- Sec. 72-296. Airport protection overlay zone.
- (a) *Purpose*. The purpose of this section is to establish reasonable airport zoning regulations to implement the provisions of state and federal law relating to airport zoning; to provide for airspace protection and land use compatibility with airport operations; to protect the public health, safety and welfare in the vicinity of an airport by minimizing the exposure to hazards and noise levels generated by aircraft operations; to facilitate proper land use planning and to prohibit the location of incompatible land uses and structures in areas surrounding existing or future airports; to provide a process to issue or deny permits and enforcement thereof for airport obstructions; to provide for coordination and notification of airport protection permitting between municipalities and the county; and to provide for coordination of permit applications between the county and state.
- (b) *Definitions*. In addition to the definitions contained in <u>section 72-2</u>, the following terms shall have the following meanings:
 - (1) Aeronautical study: 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: See section 72-2. For purposes of airport protection and land use compatibility regulations in this section, the term also includes all land lying vertically under the designated approach zones.
 - (3) Airport elevation: The highest point of an airport's usable landing area measured in feet above Mean Sea Level.
 - (4) 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.
 - (5) Airport hazard area: Any area of land or water upon which an airport hazard might be established.
 - (6) 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.

(7) Decision height: The height at which a decision must be made during all ILS instrument approach to either continue the approach or to execute a missed approach.

- (8) 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.
- (9) *L* _{dn}: A day/night 24-hour average sound level measurement, expressed in decibels, obtained after addition of ten decibels to sound levels occurring during the nighttime period from 10:00 p.m. to 7:00 a.m.
- (10) *Minimum descent altitude:* The lowest altitude, expressed in feet above mean sea level, to which descent is authorized on final approach or during circling-to-land maneuvering in execution of a standard instrument approach where no electronic glide slope is provided.
- (11) *Nonconforming use:* For purposes of airport protection and land use compatibility regulations in this <u>section 72-296</u>, any pre-existing structure, object of natural growth or use of lands which is inconsistent with the provisions therein.
- (12) Obstruction: 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 that obstructs the airspace required for flight of aircraft in landing and takeoff at an airport or is otherwise hazardous to such landing or takeoff of aircraft. 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; or 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) Precision instrument runway: A runway having an 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 on an FAA-approved airport layout plan; a military service's approved military airport layout plan; any other FAA planning document, or military service's military airport planning document.
- (14) *Public-use airport:* An airport, licensed by the state, which is open for use by the public. For the purposes of this section, the public-use airports are: Bob Lee

Flight Strip (1J6); Daytona Beach International Airport (DAB), DeLand Municipal Airport — Sidney H. Taylor Field (DED), New Smyrna Municipal Airport (EVB), Ormond Beach Municipal Airport (OMN), Pierson Municipal Airport (2J8), Orlando-Sanford International Airport (SFB), and Massey Ranch Airpark (X50).

- (15) Runway: A defined area on an airport prepared for landing and takeoff of aircraft along its length.
- (16) 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.
- (17) Visual runway: A runway intended solely for the operation of aircraft using visual approach procedures with no straight-in instrument approach procedures and no instrument designation indicated on an FAA approved airport layout plan, a military services approved military layout plan, or by any planning document submitted to the FAA by competent authority.
- (c) Airport protection overlay zone. In order to carry out the provisions of this section, there are hereby created and established certain "protected surface zones" that include all lands, in the unincorporated portions of the county, lying beneath the primary, approach, transitional, horizontal, and conical surfaces as they apply to a particular public-use airport. An additional zone also includes the land surrounding an ASR-9 radar site. The boundaries of the airport protection overlay zone shall apply to all zoning classifications established in article II, division 7 of this chapter, and the official zoning map shall identify said overlay zone by adding the letter "A" as a suffix to the existing zoning classification. The zones, or portions thereof, to which these regulations apply are as follows:
 - (1) *Primary zone.* A rectangular area located at each end of a runway, longitudinally centered on the runway. For hard surface runways, the primary surface extends 200 feet beyond each end. For runways without a hard surface, the primary zone ends at each runway end. The width depends on the existing or planned approach and runway type, as follows:

a. Precision instrument runways: 1,000 feet

b. Non-precision instrument runways: 500 feet

c. Public utility visual runways: 250 feet

d. Private utility visual runways: 100 feet

No structure or obstruction that is not part of the landing and takeoff area and is of a greater height than the nearest point on the runway centerline will be permitted within the primary zone.

- (2) Runway protection zone. A trapezoidal area at ground level beginning 200 feet beyond the end of a runway and centered about the extended runway centerline, with the shortest side of the trapezoid closest to the runway. The runway protection zone dimension for a particular runway end is a function of the type of aircraft and approach visibility minimum associated with that runway end. Its width corresponds to that approach zone. Its length varies as follows:
 - a. Precision instrument runways: 2,500 feet
 - b. Non-precision instrument runways: 1,000 1,700 feet
 - c. Public utility visual runways: 1,000 feet
- (3) Horizontal zone. An area around each airport 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 zone of the airport's runways and connecting the adjacent arcs by lines tangent to those arcs. The radius for each arc for the horizontal surface is 5,000 feet for visual approach runways, and 10,000 feet for all other approach types. The horizontal zone extends outward from the transitional zone to the edge of the conical zone. No structure or obstruction can extend 150 feet above the established airport elevation.
- (4) Conical zone. The area extending outward from the periphery of the horizontal zone for a distance of 4,000 feet. Height limitations on structures or obstructions begin at 150 feet above the established airport elevation at the inner edge, with permitted height increasing one foot vertically for every 20 feet of horizontal distance.
- (5) Approach zone. An area longitudinally centered on the extended runway centerline, and extending outward and upward from the end of the runway's primary surface. The approach surface begins at the end of the primary surface. An approach zone is designated for each runway based upon the type of approach available or planned for that runway end. Permitted height limitation within the approach zones is the same as the runway end height at the inner edge and increases with horizontal distance outward from the inner edge as follows:

a. Precision instrument runway: Permitted height increases one foot vertically for every 50 feet horizontal distance for the first 10,000 feet and then increases vertically for every 40 feet horizontal distance for an additional 40,000 feet.

- Non-precision instrument runways: Permitted height increases one foot vertically for every 34 feet horizontal distance for a total distance of 10,000 feet.
- c. Visual runways: Permitted height increases one foot vertically for every 20 feet horizontal distance for a total distance of 5,000 feet.
- (6) Transitional zone. The area extending outward and upward at a 7:1 slope from the sides of the primary zones and approach zones connecting them to the horizontal zone. Height limits within the transitional zone are the same as the primary zone or approach zone at the boundary line where it adjoins and increases at a rate of one foot vertically for every seven feet horizontally, extending out at right angles to the runway centerline and extended centerline for a distance of 5,000 feet.
- (7) ASR-9 radar zone. The area extending outward in a four-nautical-mile radius from the ASR-9 radar site. Within a one-mile radius, all proposed above-ground structures are subject to permitting. Within a four-mile radius, all proposed structures 100 feet or higher are subject to permitting.
- (d) Airport land use restrictions. Notwithstanding any other provision of this chapter, no use may be made of land or water within any zones established by this section in such a manner as to interfere with the operation of an airborne aircraft. The following special requirements shall apply to each permitted use:
 - (1) *Prohibited uses.* Notwithstanding the uses permitted in the underlying zoning classifications as provided in <u>section 72-241</u>, the following uses are prohibited within any runway protection zone:

Community residential homes;

Group homes;

Hospitals;

Multifamily standard or manufactured modular dwellings;

Schools, public, parochial or private;

Single-family standard or manufactured modular dwellings

Storage of explosive material;

Uses that assemble large groups of people or any other use that could produce a major catastrophe as a result of an aircraft crash.

- (2) Lighting. All lights or illumination used in conjunction with street, parking, signs or use of land and structures shall be arranged and operated in such a manner that it is not misleading or dangerous to aircraft operating from a public airport or in the vicinity thereof, by shielding, directing downwards, or other means as necessary.
- (3) *Height.* Notwithstanding the preceding provisions in this section, the owner of any structure over 200 feet above ground level shall install lighting in accordance with Federal Aviation Administration Advisory Circular 70-7460-ID, and amendments thereto, on such structure. Additionally, high intensity white obstruction lights shall be installed on a high structure which exceeds 749 feet above mean sea level. The high intensity white obstruction lights must be in accordance with Federal Aviation Administration Advisory Circular 70-7460-ID, and amendments thereto.
- (4) Visibility/glare. No operations from any type shall produce smoke, glare or other visual hazards that endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.
- (5) Airport noise zones.
 - a. No new noise-sensitive land uses shall be established within the limits of the 65 L _{dn}/DNL noise exposure contour as delineated in the most current 14 CFR part 150 Airport Noise Compatibility Study in effect at the time of a development proposal. Noise-sensitive land uses include, but are not limited to: single-family residential, multifamily residential, mobile homes, houses of worship, schools (with the exception of aviation schools), group homes, hospitals, day care centers and museums. A complete listing of land use types by their compatibility with aircraft-related noise levels is set forth under 14 CFR Part 150, Appendix A, and is incorporated herein by reference.
 - b. Expansion, replacement or renovation (with a cost at least 60 percent of the existing assessed value) of an existing noise-sensitive use or structure within the 65 DNL noise exposure contour may be approved if:
 - The work incorporates building techniques and materials that will result in a 25-decibel reduction between the exterior noise level and that inside the structure; or
 - 2. The owner/developer voluntarily provides a recorded avigation easement for noise with non-suit covenant running with the land in a format acceptable to the county.

c. If a noise study has not been conducted by a public airport, residential construction and any educational facility, with the exception of aviation school facilities, shall be prohibited 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.

- d. Subsection (d)(5) 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 as of July 1, 1993.
- (6) Wildlife hazard attractants. Landfills, waste disposal facilities, and other facilities that store, handle, or process organic or any other material that foster or harbor the growth of insects, rodents, amphibians, or other organisms that result in significant bird population increases above the normal background level, as well as stormwater management facilities, wetlands, and other areas containing aquatic life and vegetation also attract birds and other wildlife that may increase the potential for aircraft bird strikes, resulting in damage to aircraft and injury to occupants shall be subject to the following regulations:
 - a. New landfills shall not be located:
 - 1. Within 10,000 feet of the nearest point of any runway to be used by turbine aircraft; or
 - 2. Within 5,000 feet from the nearest point of any runway used by only non-turbine aircraft.
 - Outside the perimeters described in subsections (d)(6)1 and 2 above, but within the lateral limits of the civil airport imaginary surfaces as defined by federal regulations, as amended from time to time, for approaching, departing, and circling aircraft.
 - b. All proposed and existing landfills shall be reviewed to determine whether they attract or sustain hazardous bird movements from feeding, water, or roosting areas into or across the runways or approach and departure patterns of aircraft. The existence of such hazards shall be considered in deciding whether to permit a proposed landfill, and whether to require an existing or proposed landfill to use bird management techniques or other practices to minimize bird hazards to airborne aircraft.
 - c. Above-ground stormwater management facilities, including open water features, canals, marsh areas, dry detention, and littoral zone areas should

not be placed within airport operations areas due to their aquatic and vegetative environments and potential to attract wildlife. Where such facilities are unavoidable, best management practices shall be used to decrease the potential to attract wildlife, such as steep slopes, rip-rap lined detention areas, vegetation managements, and use of dry detention areas, subject to DRC review and approval.

(e) Permitting.

- (1) Administration and enforcement. It shall be the duty of the zoning enforcement official to administer and enforce the requirements prescribed herein within the territorial limits over which Volusia County has jurisdiction through the permitting process.
- (2) Permit required. Any person proposing to construct, alter, or allow an obstruction in an airport hazard area, as determined by the FAA, must apply for a building or development permit, as applicable. Such 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.
- (3) Permit application. In addition to the standard submittal documents associated with a building or development permit application, permit applications under this section shall include documentation showing compliance with the federal requirement for notification of proposed construction or alteration of structures and a valid aeronautical study. All such applications shall be accompanied by the appropriate review fee established by council resolution.
- (4) Review criteria. The following criteria shall be considered when determining whether to issue or deny a permit:
 - 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 F.S. ch. 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 designed 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; and h. Comments provided by affected municipal jurisdictions, if any.
- (f) FDOT review. Upon receipt of a complete permit application, a copy of the application shall be provided to the Florida Department of Transportation Aviation Office by certified mail, return receipt requested, or by a delivery service that provides a receipt evidencing delivery. Pursuant to F.S. § 333.025(4), the department of transportation shall have 15-days to review the application and provide comments, if any, to the county, said time running concurrently with the review of the application by the county.
- (g) *Hazard marking and lighting.* The owner of a permitted obstruction shall be required to install, operate, and maintain thereon, at his or her own expense, marking and lighting in conformance with the specific standards set forth by the Federal Aviation Administration.
- (h) Nonconforming uses. This section 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 subsection (e) above.
- (i) Abandonment. A nonconforming obstruction that has been abandoned or is more than 80 percent torn down, destroyed, deteriorated, or decayed shall not be granted a permit 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 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 ten days after notice, the county 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.

- (j) Variances and modifications. Unless otherwise provided in this section, a petition for variance from the requirements of this section shall be governed by the provisions of <u>section 72-379</u>. Petitions for modifications from applicable land development requirements shall be governed by <u>section 72-501</u>.
- (k) *Exemptions*. Notwithstanding any other provisions herein, the following activities and structures shall be exempt from the permitting requirements of this section:
- (1) Existing structures that received construction permits from the Federal Communications Commission that exceed 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.
- (2) Non-substantial improvements of existing residential structures and parcels, and nonresidential structures or parcels provided the principal use of the property has not been discontinued for a period of no less than 180 consecutive days.
- (3) Cranes, construction equipment, and other temporary structures in use or in place for a period not to exceed 18 consecutive months are exempt from review by the Florida Department of Transportation, unless requested by FDOT.

(Ord. No. 82-20, § XVIII, 12-9-82; Ord. No. 87-25, § V, 9-10-87; Ord. No. 89-20, § XLII, 6-20-89; Ord. No. 91-11, § XXIII, 5-16-91; Ord. No. 94-4, § XCI, 5-5-94; Ord. No. 2008-25, § II, 12-4-08; Ord. No. 2017-06, § I, 5-18-17; Ord. No. 2018-01, § I, 1-18-18)