# Meadow Lake Airport Glider Operations Procedures

The MLAA Board has delegated to High Flights Soaring Club responsibility for coordinating glider activities at Meadow Lake Airport and establishing procedures for glider operations. This document prescribes the procedures to be used by anyone operating gliders at Meadow Lake.

Everyone operating a glider at Meadow Lake is required to read this document, receive a briefing from a HFSC officer or instructor, and to sign a letter acknowledging that this has been done and agreeing to follow these procedures.

The MLAA Board has delegated to High Flights Soaring Club the maintenance of this document.

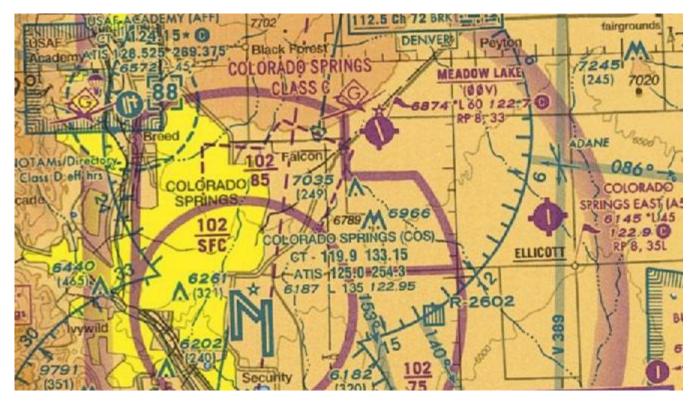
# Airspace near Meadow Lake Airport

The primary low level glider area is west of the main runway to Meridan Road and north of Garrett Road. All glider tows turn west crosswind. All glider patterns are west of the main runway; Right pattern for 15; left pattern for 33.

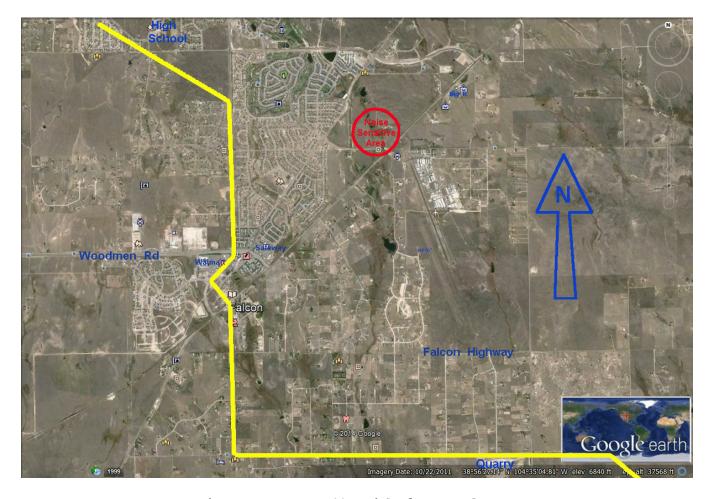
Meadow Lake is located within a notch in the northeast portion of the Colorado Springs Airport Class C airspace. This notch is defined by very visible surface features making it easy to avoid violating the Class C airspace. Review the diagrams to make sure you know the boundaries and can remain clear.

Should you find yourself in a position where you are going to enter the COS Class C airspace, **contact COS** approach on 118.5 Mhz to notify them of the incursion.

COS Approach must be notified before the start of any glider operations at Meadow Lake airport. The airspace above Meadow Lake is heavily used by traffic arriving and departing COS. COS Approach will be called at the end of the day to notify them that glider operations have concluded. COS approach can be reached at 719-556-9105.



Clip of Denver North Sectional showing Meadow Lake Airport and COS Class C Airspace



Class C Airspace Visual Reference Points

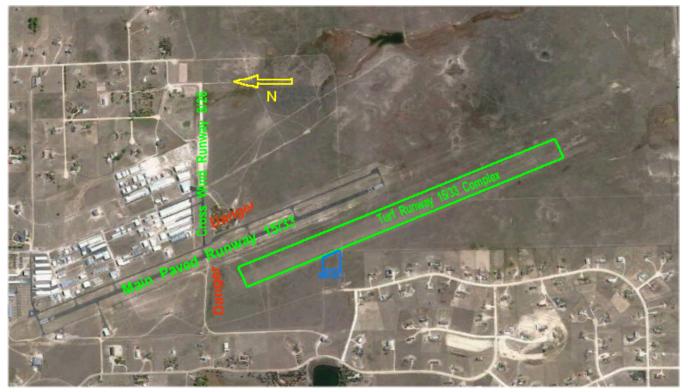
Meadow Lake airport has an AWOS. The Meadow Lake AWOS can be accessed via radio on 118.45mhz or via phone at 719-683-5371. If High Flights is operating, you can also contact High Flights Ground on CTAF to get wind information.

# **Airport Layout**

The following diagrams show the airport in general with the location of the runways. The Turf runway parallels the main paved runway but is displaced to the south east. The center lines of the 2 runways are only separated by 600'. This requires concurrent operations to be avoided.

All patterns for the main paved runway are flown east of the airport. All patterns for the turf runway are flown west of the airport. Cross wind and base pattern legs should be flown north of Falcon Highway.

The Turf Runway is accessed via a mowed taxiway from the west side of the main runway at A4. There are 60' mowed taxiways immediately to the east and west of the turf runway for taxing aircraft. All aircraft should taxi clear of the main runway as soon as possible after landing.



Meadow Lake Airport - General Layout

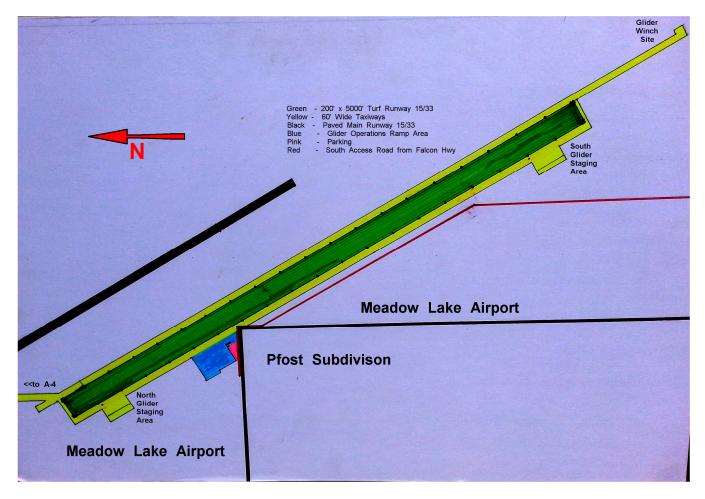
The 15/33 Main Runway at Meadow Lake Airport and the Turf Runway have non-standard spacing, ie, less than 700' center line separation. Glider Operations will hold launches to assure there is not a conflicting operation on either the main runway or the cross wind runway. Glider launches will be held if:

- There is an aircraft on the runway preparing to takeoff. The launch will be held until the aircraft has turned crosswind or passed the glider operations area.
- If there is an aircraft on short final. The launch will be held until the aircraft lands and turns off the runway, or in the case of touch and go, until the aircraft has taken off and turned crosswind or passed the glider operations area.

Gliders have the right away on landing, so power traffic should avoid conflicting operations. Glider pilots should assure they announce their entry into the pattern and their landing intentions so that power traffic can respond accordingly.

In order for everyone operating at Meadow Lake to understand where actions are occurring, the following standards have been established for identifying runways / operating areas:

- The primary glider operations area is the Turf Runway on the southwest portion of the airport. This area is referred to as "Turf Runway 15" or "Turf Runway 33"
- The main paved runway is referred to as "15" or "33". If a glider is using the main runway, the runway should be referred to as "Main Runway 15" or "Main Runway 33" in order for the rest of traffic to know the gliders intent.



General Layout of Turf Runway Complex at Meadow Lake Airport

All cars associated with glider activity are required to be parked in the designated parking area. Only authorized vehicles are allowed in the runway, taxiway, and glider staging areas (See Flying Operations for more information on Authorized vehicles).

An area for glider rigging /de-rigging is shown. Trailer tow vehicles may remain with the glider trailers in this area. Gliders may also be rigged /de-rigged in the trailer storage area.

All spectators must remain in the glider ramp area shown. Only personnel directly involved in launching and retrieving gliders and those flying may be in the glider staging area and/or on the runway/taxiway.

Most of the open areas at Meadow Lake Airport are landable in emergencies. The airport layout identifies specific areas that are not landable (Danger areas).

#### **Glider Ground Operations**

Visitors should remain in the ramp area. Only people involved in glider ground handling and launching and the actual pilots and passengers should be in the taxiway and turf runway area

Ramp space has been allocated for assembled glider tiedowns. HFSC Club Aircraft are tied down along the east tie down line. Private aircraft are tied down along the middle tiedown line. Space is kept clear at the north end of the ramp for tow out of private and transient gliders. All gliders and trailers are tied down facing west.

Trailers stored at the airport are tied downs on the along the west tie down line. These can be empty trailers as well as trailers storing private gliders. There is space for glider assembly immediately east (behind) of the trailer

Space has been allocated on the northwest corner of the ramp transient trailers allowing them to remain hitched to their tow vehicles. There is space for glider assembly immediately behind the glider.

#### Flying Operations - General

Due to the amount of ground handling required in glider operations (tows vehicles, retrieve vehicles, launch personnel) all organizations performing glider operations at Meadow Lake Airport must be scheduled. Only one aero tow operation and one winch operation will be allowed to operate concurrently.

The Meadow Lake Airport Association has delegated glider operations scheduling to High Flights Soaring Club.

Whenever glider operations are being conducted at Meadow Lake Airport, a single person will be designated by an operating organization to be the **Soaring Operations Coordinator**). The Operations Coordinator must be a licensed glider pilot. This person will be identified by an Traffic control vest (bright orange or yellow) and must have a handheld aviation radio scanning 122.7mHz (CTAF) & 123.5 mHz. The Operations Coordinator will be on the ground in the glider area at all times during glider operations. This person will coordinate all activities on the ground; coordinate between aero tow and winch launch operations; and work to keep the runway clear for landing gliders.

When High Flights Soaring is operating, as the senior gliding operations at Meadowlake, HFSC will provide the Operations Coordinator by default. The operator starting operations first will necessarily provide an Operations Coordinator. When a second operator is ready to begin operations on the same day, the 2 operators will discuss and decide which will provide the Operations Coordinator. The first operator will have the first choice to retain the role,. When one operator ceases operations, the other operator will need to be informed and will necessarily then need to provide the Operations Coordinator for the remainder of operations for that day.

All ground handling vehicles (retrieve, tow) must be equipped with an aviation radio tuned to CTAF and must display a orange and white checkered ramp flag. The number of ground handling vehicles will be minimized and will be kept in the staging areas or parking areas when not actively involved in moving gliders or retrieving winch lines.

## Flying Operations - Landing

All landing patterns for the turf runway are flown west of the Turf Runway:

- Turf 15 Right hand pattern
- o Turf 33 Left hand pattern

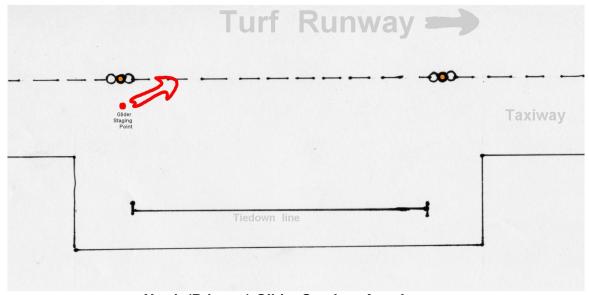
All patterns for the main runway are flown east of the main runway.

The following radio call should be made on the CTAF: "Meadow Lake traffic. Glider <call sign> entering <left/right> downwind for landing on <specify runway>.

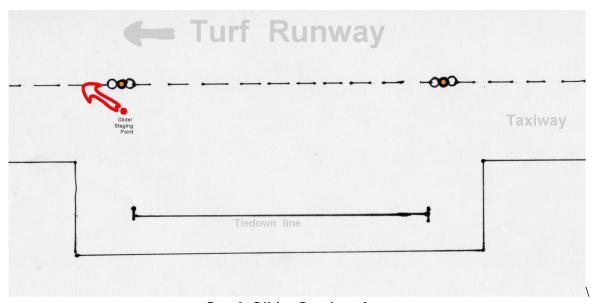
Upon landing, the glider pilot should try to roll clear of the runway, preferably to the west side. In all cases, the glider should be immediately manually moved to the side if stopped on runway while waiting for the ground tow vehicle.

All glider retrieve towing will be west of runways.

#### Flying Operations - Aero Tow Launch



North (Primary) Glider Staging Area Layout



South Glider Staging Area

All aero tow launch operations are conducted from the west side of the Turf Runway. Gliders are staged for launch on the spot designated in each staging area (red dot, which is actually on the ground in the staging area).

Gliders are staged at an angle to the runway off the west side of the turf runway. The tow plane is also kept just off the west edge of the runway. Once the tow rope is connected and we are ready for launch, the tow plane will taxi onto the runway, at an angle to the center line, in front of the glider, to take up slack in the tow rope. The launch then proceeds with the tow plane with glider in tow continuing accelerating onto the turf runway and turning to follow the center line of the runway for takeoff.

The CTAF is used for radio communications between the glider and tow plane and with ground operations.

Tow pattern for south tows will maintain runway heading until reaching Falcon Highway (south airport boundary) and then turn west. A tear drop pattern will be flown to keep the glider within gliding distance of a landing area at Meadow Lake Airport.

Tow pattern for north tows will maintain runway heading until reaching the MLAA hanger, then turn west before the MLAA Hanger. A tear drop pattern will be flown to keep the glider within gliding distance of a landing area at Meadow Lake Airport.

All aero tows will be conducted using SSA Standard signaling with one minor exception. The launch sequence is:

- Pilot indicates ready with Thumbs Up
- Wing runner checks pattern for traffic
- Wing runner lifts wing and signals tow plane to take-up slack
- Tow pilot announces takeoff on CTAF (122.7)
  - o Wing runner may hold launch to takeoffs or landings of other aircraft on the turf or main runway.
- Tow plane waggles rudder to indicate ready
- Glider responds with rudder waggle when ready for launch
- Wing runner does last check of final approach
  - If clear signals tow pilot to start tow
  - o If traffic, holds start until plane down (arm in air)

## Flying Operations – Winch Launch

All winch launch operations will be conducted from the area east of the Turf Runway. The winch will be located beyond the ends of the runway, but aligned on the east side. Winch Launches may be conducted north or south.

All glider winches operating at Meadow Lake will be equipped with an aviation radio cabable of monitoring both 122.7 and 123.5 concurrently Tost metal weaklinks will be used for all winch launches. The correct color weak link will be used for the glider being launched. The weak link color and condition will be verified by the glider PIC.

All winch operations will have a designated safety officer. This person may also function as the wing runner and/or the line retrieve driver. The safety officer will be at the glider during launch. This person must also have a radio capable of monitoring both 122.7 and 123.5.

Winch operations will be utilize a single winch line retrieve vehicle which must be equipped with a aviation radio tuned to CTAF and a ramp flag. Winch line retrieve routes will stay in the winch launch area east of the Turf Runwayto not wear a traffic pattern in the Turf Runway Use of a turf compatible vehicle is highly encouraged.

The glider PIC is responsible for informing the winch operator of the aircraft type, aircraft weight, weak link color, and winch line to be used. The PIC is responsible to assure the correct weak link is employed. This will be verified by the safety officer.

Communications between the Glider, Safety Officer, and winch will be on 123.5 in order to not clutter the CTAF frequency and to minimize the chance of CTAF transmissions blocking winch/glider communications. The following minimum radio calls will be used:

- on CTAF from glider PIC "Glider Winch Launch in 30 secs. from Meadow Lake
  - Turf Strip. Launching to the <north/south>."
- on 123.5 mhz from glider-winch launch coordination communications
- on CTAF from winch operator "Glider Winch Launch complete. Line down. Airspace clear."

At any time, anyone can stop the launch by saying "Stop. Stop. Stop" on either 122.7 or 123.5. The winch launch will immediately be aborted and reset to the very beginning. Both frequencies are allowed in order to minimize time lost retuning radios.

It is expected each winch launch operator will have more extensive launch procedures. The above procedures must be incorporated into the operators standard procedures for operation at Meadow Lake airport.

# Meadow Lake Airport Glider Operations Procedures Acknowledgement and Agreement

- I have received and read a copy of the Meadow Lake Airport Glider Operations
   Procedures. I understand these procedures and agree to abide by them while participating
   in glider operations at Meadow Lake Airport.
- I have been briefed by a member of the High Flights Soaring Club on airport layout, flight patterns, and airspace restrictions. I have had all my questions answered about participating in glider operations at Meadow Lake
- I have complied with all requirements of the Meadow Lake Airport Association board for insurance. I agree to comply with any restriction on operations times and scheduling that have been established by the MLAA Board.

Notes:		
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	Signature:	_
	Printed Name:	
	Date:	
	HFSC Director, Officer, or Flight Instructor	
	Signature:	
	Printed Name:	
	Date:	