

2.1 AIRPORT AND COMMUNITY BACKGROUND

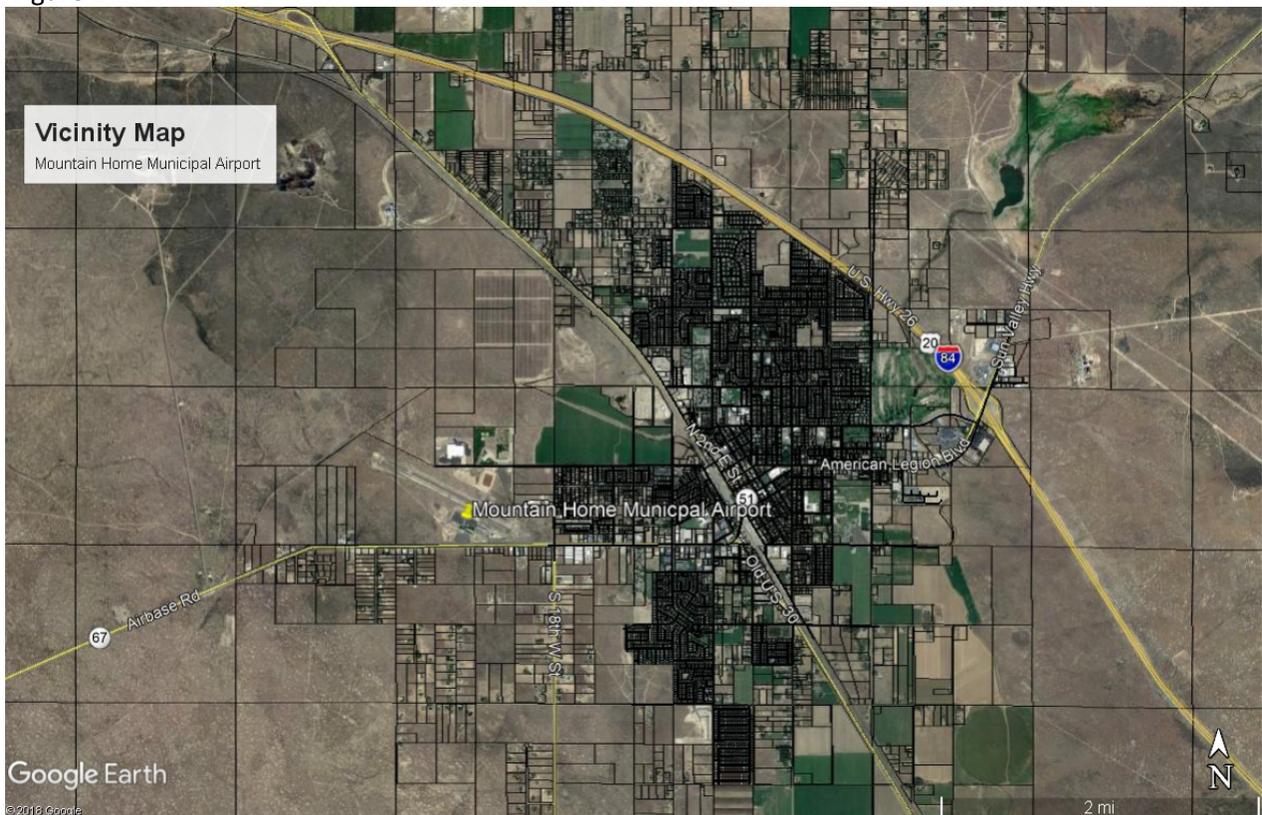
2.1.1 GENERAL

Mountain Home Municipal Airport is owned by the City of Mountain Home and is located about two miles west of the central business district serving the City of Mountain Home and western Elmore County region. The airport was initially activated May 1941 and initially consisted of a graveled and graded strip developed by the State of Idaho. The airport was closed for a short time after World War II, but reopened around 1947, when the Civil Air Patrol (CAP) initiated their local involvement. The airport has been developed over time to the present single paved runway and development configuration.

2.1.2 AIRPORT LOCATION

The airport is located at 43° 07' 53.8" north latitude and 115° 43' 50.0" west longitude in southwestern Idaho, the runway is oriented on heading(s) 100/280 degrees respectively (Runway 10/28), at an elevation of 3,167-feet on about 411 acres west of the city. Mountain Home Air Force Base is located 12 miles southwest of the airport. The airport is surrounded by open rangeland to the North and West, Air Base Road to the South and the urbanized area of Mountain Home Proper to the East. An Air Force Rail line exists 1,250 feet West of the runway and the Marathon Cheese plant is located approximately 1,000 feet North of the runway. **Figure 2-1** depicts a vicinity map for reference.

Figure 2-1



2.1.3 AIRPORT OWNERSHIP AND MANAGEMENT

The airport is currently owned and operated by the City of Mountain Home. The airport is managed via the Fixed Base Operator (FBO) as part of a contract agreement with the City. The Airport Manager divides his time between airport management and FBO operations. An Airport Advisory Board that meets the 3rd Tuesday of each month and includes city officials, the FBO/manager, a representative from the Civil Air Patrol (CAP) and local pilots, formulates recommendations for airport policy and direction. The Airport Advisory Board transmits their policies and recommended actions to the Mountain Home City Council for final action.

2.3.1 AIRPORT ROLE

The Mountain Home Airport is a part of the FAA’s National Plan of Integrated Airport Systems (NPIAS) and is recognized as a General Aviation airport. ITD identifies the role for the airport to be “Regional Business.” Per ITD, Regional Business airports accommodate regional economic activities, connecting to state and national economies, and serve all types of general aviation aircraft. They also accommodate local business activities and various types of general aviation users. The airport is primarily used for business travel, agricultural aerial applications, recreational flying, protecting the public welfare (Search & Rescue, Fire Fighting, Law Enforcement, Medical Evacuation, et cetera) and flight instruction. Mountain Home Air Force Base is located closer than any other airport and operates high performance military aircraft in the vicinity of the airport. The Boise Airport is located approximately 40 Miles to the northwest.



2.3.2 EXISTING AIRPORT ACTIVITIES AND USERS

The Mountain Home Municipal Airport provides for a variety of aviation uses and activities. The airport predominantly serves single-engine and multi-engine piston aircraft along with some usage by single engine turbine aircraft mainly involved in aerial agricultural application. The principal activities occurring at this airport include corporate/business activities, recreational activities, agricultural application (spraying), medical related transport, career training or flight instruction, search and rescue or Civil Air Patrol, government fire fighting activities (BLM and/or Forest Service) and military training activities.



2.3.3 EXISTING ACTIVITY LEVELS

Airport activity levels include the number of aircraft operations and based aircraft. The FAA’s 5010-1 Airport Master Record is the official record kept by the FAA for public-use airport activities and facility conditions. The 5010 data are populated by the reporting actions taken by the airport

management and ITD. A single aircraft operation is defined as either an aircraft take-off or landing; therefore, a “touch-and-go” counts as two operations.

The most recent FAA 5010 report retrieved on August 15, 2019 identifies 23 total aircraft (17 single-engine, 5 multi-engine, 1 helicopter) based at the Mountain Home Municipal Airport (FAA, 5010).

2.3.4 AIRPORT PAVEMENT CONDITION

The Pavement Condition Index (PCI) is based on a visual inspection of pavement condition only. ITD completes a full PCI inspection of airport pavements on a statewide basis every three years. The last PCI inspection conducted at the Mountain Home Airport by ITD was in 2016. The runway was repaved in 2015, parallel taxiway was repaved in 2016, taxiway connectors and apron were repaved and remarked in 2017. As such, all pavements at the airport will reflect a high PCI value if measured in the near future.

2.3.5 EXISTING AIRSIDE FACILITIES

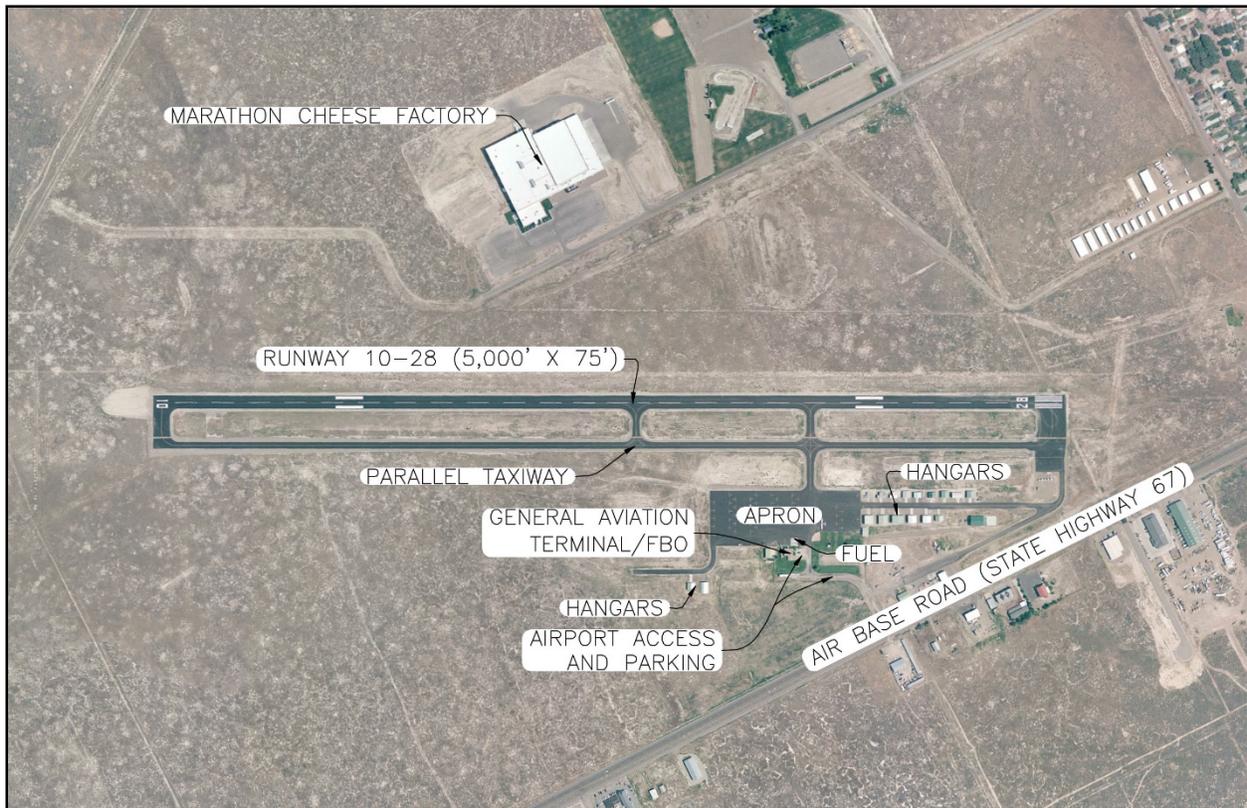
2.3.6 RUNWAY

The airport has been developed and improved over time (**Figure 2-2**) to the present single runway configuration designated 10/28 respectively with the physical dimensions of 5,000 feet in length and 75 feet in width. Runway 28 is marked with non-precision instrument (NPI) markings and Runway 10 with visual markings. The markings are considered to be in good condition. Per the 2007 ITD PCI Report, the runway had an average PCI of 83.67, which is a very good rating. The asphalt pavement strength is designed for large aircraft weighing 42,000 lbs or less, single wheel loading/53,000 lbs dual wheel. Runway 28 is the primary runway end accommodating approximately 80% of the aircraft operations. Runway 10 is the secondary runway accommodating the additional 20% of aircraft operations.

2.3.7 TAXIWAY SYSTEM

The airport has a full-length asphalt parallel taxiway that is 35 feet wide. The taxiway is equipped with a Medium Intensity Taxiway Lighting (MITL) system. Per the 2007 ITD PCI Report, the taxiway had an average PCI of 76.63, which is a very good rating.

FIGURE 2-2 – AERIAL OF AIRPORT FACILITIES



Source: T-O Engineers

2.3.8 AIRFIELD LIGHTING, VISUAL AIDS AND NAVAIDS

Runway 10/28 is equipped with a Medium Intensity Runway Lighting (MIRL) system with Pilot Controlled Lighting (PCL). PCL is activated via Common Traffic Advisory Frequency (CTAF) – 122.8. Runway 10/28 is also equipped with Precision Approach Path Indicators (PAPI) and Runway End Identifier Lighting (REIL) on both runway ends.

A NAVAID is defined by the FAA as any facility used in the aid of air navigation, including landing areas, lights, any apparatus or equipment for disseminating weather information, for signaling, for radio direction-finding, or for radio or other electronic communication, and any other structure or mechanism having similar purpose and controlling flight in the air or the landing or takeoff of aircraft.

Automated Weather

Mountain Home Municipal Airport is equipped with an Automated Weather Observation System (SuperAWOS) that is owned, operated and maintained by the City of Mountain Home. Supplemental weather data is available 24 hours a day from either Mountain Home Air Force Base or Boise Flight Service.

Table 2-1 summarizes the existing visual and NAVAIDs available at Mountain Home Municipal Airport.

TABLE 2-1 - MOUNTAIN HOME MUNICIPAL AIRPORT VISUAL AND NAVAIDS

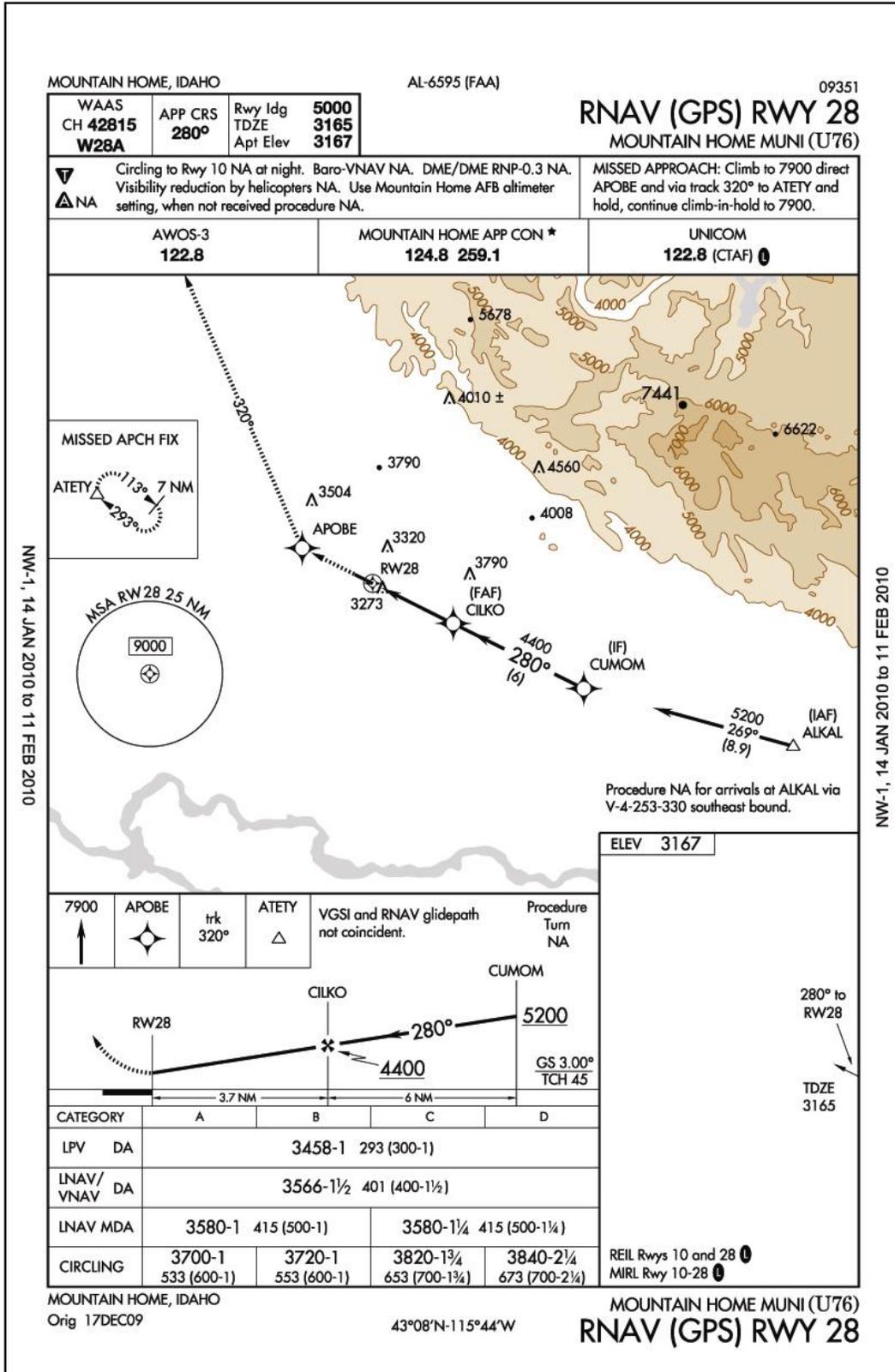
Source: T-O Engineers

MOUNTAIN HOME VISUAL AND NAVIGATIONAL AIDS (NAVAIDS)	
GENERAL	
UNICOM - 122.8	
Rotating Beacon	
Lighted Wind Cone and Segmented Circle	
SuperAWOS	
RUNWAY 10/28	
Medium Intensity Runway Lighting (MIRL)	
Supplemental Wind Cone – Runway 28	
PAPI (2 Box) – Both ends	
REIL – Both ends	

2.3.9 INSTRUMENT APPROACH CAPABILITIES

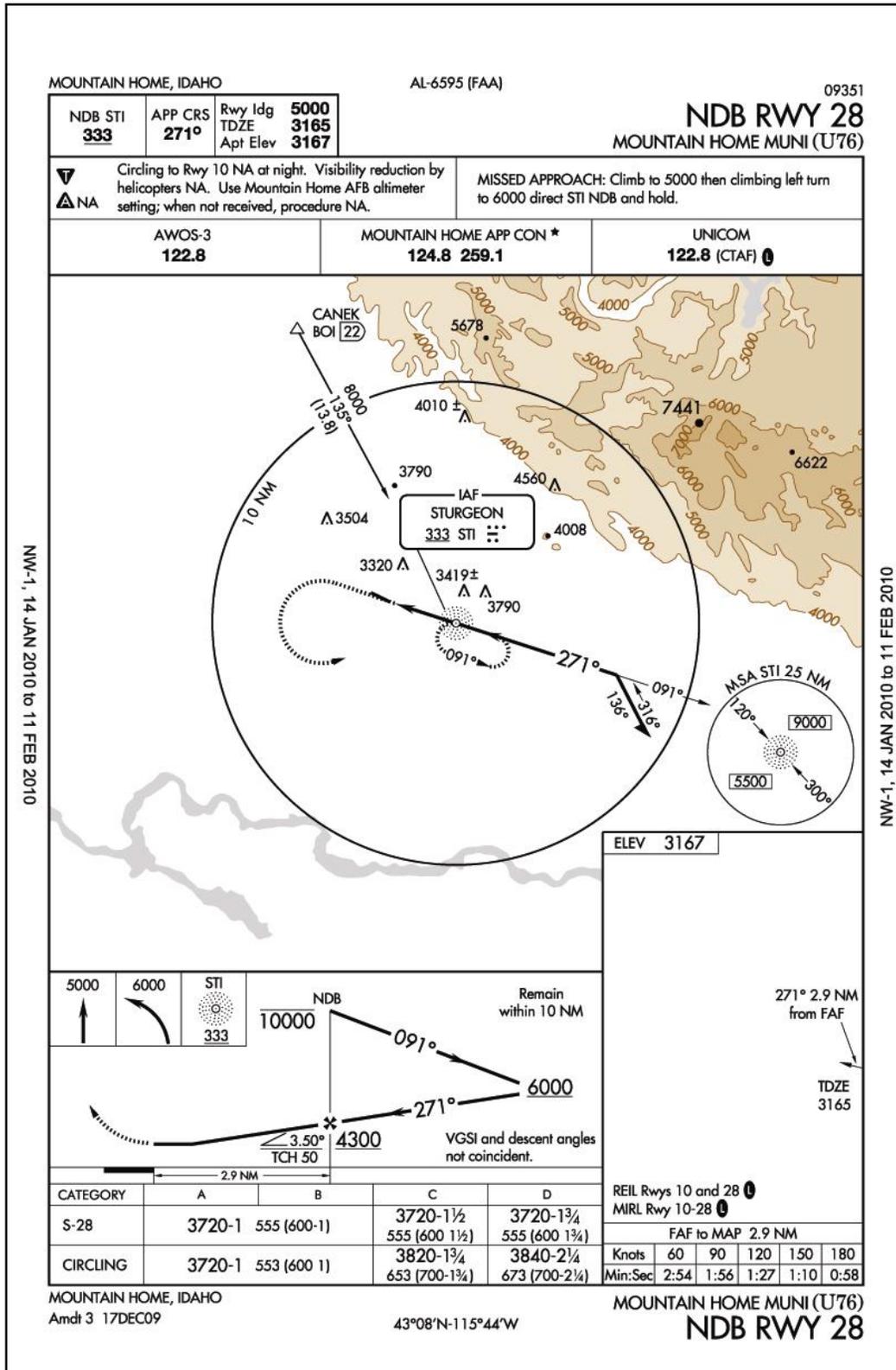
The Mountain Home Airport currently provides instrument approach capabilities to Runway 28. No instrument approach capabilities currently exist to Runway 10. Runway 28 instrument approach capabilities currently include Area Navigation (RNAV) GPS and NDB procedures. These existing procedures include a Localizer Performance with Vertical Guidance (LPV) published in December of 2009. LPV approaches offer users both lateral and vertical guidance resulting in improved minimums with no need for ground-based equipment. **Figures 2-3 and 2-4** depict the approach plates for existing Runway 28 instrument approach procedures (source: AirNav.com).

FIGURE 2-3 – RUNWAY 28 RNAV GPS APPROACH PLATE



Source: AirNav.com

FIGURE 2-4 – RUNWAY 28 NDB APPROACH PLATE



Source: Airnav.com

2.3.10 SUMMARY OF AIRSIDE FACILITIES

Table 2-2 summarizes the existing airside facilities at the Mountain Home Municipal Airport.

TABLE 2-2 – SUMMARY OF EXISTING AIRSIDE FACILITIES

ITEM	CURRENT DATA
Airport Role / Service Level / Type	GA (FAA)/Regional Business (State)
Airport Elevation	3,168' MSL
Mean/Maximum Temperature	93.5_f
Airport Reference Code – ARC	B-II
Critical Aircraft	Citation III
Airport Reference Point Latitude	43_ 07' 53.788"
Coordinates (NAD 83) Longitude	115_ 43' 50.041"
Magnetic Declination	15_ 31.7' east
Magnetic Declination	14° 5' E/0° 8' West/yr
Runway Length	5,000'
Runway Width	75'
Runway Pavement Type	Asphalt
Runway Pavement Strength - SW	42,000 lbs.
Runway Pavement Strength - DW	53,000 lbs.
% Effective Runway Gradient	0.15%
Runway Lighting Type	MIRL
Runway Marking Type	RY 28 NPI/RY 10 Visual
Taxiway Pavement Type	Asphalt
Taxiway Pavement Strength - SW	42,000 lbs.
Taxiway Width	35'

Taxiway Lighting Type	MITL
Taxiway Marking Type	Basic
Instrument Approaches	RY 28 - RNAV GPS/RY 10 - Visual
Airport Property (acres)	411

Source: Existing ALP and Narrative, T-O Engineers

2.3.11 DESIGN STANDARDS

Most public use airports are developed based on certain design standards. Design standards provide for proper ground based “set-backs” or safety related areas around the runway and taxiway environs. Typical design standards for an individual airport are predicated on (a) approach speed (Category) and (b) wingspan (Design Group) of the most common, or group, of common aircraft, using the airport. This is particularly true for FAA NPIAS airports, such as Mountain Home Municipal Airport, which are required to use a classification system recognized by the FAA commonly referred to as the Airport Reference Code (ARC). The Mountain Home Municipal Airport is classified as an ARC B-II General Aviation airport. A summary of the FAA approach categories and design groups that result in the ARC is included below:

Aircraft approach category: A grouping of aircraft based on 1.3 times their stall speed in their landing configuration at their maximum certificated landing weight. The categories are as follows:

- ✈ Category A: Speed less than 91 knots.
- ✈ Category B: Speed 91 knots or more but less than 121 knots.
- ✈ Category C: Speed 121 knots or more but less than 141 knots.
- ✈ Category D: Speed 141 knots or more but less than 166 knots.
- ✈ Category E: Speed 166 knots or more.

Airplane Design Group (ADG): A grouping of planes based on their wingspan. The groups are as follows:

- ✈ Group I: Up to but not including 49 feet.
- ✈ Group II: 49 feet up to but not including 79 feet.
- ✈ Group III: 79 feet up to but not including 118 feet.
- ✈ Group IV: 118 feet up to but not including 171 feet.
- ✈ Group V: 171 feet up to but not including 214 feet.
- ✈ Group VI: 214 feet up to but not including 262 feet.

Currently, the airport predominantly serves small single and multi-engine aircraft fleet weighing 12,500 pounds or more maximum takeoff weight (MTOW) with approach speeds less than 121 knots and with wingspans of 79 feet or less which represents a ARC of B-II. Typical aircraft with a B-II ARC include light turboprops and midsize business jets including the Raytheon King Air 200 and the Cessna Citation II, III and V. Typically, critical aircraft determination is based on 500 operations per year of the most demanding aircraft. The Citation III is the current critical aircraft with a wingspan of 53.5 feet and 22,000 lbs MTOW.

Figure 2-5 below exhibits common aircraft by ARC. The figure is a representative example only and it is not intended to show all of the types of aircraft currently using or with a likelihood of using Mountain Home Municipal Airport.

AIRCRAFT WINGSPAN (Airplane Design Group)

		I Less than 49'	II 49' to 79'	III 80' to 118'	IV 119' to 170'	V 171' to 214'
AIRCRAFT APPROACH SPEED (Aircraft Approach Category)	A Less than 91 kts	 Beech Bonanza Cessna 150 Cessna 177 Embraer-620	 Beech E18S Britten-Norman BN-2A Pilatus PC-6 Raytheon E-18	 Fairchild C-121 DHC-7 Douglas DC-3		
	B Weight less than 12,500 lbs. 91 to 120 kts	 Cessna 402 Cessna Citation I Piper 31-310 Navajo Rockwell International 690A	 Cessna-441 Conquest Beech King Air 200 Piper Cheyenne III			
	C Weight greater than 12,500 lbs. 121 to 166 kts	 Dassault Falcon 10 Gates Learjet 28/29 Mitsubishi MU 300 Rockwell Sabre 60	 Cessna Bravo, Encore, Excel Dassault Falcon 200, 900 Gruzman Gulfstream I Saab SF 340	 BAE 145-100 Convair 240, 340, 440 Dassault Mercure Saab 2000		
	D 121 to 166 kts	 Bombardier 60 Gates Learjet 25, 35A, 55 Israel Westwind Rockwell Sabre 75A	 Canadair CL-600 Cessna Citation X Gruzman Gulfstream II, III Rockwell Sabre 80	 Boeing 737-100, 200, 300, 400 Bombardier Global Express DC-9 Hawker Siddeley 121-3B	 Boeing 757 Boeing 767-100, 200 Rockwell B-1	 Airbus A340-200 Boeing 747 Series Boeing 777-200, 300

Reference Codes for aircraft that will not operate at the airport
 *Bold font depicts aircraft shown

2.3.12 RUNWAY WIND COVERAGE

A detailed wind analysis was not scoped or included as part of this planning project. Wind data from the previous planning study was obtained from the National Weather Service for the Mountain Home Air Force Base for a 10 year period from 1960-1970. Based on this data and the analysis previously conducted, annual average wind coverage for Runway 10/28 is 90.9% based on wind speeds of 12 mph (10.5 knots).

2.3.13 RUNWAY PROTECTION ZONES (RPZ)

RPZ's are defined areas on the ground beyond the end of the runway that are maintained clear of incompatible objects and activity in order to protect persons and property from collision hazards. The RPZ is trapezoidal in shape and begins 200 feet from the end of each runway. The RPZs associated with Runway 10/28 are sized to accommodate to FAA design standards, visual and not lower than 1 mile approach visibility minimums. The existing RPZ inner dimension is 500 feet centered on the runway, the length is 1000 feet, and the width at the outer end of the trapezoid is 700 feet.

The RPZ's on both runway ends are encroached; Runway 28 by a State Highway 67 road and Runway 10 by an railroad line which serves the Mountain Home Air Force base.

2.3.14 RUNWAY SAFETY AREA (RSA)

The RSA is a defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. The RSA should be cleared and graded and not have potentially hazardous ruts, humps, depressions, or other surface variations.

The RSA for Runway 10/28 at Mountain Home Municipal Airport meets design standards.

2.3.15 RUNWAY OBJECT FREE AREA (OFA)

A defined surface surrounding the runway that is required in order to keep above ground objects from protruding about the RSA edge area. Objects can be located in the OFA for air navigation or aircraft ground maneuvering purposes such as taxiing or holding aircraft. Parked aircraft cannot be allowed in the OFA.

The OFA for Runway 10/28 at Mountain Home Municipal Airport meets design standards.

2.3.16 RUNWAY/TAXIWAY SEPARATION

The required separation distance between the runway and parallel taxiway centerlines is 240 for Airplane Design Group II airports for visual runways and runways with approaches with not lower than $\frac{3}{4}$ mile approach visibility minimums.

The current runway/taxiway centerline separation at the Mountain Home Municipal Airport meets design standards.

2.3.17 TAXIWAY SAFETY AREA (TSA)

A defined surface centered on the taxiway centerline. The surface should be cleared and graded, free of objects, capable under dry conditions of supporting aircraft, snow removal equipment and aircraft rescue and fire fighting equipment to reduce the risk of damage to an airplane unintentionally departing the taxiway.

The TSA for the parallel taxiway at Mountain Home Municipal Airport meets design standards.

2.3.18 TAXIWAY OBJECT FREE AREA (TOFA)

A defined surface centered on the taxiway centerline. This area prohibits roads, parked airplanes and above ground objects except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.

The TOFA for the parallel taxiway at Mountain Home Municipal Airport meets design standards.

2.4 EXISTING LANDSIDE FACILITIES

FIGURE 2-6 – AIRPORT TERMINAL AREA FACILITIES



Source: T-O Engineers

2.4.1 AIRCRAFT APRON

The parking apron consists of asphalt pavements designed for both large and small aircraft; this airport has 48 tie-down positions for both based and transient aircraft. Per the 2007 ITD PCI Report, the apron had an average PCI of 95.5, which is an excellent rating.

2.4.2 FIXED BASE OPERATOR (FBO) AND GENERAL AVIATION TERMINAL

The airport is served by one FBO, Mountain Home Aviation. Mountain Home Aviation provides parts, supplies, aircraft maintenance services, used aircraft sales and consulting. The FBO office shares space in the airport's 1,800 square foot terminal building that includes restrooms, a pilot's lounge, pilot store in addition to flight training and general meeting areas. The airport is open 24 hours a day and is usually attended from 8 am to 5 pm, Monday through Saturday.



2.4.3 FUEL FACILITIES

The airport currently provides Avgas (100LL) only. No Jet A fuel is currently available at the airport. Avgas fuel is stored in a 10,000gallon underground tank. Fuel is available 24 hours a day via a credit card system.



2.4.4 HANGARS

There are 22 hangars located on the airport property: 3 T-type, 1 Quonset and 18 Conventional Box hangars, including the FBO hangar facility. Currently there is a 100% utilization rate for hangar capacity.



2.4.5 TIE- DOWNS

There are 48 fully improved tie-down positions on the apron; Ample space existing on the apron and no particular areas are reserved for transient/based aircraft.

2.4.6 AIRPORT ROADSIDE ACCESS

There is one defined access point providing ingress/egress onto the airport property from State Highway 67 or more commonly known as Air Base Road. The access road to Air Base Road is a fully improved paved surface, however some access roads within the airport compound are unimproved dirt surfaces or roadway surfaces improved with gravel.

2.4.7 PERIMETER FENCING

The airport perimeter is fully fenced with 8 foot chain link fence. The fence provides security and serves as a deterrent to wildlife attempting to gain access to the airfield. There is an automatic code access gate at the main airport entrance.

2.4.8 GROUND TRANSPORTATION

There are currently 28 automobile parking spaces on the airport: 3 are paved and 25 are improved with gravel. The main automobile parking lots and thoroughfares are in good condition. Off-airport rental cars, courtesy ride and organized bus service are also available by making advanced arrangements with off-airport businesses and service providers.

2.4.9 UTILITIES

The City of Mountain Home provides many municipal utility services to the airport and Idaho Power provides electricity. It is important to note that the site contains its own individual disposal facilities and does not have wet line taps to a municipal sewer system. **Table 2-3** depicts the current utilities and service providers at Mountain Home Municipal Airport.

2.4.10 LAND USE COMPATIBILITY

Effective compatible land use planning serves to protect the Public Health of both aircraft operators and the surrounding community from safety related concerns as a result of airport operations. Such planning also serves to preserve the quality of life of surrounding neighborhoods from the by products of airport/aircraft operations including such things as aircraft noise, dust and fumes. Effective land use planning via such mechanisms as zoning protects airspace, defines use of land and considers aircraft noise impacts. Currently the FAA and the State of Idaho consider airport compatible land use planning, including Through-the-Fence access, to be a top priority for airport sponsors to be concerned with and address through local planning. Following is a summary of both City of Mountain Home and Elmore County Comprehensive Plan and Zoning Ordinances as they relate to the airport. More detailed land Use compatibility information can be found in Chapter Seven.

2.4.11 CITY OF MOUNTAIN HOME COMPREHENSIVE PLAN

Chapter 11.3.1 – 11.3.2(5) of the current City of Mountain Home Comprehensive Plan addresses the development of an Airport Industrial Park, the need for updated airport plans, continued coordination between the City and County in development review proceedings, encouraging noise attenuation, attracting scheduled airline service and improving air carrier operations.

2.4.12 CITY OF MOUNTAIN HOME AIRPORT ZONING ORDINANCE

Currently the City of Mountain Home does not have an ordinance in place that addresses FAR Part 77 airspace requirements or use of land.

2.4.13 ELMORE COUNTY COMPREHENSIVE PLAN

Elmore County is not the land use jurisdiction with authority to regulate the land use within the City of Mountain Home: however, the 2004 Elmore County Comprehensive Growth and Development Plan defines a Public Airport Hazard Zone (PAZ) for the land surrounding the Mountain Home Municipal Airport.

2.4.14 ELMORE COUNTY AIRPORT HAZARD ZONING ORDINANCE

Title 6, Chapter 36, Sections 1-8 of the Elmore County Zoning and Development Ordinance address the Federal Aviation Regulation (FAR) Part 77 “Airspace Surfaces and Obstructions” around the airport. This regulatory instrument creates geographic zones that correspond with the Part 77 airspace surfaces and impose the relative height restriction. This ordinance does restrict the uses around the Mountain Home Air Force Base, but does not restrict the uses around the Mountain Home Municipal Airport.

2.4.15 THROUGH-THE-FENCE (TTF)

There are currently no access points providing ingress/egress onto the airport property other than the primary access located on Air Base Road. Additionally, no private driveways for commercial, industrial or residential uses are located on the facility.

Utility	Source	Provider
Water	Municipal Water System	City of Mountain Home
Sewer	Individual Disposal Systems	Private, Approved by IDEQ
Fire Protection	Emergency Response	City of Mountain Home
Electric	Yes	Idaho Power
Natural Gas	Trenched Pipe or Tank	Not Available
Refuse	Yes	City of Mountain Home

2.5 AIRPORT DEVELOPMENT GOALS

Realistic goals for development have been identified in this planning effort that reflect the role of Mountain Home Municipal airport in the community. These goals were developed with consideration of both the short term and long term needs of the airport including interest of airport users, compatibility with the surrounding land use, safety, noise, financial and economic conditions. These goals include:

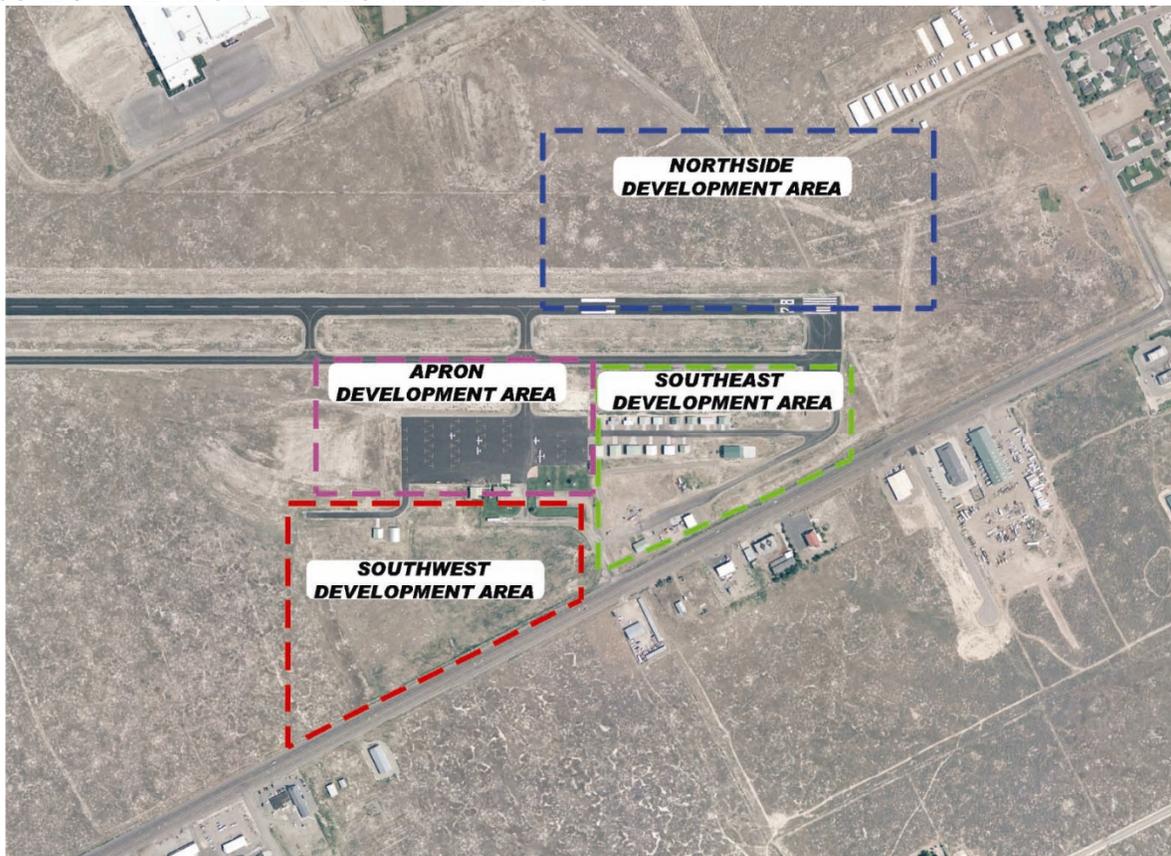
- ✦ Preparation of a logical development program for the airport that provides a realistic vision for the future.
- ✦ Analysis that provides financially feasible projects that enhances self-sustaining capability of the airport.
- ✦ Continued adherence to minimum design standards and rules and regulations.
- ✦ Preservation of existing private and public investment in the airport and related facilities through land use compatibility.

2.6 LANDSIDE ALTERNATIVES

As has been discussed, airside needs of the airport over the planning period are limited. On the other hand, future landside development provides the best opportunity to the City and the Airport Board to accommodate and attract future airport users.

Landside facility development includes aircraft parking aprons, aircraft storage facilities, airport access roads, vehicle parking and commercial development directly related to aeronautical activity. Four areas were studied for development opportunity at Mountain Home Municipal Airport. These areas are described as the North side Development Area, Southeast Development Area, Southwest Development Area and Apron Development Area. This section summarizes the various landside development alternatives considered and describes the selected alternative in each case. **Figure 5-1** below identifies the four landside development areas.

FIGURE 5-1 – LANDSIDE DEVELOPMENT AREAS



When analyzing and developing the various landside alternatives, several basic development principles and goals were considered to guide the process:

- ✦ Future development of the airport should be mindful of various aircraft and activity types:
 - Areas for general hangar storage should be segregated from areas where commercial aviation activity would be best suited.
 - Uses such as agricultural spray or BLM fire fighting activities should be located in areas that ensure compatibility with other surrounding aviation uses (due to use of retardants and chemicals in particular).
 - Orderly development of hangar areas ensuring compatibility with FAA design standards based on current and anticipated aircraft use (i.e. aircraft design groups)
 - Adherence to FAA's policy of segregating vehicle and aircraft by creating dedicated vehicle access roads to new hangar development areas.
- ✦ Future development of the airport should be done in a manner that best optimizes access to public infrastructure including:
 - Vehicle/road access
 - Utilities
 - Available land/surrounding uses
- ✦ Future development will be planned in a manner whereby phased development is possible over the planning period thus providing flexibility to the City to accommodate growth as demand warrants.