Guidance and considerations for development in the vicinity of Ohio’s airports and heliports

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When construction is proposed near public use airports and heliports in the State of Ohio, airport authorities, local government officials, zoning and building departments, contractors and everyone else in the planning and construction process should be aware of federal and state notification and permitting requirements.

The criteria for when the Federal Aviation Administration (FAA) requires notification is found in 14 Code of Federal Regulations (CFR) (a.k.a. Federal Aviation Regulations [FAR]) Part 77 - Safe, Efficient Use, and Preservation of the Navigable Airspace). In addition to notifying the FAA, a permit is required to be issued by the Ohio Department of Transportation, Office of Aviation. The filing and permitting requirements are found in the Ohio Administrative Code Section 5501:1.

**IT MAY BE A PROBLEM IF:**

The proposed construction, alteration or associated construction equipment exceeds (or in the case of trees and other vegetation may eventually exceed) any of the following limits:

- The project is 200 feet or more above ground level at any location within the State of Ohio;

**OR**

The closer the proposed project is to an airport or heliport, the shorter the structure must be.

- The proposed project is between 0 feet and 200 feet above ground level and;
  - Within 20,000 feet of an Airport with a runway length greater than 3,200 feet; or
  - Within 10,000 feet of an Airport with a runway length less than 3,200 feet; or
  - Within 5,000 feet of a Heliport

...then you need to file a notification and get permission to build, alter or plant.
FILE BEFORE YOU BUILD

WHO: The owner of the land, the development or the project that wants to construct, build or alter any structure or plant anything near an airport or heliport (overpasses, light poles, antenna or cell towers, wind turbines, buildings, billboards, trees...)

WHAT: 1. File FAA Form 7460-1 “Notification of Proposed Construction or Alteration” with the FAA and 2. Obtain a permit from the Ohio Department of Transportation, Office of Aviation.

WHEN: 90 days prior to the proposed start of construction (45 days for the FAA review and an additional 45 days for ODOT’s review)


WHY: To protect the navigable airspace from obstructions, obstacles and hazards.

NOTIFICATION PROCESS

All Four Steps are required even if the FAA issues a Determination of No Hazard

Step 1: Determine if notification is required based on height of the project and the distance of the project from the runway or helipad.

Step 2: Submit FAA Form 7460-1 to the FAA.

Step 3: FAA determines that the project does not adversely affect the surrounding airspace and issues a Determination of No Hazard. Proceed to Step 4 on state level.

OR Notice of presumed hazard determination is issued.

Step 4: ODOT conducts an independent aeronautical study and issues a permit OR a permit and waiver OR ODOT denies the permit.

WHEN IS A PERMIT APPLICATION (FAA FORM 7460-1) REQUIRED?

The FAA Form 7460-1 must be filed for any proposed construction, alteration or associated construction equipment of 200 feet or more in height.

Additionally, any construction or alteration that exceeds extending outward and upward in excess of one of the following slopes requires filing:

i) 100 to 1 slope for a horizontal distance of 20,000 feet from the nearest public use runway greater than 3,200 feet in length, excluding heliports.

ii) 50 to 1 slope for a horizontal distance of 10,000 feet from the nearest public use runway less than 3,200 feet in length, excluding heliports.

iii) 25 to 1 slope for a horizontal distance of 5,000 feet from the nearest touchdown and liftoff area of a public use heliport.

Sources: FAR Part 77. FAA Order 7400.2
Prepared by: Jacobs Consultancy
ODOT Office of Aviation protects all of 14 CFR Part 77 airspace as a whole for every public use airport and heliport in the State of Ohio. These surfaces are described as:

77.17 Obstruction Standards:
- 499 feet AGL anywhere in the State of Ohio
- 200 feet AGL or above airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport that has a runway more than 3,200 feet in length. This height increases at a rate of 100 feet per nautical mile up to a maximum of 499 feet.
- Any height within a terminal obstacle clearance area which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area to be less than the required obstacle clearance.

77.19 Civil Airport Imaginary Surfaces:
- **Horizontal Surface** - a surface 150 feet above the established airport elevation for a distance of 5,000 feet or 10,000 feet, depending on the classification of the runway
- **Conical Surface** - a surface extending outward and upward from the limit of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.
- **Primary Surface** - a surface centered longitudinally on the runway, the elevation of which is the same as the runway. The width and length are dependent on the classification of the runway.
- **Approach Surface** - a surface longitudinally centered on the extended runway centerline and extending outward and upward from the end of the primary surface. The width and length are dependent on the type of approach available or planned for each end of the runway.
- **Transitional Surface** - surfaces that extend outward and upward at right angles to the runway centerline and extended runway centerline at a slope of 7 to 1 from the sides of the primary surface and approach surface.
77.23 Heliport Imaginary Surfaces:

- **Primary Surface** - a surface consisting of a horizontal plane at the elevation of the established heliport elevation that coincides in size and shape with the designated take-off and landing area.

- **Approach Surface** - a surface that 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 to a width of 500 feet. The slope of the approach surface is 8 to 1.

- **Transitional Surface** - surfaces that extend outward and upward from the lateral boundaries of the primary and approach surfaces for a distance of 250 feet measured horizontally from the centerline of the primary and approach surfaces. The slope of the transitional surface is 2 to 1.

### WHAT AIRSPACE DOES ODOT

- Touchdown Area
- Safety Barrier
- Approach and Depart Paths
- Curved Approach-Departure Paths Also Permissible
- Landing and Takeoff Area (Primary Surface)
- Peripheral Area
- Transition Surfaces (2:1) Extend to 4,000’ from Primary Surface
- Heliport Approach Surface

### OFFICE OF AVIATION PROTECT?

#### PERMIT APPROVALS

A permit is issued, allowing the proposed construction to move forward.

#### PERMIT DENIALS

In accordance with the Ohio Administrative Code, anyone denied a permit has the right to request an administrative hearing pursuant to section 119.06 of the Revised Code.

#### WAIVER REQUESTS

The Department may grant a permit that includes a waiver from compliance with the obstruction standards. Waivers are based on sound aeronautical principles. The consideration of safety shall be paramount to considerations of economic or technical factors. Waivers are considered on a case by case basis.
Airport: Any area of land or water used in maneuvering for landing and taking off of aircraft.

Aeronautical Study: The FAA’s or State’s review of the effects of proposed construction or alteration of a structure on navigable airspace.

AGL: Height Above Ground Level.

Hazard: An obstruction that is determined to interfere with air navigation.

Heliport: Any area used in maneuvering for landing and taking off of helicopters.

Imaginary Surface: A surface defined in 14 CFR Part 77 and used to identify objects that exceed that surface and may, therefore, affect air navigation. Imaginary surfaces are typically three-dimensional sloping surfaces and are determined based on approach and departure aircraft procedures.

Navigable Airspace: The air and surface space that an aircraft requires to remain clear of obstructions when taking off and landing at an airport or heliport.

Object: Any structure, natural or artificially made, permanent or temporary, existing or future, that lies within the notification criteria area surrounding any public use airport/heliport.

Obstacle: Any object that penetrates clearance requirements within 14 CFR Part 77 protected surfaces.

Obstruction: Any obstacle that impacts navigable airspace.

Runway: The surface of the airport used for landing and taking off of aircraft.

Traverse Way: Any roadway, highway, driveway, railroad, waterway or bikeway that allows mobile objects and vehicles to navigate.

The Ohio Airport Directory:
All Public Use airports, heliports and seaplane landing areas and their runway lengths are listed in the Ohio Airport Directory. The Ohio Airport Directory can be found online at:
http://transportation.ohio.gov/aviation & click on “Aeronautical Publications.”

This information is available as well in ODOT’s Transportation Information Mapping System (TIMS).

Transportation Information Mapping System (TIMS) found at:
http://gis.dot.state.oh.us/tims

Although notification is not required when building around private use airports and heliports, it is strongly encouraged. Coordinate with the private owner of the airport or heliport and ODOT, Office of Aviation. Private use airports, heliports, and seaplane bases can be located in the TIMS system.

Select “Create A Map”, under “Assets”, select “Aviation Facilities (Private Use).”
WHEN IN DOUBT

File a FAA Form 7460-1 “Notification of Proposed Construction or Alteration” at http://oeaaa.faa.gov

OR

Contact the Ohio Department of Transportation Office of Aviation

Contact Information:

ODOT Office of Aviation
2829 West Dublin-Granville Road
Columbus, Ohio 43235-2786

Ohio Airport Protection Hotline: (614) 466-6804
Ohio Airport Protection Toll Free: (855) 867-1852

Email: Ohio.Airport.Protection@dot.ohio.gov
Web: transportation.ohio.gov/aviation & click on Ohio Airport Protection Act