

## **16-01 PRIMARY TAXIWAY EASEMENT STANDARDS**

(adopted February 9, 2016)

Ref: (a) FAA AC 150/5300-13A AIRPORT DESIGN

(b) FAA AC 150/5340-18F STANDARDS FOR AIRPORT SIGN SYSTEMS

Meadow Lake Airport uses an FAA design standard for Group 1 aircraft, which defines

- Taxiway Safety Area (TSA) ... 24.5' either side of the taxiway centerline
- Taxiway Object Free Area (TOFA) ... 44.5' either side of the taxiway centerline

The primary access taxiways of the Meadow Lake Airport hangar area (Taxiways Charlie, Delta, Echo, Foxtrot, and Kilo) are platted with 50' either side of the property boundary to allow aircraft an unobstructed view and access Through-The-Fence to the Meadow Lake Airport AOA (Airport Operations Area). The following guidance is provided to assist property owners, utility companies, and land use authorities with respect to these easements:

### **1. Utilities ...**

- a. There should be no above ground utilities within the TSA.
- b. Utilities within the TOFA should not exceed 30" and should have Low Impact Resistant (frangible) supports.
- c. Utilities within the remainder of the easement should not exceed 36" and should not impede visibility. If protection of these utilities is deemed necessary, it is recommended that two concrete-filled steel posts be considered, placed on either side of the utility parallel to the easement boundary. Winter marking of objects may be accomplished with flexible red or orange fiberglass rods.
- d. It is recommended that above-ground access to utilities (covers, lids, manholes, etc.) be flush with the surrounding surface so as to not interfere with mowing and snow plowing operations (FAA standard is no taller than 3").

### **2. Structures ...**

- a. There should be no above ground structures within the TSA.
- b. Structures (such as signs) within the TOFA should not exceed 30" and should have Low Impact Resistant (frangible) supports.
- c. Structures within the remainder of the easement should not exceed 36" and should not impede visibility. If protection of these structures is deemed necessary, it is recommended that two concrete-filled steel posts be considered, placed on either side of the structure parallel to the easement boundary. Winter marking of objects may be accomplished with flexible red or orange fiberglass rods.

### **3. Vehicles ...**

- a. There should be no parking within the TOFA.
- b. Passenger vehicle parking in the remainder of the easement should be limited to daytime temporary parking for convenience of tenants only. Property owners are requested to discourage overnight or long term parking. No vans, trucks, trailers, RVs or other vehicles that create an obstruction to visibility should be parked within the taxiway easements.

### **4. Drainage ...**

- a. The easements may be used for drainage to convey surface storm water runoff, but such drainage should not interfere with aircraft, mowing, or plowing operations.

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**Background.** As the MLAA continues to grow, a published standard for conduct and expectations of the membership (property owners) becomes more important. One feature of our hangar area that is becoming increasingly congested is the primary east-west taxiway easements that provide through-the-fence (TTF) access from the privately owned hangar properties to the Airport. The purpose of this rule is to establish guidelines for

use of the primary taxiways in the Meadow Lake Airport hangar area (Taxiways “Charlie”, “Delta”, “Echo”, “Foxtrot”, and “Kilo”) to the Airport Operations Area (Taxiway “Alpha” and Runway 8-26).

**Discussion.** Meadow Lake Airport uses design standards for Group 1 aircraft (49 foot wingspan, 20 foot tail height). Reference (a) defines mandatory standards for design on the airport for projects using FAA Airport Improvement Program funding. The Meadow Lake Airport hangar areas are on private property with Through-the-Fence (TTF) access to the MLAA-owned runway/taxiway complex (Airport Operations Area). In areas such as our hangar areas, reference (a) provides a *guide* for design. This reference describes a Taxiway Safety Area (TSA - 24.5 ft either side of the centerline), that should be “*free of objects, except for objects that need to be located in the TSA because of their function*”. In addition, the Taxiway Object Free Area (TOFA - 44.5 ft either side of the centerline), should be free “*except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes*”.

In platting the Meadow Lake Airport Filings, the Meadow Lake Airport Development Corporation used one hundred (100) feet (50 feet either side of property boundaries) as a standard for the primary access taxiways. As the density of our hangars increases, along with the accompanying aircraft and vehicular traffic, it is becoming more important to maintain this standard for obstruction and visibility clearance.

**Compliance.** The MLAA Board of Directors recognizes that the MLAA has no direct enforcement authority of these standards on the private properties of the various Meadow Lake Airport sub-division filings. However, these standards shall be used by the MLAA Airport Development Committee (ADC) in developing recommendations to the Board for input to El Paso County Development Services Department and Board of County Commissioners, Pikes Peak Regional Building Department, and various utility companies. In addition, gross violation of these standards may result in consideration of revocation of Through-The-Fence access to the airport for non-compliant properties.

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The following excerpts from Reference (a) provides guidance:

*Section 404. Taxiway/taxilane clearance requirements.*

- a. **Taxiway separations.** *The required distance between a taxiway/taxilane centerline and other objects is based on the required wingtip clearance, which is a function of the wingspan, and is determined by ADG [Airplane Design Group. Meadow Lake is a Group 1: TSA = 49 ft, TOFA = 89 ft, wingtip clearance = 20 ft]*
- b. **Taxiway and Taxilane Object Free Area (TOFA).** *The taxiway and taxilane OFAs are centered on the taxiway and taxilane centerlines ...*
  - (1) *The taxiway and taxilane OFA clearing standards prohibit service vehicle roads, parked aircraft, and other objects, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes. Vehicles may operate within the OFA provided they give right of way to on coming aircraft by either maintaining a safe distance ahead or behind the aircraft or by exiting the OFA to let the aircraft pass. Provide vehicular exiting areas along the outside of the OFA where required.*
  - (2) *The width of the OFA must be increased at intersections and turns.*
- c. **Taxiway and Taxilane Safety Area (TSA).** *The TSA is centered on the taxiway/taxilane centerline ....*
- d. **Designs Standards.** *The TSA must be:*
  - (1) *cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations;*
  - (2) *drained by grading or storm sewers to prevent water accumulation;*
  - (3) *capable, under dry conditions, or supporting snow removal equipment, Aircraft Rescue and Fire Fighting (ARFF) equipment, and the occasional passage of aircraft without causing structural damage to the aircraft; and*
  - (4) *free of objects, except for objects that need to be located in the TSA because of their function. Objects higher than 3 inches (76 mm) above grade must be constructed on Low Impact resistant (LIR) supports (frangible mounted structures) of the lowest practical height with the frangible point no higher than 3 inches (76 mm) above the grade adjacent to any foundation. Other objects, such as manholes, should be constructed at grade. In no case may their height exceed 3 inches (76 mm) above grade.*