstruction
    - Obstruction marking and lighting
    - Documentation showing compliance with the federal requirement for Notification of proposed construction or alteration of structures and a valid aeronautical study submitted by each person applying for a permit
    - Consideration of the following criteria:
        - Safety of persons on the ground and in the air
        - Safe and efficient use of navigable airspace
        - Nature of the terrain and height of existing structures
        - Effect of the construction or alteration of an obstruction on the state licensing standards for a public-use airport
        - Character of existing and planned flight operations and developments at public-use airports
        - Federal airways, visual flight rules, flyways and corridors, and instrument approaches as designated by the FAA
        - Effect of the construction or alteration of an obstruction on the minimum descent altitude or the decision height at the affected airport
        - Cumulative effects on navigable airspace of all existing obstructions and all known proposed obstructions in the area
    - That approval of a permit not be based solely on the Determination by the FAA that the proposed structure is not an airport hazard
9. Regulations must, at a minimum, address the prohibition of new landfills and the restriction of existing landfills within the following areas (per Section 333.03(2)(a)):
    - Within 10,000 feet from the nearest point of any runway used or planned to be used by turbine aircraft
    - Within 5,000 feet from the nearest point of any runways used by only non-turbine aircraft
    - Outside the perimeters defined in the previous two bullet points, but still within the lateral limits of the civil imaginary surfaces defined in Part 77. Case-by-case review of such landfills is advised.
10. Per Section 333.03(2)(b), regulations must, at a minimum, address any instances where any landfill is located and constructed in a manner that attracts or sustains hazardous bird movements from

feeding, water, or roosting areas into or across the runways or approach and departure patterns of aircraft. The landfill operator must incorporate bird management techniques or other practices to minimize bird hazards to airborne aircraft.

11. Per Section 333.03(2)(c), where an airport authority or other governing body operating a public-use airport has conducted a Part 150 noise study, or where a public-use airport owner has established noise contours pursuant to another public study approved by the FAA, regulations must, at a minimum, address the prohibition of incompatible uses within the noise contours established by any of these studies, except if such uses are specifically contemplated by such study with appropriate mitigation or similar techniques described in the study.
12. Per Section 333.03(2)(d), where an airport authority or other governing body operating a public-use airport has not conducted a noise study, regulations must, at a minimum, address the prohibition of residential construction and any educational facility, with the exception of aviation school facilities, within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline.
13. Per Section 333.03(2)(e), regulations must, at a minimum, address the restriction of new incompatible uses, activities, or substantial modifications to existing incompatible uses within RPZs.
14. Per Section 333.03(1)(b), if an airport is owned or controlled by local government "A" (a political subdivision) and if local government "B" has land upon which an obstruction may be constructed or altered which underlies any surface of the airport as provided in Part 77, the local government "A" shall either:
    - By interlocal agreement, adopt, administer, and enforce a set of airport protection zoning regulations, or
    - By ordinance, regulation, or resolution duly adopted, create a joint airport protection zoning board that shall adopt, administer, and enforce a set of airport protection zoning regulations. The joint airport protection zoning board shall have as voting members two representatives appointed by each participating political subdivision and a chair elected by a majority of the members so appointed. The airport manager or a representative of each airport in the affected participating political subdivisions shall serve on the board in a nonvoting capacity.

Suggested Components

The following components are recommended to be addressed in local government airport zoning regulations. These items are recommended to enhance understanding of federal regulations and as based on ACRP Report 27. Please note that Chapter 333, FS allows for more restrictive airport zoning regulations than just those prescribed by statute, if necessary, to protect the health, safety, and welfare of the public on the ground and in the air.

7. Explanation of imaginary surfaces
    - The avoidance of the following objects, developments, and uses within imaginary surfaces including:
        - 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 identify an airport.

        - Any object or development that would create or cause glare that would interfere with airport operations
        - Any use that would attract birds or other wildlife, thereby creating hazards either on the ground or in the air
8. Explanation of other types of development that are a concern within imaginary surfaces per ACRP guidance
9. Information concerning the FAA's Notice Criteria Tool
10. Instructions on how to use the FAA's Notice Criteria Tool
11. Information concerning wildlife hazard attractants and the wildlife separation criteria
12. Address the prohibition of the following within the FAA's wildlife separation criteria:
    - Trash transfer stations
    - Golf courses with bodies of water
    - Sanitary sewer systems
    - Stormwater management facilities
    - Wetlands
    - Agricultural areas that provide a source of food for wildlife
    - Parks, natural resources, and natural areas
    - Landscaping
    - Renewable energy facilities

Resources for Ensuring Compliance

This section provides federal and state resources for ensuring compliance with airport, airspace, and land use compatibility. This includes federal and state laws, federal guidance, federal and state contact information, and federal and state forms. Many of the links contained within this appendix were not directly referenced in the body of this Guidebook but may be needed by users in order to draft airport zoning regulations.

Federal and State Airspace and Land Use Statutes and Administrative Code

- ***Code of Federal Regulations (CFR) Search Page***

  https://www.govinfo.gov/help/cfr

- ***Title 14 CFR, Part 77 Objects Affecting Navigable Airspace***

  https://www.law.cornell.edu/cfr/text/14/part-77

- ***Title 14 CFR, Part 150, Airport Noise Compatibility Planning***

  https://www.law.cornell.edu/cfr/text/14/part-150

- ***Title 14 CFR, Part 161, Notice and Approval of Airport Noise Access Restrictions***

  https://www.law.cornell.edu/cfr/text/14/part-161

- ***Chapter 333, Florida Statutes (FS), Airport Zoning***

  http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0300-0399/0333/0333.html

- ***Chapter 163, FS, Part II, Growth Policy; County and Municipal Planning; Land Development Regulations***

  http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0100-0199/0163/0163PARTIIContentsIndex.html

- ***Florida Administrative Code (FAC), Chapter 14-60 Airport Licensing, Registration, and Airspace Protection***

  www.flrules.org/gateway/ChapterHome.asp?Chapter=14-60

FAA Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) Resources

- ***OE/AAA Online Portal***

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

- ***FAA Contacts***

FAA Manager for OE/AAA	National Office for OE/AAA Petitions
Mike Helvey Manager, Obstruction Evaluation Group Federal Aviation Administration 800 Independence Ave, SW Room 400 East Washington, DC 20591 Phone: (202) 267-9354 | Fax: (202) 267-5467 Email: Michael.Helvey@faa.gov	**Rodger A. Dean** Manager, Airspace Policy Group Federal Aviation Administration 800 Independence Ave, SW Room 423 Washington, DC 20591 Phone: (202) 267-8783 | Fax: (202) 267-9328 Email: OEPetitions@faa.gov

- ***OE/AAA Filing Instructions***

  6. E-File Instructions

     https://oeaaa.faa.gov/oeaaa/external/content/instructions.jsp

  7. Form 7460-1, *Notice of Proposed Construction or Alteration*

     - If construction or alteration <u>IS NOT LOCATED</u> 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

OE/AAA Mailing Address
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	South Florida
https://oeaaa.faa.gov/oeaaa/external/public/aorDetails.jsp?aorID=61	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 where the construction is located.

FAA Southern Region – Orlando ADO
Orlando ADO 8427 South Park Circle, Suite 524 Orlando, FL 32819 Phone: (407) 487-7220 | FAX: (407) 487-7135

- ***Form 7460-2 Supplemental Notice***

  https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchSuppNoticesForm
- ***FAA's Notice Criteria Tool***

  https:/oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm
- ***To view recently submitted determined 7460-1 forms by state (within last 30 days)***

  https:/oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchDeterminedCasesForm
- ***To view recently submitted proposed 7460-1 forms by state (processed but not yet determined)***

  https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchProposedCasesForm
- ***To view recently submitted supplemental Notice 7460-2 forms by state (within last 120 days)***

  https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchSuppNoticesForm
- ***To view circularized cases where FAA Solicits Input from the Public***

  https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchCircularizationForm
- ***Email to submit comments for circularized cases is at the bottom of privacy act statement:***

  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***

  https://oeaaa.faa.gov/oeaaa/external/userMgmt/permissionAction.jsp?action=showRegistrationForm

- ***To search the entire archive of OE/AAA cases, 1988 – present***

  https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchArchivesForm

- ***To perform a circle search for obstacles***

  8. Cases around a center point with a specified radius

     https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchForm

  9. Public use airports around a center point with a specified radius

     https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAirportsForm

FAA Advisory Circulars (ACs) & Orders

- ***Search ACs***

  www.faa.gov/airports/resources/advisory_circulars

- ***FAA AC 70/7460-1L, Obstruction Marking and Lighting with Change 2***

  https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.current/documentnumber/70_7460-1

- ***FAA AC 150/5020—1, Noise Control and Compatibility Planning for Airports***

  https://www.faa.gov/documentlibrary/media/advisory_circular/150-5020-1/150_5020_1.pdf

- ***FAA AC 150/5070-6B, Airport Master Plans***

  https://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentnumber/150_5070-6

- ***FAA AC 150/5190.4A, A Model Zoning Ordinance to Limit Height of Objects around Airports***

  https://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentNumber/150_5190-4

- ***FAA AC 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports***

  https://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentNumber/150_5200-33

- ***FAA AC 150/5200-34-A, Construction or Establishment of Landfills near Public Airports***

  https://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentNumber/150_5200-34

- ***Title 40 CFR, Part 258, Criteria for Municipal Solid Waste Landfills***

  https://www.law.cornell.edu/cfr/text/40/part-258

- ***FAC, Chapter 62-701, Solid Waste Management Facilities***

  https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-701

- ***FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects***

  https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/14836

- ***FAA Order JO 7400.2G, Procedures for Handling Airspace Matters***

  https://www.faa.gov/documentlibrary/media/order/7400.2g.pdfw

FAA Forms

- ***FAA Form 7460-1, Notice of Proposed Construction or Alteration***

  https://www.faa.gov/forms/index.cfm/go/document.information/documentid/186273

- ***FAA Form 7460-2, Notice of Actual Construction or Alteration***

  https://www.faa.gov/forms/index.cfm/go/document.information/documentID/186274

- ***FAA Form 5010-3, For Newly Established Public-Use Airports***

  https://www.faa.gov/forms/index.cfm/go/document.information/documentid/185475

- ***FAA Form 5010-5, For Newly Established Private-Use Airports***

  https://www.faa.gov/forms/index.cfm/go/document.information/documentID/185478

- ***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)***

  https://www.faa.gov/forms/index.cfm/go/document.information/documentid/185334

FDOT Forms

- ***725-40-11, Airspace Obstruction Permit Application***

  https://fms.fdot.gov/Anonymous/SendDocumentToClient?documentId=124 (pdf)

  https://fms.fdot.gov/Anonymous/SendDocumentToClient?documentId=125 (Word Document)

Submit completed forms to:
Airspace and Land Use Manager Florida Department of Transportation 605 Suwannee Street, M.S. 46 Tallahassee, Florida 32399-0450

- ***725-40-12 Airport Site Approval and License Application***

  https://fms.fdot.gov/Anonymous/SendDocumentToClient?documentId=126 (pdf)

  https://fms.fdot.gov/Anonymous/SendDocumentToClient?documentId=127 (Word Document)

- ***Exhibit "C" Aviation Program Assurances***

  https://fms.fdot.gov/Anonymous/SendDocumentToClient?documentId=380(pdf)

  https://fms.fdot.gov/Anonymous/SendDocumentToClient?documentId=381(Word Document)

Military Program Resources

- ***Air Installation Compatible Use Zone Program Guidance***

  https://www.cnic.navy.mil/content/dam/cnic/cnrnw/pdfs/NASWfactsheets/NAVFAC%20Guide%20to%20AICUZ%20Program%202014.pdf

- ***Air Installations Compatible Use Zones***

  https://www.navfac.navy.mil/products_and_services/am/products_and_services/zone_planning.html

- ***Air Force Center for Engineering and the Environment staff contacts***

Air Force Installation and Mission Support Center (AFIMSC) Public Affairs	Reach-Back Center
2261 Hughes Ave JBSA Lackland, TX 78236-9853 Toll Free: (866) 725-7617 | Comm: (210) 925-0956 Email: AFIMSC.PA.Workflow@us.af.mil	Toll Free: (888) 232-3721 Comm: (850) 283-6995 | DSN: (312) 523-6995 Email: AFCEC.RBC@us.af.mil

- ***Joint Land Use Study Program Manual***

  https://www.plaqueminesparish.com/DocumentCenter/View/337/Joint-Land-Use-Study-Guidance-Manual-PDF?bidId=

Additional FAA Guidance

- ***Airport Noise Compatibility Planning Toolkit***

  https://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/planning_toolkit

- ***Overview of FAA Policy on Part 150 Approval of Noise Mitigation Measures***

https://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/planning_toolkit/media/iii.b.pdf

- ***Land Use Compatibility and Airports, A Guide for Effective Land Use Planning***

  https://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/planning_toolkit/media/iii.b.pdf

- ***Land Use Planning Process Flowchart***

  https://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/planning_toolkit/media/IV.A.pdf

- ***Part 150 Checklists***

  https://www.faa.gov/airports/environmental/airport_noise/part_150/checklists/

- ***FAA Airport Facility Directory***

  https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dafd/search/advanced/

- ***FAA Environmental and Planning Contacts***

FAA Environmental Contacts	FAA Planning Contacts
Phone: (202) 267-3263 | Fax: (202) 267-5383 Website: Policy, International Affairs and Environment	Phone: (202) 267-3451 | Fax: (202) 267-5383 Website: Airport Planning & Capacity

Additional FDOT Guidance

- ***FDOT Guidance on Airspace Obstructions***

  https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/aviation/pdfs/airspace_obstructions1167163424.pdf?sfvrsn=3ab66037_0

- ***Florida Airports Directory***

  https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/topics/2019_directory.pdf?sfvrsn=fdc90579_0

- ***Florida Aviation System Plan (FASP)***

  https://www.fdot.gov/aviation/FASP2035

- ***FDOT Contact***

Submit completed forms to:

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

Phone: (850) 414-4500 | Fax: (850) 414-4508

Other Information

- ***Airport Reference Point Computation***

  www.ngs.noaa.gov/AERO/arpcomp/arpframe.html

Unmanned Aircraft Systems (UAS) Guidance

This section provides current FDOT guidance on and FAA requirements related to unmanned aircraft systems (UAS). UAS, or drones, are powered aircraft and all the associated support equipment, control station, data links, telemetry, communications, and navigation equipment necessary to operate it. UAS do not have to have a human pilot onboard, and the UAS operator can in a geographically different location than the UAS itself. While UAS are an innovative technology with many useful and recreational applications, they pose a hazard to safe airport operations. UAS can interfere with aircraft in the air and on the ground. Local government planners should be familiar with the laws and regulations governing UAS. Note: FDOT is not involved in the regulation, tracking, licensing, registration, or any other regulatory effort related to UAS. All regulation and management functions of UAS are strictly within the jurisdiction of the FAA.

The following sections will detail FDOT's current UAS website and informational brochure, FAA's UAS website, and relevant ACRP documents in order to assist local government planners in addressing and managing UAS at the local level.

FDOT UAS Website

The FDOT Aviation Office has created a website with information on UAS, which can be found at the following link: https://www.fdot.gov/aviation/uas.shtm. This website is organized into the following sections:

- ***Overview.*** This section provides information on UAS and a regulatory overview.
- ***UAS Brochure.*** This section provides a link to download the FDOT Aviation Office UAS Brochure.
- ***FAA's B4UFLY Smartphone Application.*** This section provides information about and access to the FAA's B4UFLY smartphone application, which is intended for use by UAS operators.
- ***Federal Laws.*** This section provides an overview of applicable federal UAS laws.
- ***Federal UAS Operator Guidance.*** This section details the federal Know Before You Fly Campaign.
- ***Department of Homeland Security.*** This section details the Department of Homeland Security's authority with regards to interacting with UAS.
- ***State Regulations.*** This section details the state's regulating authority with regards to UAS.
- ***Airport's Responsibility.*** This section details an individual airport's responsibility with regards to understanding the rules and regulations related to UAS.
- ***Local Law Enforcement's Responsibility.*** This section details the responsibility of local law enforcement as it relates to regulating UAS.
- ***Pilot's Responsibility.*** This section details a pilot's responsibility with regards to understanding the rules and regulations related to UAS.
- ***Community Responsibility.*** This section details a community's responsibility with regards to understanding the rules and regulations related to UAS.

FAA UAS Website

The FAA has also created a website with information on UAS, which can be found at the following link: https://www.faa.gov/uas/. As all regulation and management functions of UAS are strictly within the jurisdiction of the FAA (not the state), local government planners should ensure they are familiar with the resources available on this website. The FAA UAS website provides several resources primarily geared towards UAS operators. The website has several resources for different types of UAS operators, including recreational flyers and modeler community-based organizations, certified remote pilots including

commercial operators, public safety and government users, and education users. The website also provides a resource to help UAS operators determine what type of operator they are.

The FAA encourages UAS operators to download the B4UFLY app to determine whether there are any restrictions or requirements in effect where the operator wants to fly. The FAA also identifies the following as the "top tasks" for UAS operators:

- Register a drone
- Download the B4UFLY mobile app
- UAS en Espanol
- Keep your remote pilot certificate current
- Check out hot topics in UAS

Relevant ACRP Documents

The Airport Cooperative Research Program (ACRP) is an aviation research program that is sponsored by the FAA and managed by the Transportation Research Board (TRB). ACRP provides research and additional resources on topics currently affecting the aviation industry that other Federal research programs do not address, including UAS. ACRP research has funded over 400 practical resources and tools for airports and other aviation professionals.

Local government planners should familiarize themselves with ACRP research related to UAS. This research will assist local government planners with protecting safe airport operations while also facilitating the safe and innovative use of UAS. However, local government planners should also be aware that UAS and their regulatory environment are constantly evolving and that the guidance contained within these reports may have since been updated. Local government planners should always check with the FAA for the most up-to-date guidance and regulations concerning UAS. There are two major ACRP publications relating to UAS, including:

- ***ACRP Research Report 144: Unmanned Aircraft Systems (UAS) at Airports: A Primer.*** ACRP notes that airports of all sizes can potentially benefit from or be impacted by UAS. ACRP Research Report 144 provides an overview of UAS at airports, including a glossary of key terms, a background on the current state of UAS operations, UAS costs and benefits to airports, regulatory and community considerations, UAS infrastructure and operational considerations, UAS safety and security issues, and more. Users can access these volumes at the following link: ***http://www.trb.org/Publications/Blurbs/173263.aspx.***
- ***ACRP Research Report 212: Airports and Unmanned Aircraft Systems.*** ACRP notes that the introduction of UAS has presented a wide range of new safety, economic, operational, regulatory, community, environmental, and infrastructure challenges to airports. These risks are further complicated by the dynamic and shifting nature of UAS technologies. ACRP Research Report 212 addresses these issues across three volumes. Volume 1 addresses managing UAS operations in the vicinity of an airport and engaging stakeholders, Volume 2 addresses the incorporation of UAS into airport infrastructure and planning, and Volume 3 addresses the potential use of UAS by airport operators. This research expands upon the research found in ACRP Research Report 144. Users can access these volumes at the following link: ***http://www.trb.org/Main/Blurbs/179733.aspx***

Frequently Asked Questions

Chapter 333 was amended in 2016, what Florida law revised the former Chapter 333 and what were the significant revisions?

Answer: House Bill 7061 (Transportation) passed the Florida House of Representatives, and its counterpart in the Florida Senate, in the 2016 regular legislative session. HB 7061 was a comprehensive bill related to transportation. The portions make amendments to Chapter 333, FS, stated that airport zoning regulations must be in place as of July 1, 2017. In summary, this bill:

- Revised statute definitions
- Revised requirements concerning the permit required for structures exceeding federal obstruction standards
- Amended statutory language and references concerning the power to adopt airport zoning regulations
- Stipulated that the most stringent comprehensive zoning regulation shall prevail where conflicts occur
- Amended statutory language concerning the procedure for adoption of zoning regulations
- Amended statutory language concerning airport zoning requirements
- Repealed requirements for guidelines regarding land use near airports

What responsibilities does Chapter 333 require of local governments regarding airport zoning regulations?

Answer: Section 333.03(1)(a), FS, states that every political subdivision having an airport hazard area within its territorial limits shall adopt, administer, and enforce, under the police power and in the manner and upon the conditions prescribed in this statute, airport protection zoning regulations for airport hazard areas. Section 333.01(14), FS, defines a "political subdivision" as the local government of any county, city, town, etc, other subdivision or agency thereof, or any district or special district—essentially, any agency authorized to establish or operate airports in the state. The local government must provide a copy of all airport protection zoning regulations to FDOT's Aviation Office within 30 days after adoption.

Additionally, the chapter does not prohibit a local government from establishing airport zoning regulations that are more restrictive than prescribed in the chapter.

What are "obstructions" and how do they impact airport zoning regulations?

Answer: Section 333.01(12), FS, defines an "obstruction" as any existing or proposed object, terrain, or structure construction or alteration that exceeds the federal obstruction standards contained in 14 C.F.R. part 77, subpart C. If your local government has airport protection zoning regulations in place, and your existing or proposed object, terrain, or structure construction or alteration is not an obstruction, then you do not need to file a permit. The term "obstruction" means:

- Section 333.01(12)(a), Any object of natural growth or terrain
- Section 333.01(12)(b), Permanent or temporary construction or alteration, including equipment or materials used and any permanent or temporary apparatus, or

- Section 333.01(12)(c), Alteration of any permanent or temporary existing structure by a change in the structure's height, including appurtenances, lateral dimensions, and equipment or materials used in the structure
- A person proposing the construction or alteration of an obstruction must obtain a permit from FDOT. However, an FDOT permit is not required for a structure in a political subdivision that has adequate airport protection zoning regulations on file with FDOT and that has established a permitting process. FDOT has 15 days, concurrent with the permitting process, to evaluate the permit for technical consistency.

What is the difference between an airport obstruction and an incompatible land use?

Answer: An *airport obstruction* is an *object or structure* that could negatively impact safe operations at an airport. An *incompatible land use* allows *activities* that could negatively impact safe operations at an airport or cause greater damage to individuals and/or property if an airplane lands or crashes outside the runway. An *airport obstruction* is any object or structure that reduces the size of the area available for taking off, maneuvering, or landing of aircraft, which would possibly destroy or impair the utility of the airport and the public investment therein. An *incompatible land use* is the use of land which is incompatible with the aircraft and airport operations. Certain activities and uses of land in the immediate vicinity of airports are not compatible with normal airport operations, and may, if not regulated, also endanger the lives of the participants, adversely affect their health, or otherwise limit the accomplishment of normal activities.

How do the requirements within Chapter 333, FS, affect a local government's ability to issue permits?

Answer: Per Section 333.025(4), FS, political subdivisions have, in compliance with this chapter, adopted adequate airport protection zoning regulations, placed such regulations on file with the department's aviation office, and established a permitting process, a permit for the construction or alteration of an obstruction is not required from the department. Upon receipt of a complete permit application, the local government shall provide a copy of the application to the department's aviation office by certified mail, return receipt requested, or by a delivery service that provides a receipt evidencing delivery. To evaluate technical consistency with this subsection, the department shall have a 15-day review period following receipt of the application, which must run concurrently with the local government permitting process. Cranes, construction equipment, and other temporary structures in use or in place for a period not to exceed 18 consecutive months are exempt from the department's review, unless such review is requested by the department.

What conditions must a political subdivision consider when determining whether to issue an airport zoning permit?

Answer: Per Section 333.07(2)(a)-(i), FS, in determining whether to issue or deny a permit, local government, or administrative agency shall consider:

- The safety of persons on the ground and in the air
- The safe and efficient use of navigable airspace
- The nature of the terrain and height of existing structures
- The effect of the construction or alteration of an obstruction on the state licensing standards for a public-use airport contained in Chapter 330
- The character of existing and planned flight operations and developments at public-use airports

- Federal airways, visual flight rules, flyways and corridors, and instrument approaches as designated by the FAA
- The effect of the construction or alteration of an obstruction on the minimum descent altitude or the decision height at the affected airport
- The cumulative effects on navigable airspace of all existing obstructions and all known proposed obstructions in the area.

Once complete, where do I send my airport zoning permit application and when can I expect a response?

Answer: If you are within a local government's jurisdiction where the local government has adopted and filed adequate airport protection zoning regulations and established its own permitting process, you must send your permit application to your local government.

Otherwise, send the permit application to FDOT's Aviation Office. The majority of local governments have established a maximum number of days to issue or deny a permit; check your local government regulations to determine their particular timeline. FDOT may take a maximum of 30 (sub 5) days to issue or deny a permit after receipt of a permit application.

What circumstances require a local government to enter into an interlocal agreement with another political subdivision or to form a joint zoning board to comply with Section 333.03, FS?

Answer: If an airport is owned or controlled by a political subdivision and if any other political subdivision has land upon which an obstruction may be constructed or altered which underlies any surface of the airport as provided in 14 C.F.R., part 77, subpart C, the local government that controls the airport and the local government that could build an obstruction must enter into an interlocal agreement.

Does Chapter 333 prohibit a local government operating a public-use airport from establishing airport zoning regulations that are more restrictive than those provided in this statute? If not, what is the basis for the more restrictive regulations?

Answer: Section 333.03(5), FS, does not prohibit an airport authority, a political subdivision or its administrative agency, or any other governing body operating a public-use airport from establishing airport zoning regulations more restrictive than those provided in statute, if such restrictions are in place to protect the health, safety, and welfare of the public in the air and on the ground.

How are affected entities informed about airport restrictions or zoning requirements?

Answer: Per Section 333.05(1), FS, airport zoning regulations may not be adopted, amended, or repealed under this chapter except by action of the legislative body of the political subdivision or affected subdivisions, or the joint board provided in Section 333.03(1)(b)2., FS, by the political subdivisions therein provided and set forth, after a public hearing in relation thereto, at which parties in interest and citizens shall have an opportunity to be heard. Notice of the hearing shall be published at least once a week for 2

consecutive weeks in a newspaper of general circulation in the political subdivision or subdivisions where the airport zoning regulations are to be adopted, amended, or repealed.

Appendix I: Florida Counties and Municipalities within 10 Nautical Miles of an Airport

Section 333.025, Florida Statutes (FS), states, in part, that "permits from the department will be required only within an airport hazard area where federal obstruction standards are exceeded and if the proposed construction or alteration is within a 10-nautical-mile (NM) radius of the airport reference point." The table provided in this appendix lists every county and municipality within 10 NM of a public-use airport.

Airport	Counties Within 10 Nautical Miles	Municipalities Within 10 Nautical Miles
Airglades	Glades, Palm Beach, Hendry	Clewiston, Moore Haven
Airport Manatee	Hillsboro, Manatee, Pinellas	Bradenton, Palmetto, St. Petersburg
Albert Whitted	Hillsboro, Manatee, Pinellas	Gulfport, Kenneth City, Largo, Madeira Beach, Pinellas Park, Seminole, South Pasadena, St. Pete Beach, St. Petersburg, Tampa, Treasure Island
Apalachicola Regional – Cleve Randolph Field	Franklin, Gulf	Apalachicola
Arcadia Municipal	Charlotte, De Soto, Hardee	Arcadia
Arthur Dunn Air Park	Brevard, Orange, Seminole, Volusia	Titusville
Avon Park Executive	Hardee, Highlands, Polk	Avon Park, Frostproof, Sebring
Bartow Executive	Polk	Auburndale, Bartow, Dundee, Eagle Lake, Fort Meade, Lake Alfred, Lake Hamilton, Lake Wales, Lakeland, Winter Haven
Belle Glade State Municipal	Palm Beach	Belle Glade, Pahokee, South Bay
Bob Lee Flight Strip	Flagler, Lake, Volusia	Daytona Beach, Deland, Deltona, Lake Helen, Orange City, Pierson
Bob Sikes	Okaloosa, Walton	Crestview
Bob White Field	Lake, Orange	Apopka, Astatula, Eustis, Howey-In-The-Hills, Montverde, Mount Dora, Ocoee, Tavares
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
Brooksville-Tampa Bay Regional	Hernando, Pasco	Brooksville, Weeki Wachee

Airport	Counties Within 10 Nautical Miles	Municipalities Within 10 Nautical Miles
Buchan	Charlotte, Sarasota	North Point, Venice
Calhoun County	Calhoun, Jackson, Liberty	Altha, Blountstown, Bristol
Carrabelle-Thompson	Franklin	Carrabelle
Cecil	Clay, Duval, Nassau	Baldwin, Jacksonville, Orange Park
Chalet Suzanne Air Strip	Osceola, Polk	Dundee, Eagle Lake, Haines City, Highland Park, Hillcrest Heights, Lake Alfred, Lake Hamilton, Lake Wales, Winter Haven
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
Costin	Franklin, Gulf	Port St. Joe
Cross City	Dixie, Gilchrist,	Cross City, Fanning Springs Levy
Crystal River – Captain Tom Davis Field	Citrus, Levy	Crystal River, Inglis
Dade-Collier Training and Transition	Broward, Collier, Miami-Dade, Monroe	-
Daytona Beach International	Flagler, Volusia	Daytona Beach, Daytona Beach Shores, Holly Hill, New Smyrna Beach, Ormond Beach, Ponce Inlet, Port Orange, South Daytona
Defuniak Springs	Holmes, Walton	De Funiak Springs
DeLand Municipal – Sidney H Taylor Field	Lake, Volusia	Daytona Beach, De Bary, De Land, Deltona, Lake Helen, Orange City
Destin-Fort Walton Beach / Eglin Air Force Base	Okaloosa, Walton	Cinco Bayou, Destin, Fort Walton Beach, Niceville, Shalimar, Valparaiso
Destin Executive Airport	Okaloosa, Walton	Destin, Fort Walton Beach, Miramar Beach, Valpraiso
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
Everglades Airpark	Collier, Monroe	Everglades

Airport	Counties Within 10 Nautical Miles	Municipalities Within 10 Nautical Miles
Executive	Orange, Seminole	Altamonte Springs, Casselberry, Eatonville, Edgewood, Longwood, Maitland, Orlando, Oviedo, Winter Park, Winter Springs
Ferguson	Escambia, Santa Rosa	Gulf Breeze, Pensacola
Fernandina Beach Municipal	Duval, Nassau	Fernandina Beach, Jacksonville
Flagler Executive	Flagler, Volusia	Beverly Beach, Bunnell, Flagler Beach, Ormond Beach, Palm Coast
Flying Ten	Alachua, Gilchrist, Levy	Alachua, Archer, Gainesville, Newberry
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
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
Fort Walton Beach	Escambia, Okaloosa, Santa Rosa	Fort Walton Beach, Mary Esther
Gainesville Regional	Alachua, Bradford	Alachua, Gainesville, Waldo
George T Lewis	Levy	Cedar Key
Halifax River Sea Plane Base	Flagler, Volusia	Daytona Beach, Holly Hill, Ormond Beach, Ormond-By-The-Sea, Port Orange
Herlong Recreational	Clay, Duval, Nassau	Baldwin, Jacksonville, Orange Park
Hilliard Airpark	Nassau	Callahan, Hilliard
Immokalee Regional	Collier, Hendry, Lee	-
Indiantown	Martin, Palm Beach	-
Inverness	Citrus, Hernando, Marion, Sumpter	Inverness
Jack Browns Seaplane Base	Polk	Auburndale, Bartow, Dundee, Eagle Lake, Haines City, Lake Alfred, Lake Hamilton, Lake Wales, Lakeland, Polk City, Winter Haven
Jacksonville Executive At Craig	Duval, St. Johns	Atlantic Beach, Jacksonville, Jacksonville Beach, Neptune Beach

Airport	Counties Within 10 Nautical Miles	Municipalities Within 10 Nautical Miles
Jacksonville International	Duval, Nassau	Callahan, Jacksonville
Key West International	Monroe	Key West
Keystone Airpark	Alachua, Bradford, Clay, Putnam	Hampton, Keystone Heights, Starke, Waldo
Kissimmee Gateway	Orange, Osceola, Polk	Bay Lake, Kissimmee, Lake Buena Vista, Orlando, St. Cloud
La Belle Municipal	Charlotte, Glades, Hendry, Lee	Labelle
Lake City Gateway	Baker, Columbia, Union	Lake City
Lake Wales Municipal	Polk	Dundee, Eagle Lake, Frostproof, Highland Park, Hillcrest Heights, Lake Hamilton, Lake Wales, Winter Haven
Lakeland Linder International	Hillsborough, Polk	Bartow, Lakeland, Mulberry, Plant City
Leesburg International	Lake, Marion, Orange, Sumter	Astatula, Eustis, Fruitland Park, Howey-In-The-Hills, Lady Lake, Leesburg, Mount Dora, Tavares, Umatilla
Marco Island Executive	Collier	Marco Island, Naples
Marianna Municipal	Jackson	Bascom, Greenwood, Malone, Marianna
Marion County	Citrus, Levy, Marion, Sumter	Dunnellon, Ocala
Massey Ranch Airpark	Volusia	Daytona Beach Shores, Edgewater, New Smyrna Beach, Oak Hill, Ponce Inlet, Port Orange
Melbourne International	Brevard	Indialantic, Indian Harbour Beach, Malabar, Melbourne, Melbourne Beach, Melbourne Village, Palm Bay, Palm Shores, Satellite Beach, West Melbourne
Merritt Island	Brevard	Cape Canaveral, Cocoa, Cocoa Beach, Melbourne, Palm Shores, Rockledge, Satellite Beach
Miami Executive	Miami-Dade	Coral Gables, Homestead, Miami, Pinecrest, South Miami, Sweetwater, West Miami
Miami Homestead General Aviation	Miami-Dade	Florida City, Homestead
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

Airport	Counties Within 10 Nautical Miles	Municipalities Within 10 Nautical Miles
Miami-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
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
Mid Florida At Eustis	Lake, Marion, Orange	Apopka, Astatula, Eustis, Mount Dora, Tavares, Umatilla
Naples Municipal	Collier, Lee	Bonita Springs, Naples
New Hibiscus Airpark	Indian River, St. Lucie	Fellsmere, Indian River Shores, Sebastian, Vero Beach
New Smyrna Beach Municipal	Volusia	Daytona Beach, Daytona Beach Shores, Edgewater, New Smyrna Beach, Ponce Inlet, Port Orange, South Dayton
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
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
Northeast Florida Regional	St. Johns	St. Augustine, St. Augustine Beach
Northwest Florida Regional	Okaloosa, Walton	Cinco Bayou, Destin, Fort Walton Beach, Mary Esther, Niceville, Shalmar, Valparaiso
Northwest Florida Beaches International	Bay	Callaway, Cedar Grove, Lynn Haven, Panama City, Panama City Beach, Parker, Springfield
Oak Tree Landing	Alachua, Columbia, Gilchrist, Levy	Alachua, High Springs, Newberry

Airport	Counties Within 10 Nautical Miles	Municipalities Within 10 Nautical Miles
Ocala International – Jim Taylor Field	Marion	Ocala
Okeechobee County	Glades, Highlands, Okeechobee	Okeechobee
Orlando Apopka	Lake, Orange, Seminole	Altamonte Springs, Apopka, Astatula, Eustis, Montverde, Mount Dora, Oakland, Ocoee, Orlando, Tavares, Winter Garden
Orlando International	Orange, Osceola	Belle Isle, Edgewood, Kissimmee, Orlando, St. Cloud, Winter Park
Orlando Sanford International	Lake, Orange, Seminole, Volusia	Altamonte Springs, Casselberry, De Bary, Deltona, Lake Mary, Longwood, Orange City, Oviedo, Sanford, Winter Springs
Ormond Beach Municipal	Flagler, Volusia	Daytona Beach, Daytona Beach Shores, Flagler Beach, Holly Hill, Ormond Beach, Palm Coast, Port Orange, South Daytona
Page Field	Lee	Bonita Springs, Cape Coral, City Of Fort Myers
Palatka Municipal – Lt Kay Larkin Field	Putnam, St. Johns	Palatka, Pomona Park
Palm Beach Count Glades	Palm Beach	Belle Glade, Pahokee, South Bay
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
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
Pensacola International	Escambia, Santa Rosa	Gulf Breeze, Pensacola
Perry-Foley	Taylor	Perry
Peter O Knight	Hillsborough, Pinellas	St. Petersburg, Tampa, Temple Terrace
Peter Prince Field	Santa Rosa	Milton
Pierson Municipal	Flagler, Lake, Putnam, Volusia	Pierson
Pilot Country	Hernando, Hillsborough, Pasco	-
Plant City Airport	Hillsborough, Polk	Lakeland, Plant City

Airport	Counties Within 10 Nautical Miles	Municipalities Within 10 Nautical Miles
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
Punta Gorda	Charlotte, De Soto, Lee, Osceola, Polk, Sarasota	North Point, Punta Gorda
Quincy Municipal	Gadsen, Leon	Gretna, Havana, Midway, Quincy
River Ranch Resort	Highlands, Okeechobee, Osceola, Polk	-
Sarasota/Bradenton International	Manatee, Sarasota	Bradenton, Bradenton Beach, Longboat Key, Palmetto, Sarasota
Sebastian Municipal	Brevard, Indian River	Fellsmere, Indian River Shores, Malabar, Orchid, Palm Bay, Sebastian, Vero Beach
Sebring Regional	Highlands, Okeechobee	Lake Placid, Sebring
Shell Creek Airpark	Charlotte, De Soto, Sarasota	North Point, Punta Gorda
South Lakeland	Hillsborough, Polk	Bartow, Lakeland, Mulberry, Plant City
Southwest Florida International	Collier, Lee	Bonita Springs, Fort Myers
Space Coast Regional	Brevard, Orange	Cocoa, Titusville
St Cloud Seaplane Base	Orange, Osceola	Kissimmee, St Cloud
St George Island	Franklin	Apalachicola
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
Suwannee County	Hamilton, Suwannee	Live Oak
Tallahassee Commercial	Gadsen, Leon	Havana, Midway, Tallahassee
Tallahassee International	Gadsen, Leon, Wakulla	Midway, Tallahassee
Tampa Executive		Plant City, Tampa, Temple Terrace

Airport	Counties Within 10 Nautical Miles	Municipalities Within 10 Nautical Miles
Tampa International	Hillsborough, Pinellas	Clearwater, Oldsmar, Pinellas Park, Safety Harbor, St. Petersburg, Tampa, Temple Terrace
Tampa North Aero Park	Hillsborough, Pasco	San Antonio, St. Leo, Tampa, Temple Terrace, Zephyrhills
Tavares Seaplane Base	Lake, Marion, Orange	Eustis, Leesburg, Tavares
The Florida Keys Marathon	Monroe	Key Colony Beach, Marathon
Treasure Coast International	Indian River, St. Lucie	Fort Pierce, Port St. Lucie, St. Lucie, Vero Beach
Tri-County	Holmes, Jackson, Washington	Bonifay, Chipley, Esto, Graceville, Noma
Umatilla Municipal	Lake, Marion, Orange	Eustis, Mount Dora, Tavares, Umatilla
Valkaria	Brevard, Indian River	Indialantic, Malabar, Melbourne, Melbourne Beach, Melbourne Village, Palm Bay, Sebastian, West Melbourne
Venice Municipal	Charlotte, Sarasota	North Point, Venice
Vero Beach Regional	Indian River, St. Lucie	Fellsmere, Indian River Shores, Orchid, Sebastian, St. Lucie, Vero Beach
Wakulla County	Franklin, Liberty, Wakulla	Sopchoppy
Wauchula Municipal	Hardee, Polk	Bowling Green, Wauchula, Zolfo Springs
Williston Municipal	Alachua, Levy, Marion	Williston
Winter Haven Regional	Polk	Auburndale, Bartow, Davenport, Dundee, Eagle Lake, Haines City, Lake Alfred, Lake Hamilton, Lake Wales, Lakeland, Polk City, Winter Haven
Witham Field	Martin, St. Lucie	Jupiter Island, Ocean Breeze Park, Port St. Lucie, Sewall's Point, Stuart
Zephyrhills Municipal	Hillsborough, Pasco, Polk, Sumter	Dade City, San Antonio, St. Leo, Tampa, Zephyrhills

Appendix J: Florida Counties and Municipalities Adjacent to an Airport

This table contained in this appendix provides a list of every adjacent county and/or municipality to a public-use airport. Adjacent counties and municipalities may be involved in the process of adopting and enforcing airport zoning regulations.

Airport	Adjacent County	Adjacent Municipalities
Airglades	Hendry	-
Airport Manatee	Manatee	-
Albert Whitted	-	St. Petersburg
Apalachicola Regional – Cleve Randolph Field	Franklin	-
Arcadia Municipal	De Soto	-
Arthur Dunn Air Park	Brevard	Titusville
Avon Park Executive	Highlands	Avon Park
Bartow Executive	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	-	Jacksonville
Chalet Suzanne Air Strip	Polk	Lake Wales
Clearwater Air Park	Pinellas	Clearwater
Costin	Gulf	-
Cross City	Dixie	Cross City
Crystal River – Captain Tom Davis Field	Citrus	-
Dade-Collier Training and Transition	Collier, Miami-Dade	-
Daytona Beach International	Volusia	Daytona Beach
Defuniak Springs	Walton	De Funiak Springs
DeLand Municipal – Sidney H Taylor Field	Volusia	Deland
Destin-Fort Walton Beach / Eglin Air Force Base	Okaloosa	Destin
Destin Executive	Okaloosa	Destin
Downtown Fort Lauderdale	-	Fort Lauderdale
Everglades Airpark	Collier	Everglades

Airport	Adjacent County	Adjacent Municipalities
Executive	Orange	Orlando
Ferguson	Escambia	-
Fernandina Beach Municipal	Nassau	Fernandina Beach
Flagler Executive	-	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
Halifax River Sea Plane Base	Volusia	Holly Hill
Herlong Recreational	-	Jacksonville
Hilliard Airpark	Nassau	Hilliard
Immokalee Regional	Collier	-
Indiantown	Martin	-
Inverness	Citrus	-
Jack Browns Seaplane Base	Polk	Winter Haven
Jacksonville Executive Airport At Craig	-	Jacksonville
Jacksonville International	-	Jacksonville
Key West International	Monroe	Key West
Keystone Airpark	Bradford, Clay	-
Kissimmee Gateway	Osceola	Kissimmee
La Belle Municipal	Hendry	Labelle
Lake City Gateway	Columbia	-
Lake Wales Municipal	Polk	Lake Wales
Lakeland Linder International	Polk	Lakeland
Leesburg International	Lake	Leesburg
Marco Island Executive	Collier	-
Marianna Municipal	Jackson	-
Marion County	Marion	-
Massey Ranch Airpark	Volusia	Edgewater
Melbourne International	-	Melbourne, West Melbourne
Merritt Island	Brevard	-
Miami Executive	Miami-Dade	-
Miami Homestead General Aviation	Miami-Dade	-
Miami International	Miami-Dade	Miami, Virginia Gardens
Miami-Opa Locka Executive	Miami-Dade	Hialeah, Miami Gardens, Miami Lakes, Opa-locka

Airport	Adjacent County	Adjacent Municipalities
Miami Seaplane Base	-	Miami
Mid Florida At Eustis	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
Northeast Florida Regional	St. Johns	-
Northwest Florida Beaches International	Bay	-
Oak Tree Landing	Alachua, Gilchrist	-
Ocala International – Jim Taylor Field	Marion	Ocala
Okeechobee County	Okeechobee	Okeechobee
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 County Glades	Palm Beach	-
Palm Beach County Park	Palm Beach	Atlantis
Palm Beach International	Palm Beach	Cloud Lake, Glen Ridge, Haverhill, West Palm Beach
Pensacola International	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
Punta Gorda	Charlotte	-
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	-

Airport	Adjacent County	Adjacent Municipalities
South Lakeland	Polk	-
Southwest Florida International	Lee	-
Space Coast Regional	Brevard	Titusville
St Cloud Seaplane Base	Osceola	St Cloud
St George Island	Franklin	-
St Petersburg-Clearwater International	Pinellas	Largo
Suwannee County	Suwannee	Live Oak
Tallahassee Commercial	Leon	-
Tallahassee International	Leon	Tallahassee
Tampa Executive	Hillsborough	-
Tampa International	Hillsborough	Tampa
Tampa North Aero Park	Pasco	-
Tavares Seaplane Base	Lake	Tavares
The Florida Keys Marathon International	-	Marathon
Treasure Coast International	St. Lucie	-
Tri-County	Holmes, Jackson	-
Umatilla Municipal	Lake	Umatilla
Valkaria	-	Grant-Valkaria
Venice Municipal	Sarasota	Venice
Vero Beach Regional	Indian River	Vero Beach
Wakulla County	Wakulla	-
Wauchula Municipal	Hardee	-
Williston Municipal	Levy	Williston
Winter Haven Regional	Polk	Lake Alfred, Winter Haven
Witham Field	Martin	Stuart
Zephyrhills Municipal	Pasco	Zephyrhills