

MEADOW LAKE
A I R P O R T

COMPLIANCE PLAN

FINAL REPORT

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Funded by grant from CDOT Aeronautics

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1.0 EXECUTIVE SUMMARY

1.1 Background

The Meadow Lake Airport is owned by the Meadow Lake Airport Association, Inc. (MLAA). It is the only privately owned airport in the Federal Aviation Administration's (FAA), National Plan of Integrated Airport Systems (NPIAS) in the State of Colorado. The airport is also the only NPIAS airport in Colorado where nearly 100% of the based aircraft operate Through-the-Fence (TTF).



In addition, the airport is one of the few general aviation airports in Colorado that continues to thrive during the current economic downturn. The typical NPIAS airport is a publically owned airport with all aviation activity occurring on airport property. The public entity owner has enforcement authority and establishes the rules needed to comply with the Airport Improvement Program (AIP) grant assurances. Airports with on-airport activity have significant control over tenants because of leases and agreements. While the Meadow Lake Airport is currently a nearly 100% TTF operation, the TTF users are “owners” of the airport and are governed by MLAA Bylaws.

Meadow Lake Airport has been in compliance with their AIP Grant Assurances; however the operating environment associated with private ownership and “Through-the-Fence” activity makes compliance more challenging. The unique operation of the Meadow Lake Airport was a major factor in the Colorado Department of Transportation, Division of Aeronautics (CDOT) decision to seek greater assurance that the airport is operating within the safety and compliance rules of the FAA and CDOT. Their decision was supported with a grant to develop this Airport Compliance Plan.

1.2 Compliance Plan Summary

The Compliance Plan was a thorough review of all airport requirements and an Implementation Plan for recommendations. The Compliance Review determined that the MLAA is in compliance with all AIP Grant Assurances; however there are areas where significant improvement can and should be made by MLAA. In particular two near term actions are recommended which will improve safety in one case and reduce perception of funds misuse in the other.

The nearly 100% “Through-the-Fence” activity at Meadow Lake increases the potential for inadvertent vehicle access to airport runways and parallel taxiways. Several locations exist where one mistake by a vehicle driver can lead to the vehicle being on an airport runway or parallel taxiway. The busy nature of the airport, i.e. approximately 400 based aircraft, and a difficult address system add to the potential. The Compliance Review recommended that an “Inadvertent Vehicle Access Prevention Plan” be developed. The “Inadvertent Vehicle Access Prevention Plan” has been developed, and reviewed by the FAA, State, MLAA Advisory Team, and MLAA Board. It appears that implementation can start in 2012.

MLAA members currently pay an “Assessment” as defined in MLAA Bylaws. There is no definition of what portion of the “Assessment” is airport revenue and what portion is designated for other Association

activities. There needs to be a clear indication of airport revenue so that the FAA Revenue Use Policy can be monitored. It is recommended that the MLAA “Assessment” be a two part assessment, an airport charge that must be spent on the airport, and a MLAA fee that can be spent either on or off the airport.

2.0 INTRODUCTION

The Meadow Lake Airport is a unique, successful airport. Most of the airport operation occurs “Through-the-Fence.” The airport has nearly 400 based aircraft¹ with nearly 100% of the aircraft located on private property outside the airport boundary. The airport is a privately owned reliever to Colorado Springs Municipal Airport. The owner, Meadow Lake Airport Association, is a not for profit corporation incorporated under the provisions of the “Colorado Non-Profit Corporation Act,” Article 24, Chapter 31 of the 1963 Colorado Revised Statutes, as amended².

Prior to passage of The Airport and Airway Safety and Capacity Expansion Act of 1987, the only airports eligible to receive federal airport funding were publically owned facilities. The Airport and Airway Safety and Capacity Expansion Act expanded airport eligibility to include privately owned Reliever and Commercial Service airports. The MLAA became an eligible sponsor to receive AIP grants in 1989 when the FAA designated the Meadow Lake Airport as a Reliever to Colorado Springs Municipal Airport. AIP funds have never been denied to the MLAA; however the unique operating environment is out of the norm for airports in the Colorado Aviation System Plan and the FAA’s NPIAS. CDOT Aeronautics has requested that a more thorough review be accomplished to ensure that CDOT and FAA requirements are being met.

2.1 Study Objective and Approach

The MLAA is eligible to receive grants from the Airport Improvement Program (AIP) and CDOT Aeronautics Discretionary Aviation Grant Program. When airports receive AIP or CDOT Aeronautics funds they agree to meet a set of Sponsor Assurances. The MLAA desires to maintain a favorable compliance standing with the FAA to ensure receipt of AIP funds. The objective of this Compliance Plan was to complete a thorough review of the airport operation and its procedures, Bylaws, finances, etc. and develop strategies for attaining or improving compliance.

The approach to the project was a thorough physical inspection of the airport and a records review of all available MLAA, FAA, and CDOT records. The information gathered was used to determine compliance with the most recent AIP Sponsor Assurances accepted by the MLAA. In addition to determining compliance with assurances, any areas where improvements should be made were noted and implementation plans were developed. The implementation plans included cost estimates and recommended changes to the airport’s Capital Improvement Program. Some recommendations involved creating documents such a draft hangar ground lease or Minimum Standards. We provided MLAA with FAA guidance on these matters and names of airport owners with excellent documents.

¹ Airport provided information

² MLAA Articles of Incorporation

2.2 Airport Description

Meadow Lake Airport has been developed to standards for small, B-I aircraft. The airport has two based aircraft in Airplane Design Group II, a King Air 200 with a 54.5 foot wingspan and a de Havilland Dove with a 57.0 foot wingspan. The airport has grown consistently since being designated as a Reliever to Colorado Springs Municipal in 1989. The FAA Reliever Designation Study³ completed in 1988 showed 200 based aircraft. The current based aircraft count provided by MLAA is over 385.



2.2.1 Runways

The Airport Facility Directory shows three runways at Meadow Lake. The primary Runway 15/33, is a 6000' x 60' asphalt concrete runway with visual approaches only. The pavement was designed for 12,500 single wheel loading, and is in good condition. The runway has a PAPI-2 on both runway ends. The PAPIs are owned and maintained by MLAA.

The crosswind Runway 8/26 is 2084' x 35' with the western 900' paved with asphalt concrete and the eastern 1184' having a gravel surface. This runway doesn't meet FAA design standards and an Operational Restriction Note in AirNav.com states, "emergency runway use only⁴."

The third runway in the Airport Facility Directory is a glider strip west of the primary runway labeled Runway N/S. The 1800' x 15' runway has an obstructed approach to north runway end. The High Flights Soaring Club uses the runway for takeoffs to the south. The airport is working to open a replacement runway for glider operations.

2.2.2 Based Aircraft

A unique feature of this airport is that nearly 100% of the based aircraft operate Through-the-Fence. The landowners surrounding the airport property are the owners of the MLAA. Twenty-two aircraft⁵ are in hangars on residential property. The remaining aircraft, are mostly in hangars on properties specifically developed to provide aircraft shelter. Tie-down areas are available on Through-the-Fence properties.

2.2.3 Operations

Airnav.com and FAA Master Records indicate that daily operations for the year ending December 31, 2010 averaged 162 operations per day. This equates to over 59,000 annual operations in 2010.

³ Denver ADO records

⁴ AirNav.com

⁵ MLAA records, June 2011

2.2.4 Aviation Businesses

The Meadow Lake Airport supports numerous aviation businesses that provide services to the public. There are currently 45 businesses that provide services like flight training, aircraft maintenance, aircraft rental, fuel sales, transient parking, glider towing, hangar rentals, and electronics maintenance. Most of the businesses are currently located on private property in the Through-The-Fence areas.

3.0 HISTORY OF AIRPORT IMPROVEMENT PROGRAM GRANT FUNDING AT MEADOW LAKE

Federal grant funding to airports began when the Federal Airport Act was signed into law on May 13, 1946. This legislation established the Federal Aid to Airports Program (FAAP). This program and the subsequent Airport Development Aid Program (ADAP) and Airport Improvement Program (AIP) have provided federal funds to airport owners to develop a national system of airports. Until 1987, the only eligible airports to receive funds were publically owned. The Airport and Airway Safety and Capacity Expansion Act of 1987 extended and amended the AIP adding privately owned Reliever and Commercial Service Airports as eligible airport sponsors. On July 14, 1989 the FAA designated Meadow Lake Airport as a reliever to Colorado Springs Municipal Airport and Meadow Lake became eligible to receive AIP funds.⁶

The MLAA has received 20 grants from the FAA through the end of Fiscal Year 2011. One grant, the -19 project, was cancelled before the work was started. The airport currently receives a \$150,000 annual entitlement as a private reliever airport in the FAA's National Plan of Integrated Airport Systems (NPIAS)⁷. The MLAA can also compete from AIP grants from State Apportionment Funds and Discretionary Funds.

⁶ Denver ADO files

⁷ Report to Congress, National Plan of Integrated Airport Systems (NPIAS) 2011-2015

4.0 FAA Compliance Program

4.1 Compliance Program Basis

The Meadow Lake Airport Association, Inc. (MLAA) has received twenty grants from the Federal Aviation Administration under the Airport Improvement Program (AIP), pursuant to the Airport and Airway Improvement Act of 1982 (AAIA), as amended. The AIP required MLAA to agree to certain assurances under the authorizing legislation of the AIP. Most assurances remain unchanged from one grant to the next. A few new assurances have been added with extensions of the AIP authorizing legislation. No assurance has been deleted since MLAA received its first grant. The Grant Application submitted by MLAA with AIP Project 18 was used as the applicable document for current requirements, and is included in Appendix 1 of this report. Grant Applications contain the assurances that an airport owner agrees to as a condition of receiving a grant. MLAA has received two additional grants since AIP Project 18. The assurances remained the same for Project 19; however the assurances for AIP Project 20 contained one change which is discussed in the next paragraph.



In addition to the assurances that result from federal legislation and rulemaking, the FAA has statutory authority to prescribe additional assurances or requirements to grant recipients (sponsor).⁸ The FAA is currently doing this for Residential Through-The-Fence (RTTF) activities. The FAA issued Interim Policy on this activity on March 18, 2011 and amended Grant Assurance No. 5, Preserving Rights and Powers.⁹ MLAA became subject to this new assurance upon accepting a grant for AIP Project 20. A copy of the rulemaking and an updated Grant Assurance No. 5 are included in Appendix 2.

The FAA can also include project-specific Special Conditions in AIP grants.¹⁰ Beginning with AIP Project 15 during Fiscal Year 2008, the FAA began inserting a special condition in all subsequent grants, requiring FAA approval for the MLAA to terminate or dissolve the MLAA.¹¹ The condition reads:

Insofar as the Sponsor administers the public-use, federally obligated airport facilities of the Meadow Lake Airport in Peyton, Colorado, the Sponsor shall not be terminated or dissolved without out prior approval of the Federal Aviation Administration. In the event of the termination or dissolution of the Sponsor, the Sponsor shall return, convey or transfer land purchased with Federal grant funds to the Federal Aviation Administration by selling such land for the highest and best use, and otherwise comply with all terms of the Federal assistance grant assurances to return and dispose of land or assets purchased through Federal grants.

⁸ FAA Order 5190.6B, FAA Airport Compliance Manual

⁹ Federal Register/Vol. 76, No. 53/Friday, March 18, 2011

¹⁰ FAA Order 5190.6B, FAA Airport Compliance Manual

¹¹ Denver ADO files

AIP obligations at privately owned airports relating to the use, operation, and maintenance of the airport remain in effect throughout the useful life of the facilities developed under the project, but not to exceed ten years.¹² This can be interpreted that the requirement to “maintain” a certain piece of pavement expires ten years after the most recent grant funded construction or maintenance of the piece of pavement. The obligations concerning use and operation do not automatically expire with the maintenance requirement. *Obligations relative to use and operation extend over the entire airport operation for ten years after the most recent grant.*¹³ The exception to the ten year useful life is land acquired with AIP funds.¹⁴ Land has no useful life limit and the MLAA is required to use the land acquired with AIP funds as an airport in perpetuity.

Additionally, there are three assurances for which the obligation continues, without limit as long as the airport is used as a public use Airport¹⁵: Grant Assurance 23, *Exclusive Rights*; Grant Assurance 25, *Airport Revenues*; and Grant Assurance 30, *Civil Rights*.

4.2 Implementation of the FAA Compliance Program

The FAA generally reviews a sponsor’s compliance with Federal Agreements in three situations. The first situation is a formal compliance inspection. These inspections are infrequent at general aviation airports. The second situation is prior to making a new Grant Offer to a sponsor. This is mainly a files review to see if compliance issues have been raised after a formal inspection. The third situation is complaint investigation. Complaints can be informal under 14 CFR Part 13 where parties are trying to resolve matters early, or formal when parties believe that negotiations have been unsuccessful and a complaint is filed with the FAA under 14 CFR Part 16.¹⁶

The FAA’s Airport Compliance Program is mostly based upon sponsor education. Conference topics, newsletters, and website information are the primary tools to help sponsors understand their agreements. This educational effort includes commenting on proposed sponsor actions if they believe the proposed action is contrary to grant obligations.

When administering the AIP, the FAA has implemented a simplified noncompliance process to withhold sponsor entitlement funds.¹⁷ The project grant application approval process is outlined in 49 U.S.C. § 47106. Subparagraph 47106(d) discusses withholding grant application approval and specifically calls out primary apportionment funds 47114(c) and supplemental apportionment for Alaska 47114(e) as requiring the opportunity for a hearing prior to withholding grant application approval due to a violation of grant assurances. The statute does not require a hearing to withhold grant application approval for general aviation apportionment 47114(d); this includes 47114(d)(2) state apportionment and 47114(d)(3) non-primary apportionment. Non-primary apportionment is the funds commonly referred to as General Aviation Entitlements, i.e. \$150,000 maximum per fiscal year per general aviation airport. Section (g)(2) of 49 U.S.C. § 47107 states that “The Secretary of Transportation may approve an application for a project grant only if the

¹² FAA Order 5190.6B, FAA Airport Compliance Manual

¹³ FAA Order 5190.6B, FAA Airport Compliance Manual

¹⁴ FAA Order 5190.6B, FAA Airport Compliance Manual

¹⁵ FAA Order 5190.6B, FAA Airport Compliance Manual

¹⁶ FAA Order 5190.6B, FAA Airport Compliance Manual

¹⁷ FAA Northwest Mountain Region Airports Division Guidance

Secretary is satisfied that the requirements prescribed under paragraph (1)(A) of this subsection have been met.” Subsection 1(A) says, “To ensure compliance with this section, the Secretary of Transportation shall prescribe requirements for sponsors that the Secretary considers necessary.” *The FAA can administratively determine that a sponsor is not meeting its grant assurances and withhold entitlement funds at general aviation airports.*

5.0 Specific Grant Assurance Requirements

The airport sponsor completes an Application for Federal Funds for each requested grant. As part of that application, the sponsor assures and certifies that it has and will continue to meet 39 assurances. Eighteen of the assurances relate to the continued operation of an airport and are the focus of this Compliance Plan. The titles to these eighteen assurances are in **BOLD** in the list below. The remaining 21 assurances are mostly requirements when performing AIP grants and are reviewed by the FAA when issuing or closing AIP grants. Past grants indicate that the MLAA is in good standing on these 21 requirements. An easy reading summary of the intent of each assurance follows.

1 General Federal Requirements

When accomplishing work funded by an AIP grant, the sponsor assures and certifies that it will comply with 24 Federal Laws, 6 Executive Orders, 17 Code of Federal Regulations, and 2 Office of Management and Budget Circulars. Many of these requirements are reviewed during the environmental review which is completed before a Grant Offer is made. Some requirements may not be applicable to the type of work funded by the grant. The remaining requirements are reviewed at project closeout by the FAA and the sponsor’s engineer.

2 Responsibility and Authority of the Sponsor

The sponsor assures and certifies that it has the legal authority to apply for the grant, and carry out the proposed project, e.g. issue contracts, and comply with the grant assurances. The sponsor also designates an official representative in writing to legally file the application, act in connection with the application, and provide required information. The FAA Northwest Mountain Region reviewed the bylaws for the MLAA in 1989 as part of the reliever designation process.¹⁸ The Denver ADO is reviewing MLAA’s current bylaws and as of July 21, 2011 we have not received comments.

3 Sponsor Fund Availability

The sponsor is assuring the FAA on two funding matters. The first is the availability of funds for that portion of the grant work description not funded by the FAA. The grant application shows the amount and source of sponsor funds needed to complete the project. The sponsor is also assuring the FAA that they have sufficient funds available to operate, and maintain the development funded by the grant.

4 Good Title

The sponsor assures that it holds good title satisfactory to the FAA for the landing area of the airport and land upon which an AIP project will be constructed. MLAA provided an attorney’s title opinion before they received their first grant. When AIP projects contain land acquisition, MLAA provides title evidence to the

¹⁸ Denver ADO files

FAA as part of the project closeout process. Prior to each grant, MLAA must show their current land title situation on a land map (Exhibit A) attached to the project application.

5 Preserving Rights and Powers

- The sponsor assures the FAA that it will not take or permit any action which would deprive them of the rights and powers necessary to meet all the terms of a grant agreement.
- The sponsor assures the FAA that it will not sell, lease, encumber, transfer, or dispose of any part of airport property shown on the Exhibit A without approval by the FAA.
- As a private sponsor, MLAA assures the FAA that it will take steps satisfactory to the FAA to ensure that the airport will continue to function as a public-use airport for the duration of the assurances.
- The sponsor assures the FAA that it will not enter into an arrangement with an outside party for management and operation of the airport unless the sponsor reserves sufficient rights and authority to ensure compliance with grant assurances.



6 Consistency with Local Plans

The sponsor is assuring the FAA that the requested project is reasonably consistent with the development plans of public agencies that control land use surrounding the airport.

7 Consideration of Local Plans

The sponsor is assuring the FAA that it has given fair consideration to the interest of communities near the airport. This mainly involves being compatible with public agencies plans for roads, utilities, etc. The Airport Layout Plan (ALP) approval process is the main tool for assuring compliance with this grant assurance. New ALPs are reviewed by neighboring governmental bodies and they have the opportunity to object to MLAA's development plans.

8 Consideration of Local Interest

The sponsor is assuring the FAA that it has given fair consideration to the interest of communities in or near the airport. This assurance was created during the early years of National Environmental Policies Act (NEPA) implementation. The current NEPA process requires a sponsor to adequately respond to public agency comments received. FAA environmental approval documents compliance with this assurance.

9 Public Hearings

For projects involving the location of an airport, an airport runway, or a major runway extension, the airport owner must offer the opportunity for public hearings. The current NEPA process has the same requirement. FAA environmental approval documents compliance with this assurance.

10 Air and Water Quality Standards

For projects involving airport location, a major runway extension, or runway location, the sponsor will provide information to the Governor to certify in writing to the Secretary of Transportation that the project will be located, designed, constructed, and operated so as to comply with applicable air and water quality standards. The current NEPA process requires this certification on new airports, new runways, and major runway extensions. FAA environmental approval documents compliance with this assurance.

11 Pavement Preventive Maintenance

For pavement replacement or reconstruction projects approved after January 1, 1995, the sponsor assures the FAA that it has implemented an effective airport pavement maintenance management program. Most sponsors have their airport consultant develop these plans as a part of the design process. CDOT Aeronautics performs pavement condition surveys on a routine basis. The information from these surveys shows the effectiveness of individual airports' pavement preventive maintenance.



12 Terminal Development Prerequisites

The approval of a terminal building project requires a sponsor to have all of the safety equipment required by airport certification and all of the security equipment needed to meet airport security requirements. This assurance is not applicable to non-certificated general aviation airports like Meadow Lake.

13 Accounting System, Audit, and Record Keeping Requirements

The sponsor assures the FAA that it will keep all project records disclosing disposition of grant funds. The sponsor shall have an accounting system that will facilitate an audit in accordance with the Single Audit Act of 1984. The sponsor shall make available to the FAA any books, documents, papers, and records that are pertinent to the grant. The FAA may require the sponsor to conduct an appropriate audit.

14 Minimum Wage Rates

This assurance comes from the Davis-Bacon Act and requires a sponsor to include certain provisions in all contracts in excess of \$2,000 that involve labor. These provisions pertain to minimum wages, as determined by the Secretary of Labor. Contract documents require contractors and subcontractors to pay these minimum wages and to submit weekly payrolls. The financial closeout of an AIP project requires sponsor review of the payrolls submitted. Sponsors must notify contractors and the FAA of any discrepancies.

15 Veteran's Preference

This assurance requires a sponsor with a grant involving labor to include contract provisions to ensure that preference is given to Veterans of the Vietnam era and disabled veterans.

16 Conformity to Plans and Specifications

This assurance requires a sponsor to construct an AIP funded project in accordance with plans, specifications, and schedules approved by the FAA. These plans, specifications, and schedules must be approved prior to commencing work. Any modification to the plans, specifications, or schedules requires approval by the FAA.

17 Construction Inspection and Approval

The sponsor must assure the FAA that it will provide competent technical supervision at the construction site throughout the project to guarantee that the work conforms to the approved plans, specifications, and schedules. The sponsor shall allow the FAA to conduct inspections and the sponsor shall submit reports as requested by the FAA. A final report is required that summarizes all aspects of the project, including test results.

18 **Planning Projects**

This assurance outlines the requirements for planning projects, including the ownership of material developed by the study. The sponsor also acknowledges that completion of a planning project does not imply an assurance or commitment of FAA funds for implementing the development shown on the ALP.

19 **Operations and Maintenance**

The sponsor assures the FAA that they will operate the airport at all times in a safe and serviceable condition, in accordance with applicable standards of the FAA, state, and local agencies. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the FAA.

20 Hazard Removal and Mitigation

The sponsor assures the FAA that it will take appropriate action to protect instrument and visual operations to the airport. The sponsor will clear, remove, lower, relocate, mark, light, or otherwise mitigate existing airport hazards and prevent the establishment or creation of future hazards.

21 Compatible Land Use

As a privately owned airport sponsor, MLAA will, to the extent reasonable, persuade the governmental bodies with zoning authority to implement zoning laws. These zoning laws will restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. El Paso County controls zoning on all sides of the airport.

22 Economic Nondiscrimination

- The sponsor assures the FAA that it will make the airport available for public use on reasonable terms and without unjust discrimination to all types, kinds, and classes of aeronautical activities.
- The sponsor assures the FAA that it will include in any agreement, contract, lease, or other arrangement under which a right or privilege is granted to any person, firm, or corporation to conduct an aeronautical activity furnishing services to the public at the airport, provisions requiring the contractor to furnish services on a reasonable, and not unjustly discriminatory basis to all users and charge reasonable, and not unjustly discriminatory prices for each unit or service. The sponsor also agrees to enforce the provisions with its tenants.
- The sponsor assures the FAA that it will not prevent any person, firm, or corporation operating aircraft on the airport from performing any service, including fueling of its own aircraft with its own employees, subject to reasonable standards established by the sponsor.
- The sponsor may establish reasonable and not unjustly discriminatory conditions to be met by all users of the airport, as may be necessary for the safe and efficient operation of the airport.

23 Exclusive Rights

The sponsor assures the FAA that it will not permit an exclusive right to provide aeronautical services to the public.

24 Fee and Rental Structure

The sponsor will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible.

25 Airport Revenues

The sponsor assures the FAA that all revenues generated by the airport will be expended for the capital or operating costs of the airport. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit provide an opinion concerning the use of airport revenue.

The proper use of airport revenue also involves using AIP grant funded land for the purpose intended. Land acquired with federal airport funds must be used for the intended purpose only. When the FAA provides an AIP grant to assist in land acquisition, the grant work description lists the intended purpose of the land acquisition, e.g. “Acquire Parcel 4, development land”, or “Acquire Parcel IV, Runway Protection Zone”.

Development land must be used for aeronautical activity including access to the airport. Airside development land includes land for runways, taxiways, associated safety areas, ramps, aprons, and land adjacent to these facilities required for separation and clearance.¹⁹ Landside development land includes land for airport terminals and administrative buildings, hangars, equipment buildings, fixed base operator buildings, other airport buildings needed in connection with the operation and maintenance of the airport, automobile parking, access roads, and walkways.²⁰

Land acquired for Clear Zones and subsequent Runway Protection Zones (RPZ), must be cleared of structures; this land was acquired to ensure clear approaches and to protect persons and property on the ground. A special condition is generally added to AIP grants for acquisition of RPZ land. The condition states: “The Sponsor agrees to prevent the erection or creation of any structure or place of public assembly in the Runway Protection Zone, except for NAVAIDS that are fixed by their functional purposes or any other structure approved by the FAA.”²¹ This limits the use to activities such as grazing or farming. This concurrent use requires FAA agreement through the ALP approval process.

The only allowable non-aeronautical uses for Grant Land are either concurrent use or interim use. Concurrent use is when aeronautical land can be used for its primary aeronautical purpose, while also being used for a compatible non-aeronautical revenue producing purpose. An example is low growing crops or grazing in the Runway Protection Zone. While no formal release is required, the airport owner should seek FAA approval for concurrent use. The vehicle for FAA consent is an amendment to the ALP.²² Interim use represents a temporary arrangement for the use of aeronautical development land for non-aeronautical purposes. The FAA may consent to the interim use of dedicated aeronautical property for non-aeronautical purposes (not more than five years) when insufficient aeronautical demand exists to develop the land for aviation purposes. The airport owner must have FAA approval on the decision to temporarily use aviation land for non-aeronautical purposes.²³ It is assumed that the aeronautical need may develop quickly, the interim use will need to end, and the land be returned to aeronautical use. When the land is needed for aeronautical development, the airport owner must be able to cancel or terminate the non-aeronautical lease in a short amount of time.

26 Reports and Inspections

The sponsor shall provide the FAA with annual or special financial and operations reports as requested and make the reports available to the public. The sponsor shall make all records involving an AIP project available to the FAA upon request. The FAA currently does not request annual financial reports from general aviation airports. The typical records request for AIP projects is covered by the final report prepared by the airport’s consultant.

¹⁹ FAA Order 5100.38C, Airport Improvement Program Handbook

²⁰ FAA Order 5100.38C, Airport Improvement Program Handbook

²¹ FAA Order 5200.38C, Airport Improvement Program Handbook

²² FAA Order 5190.6B, FAA Airport Compliance Manual

²³ FAA Order 5190.6B, FAA Airport Compliance Manual

27 Use by Government Aircraft

The sponsor agrees to make the airport available for aircraft operated by the United States without charge unless the use by Government aircraft is substantial. Substantial use is defined on a monthly basis as five or more based aircraft, or operations equaling 300 total or five million pounds of landing and takeoff weight.

28 Land for Federal Facilities

The sponsor shall provide at no cost: land for air traffic control, air navigation facilities, or weather-reporting or communication facilities. MLAA will receive a request from the FAA or the National Weather Service if these agencies are looking at installing these facilities at Meadow Lake.

29 Airport Layout Plan

The sponsor assures the FAA that it will keep their Airport Layout Plan current. The plan must show all past development and the sponsor's plan for future development. The FAA approves ALPs and the sponsor assures the FAA that it will not construct facilities or allow tenants to construct facilities in conflict with the approved ALP. The sponsor also agrees to remove facilities that it or its tenants construct in conflict with the approved ALP. Airspace cases are the means for making changes to ALPs or requesting concurrence for development projects. The sponsor agrees to file a Notice of Proposed Construction or Alteration, FAA Form 7460-1 before allowing construction at the airport.

30 Civil Rights

The sponsor assures the FAA that no person shall on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with AIP grant funds. The sponsor agrees to include appropriate language in all contracts funded with AIP funds. The FAA provides current contract language for use by sponsors.

31 Disposal of Land

When land acquired with AIP grant funds is no longer needed for the intended purpose, the sponsor agrees to dispose of the land and repay the United States its proportionate share of the current fair market value of the land. This can be done through sale proceeds or repaying the United States proportionate share of the current fair market value if the land is retained. The FAA may also approve reinvestment of the United States share in needed AIP eligible work at the airport in lieu of cash payment.

32 Engineering and Design Services

The sponsor will award each contract, or sub-contract utilizing AIP funds for program management, construction management, planning studies, feasibility studies, architectural services, preliminary design, design, engineering, surveying, mapping, or related services on a qualifications-based selection. The final AIP project report documents this action.

33 Foreign Market Restrictions

The sponsor will not allow funds provided under AIP grants to be used to finance any product or service of a foreign country listed by the United States Trade



Representative as denying fair and equitable market opportunities for products and supplies of the United States. The submittal process required in construction contracts verifies compliance with this requirement.

34 Policies, Standards, and Specifications

The sponsor agrees to carry out AIP funded projects in accordance with FAA approved policies, standards, and specifications. Submittals by the sponsor to the FAA during the design and closeout processes ensure that FAA standards are met.

35 Relocation and Real Property Acquisition

The sponsor agrees to conduct all real property acquisitions and relocations of persons and businesses in accordance with 49 CFR Part 24, Uniform Relocation Assistance and Real Properties Acquisition for Federal and Federally Assisted Programs. During the AIP project closeout process, the airport sponsor signs additional assurances that the acquisition and relocations were accomplished in accordance with 49 CFR Part 24.

36 Access by Intercity Buses

The sponsor agrees to permit access to the airport by intercity buses or other modes of transportation; however, the sponsor has no obligation to fund special facilities to support these activities.

37 Disadvantaged Business Enterprises (DBE)

The sponsor agrees to not discriminate on the basis of race, color, national origin, or sex in the award and performance of any AIP funded contract. The sponsor submits a DBE plan to the FAA for approval prior to any contract awards. After project completion, the sponsor submits actual compliance numbers to the FAA Civil Rights Office. Any shortcomings in the actual project performance can generate higher performance goals for future projects.

38 Hangar Construction

The sponsor agrees to provide hangar developers with a long term lease opportunity that is subject to such terms and conditions on the hangar as the sponsor may impose. There are no privately owned hangars on MLAA airport property.

39 Competitive Access

Owners of medium or large hub airports unable to accommodate a request(s) by an air carrier for access to gates or other facilities accept a reporting requirement to the Secretary of Transportation. This assurance is not applicable at Meadow Lake.

6.0 GRANT ASSURANCE COMPLIANCE REVIEW

Eighteen grant assurances relate to the continued operation of an airport. CDOT Aeronautics provided a grant to MLAA primarily to improve compliance with these 18 assurances. A thorough review of MLAA's compliance with these assurances was conducted using field review, FAA files review, MLAA document review, and interviews with CDOT and FAA staff. A Compliance Review Checklist included as Appendix 3 to this document summarizes information discovered in the compliance review. Compliance with these assurances ranges from clearly in compliance to needing improvement.

4 Preserving Rights and Powers

The Exhibit A from AIP Project 18 shows that MLAA has satisfactory title to landing areas and other areas needed to protect the airport, such as Runway Protection Zones. *We believe MLAA is in compliance with this grant assurance.*

5 Preserving Rights and Powers

Article VII of the Amended and Restated Articles of Incorporation of Meadow Lake Airport Association, dated October 30, 2007 prohibits the termination or dissolving of the corporation without the prior approval of the FAA. The airport has no leases or agreements for airport land, so there are no known agreements in place which would interfere with the MLAA's ability to meet FAA Grant Assurances. We have reviewed the MLAA Articles of Incorporation and Bylaws and it appears that MLAA retains the rights and powers necessary to meet its grant assurances. *We believe MLAA is in compliance with this grant assurance.*

The FAA has adopted an interim policy amending and clarifying the FAA policy concerning through-the-fence access to a federally-obligated airport from an adjacent or nearby property, when the property is used as a residence, and permits continuation of existing access subject to certain standards. The action modified Grant Assurance No. 5 by adding subparagraph g: *"It will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport."* Airports with Residential Through-the-Fence (RTTF) activity have been requested by the FAA to certify that they have RTTF as defined in the FAA's Interim Policy. MLAA is prepared to certify that they have RTTF and will submit an RTTF access plan in accordance with the Interim Policy prior to requesting its first AIP grant after Fiscal Year 2012. *We believe MLAA is currently in compliance with this grant assurance; however, future compliance is dependent upon developing and implementing a satisfactory RTTF access plan.*

11 Pavement Preventive Maintenance

The pavements at Meadow Lake that have been constructed with AIP funds are the runway and the parallel taxiway, including connectors. These pavements were constructed in 1990, with the exception of connector taxiways A2 and A5 which were constructed in 1995. CDOT's Pavement Condition Survey information shows that all pavements are in good condition or better.²⁴ MLAA has received two recent CDOT Aeronautics grants for pavement maintenance, a \$130,621 grant in 2006 and a \$44,000 grant in 2009.²⁵ Both grants were 80/20 state/local participation for a total pavement maintenance expenditure of \$218,276. MLAA also used their AIP sponsor entitlements in 2002 to rehabilitate Runway 15/33.²⁶ The 21 year life of the runway and taxiway pavements exceeds the FAA 20 year design goal.²⁷ *We believe that pavement preventive maintenance has been sufficient and MLAA is in compliance with this grant assurance.*



13 Accounting System, Audit, & Record Keeping

As a privately held corporation, the MLAA does not have routine audits like public agencies. The FAA can request an audit, but has not done so. MLAA has kept all grant records; they are available for audit if necessary. The MLAA Board of Directors is considering a project audit at the conclusion of their land acquisition program which has received AIP funds since 2003. *We believe MLAA is in compliance with this grant assurance.*

19 Operation and Maintenance

The Operation and Maintenance assurance includes physical issues like maintaining pavements, markings, lights, safety areas, etc. and procedural issues, e.g. proper plowing of snow, limiting vehicular access, issuance of NOTAMs, airfield inspections, etc. A physical safety inspection was performed on June 10, 2011. The AIRPORT SAFETY INSPECTION CHECKLIST is contained in Appendix 3. Some minor problems like

²⁴ CDOT Aeronautics Website

²⁵ CDOT Aeronautics provided

²⁶ FAA SOAR reports

²⁷ FAA AC 150/5320-6, Airport Pavement Design and Evaluation

erosion from recent rains were noted. The items should receive quick attention, but they are not an indicator of non-compliance with the maintenance assurance. The MLAA Board of Directors appears to be satisfactorily educated on FAA standards and maintenance expectations, except for safety area standards and the inspection cycle for PAPIs. Information on these two areas has been provided to the Board President. *We believe MLAA is in compliance with the maintenance portion of this grant assurance.*

Operational issues have also been reviewed. The airport is available at all times, as required by the assurance. The airport has five pieces of snow removal equipment, which is sufficient to meet snow removal needs. There are no known reported problems with the airport being available to users in a reasonable amount of time after a snow event. The Board President holds an FAA Airline Transport Certificate and is knowledgeable about NOTAM procedures. Airfield inspections are performed daily by an association volunteer. The inspections appear to be effective based upon the good condition of pavements, lights, signs, wind cones, PAPIs, and lack of FOD, etc.

Access to airport operational areas is an area of concern. The association has made improvements to decrease the risk of inadvertent entry by persons and vehicles, but additional improvements should be a priority for MLAA. Much of the airport perimeter is fenced with four strand barbed wire. In recent years, existing fences were repaired and additional fencing was installed to reduce the attraction for bikes, motorcycles, and off-road vehicles. Gates were also installed to secure the perimeter yet allowing emergency and construction access. There are a small number of gliders based aircraft at Meadow Lake. There are no on-airport aprons for transient aircraft. Nearly all aviation activity operates "Through-the-Fence." Providing sufficient access control to prevent inadvertent access to the airport operational areas from the through-the-fence areas should be a MLAA priority. Inadvertent access occurrences could result in future non-compliance with grant assurances. An Access Plan involving both physical and educational measures should be developed to reduce the potential for inadvertent entry onto airport operational areas. *We believe MLAA is in compliance with the operational portion of this grant assurance; however, an access plan to minimize inadvertent access potential is highly recommended.*

20 Hazard Removal and Mitigation

Two hangars in the through-the-fence area are obstructions to FAR Part 77 imaginary surfaces. These obstructions were noted on the last update of the ALP. No marking or lighting was recommended. There are no on-airport obstructions to Part 77 surfaces.²⁸ *We believe MLAA is in compliance with this grant assurance.*

21 Compatible Land Use

Meadow Lake, as a privately owned airport, has no zoning powers. Zoning around the airport is controlled by El Paso County. In the past, MLAA has requested FAA assistance to encourage El Paso County to adopt airport zoning. CDOT Aeronautics, in a letter dated September 2, 2002, requested that El Paso County adopt zoning to protect the Meadow Lake Airport.²⁹ The FAA, in a letter dated September 17, 2002, also encouraged the County to adopt zoning to protect the airport.³⁰ It is recommended that MLAA, CDOT

²⁸ Denver ADO files

²⁹ Denver ADO files

³⁰ Denver ADO files

Aeronautics, and the FAA routinely encourage the El Paso County Board of Commissioners to enact zoning. *We believe MLAA is in compliance with this grant assurance.*

22 Economic Nondiscrimination

The airport has no leases for airport property so there is no current economic discrimination issue. There is an old rule in the RULES and REGULATIONS of the MEADOW LAKE AIRPORT ASSOCIATION which could be discriminatory if improperly implemented. Rule 90-4 subparagraph 2.a. reads, “Use of the Glider Strip by any aircraft or ultralight must have the prior permission of the designated High Flights line chief during periods of operations by the High Flights Soaring Club.” The rule is intended to promote safe operations by allowing sufficient time to remove gliders from the Glider Strip prior to operations by ultralight, STOL, and tailwheel aircraft; however the rule could be seen as allowing preferential treatment to the High Flight Soaring Club. The High Flights line chief has authority to deny access while High Flights is operating. Even though no preferential treatment has been noted, we recommend that subparagraph 2.a. of the rule be repealed or rewritten to remove any appearance of unjust discrimination.



There are several through-the-fence aeronautical businesses operated by association members that utilize the airport runways and taxiways. Examples are pilot training and aircraft maintenance. A situation that the airport should be prepared for is a request by a nonmember owned business to conduct similar activities to member through-the-fence operators. We recommend that the airport develop standards that are not discriminatory between these classes of users, i.e. member vs. nonmember. *We believe MLAA is in compliance with this grant assurance; however, subparagraph 2.a. of MLAA Rule 90-4 should be repealed or rewritten, and minimum standards for member and nonmember use of the airport for aeronautical activities should be developed.*

23 Exclusive Rights

The airport currently has no written agreements with on-airport tenants so they have not entered into any agreements which provide an operator with an exclusive right. High Flights Soaring Club currently pays a monthly fee to the airport, but doesn't have a signed agreement. There are numerous off-airport aeronautical businesses operating through-the-fence. MLAA does not have agreements with these entities and has not given an exclusive right to a provider of aeronautical services to the public. A files review at the Denver ADO also indicates that there are no known complaints concerning exclusive rights. *We believe MLAA is in*



compliance with this grant assurance.

24 Fee and Rental Structure

A review of the revenue and expenses of MLAA was conducted. The fees assessed to members have been sufficient to pay operating expenses and generate a small surplus adequate to support sponsor match for FAA and CDOT Aeronautics grants. The 2010 airport income was \$95,079 and expenses were \$66,343. However, additional revenue will be needed in the future to support major projects like runway and parallel taxiway rehabilitation. *We believe MLAA is currently in compliance with this grant assurance.*

25 Airport Revenues

A review of the calendar year 2010 airport financial records shows that airport expenditures can be tracked; however it is difficult to determine what MLAA income is “airport revenue.” Revenue from Fuel Assessments, users such as High Flight, and CDOT Fuel Tax Refunds should be classified as “airport revenue.” The annual “Assessment” to MLAA members needs to have a clear distinction between “airport revenue” and “other MLAA income.” The portion of the Assessment that is “airport revenue” would be restricted to expenditures for capital or operating costs of the airport. The portion of the Assessment that is “other MLAA income” could be spent for airport costs or MLAA activities outside the airport. It is recommended that MLAA By laws be amended to establish a clear definition of “airport revenue” and “other MLAA income.” Separate tracking of the expenditures for “airport revenues” and “other MLAA income” should also be established.

The MLAA Rules and Regulations were reviewed to see if procedures existed that would be contrary to grant assurances. Airport Rule 02-03, Taxiway and Roadway Improvement Plan, contains priorities for expenditures if adequate funding exists. The lowest priorities include some pavements outside the airport boundary. As a proactive step to ensure future compliance, MLAA should update this rule to indicate that the funding of projects outside the airport boundary cannot come from “airport revenues.” *We believe MLAA is in compliance with this grant assurance; however By law changes are recommended for improved tracking of airport revenues and expenses.*

27 Use by Government Aircraft

Over the years, MLAA has been used by the U.S. Air Force Academy for training flights. There have been no based U.S. Government aircraft at Meadow Lake. The training aircraft are light and should not damage airport pavements. MLAA has not assessed a fee to the U.S. Government for use of Meadow Lake. *We believe MLAA is in compliance with this grant assurance.*

28 Land for Federal Facilities

There are no known requests by the Federal Government to use land at the Meadow Lake Airport for air traffic control, air navigation activities, or weather-reporting and communication activities related to aeronautical activity. *We believe that MLAA is in compliance with this grant assurance.*

29 Airport Layout Plan (ALP)

The most recent ALP was approved by the FAA on May 30, 2008.³¹ The FAA desires to have ALPs updated on a five year frequency at busy general aviation airports. Most aeronautical activity at Meadow Lake occurs from through-the-fence activity. Even transient aircraft taxi to off-airport facilities to fuel and tiedown. There has been no on-airport construction since the ALP was approved. There are no new through-the-fence access points since the ALP was approved. MLAA is attempting to open a turf landing area primarily for glider activity. They have filed a 7480-1 with the FAA. The ALP needs to be updated to show the turf landing area. This action is pending the completion of an environmental assessment. MLAA also desires to develop an on-airport transient aircraft apron. This activity would also require an update to the ALP. *We believe that MLAA is in compliance with this grant assurance; however, some proposed plans require changes to the approved ALP.*

31 Disposal of Land

The Exhibit A for the first AIP grant issued to the MLAA was compared to the most recent Exhibit A for AIP Project 18 and there has been no disposal of land. There are also no known requests for disposal by MLAA and all airport land at Meadow Lake is still needed for the intended purposes. *We believe that MLAA is in compliance with this grant assurance.*

36 Access by Intercity Buses

Airports receiving AIP funds are required to provide access to the airport for intercity buses or other modes of transportation. The City of Colorado Springs serves as the transit provider for the Colorado Springs area. The Pikes Peak Area Council of Governments adopted their Regional Transportation Plan, titled “Moving Forward Plan” in the spring of 2008. The plan does not show any current or planned bus service to the Meadow Lake Airport area.³² *We believe that MLAA is in compliance with this grant assurance.*

38 Hangar Construction

The MLAA currently has no land leases for hangars on the airport. There is also no evidence that MLAA has denied a long term lease to a prospective hangar developer; however verbal and email requests for ground leases have been made and MLAA will soon need to initiate lease negotiations. *We believe that MLAA is in compliance with this grant assurance. As a proactive step to ensure future compliance with this assurance it is recommended that MLAA develop minimum standards and lease terms for on-airport hangar construction.*

39 Competitive Access

This grant assurance only applies to large and medium hub airports and is not applicable to Meadow Lake.

³¹ Denver ADO records

³² Pikes Peak Area Council of Governments website

7.0 Summary of Compliance Review

We believe MLAA is in full compliance with AIP Grant Assurances that relate to grant management; however, our review of the 18 grant assurances that relate to the continued operation of the airport indicates that improvement is needed in one area, Assurance No. 25, Airport Revenues. The following Table 1.0 summarizes our findings:

Table 7-1 - SUMMARY OF COMPLIANCE FINDINGS

Assurance No.	Assurance Title	Finding
4	Good Title	Compliant
5	Preserving Rights and Powers	Compliant; however, future compliance dependent upon developing and implementing satisfactory RTTF Access Plan
11	Pavement Preventative Maintenance	Compliant
13	Accounting System Audit, and Record Keeping	Compliant
19	Operations and Maintenance	Maintenance – Compliant Operations – Compliant; however, access plan to reduce risk of inadvertent access is recommended
20	Hazard Removal and Mitigation	Compliant
21	Compatible Land Use	Compliant
22	Economic Nondiscrimination	Compliant; however, Airport Rule 90-4 subparagraph 2.a. should be repealed or rewritten
23	Exclusive Rights	Compliant
24	Fee and Rental Structure	Compliant; however, development of minimum standards for member and nonmember use of the airport for aeronautical activities is recommended
25	Airport Revenues	Compliant; however, Airport Rule 02-03 needs to be updating removing reference to off airport expenditures, and a Bylaw change is recommended to improve definition of airport revenue
27	Use by Government Aircraft	Compliant
28	Land for Federal Facilities	Compliant
29	Airport Layout Plan	Compliant
31	Disposal of Land	Compliant
36	Access by City Buses	Compliant
38	Hangar Construction	Compliant; however, minimum standards and draft lease terms are recommended
39	Competitive Access	Not Applicable at Meadow Lake

8.0 IMPLEMENTATION PLANS

The Compliance Review found five areas that should receive attention. Three areas involve current situations where safety can be improved or possible perceptions of noncompliance can be eliminated. Two areas involved future situations the MLAA is facing.

8.1 Current needs

Current needs are those areas where safety improvements should be pursued immediately or existing MLAA guidance to members if misapplied or misinterpreted could place the MLAA in non compliance with FAA Grant Assurances.

8.1.1 Inadvertent Vehicle Access Prevention

The Compliance Review determined that inadvertent vehicle access to airport runways and taxiways is a concern. The Through-the-Fence nature of the Meadow Lake Airport creates more vehicle traffic than typically seen at airports. Individual property owners in the Through-the-Fence hangar and apron areas have rights to access their private property causing an increased number of vehicles within a few hundred feet of airport runways. The larger number of vehicles increases the potential for an unintended excursion by a vehicle onto an airport parallel taxiway or runway. An Inadvertent Vehicle Access Prevention Plan has been developed and is Appendix 4 of this report.

8.1.2 Economic Nondiscrimination

MLAA Rule 90-4 subparagraph 2.a. could be construed as preferential to the High Flights Soaring Club. The intent of the rule is to allow High Flights glider activity sufficient time to exit the Glider Strip prior to powered activity occurring; however the rule gives authority to the High Flights line chief to deny access to other users during periods of operations by the High Flights Soaring Club. It is recommended that the rule be rewritten or repealed to eliminate possible claims of unjust discrimination.

8.1.3 Separation of Funds

The Compliance Review determined that airport revenue is not well defined. Most MLAA revenue comes from the annual “Assessment” to members. There is no indication of what portion of the “Assessment” is airport revenue. The October, 2007 Amended and Restated Articles of Incorporation of Meadow Lake Airport Association state the purpose or purposes for which the corporation is formed. They are:

- To provide an organization to administer the public use federally-obligated airport facilities of the Meadow Lake Airport in Peyton, Colorado; to maintain, construct and provide airfield operating areas, runways, taxiways, roads and lighting facilities.
- To provide, construct and approve water and sewer systems; to provide for the insuring of all airport facilities; to provide for the payment of all taxes and other assessments on runways, taxiways, roads and other improvements or on any and all real property on the airport facility; to provide for the establishment of traffic patterns, taxi route and airfield safety in general.

- To approve any and all activities conducted at the public-use federally obligated airport; to appoint an airport manager, and any other employees required to conduct and administer the airport activities; to establish rules and regulations for the use of the Meadow Lake Airport and to enforce any and all such rules and any Federal Aviation Administration rules and regulations that are in existence or to be promulgated in the future.

The MLAA has necessary expenses that occur off the airport property. The improvements necessary to reduce the risk of inadvertent vehicular access to runways and taxiways will involve off airport expenditures. MLAA Bylaws need to be amended to create a clear separation of airport revenue and other MLAA income. The MLAA accounting system should then track airport revenue and expenses as a separate account.

8.2 Future Needs

Future needs are areas where upcoming first time actions by the MLAA could affect MLAA's compliance status. Meadow Lake Airport has Residential Through-the-Fence (RTTF) activity. RTTF is a recent high visibility subject for the FAA and is receiving great attention across the country. The airport also continues to grow and is attempting to accommodate increased commercial glider activity and develop on-airport aeronautical services and ground leases for the first time.

8.2.1 Residential Through-the-Fence Access Plan

The FAA published an Interim Policy Regarding Access to Airports from Residential Property in the Federal Register on March 18, 2011. MLAA has certified to the FAA that the airport has RTTF Access³³. The Interim Policy established standards for compliance. The FAA will require evidence of compliance before issuing an AIP grant, beginning in Fiscal Year 2013³⁴. The Interim Policy requires that the evidence be submitted in the form of a "RTTF Access Plan."³⁵ It is recommended that MLAA submit its RTTF Access Plan well in advance of the start of Fiscal Year 2013 so that FAA review doesn't affect Fiscal Year 2013 entitlement funding. Aviation has provided the MLAA with a draft RTTF Access Plan.

8.2.2 Minimum Standards and Draft Leases

The airport has continued to grow while many general aviation airports have seen a decrease in based aircraft and operations. The airport is developing a turf runway to meet the demand for glider activity in the Colorado Springs area. Four commercial operators currently use the airport and four more have contacted the MLAA Board about operating at Meadow Lake. These operators would require ground leases or operating agreements. The airport currently does not have Minimum Standards for Commercial Activity or draft leases. The unique nature of having both on-airport and off-airport

³³ MLAA Sponsor Certification dated 4-27-2011

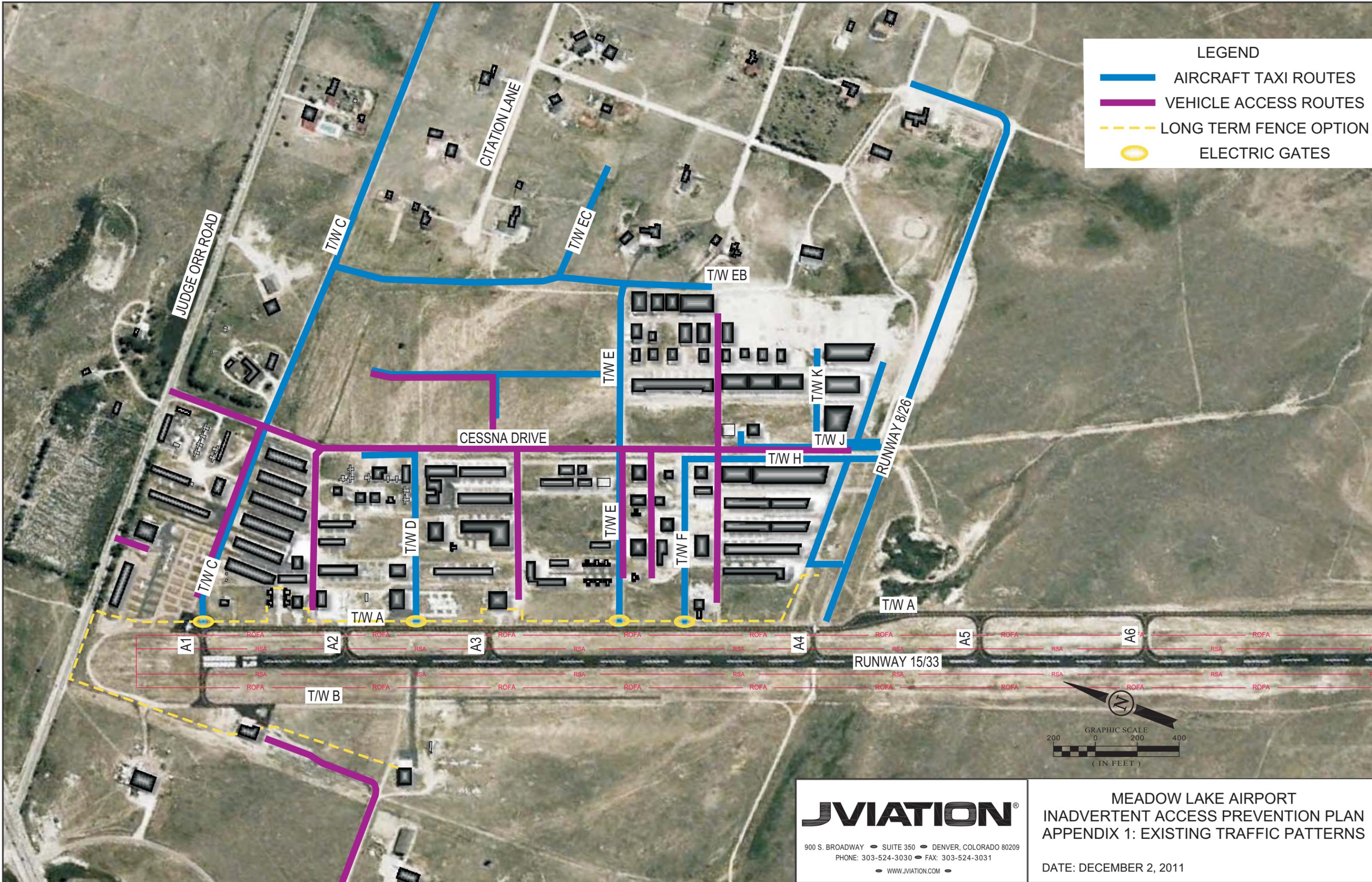
³⁴ Airport Improvement Program Interim Policy Regarding Access to Airports From Residential Property dated March 14, 2011

³⁵ Airport Improvement Program Interim Policy Regarding Access to Airports From Residential Property dated March 14, 2011

commercial activity will make the need for Minimum Standards and standard lease terms even more important if the MLAA is going to continue to be compliant with the “Economic Nondiscrimination” and “Fee and Rental Structure” grant assurances. There are airports in Colorado with excellent Minimum Standards, Rules, and Lease Agreements. We have provided the MLAA Board with contact information of airports that are willing to provide draft materials and good insight into developing agreements.

LEGEND

-  AIRCRAFT TAXI ROUTES
-  VEHICLE ACCESS ROUTES
-  LONG TERM FENCE OPTION
-  ELECTRIC GATES



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**MEADOW LAKE AIRPORT
 INADVERTENT ACCESS PREVENTION PLAN
 APPENDIX 1: EXISTING TRAFFIC PATTERNS**

DATE: DECEMBER 2, 2011

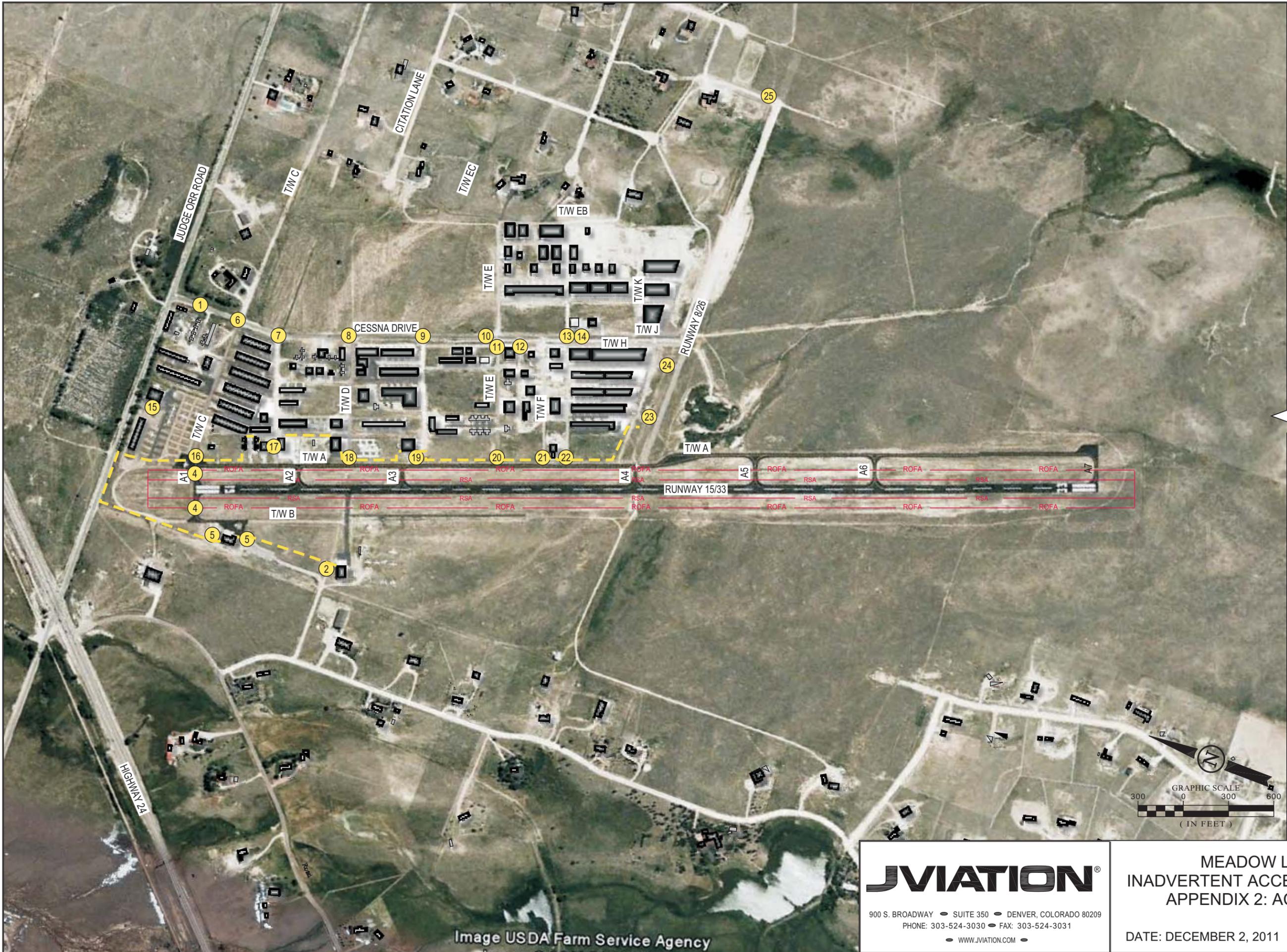


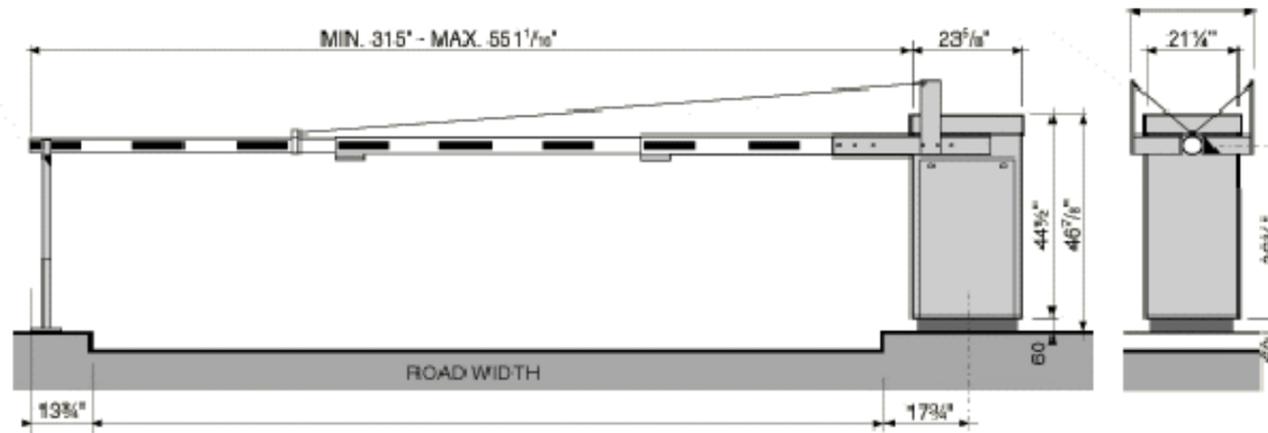
Image USDA Farm Service Agency

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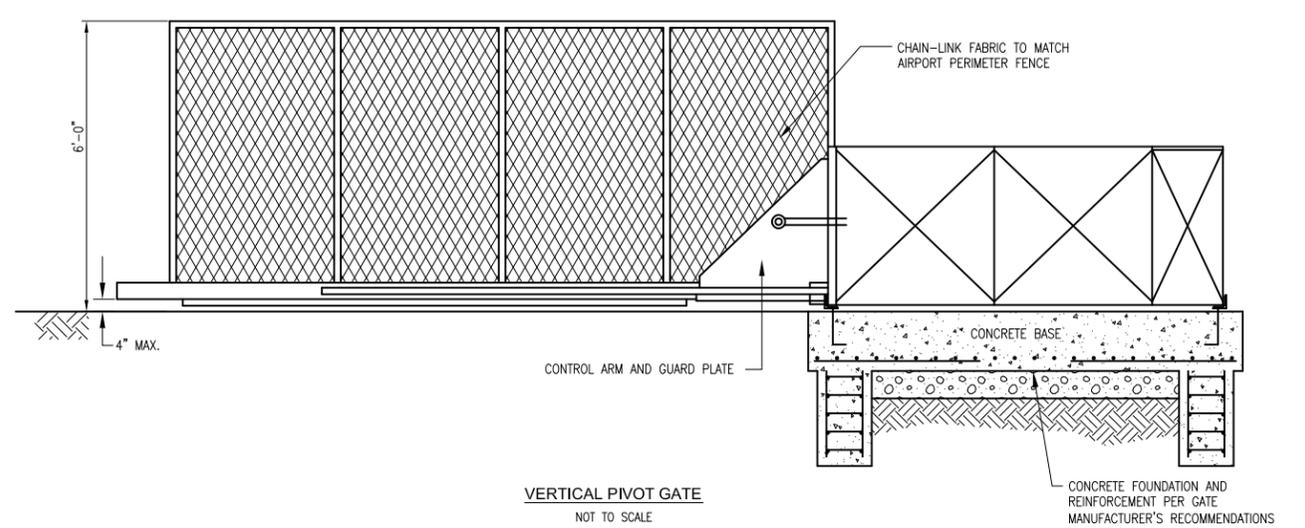
MEADOW LAKE AIRPORT INADVERTENT ACCESS PREVENTION PLAN APPENDIX 2: ACCESS POINT MAP

DATE: DECEMBER 2, 2011



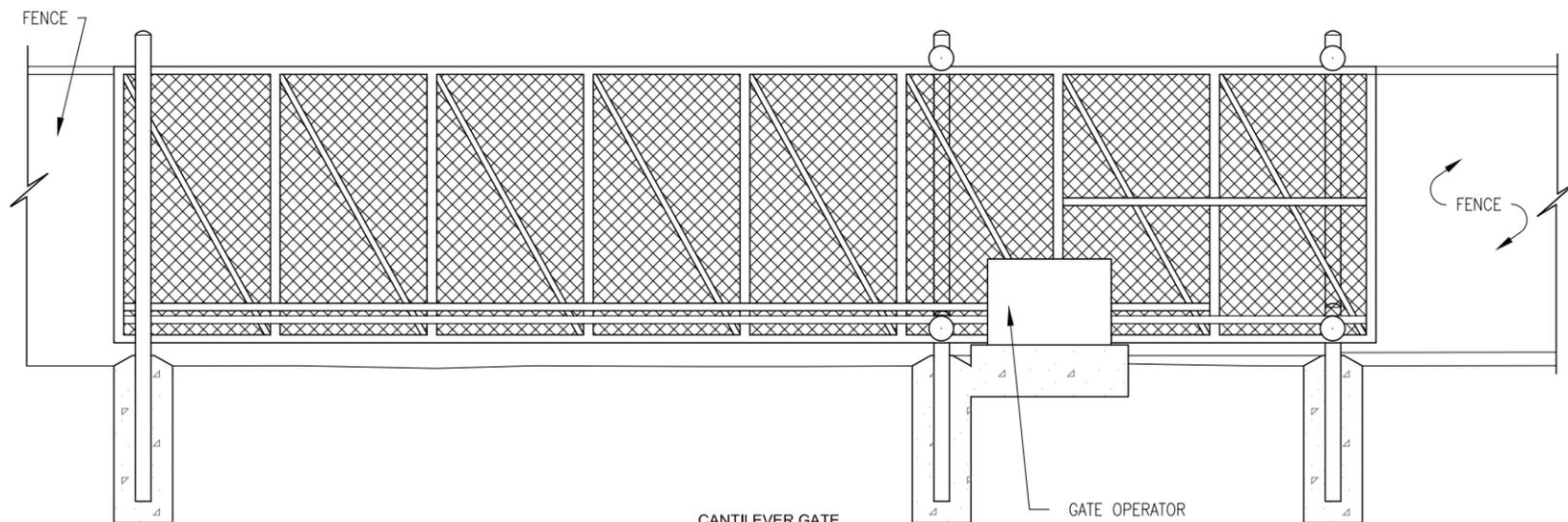
AUTOMATIC BARRIER GATE
NOT TO SCALE

GATE ALTERNATIVE NO. 1



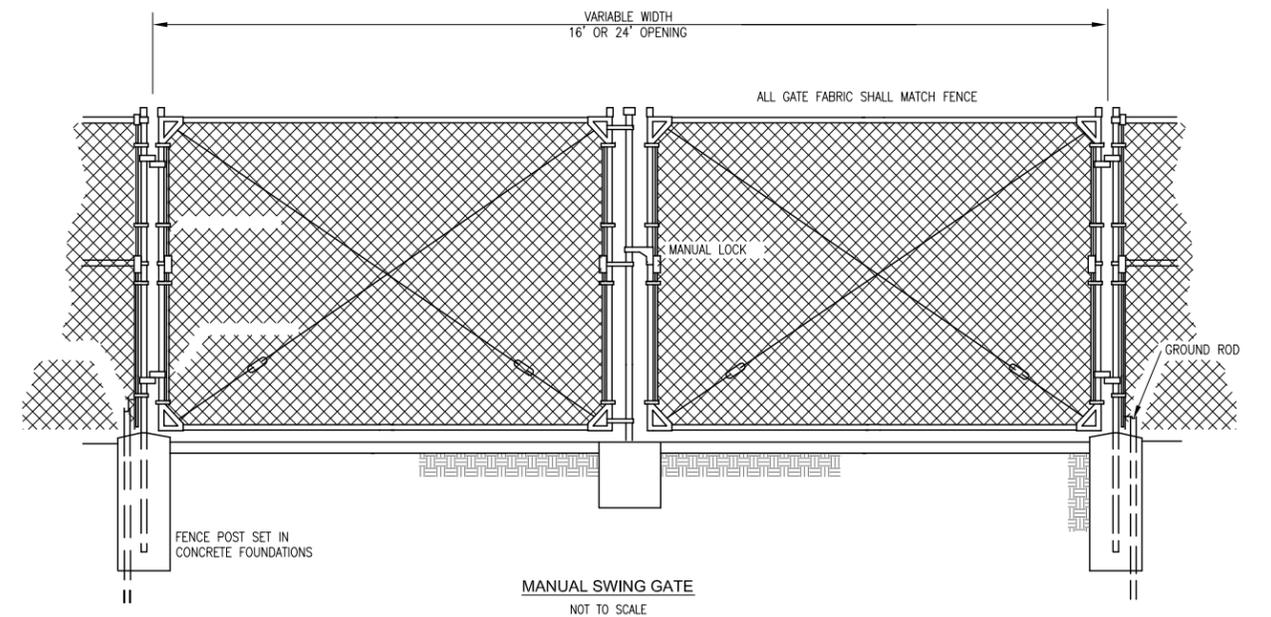
VERTICAL PIVOT GATE
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GATE ALTERNATIVE NO. 3



CANTILEVER GATE
NOT TO SCALE

GATE ALTERNATIVE NO. 2



MANUAL SWING GATE
NOT TO SCALE

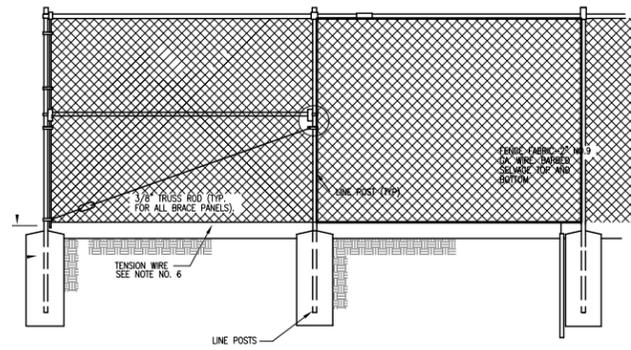
GATE ALTERNATIVE NO. 4

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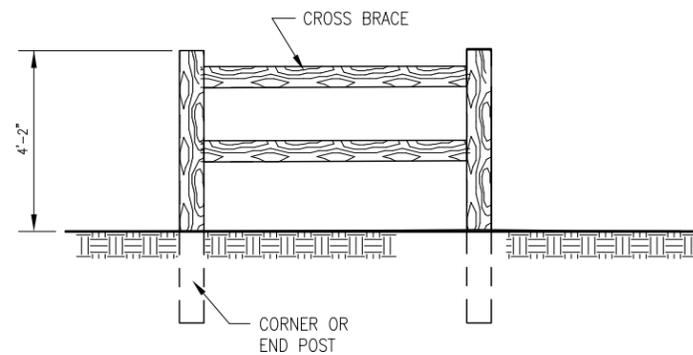
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MEADOW LAKE AIRPORT
INADVERTENT ACCESS PREVENTION PLAN
APPENDIX 3: PROPOSED GATE EXHIBIT

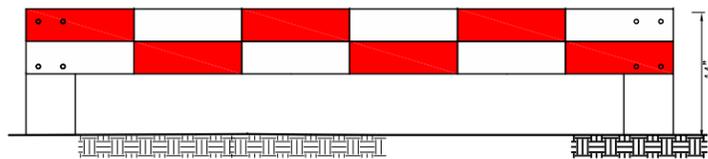
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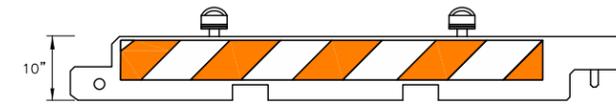
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NOT TO SCALE
PROPOSED FENCE NO. 1



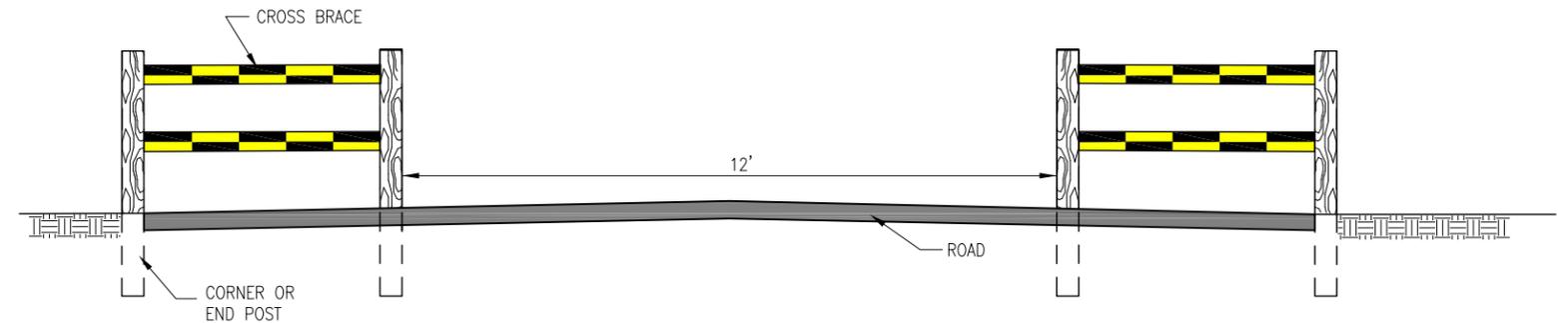
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FENCE ALTERNATIVE NO. 2



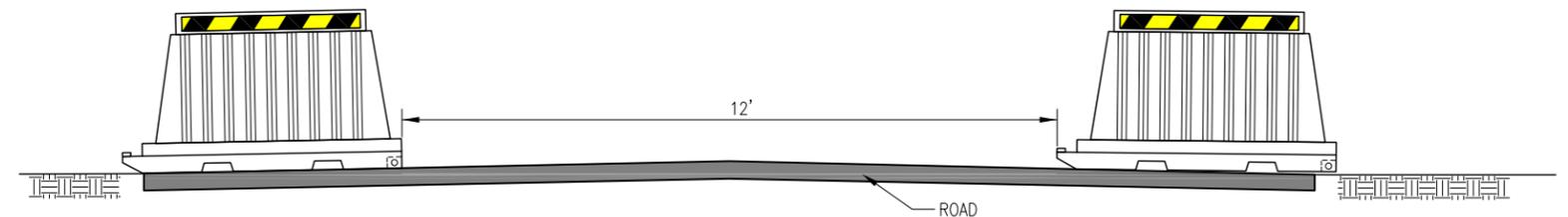
LOW PROFILE BARRICADE
NOT TO SCALE
FENCE ALTERNATIVE NO. 3



FLASHER BARRICADE DETAIL
NOT TO SCALE
PROPOSED FENCE NO. 4



REDUCED DRIVE LANE DETERRENT #1
NOT TO SCALE
FENCE ALTERNATIVE NO. 5



REDUCED DRIVE LANE DETERRENT #2
NOT TO SCALE
FENCE ALTERNATIVE NO. 6

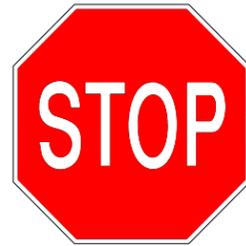
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MEADOW LAKE AIRPORT
INADVERTENT ACCESS PREVENTION PLAN
APPENDIX 3: PROPOSED FENCE EXHIBIT
DATE: DECEMBER 2, 2011

SIGN OPTIONS:



PROPOSED SIGN NO. 1



PROPOSED SIGN NO. 2

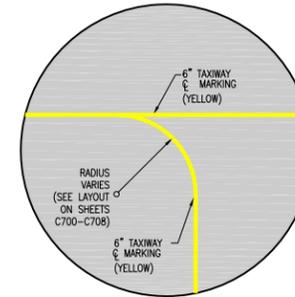


PROPOSED SIGN NO. 3



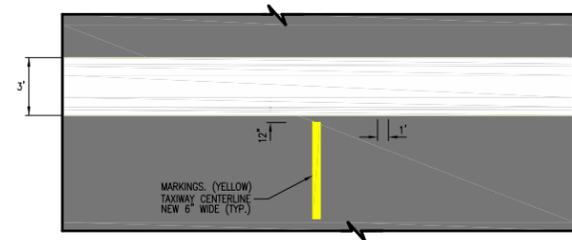
PROPOSED SIGN NO. 4

PAINT OPTIONS:



TAXIWAY CENTERLINE DETAIL
NOT TO SCALE

PROPOSED PAINT NO. 1



STOP BAR MARKING
NOT TO SCALE

PROPOSED PAINT NO. 2



RUNWAY HOLDING POSITION SIGN
NOT TO SCALE

PROPOSED PAINT NO. 3



TAXIWAY IDENTIFICATION MARKING
NOT TO SCALE

PROPOSED PAINT NO. 4

Appendix 4
Summary of Options

Number	Critical Areas of the Airport	Public Protection/Access Control		Recommended Improvement				Notes
		Aircraft Access	Vehicular Access	Paint Alternative	Signage	Gate	Fence	
Airport Main Entrance (North)								
1	Airport Main Entrance (North) from Judge Orr Road	Prohibit	Yes	2	1,2	2,3	N/A	Important to notify visitors upon entry of the operational rules of the airport. A push button gate opener would require motorists to make a deliberate action to enter the airport environment.
2	Airport Entrance (West)	Prohibit	Yes	N/A	1	N/A	1	Fence would have manual swing gates
3	Glider Entrance (South) from Falcon Highway	Allow Gliders	Yes	N/A	Existing Signs : "No Trespassing Property of Meadow Lake	Existing Gate in good condition	Existing Gate in good condition	Not a problematic entrance point. The existing gate requires exiting the vehicle to gain access to the airport.
Runways								
4	Runway 15/33 (Main)	Allow	Prohibit	3	N/A	N/A	N/A	Install surface painted signage at hold bars as an added precaution to reduce chance of Runway Incursions
Taxiways								
Overall	Taxiway A	Allow	Prohibit	2	1	2	1	Eliminate pavement at all vehicle only access points to T/W A. Install continuous fencing/markings along the setback/OFA for Taxiway "A" on private property
Overall	Taxiway B	Allow	Prohibit	N/A	1	4	1	
Overall	Cessna Drive	An alternative taxiway in the existing 40' easement could separate vehicles and aircraft		1	N/A	N/A	N/A	This is the first line of defense to reduce inadvertent access. Improvements would clarify signage and promote aircraft/vehicle segregation and deter unintended motorists from entering the hangar areas. Stripe all paved T/W Centerlines.
5	Taxiway B	Allow	Prohibit	2	1,2	4	1	
6	Taxiway C	Allow	Allow	1,4	2	N/A	3,4	Aircraft crossing, vehicles entering airport. Replace existing yield sign with a stop sign.
7	Driveway	Prohibit Aircraft Taxiing between 8 and 11	Allow	N/A	N/A	N/A	5,6	Fence off half of Cessna Drive to prohibit aircraft taxiing, and deter unintended motorists.
8	Taxiway D	Prohibit Aircraft Taxiing between 8 and 11	Allow	1,4	N/A	N/A	3,4	Fence off half of Cessna Drive to prohibit aircraft taxiing, and deter unintended motorists.
9	Driveway	Prohibit Aircraft Taxiing between 8 and 11	Allow	N/A	N/A	N/A	5,6	Fence off half of Cessna Drive to prohibit aircraft taxiing, and deter unintended motorists.
10	Driveway	Prohibit Aircraft Taxiing between 8 and 11, allow T/W	Allow	N/A	2	N/A	5,6	Fence off half of Cessna Drive with low fencing to prohibit aircraft taxiing, and deter unintended motorists, but allow aircraft crossing from T/W E.
11	Taxiway E	Allow	Allow	1,4	2	N/A	3,4	Aircraft, vehicle crossing

Appendix 4
Summary of Options

Number	Critical Areas of the Airport	Public Protection/Access Control		Recommended Improvement				Notes
		Aircraft Access	Vehicular Access	Paint Alternative	Signage	Gate	Fence	
12	Driveway	Prohibit Aircraft Taxiing between 8 and 11	Allow	N/A	2	N/A	5,6	Fence off half of driveway to prohibit aircraft taxiing, and deter unintended motorists.
13	Driveway	Prohibit	Allow	N/A	N/A	N/A	5,6	Fence off half of driveway to prohibit aircraft taxiing, and deter unintended motorists.
14	Cessna Drive	Prohibit Aircraft to the North	Allow	1	1,2	N/A	5,6	Fence off half of driveway to prohibit aircraft taxiing, and deter unintended motorists.
15	Driveway from Judge Orr Road	Prohibit	Allow			1		Install an access control gate
16	Taxiway C	Allow	Prohibit	1,2	2,4	N/A	3,4	Install low barricades to clearly demarcate the airfield entrance.
17	Driveway	Prohibit	Prohibit - Remove pavement to T/W A	N/A	N/A	N/A	N/A	Sever direct route from driveway to Taxiway A, fencing between hangars and/or removal of pavement
18	Taxiway D	Allow	Prohibit	1,2	2,4	N/A	3,4	Install low barricades to clearly demarcate the airfield entrance.
19	Driveway	Prohibit	Prohibit - Remove pavement to T/W A	N/A	N/A	N/A	1,2	Sever direct route from driveway to Taxiway A, fencing with a gate to allow hangar owner access
20	Taxiway E	Allow	Prohibit	1,2	2,4	N/A	3,4	Install low barricades to clearly demarcate the airfield entrance.
21	Taxiway F	Allow	Prohibit	1,2	2,4	N/A	3,4	Install low barricades to clearly demarcate the airfield entrance.
22	Driveway	Prohibit	Prohibit - Remove pavement to T/W A	N/A	N/A	N/A	N/A	Sever direct route from driveway to Taxiway A, fence off and/or removal pavement
23	Taxiway	Allow	Prohibit	1,2	2,4	N/A	3,4	Install low barricades to clearly demarcate the airfield entrance.
24	Driveway	Prohibit	Prohibit - Remove pavement to T/W A	N/A	N/A	N/A	N/A	Sever direct route from driveway to Taxiway A, fence off and/or removal pavement
25	Entrance to Crosswing Runway 8/26	Allow	Prohibit	N/A	2,4	N/A	N/A	Add signage to indicate entrance to airfield

OBJECTIVES AND APPROACH

The Compliance Review of the Meadow Lake Airport recommended that an access plan be developed to reduce the risk of inadvertent entry by vehicles onto the runway/taxiway system. This is particularly true on the east side of the airport where more than 95% of the aircraft are located. Fencing is limited in this area, taxiway and road pavements are hard to differentiate, and there are numerous vehicles each day accessing businesses and hangars. The challenge is to significantly decrease the potential for an uninformed person to accidentally drive onto a primary airport runway or taxiway. There are several locations where a driver has a direct route from the primary airport access road, Cessna Drive, to Taxiway A, the parallel taxiway to Runway 15/33. **The objective of this plan is to decrease the potential that vehicular traffic will inadvertently access Taxiway A, Runway 15/33, or Runway 8/26.**

The approach to developing a plan is based on six steps which will tailor the plan to fit Meadow Lake Airport's situation. The steps are:

1. Identify principles and practices that decrease the potential for inadvertent access
2. Identify physical and educational measures that support the principles and practices
3. Identify airport locations with the potential for inadvertent vehicular access
4. Identify options at vehicle access points
5. Develop cost estimates and Capital Improvement Program (CIP) information
6. Recommend near term and long term actions

PRINCIPLES AND PRACTICES THAT DECREASE THE POTENTIAL FOR INADVERTENT VEHICULAR ACCESS

The principles that decrease the potential for inadvertent vehicular access to critical airport areas are:

- Limitation of vehicular traffic
- Increasing driver awareness of their location and situation while driving on the airport

Practices that reduce the potential for inadvertent vehicular access include:

- Gated restriction to vehicles where practical
- Elimination of direct vehicular routes to operational areas
- Standard markings and location identification of roads, taxiways, and buildings
- Separation of vehicles and aircraft where practical
- Education of users on rules, marking, and signage
- Multiple indicators to drivers of the need to STOP and not proceed into an operational area

Fencing, marking, and signage are the primary physical measures available to implement the practices. A variety of fencing, marking, and signage options are presented in this working paper, giving latitude to match cost with potential funds. Educational measures include providing information to all Meadow Lake Airport Authority (MLAA) members about standard signs, markings, and routes.

IDENTIFICATION OF LOCATIONS AT MEADOW LAKE AIRPORT WITH POTENTIAL FOR INADVERTENT VEHICULAR ACCESS

Locating the points with inadvertent vehicular access potential was accomplished by a review of maps and a physical inspection of the airport and surrounding land. Two maps were developed from the review. The first, Existing Traffic Patterns (**Exhibit A**), illustrates the primary vehicular and aircraft routes at the airport. The second, Access Point Map (**Exhibit B**), highlights the primary vehicular access points to the runway/taxiway environment. The unique through-the-fence environment of Meadow Lake yielded many more access points than at a typical airport. **One challenge is to reduce the number of locations where a single mistake would end with a vehicle on an airport runway or parallel taxiway.** Locations currently exist where a vehicle driver has a straight uninterrupted path to the airport runways or parallel taxiways.

IDENTIFICATION OF OPTIONS AT VEHICLE ACCESS POINTS

Fencing, marking, and signage alternatives that are available are shown in **Exhibit C**. Each location with vehicle access was initially reviewed by Aviation staff to recommend options. A preliminary meeting was held with the Federal Aviation Administration (FAA) and State Aeronautics staff on August 30, 2011 to review access points and measures available for each point. Further input was obtained from the Meadow Lake Compliance Plan Working Group on September 6, 2011. Comments from these meetings were used to refine a presentation to the Meadow Lake Airport Board. A summary of options for each access point is shown in **Exhibit D**. Visual pictures of the primary options can be found in **Exhibit E**.

Some recommended measures require actions in addition to fencing, marking, and lighting. **One highly recommended action to reduce inadvertent vehicular access is an improved location identifier system, i.e. address changes.** At the present time, all businesses, hangars, homes, and other buildings in the vicinity of the airport have a Cessna Drive address. The development of a better address system should significantly reduce the number of drivers wandering among hangars trying to find a location. Another recommended action is the education of MLAA members to only use established roads when accessing their hangars or businesses. Association members can lead by example if they follow established procedures.

DEVELOP COST ESTIMATES AND CAPITAL IMPROVEMENT PLAN (CIP) INFORMATION

The location of options determines the funding sources available to MLAA. Airport Improvement Program funds are limited to work on airport property. Colorado Department of Transportation (CDOT) Aeronautics funds appear to be available for projects on areas with easements in place allowing public use. The optimum answer to most access concerns is a fence and electric gate system on taxiways connected to Taxiway A. Funding for this option is probably not available in the near term. Short of complete fencing near Taxiway A, less expensive measures at numerous points are being considered. A cost estimate for fencing and electric gates along Taxiway A is shown in **Exhibit F**. **Exhibit F** also includes the cost of individual measures that may be implemented in the short term in lieu of a complete fence and gate solution.

RECOMMENDED NEAR TERM AND LONG TERM ACTIONS

During the development of this Compliance Plan, several high priority projects came to light, in addition to the recommendations made in the Compliance Plan. Airport Board members, the FAA, and CDOT Aeronautics all provided information that was used to develop a five year Capital Improvement Plan (CIP) for Meadow Lake Airport. In addition, longer term projects were considered and were presented to the FAA for inclusion in the National Plan of Integrated Airports System (NPIAS).

The highest priority project for consideration is the implementation of the Inadvertent Vehicle Access Prevention Plan from this Compliance Plan. The optimum solution involves a fence with manual and electric gates to prevent unauthorized vehicular access to airport runways and parallel taxiways. This solution on the west side of Runway 15/33 is considered to be implementable in the near term. The construction of fence and gates on the east side of Runway 15/33 is significantly more difficult for several reasons, the most significant of which is that the bulk of construction would be on private property. Significant time is estimated to fine tune a plan and enter into agreements with the numerous private parties involved. This fact was recognized during the development of the Vehicle Access Prevention Plan. Alternative measures were developed that could be implemented much more quickly. These near term measures, while not an optimum solution, should greatly increase driver awareness of location and better identify off limit areas. **Individual meetings with the MLAA, FAA, and CDOT Aeronautics generated similar comments that implementing the alternative measures quickly was the preferred scenario.**

Another important need of MLAA is initiating development west of Runway 15/33 to accommodate proposed on-airport tenants. The MLAA has received several verbal and email inquiries about leasing property for hangars and aviation businesses. This project, labeled Taxiway Bravo Loop, was presented by the MLAA Board as four smaller projects for possible phasing.

In 2011, the MLAA filed a FAA Form 7480-1, Notice of Landing Area Proposal, to establish a turf landing area parallel to Runway 15/33. This request received a satisfactory review; however, the FAA requires an Environmental Assessment (EA) prior to publishing the proposed runway on aviation charts, etc. Completing an EA to allow opening of the turf runway is necessary for the MLAA to proceed with leases.

Other important projects presented by the MLAA Board, FAA, and CDOT Aeronautics include pavement maintenance and the replacement of Runway 15/33 MIRL. A CIP meeting was held with the Denver ADO and CDOT Aeronautics staff on December 8, 2011 and a final CIP was developed for Meadow Lake Airport. The CIP presented to the FAA and CDOT Aeronautics is included as **Exhibit G**. Longer term development items, i.e. beyond five years, are included as NPIAS projects for future consideration.



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MEADOW LAKE AIRPORT
INADVERTENT ACCESS PREVENTION PLAN
APPENDIX 5: RENDERING OF GATE ALT. 1
AT MAIN ENTRANCE
DATE: DECEMBER 2, 2011



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INADVERTENT ACCESS PREVENTION PLAN
APPENDIX 5: RENDERING OF GATE ALT. 2
AT MAIN ENTRANCE

DATE: DECEMBER 2, 2011



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MEADOW LAKE AIRPORT
INADVERTENT ACCESS PREVENTION PLAN
APPENDIX 5: RENDERING OF FENCE ALT. 3
AT TAXIWAY A ENTRANCE
DATE: DECEMBER 2, 2011



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MEADOW LAKE AIRPORT
INADVERTENT ACCESS PREVENTION PLAN
APPENDIX 5: RENDERING OF FENCE ALT. 5
AT CESSNA DRIVE

DATE: DECEMBER 2, 2011



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MEADOW LAKE AIRPORT
INADVERTENT ACCESS PREVENTION PLAN
APPENDIX 5: RENDERING OF FENCE ALT. 6
AT CESSNA DRIVE

DATE: DECEMBER 2, 2011

**Appendix 6 - Meadow Lake Airport
Inadvertent Access Prevention Alternatives
Preliminary Cost Estimate
October 31, 2011**

Alternative Unit Prices

Fence Alternatives	Description	Unit	Engineer's Estimate
Fence Alternative No. 1	6' Chain Link Fence	LF	\$ 40
Fence Alternative No. 2	Wooden Fence (5' wide)	EA	\$ 32
Fence Alternative No. 3	Low Profile Barricade (5' Wide)	EA	\$ 100
Fence Alternative No. 4	Flasher Barricade	EA	\$ 150
Fence Alternative No. 5	Reduced Drive Lane Deterrent No. 1	Pair	\$ 160
Fence Alternative No. 6	Reduced Drive Lane Deterrent No. 2	Pair	\$ 400

Gate Alternatives	Description	Unit	Engineer's Estimate
Gate Alternative No. 1	Automatic Barrier Gate	EA	\$ 12,000
Gate Alternative No. 2	20' Vertical Pivot Gate	Pair	\$ 70,000
Gate Alternative No. 3	40' Cantilever Gate	EA	\$ 42,000
Gate Alternative No. 4	20' Manual Swing Gate	EA	\$ 3,500

Access Control System, Vehicle Loop Sensors, Card Readers, are Included in Prices

Sign Alternatives	Description	Unit	Engineer's Estimate
Sign Alternative No. 1	AOA only Sign	EA	\$ 100
Sign Alternative No. 2	Stop Sign	EA	\$ 60
Sign Alternative No. 3	Speed Limit Sign	EA	\$ 60
Sign Alternative No. 4	Aircraft Only Beyond This Point	EA	\$ 100

Paint Alternatives	Description	Unit	Engineer's Estimate
Paint Alternative No. 1	Taxiway Centerline	SF	\$ 5
Paint Alternative No. 2	Stop Bar Marking	EA	\$ 500
Paint Alternative No. 3	Runway Holding Position	EA	\$ 1,250
Paint Alternative No. 4	Taxiway ID Marking	EA	\$ 500

**Appendix 6 - Meadow Lake Airport
Inadvertent Access Prevention Alternatives
Preliminary Cost Estimate
October 31, 2011**

Airport Operations Area (AOA) Perimeter Fence

Item	Description	Quantity	Engineer's Estimate		
			Unit	Unit Cost	Total Cost
Fence Alternative					
Fence Alternative No. 1	6' Chain Link Fence	6000	LF	\$ 40	\$ 240,000
Gate Alternatives					
Gate Alternative No. 3	40' Cantilever Gate at East Side Access Points	4	EA	\$ 42,000	\$ 168,000
Gate Alternative No. 4	20' Manual Swing Gates at West Side Access Points	2	EA	\$ 3,500	\$ 7,000
Signs & Paint Alternatives					
Sign Alternative No. 1	AOA only Sign	30	EA	\$ 100	\$ 3,000
Sign Alternative No. 4	Aircraft Only Beyond This Point	8	EA	\$ 100	\$ 800
Paint Alternative No. 2	Stop Bar Marking	4	EA	\$ 500	\$ 2,000
Additional Project Costs					
Contractor	Mobilization, Overhead and Profit				\$ 45,000
Contingency					\$ 65,000
Engineering					
Design					\$ 42,000
Construction Management					\$ 47,000
Total					\$619,800

Appendix 6
Summary of Options with High/Low Costs

Number	Critical Areas of the Airport									Low Cost Alternative	High Cost Alternative
		Paint Alternative		Signage		Gate		Fence			
		Low Cost	High Cost	Low Cost	High Cost	Low Cost	High Cost	Low Cost	High Cost		
1	Airport Main Entrance (North) from Judge Orr Road	N/A	2	1,2	1,2	3	2	N/A	N/A	\$42,160	\$70,660
2	Airport Entrance (West)	N/A	N/A	1	1	N/A	N/A	1	1	\$28,100	\$28,100
3	Glider Entrance (South) from Falcon Highway	N/A	N/A	Existing Signs	Existing Signs	Existing Gate	Existing Gate	Existing Gate	Existing Gate	\$0	\$0
4	Runway 15/33 (Main)	3	3	N/A	N/A	N/A	N/A	N/A	N/A	\$1,250	\$1,250
5	Taxiway B	N/A	2	1,2	1,2	4	4	1	1	\$71,660	\$72,160
6	Taxiway C	4	1,4	2	2	N/A	N/A	3	4	\$760	\$3,860
7	Driveway	N/A	N/A	N/A	N/A	N/A	N/A	5	6	\$160	\$400
8	Taxiway D	4	1,4	N/A	N/A	N/A	N/A	3	4	\$700	\$2,675
9	Driveway	N/A	N/A	N/A	N/A	N/A	N/A	5	6	\$160	\$400
10	Driveway	N/A	N/A	2	2	N/A	N/A	5	6	\$220	\$460
11	Taxiway E	4	1,4	2	2	N/A	N/A	3	4	\$760	\$2,948
12	Driveway	N/A	N/A	2	2	N/A	N/A	5	6	\$220	\$460
13	Driveway	N/A	N/A	N/A	N/A	N/A	N/A	5	6	\$160	\$400
14	Cessna Drive	N/A	1	1,2	1,2	N/A	N/A	5	6	\$320	\$2,685
15	Driveway from Judge Orr Road	N/A	N/A	N/A	N/A	1	1	N/A	N/A	\$12,000	\$12,000

Appendix 6
Summary of Options with High/Low Costs

Number	Critical Areas of the Airport									Low Cost Alternative	High Cost Alternative
		Paint Alternative		Signage		Gate		Fence			
16	Taxiway C	2	1,2	2,4	2,4	N/A	N/A	3	4	\$860	\$1,335
17	Driveway	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$0	\$0
18	Taxiway D	2	1,2	2,4	2,4	N/A	N/A	3	4	\$860	\$2,298
19	Driveway	N/A	N/A	N/A	N/A	N/A	N/A	2	1	\$160	\$1,000
20	Taxiway E	2	1,2	2,4	2,4	N/A	N/A	3	4	\$860	\$960
21	Taxiway F	2	1,2	2,4	2,4	N/A	N/A	3	4	\$860	\$2,710
22	Driveway	N/A	N/A	N/A	N/A	N/A	N/A	2	1	\$160	\$1,000
23	Taxiway	2	1,2	2,4	2,4	N/A	N/A	3	4	\$860	\$1,960
24	Driveway	N/A	N/A	N/A	N/A	N/A	N/A	2	1	\$160	\$1,000
25	Entrance to Crosswing Runway 8/26	N/A	N/A	2,4	2,4	N/A	N/A	N/A	N/A	\$160	\$160
TOTAL										\$163,570	\$210,880
Electrical for Gates										\$25,000	\$25,000
Contingency										\$28,286	\$35,382
Engineering & CM										\$32,528	\$40,689
GRAND TOTAL										\$216,856	\$271,262