Airspace Obstruction Permit

Minnesota law protects the national airspace in Minnesota by preventing airport hazards and by preventing inappropriate uses of land near public-use airports. Minnesota law also gives MnDOT Aeronautics the responsibility and authority to issue an airspace obstruction permit for any proposed structure.

A permit from MnDOT Aeronautics **may be required** for the following wind turbines and other tall, non-transmitting structures located outside the zoned territory of any public use airports with airport zoning in place:

- that are more than **500' AGL** any place in the state, or
- when the structure is more than 200' AGL or more than 200 feet above the established airport elevation, whichever gives the highest elevation, within three nautical miles of an airport and increasing by 100' for each additional mile out to six miles and 500', or
- that would increase an instrument approach minimum flight altitude or increase its flight visibility minimums, or
- that would increase the minimum obstruction clearance altitude of a federal airway, or
- that penetrates any of the following imaginary surfaces: primary, horizontal, conical, approach, or transitional surfaces.

Note: MnDOT Aeronautics is not authorized to issue a permit for a tower greater than 1000' with a few exceptions.

A permit from MnDOT Aeronautics is not required for tall structures

- that transmit, and therefore require a permit from the FCC, or
- that are within the zoned territory of any public-use airport that has airport zoning.

Note: A FAA letter of determination stating "No Hazard" does not negate or fulfill the need for a state issued permit.

It is imperative for every airport manager to understand their local airport zoning ordinance and which department is responsible for its enforcement. In addition, every airport manager should also verify that the FAA has the most current runway endpoint data (including planned runways and runway extensions). Every FAA OE/AAA aeronautical case study depends on the accuracy of this data.

Application for Permit

To apply for this permit, the sponsor of the project can submit an application by one of the following ways:

1. Online application http://www.dot.state.mn.us/aero/talltowers-application.html
2. Email: aviationplanning.dot@state.mn.us

Applications should contain the sponsor's information, including point of contact, preferred method of communication, the latitude and longitude of the structure(s), a map representing the distance between the structure(s) closest to the nearest airport(s) and the airport runway(s), the height above ground level, any plans for marking and lighting, and a copy of the FAA letter of determination. If the proposed structure is a wind turbine the elevation should include the maximum height at the top of the rotating blades, and the marking and lighting should contain the plans for illuminating or marking the blades in addition to the tower. The request should also contain a copy of the FAA's airspace determination.

Please direct your request to:

MnDOT Aeronautics - Aviation Planning
395 John Ireland Blvd., MS 410
St. Paul, MN 55155

Email: aviationplanning.dot@state.mn.us

MnDOT Aeronautics Coordination

While the responsibility for filing notifications and permit applications or variances rests with the project sponsor, MnDOT Aeronautics is available to provide additional guidance for projects that may impact the national airspace system in Minnesota.

Marking and Lighting Requirements

Any marking and/or lighting of a structure that is considered an airspace obstruction—and that has been recommended by the FAA in its aeronautical study in order to enhance pilot visual awareness of the structure's presence and location—is a mandatory requirement to be included on the structure by Minnesota law. All airspace obstruction permits contain provisions which require obstruction marking and lighting. Advisory Circular 70/7460-1K, "Obstruction Marking and Lighting", describes the standards for marking and lighting structures such as buildings, chimneys, antenna towers, cooling towers, storage tanks, supporting structures of overhead wires, etc. and is available on FAA's OE/AAA web site listed below.

Airspace Regulations and Information

- FAA's OE/AAA web site is http://oeaaa.faa.gov
- 14 C.F.R., Part 77, "Objects Affecting Navigable Airspace", Federal Aviation Regulations, is available at https://www.faa.gov/airports/central/engineering/part77/
- Minnesota Structure Height Regulations: www.mndot.gov/aero/talltowers.html

DEPARTMENT OF TRANSPORTATION
AERONAUTICS

Minnesota Airspace Obstructions

September 2021

Minnesota Airspace and Tall Structures

In General

When planning to build or modify a structure in Minnesota, one of the considerations must be the impact of the structure on the national airspace system. This consideration is vitally important to Minnesota's public airports; navigational aids; and instrument approach flight procedures.

A number of federal, state, and local regulations exist to protect our airspace system. In the paragraphs below we discuss Federal Aviation Administration (FAA) and Minnesota Regulations concerning airspace obstructions.

FAA Notification

Federal law requires that the FAA must receive "prior notification" regarding construction or alteration of a structure, whether permanent or temporary, which meets specific criteria per 14 C.F.R. Part 77.

Whether or not the proposed structure meets these criteria depends on its location in relation to an aviation facility, navigational aid, or instrument procedure ground track. These structures may include but are not limited to highways, roads, railroads, waterways, traverse ways (parking or rest areas), bridges, overpasses, high-mast light poles, utility poles, antenna towers, buildings, signs or billboards, fences or gates, plus temporary-use construction materials or equipment, including dirt piles and cranes, as well as natural growth, vegetation, and landscaping.

For additional information to persons proposing to erect or alter an object that may affect the navigable airspace, see Advisory Circular 70/7460-2K, "Proposed Construction or Alteration of Objects That May Affect the Navigable Airspace", on the FAA's Obstacle Evaluation/Airport Airspace Analysis (FAA OE/AAA) web site, http://oeaaa.faa.gov.

If FAA notification is required, the project sponsor must submit FAA Form 7460-1, "Notice of Proposed Construction or Alteration," electronically via FAA's OE/AAA web site or submit hard copy documents to:

Express Processing Center
Federal Aviation Administration
Southwest Regional Office
Air Traffic Airspace Branch, ASW-520
2601 Meacham Boulevard
Fort Worth, TX 76137-0520

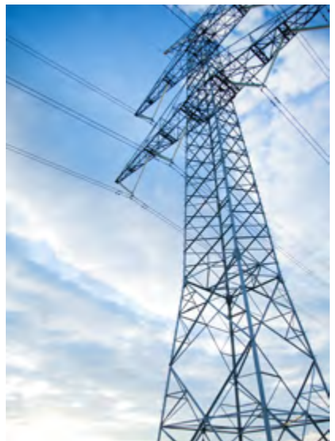
Submitting FAA Form 7460-1 to any other FAA address may significantly delay the OE/AAA process.

Notification must be submitted at least 30 days before the earlier of two dates: the date the proposed construction or alteration is to begin, or the date an application for a construction permit is to be filed.

Notification to FAA for Large Projects

A large project, such as a power line or a road or maybe a bridge, includes the submittal of at least 12 or more study points. If the structure is a building, FAA will want the latitude and longitude for the corner of the building that is closest to the nearest public use runway, the latitude and longitude for all other corners, as well as the appropriate elevations, a picture and/or a diagram. In addition, file the highest height of any of the points and let the FAA build a worst case scenario.

If you are planning a large project in Minnesota, consider contacting the FAA Southern Region Technician at 718-553-2611. He/She may provide guidance which will save you and the FAA time during the aeronautical study process. In addition, time and money spent on a professional aviation consultant may benefit you greatly.



FAA OE/AAA Web Site

The FAA OE/AAA web site has become the single source for all OE/AAA case studies and information. You may view proposed, determined and circularized cases, as well as supplemental notices. MnDOT Aeronautics highly recommends all airports sign up for automatic notification of circularized cases. http://oeaaa.faa.gov

Once a username and password has been set up, submitting structures for analysis becomes very simple, especially if there are multiple structures. In addition, you may track the progress of your case studies by logging onto the OE/AAA web site. You may also submit additional materials to the FAA electronically. All OE/AAA related information and instructions are just a click away.

FAA Supplemental Notification

If the FAA advises that supplemental notice is required, the sponsor of the notice of construction or alteration is also required to submit a supplemental notice (FAA Form 7460-2, Part 1) to the FAA Southwest Regional Office in Fort Worth, Texas within 48 hours of the start of construction. Also, within five days after the construction or alteration reaches its greatest height, the sponsor must notify the FAA Southwest Regional Office using FAA Form 7460-2, Part 2.

FAA Emergency Notification

In the case of an emergency involving essential public services, public health, or public safety that requires immediate construction or alteration, the 30-day advance notice requirement does not apply. In such a case, the required notification may be sent by telephone (800-992-7433) or any expeditious means to the nearest FAA Flight Service Station. Within five days thereafter, the sponsor must submit a completed copy of FAA Form 7460-1 to the FAA Southwest Regional Office in Fort Worth, Texas.

FAA Notification for On-Airport Structures

For structures to be located on a public-use airport, the airport sponsor must notify the FAA's Airports District Office (ADO). For additional information pertaining to submitting on airport structures, please contact your Minneapolis Airports District Office representative at 612-713-4350.

FAA Determinations

After receiving a notice of proposed construction or alteration, the FAA conducts an aeronautical study to determine the structure's potential impact on the navigable airspace. That study results in an FAA determination of "hazard" or "no hazard," and the FAA indicates whether or not the proposed construction exceeds the FAA's standards. In some cases, the FAA determination is "no hazard" even though the structure exceeds the standards. If the FAA indicates the proposed construction poses no hazard and does not exceed standards, then refer to Minnesota Structure Heights Regulations for permits that may be required from the state of Minnesota or from a local authority. If, however, the proposed construction does exceed standards (even if it poses "no hazard"), then the sponsor must apply for a permit from the state or from a local government, if a local ordinance governs the matter.