MINDEN-TAHOE AIRPORT

DOUGLAS COUNTY NEVADA

MINDEN-TAHOE ACCESS WAIVER TEXTBOOK

Updated: January 2021

DOUGLAS COUNTY NEVADA

Table of Contents

SECTION 1: AIRPORT FAMILIARIZATION

Purpose: To outline the various surfaces, signage, and lighting located on the airport and their intended functions. Upon completion of this module, you should be able to identify the difference between a runway and taxiway, explain what the different signage and lights mean while properly identify where you are on the airport.

1.1 CONTROLLED SURFACES

Runway: A defined rectangular area, on a land aerodrome selected or prepared for the landing and take-off run of aircraft along its length. Identified by white centerlines, edge lines, and lights. Runways are identified by NUMBERS.

Runway 16-34

Runway 12-30

Taxiway: A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another. Identified by yellow centerlines and blue edge lights/reflectors. Taxiways are identified by LETTERS.

1.2 RUNWAYS AT MINDEN-TAHOE AIRPORT

Minden-Tahoe Airport has three runways, two of which intersect and may cause confusion for pilots and ground vehicles if they become disorientated on the airport. It is imperative to always be aware of where you are and have the ability to correctly identify your location on the airport. The three runways on Minden-Tahoe are:

RUNWAY 16/34:
This is Minden's largest runway and is the preferred runway by powered aircraft. Under calm wind situations, powered airplane pilots are encouraged to use Runway 34.

- Dimension: 7,399 FT x 100 FT
- Non Precision Approach Markings
- High Intensity Runway Lights (HIRL)
- Runway End Identifier Lights (REIL)
- Runway 34 is the Calm Wind Runway

RUNWAY 12/30:
This is Minden's crosswind runway and is the preferred runway by glider aircraft. Normally when the winds at Minden pick up in the afternoon, pilots of both powered and glider aircraft may utilize this runway to reduce the impact of crosswinds. Runway 12/30 intersects runway 16/34 at mid-field presenting a potential collision hazard for aircraft.

- Dimension: 5,299 FT x 75 FT
- Basic Approach Markings
- No Runway Lights

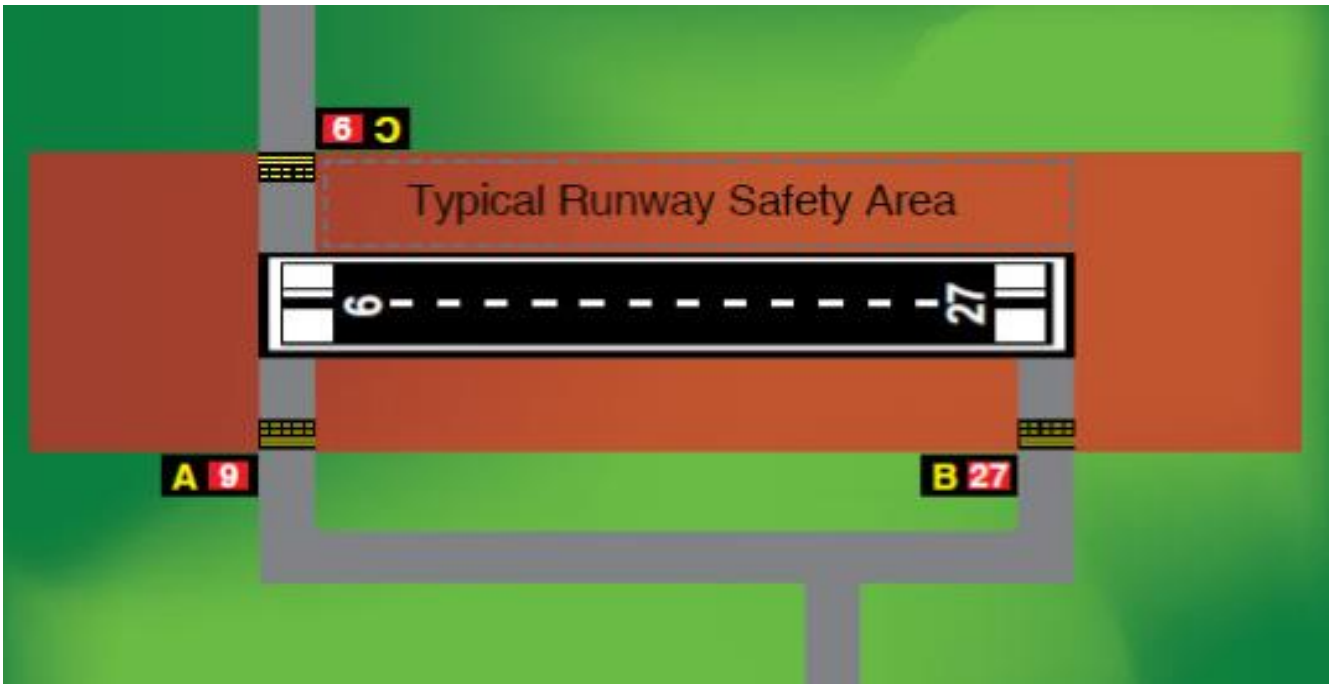
RUNWAY 30G:
This is Minden's dirt runway and used primarily for flight training and glider tow plane operations. This runway parallels runway 12/30 on the north side between the east side glider ramp.

- Dimension: 2,050 FT x 60 FT
- Dirt Runway
- *Orange/White Panels Signify Touchdown Point*

1.3 RUNWAY SAFETY AREA (RSA)

FAA Definition:

Runway Safety Area (RSA): A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway. (AC 150/530-13)



The Runway Safety Area is the protected area around the runway provided for pilots who may accidently depart the runway while landing or taking off. This area is to remain clear of vehicles, people, or other equipment while an airplane is landing or departing the runway.

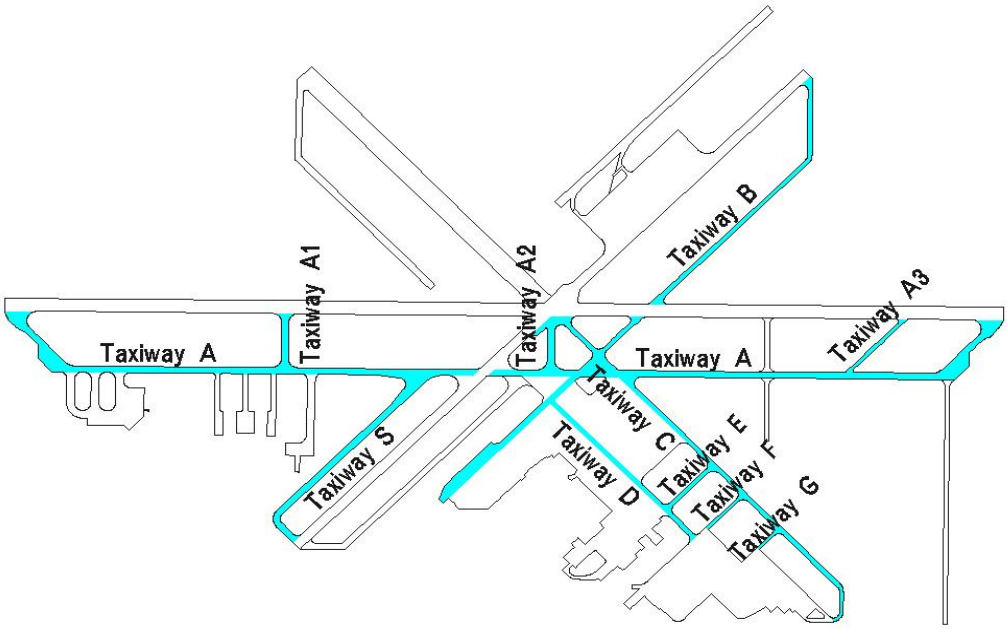
THE "HOLD SHORT LINES"

The hold position markings, more commonly known to pilots as "Hold Short Lines" or "Hold Short Bars" identify the boundary of the runway safety area. When crossing the hold position lines, identified by two yellow solid lines and two yellow broken lines, a plane or vehicle is entering the runway. This can be cause for a runway incursion and present an unsafe situation. If an airplane is arriving or departing the runway, you MUST remain behind the solid yellow bars until the airplane has cleared or departed the runway.

1.4 TAXIWAYS

Taxiways are how aircraft transition between the ramps and the runways. Minden-Tahoe Airport has a network of taxiways that are identified by alphabetical letters (i.e. A, B, C...). Remember, taxiways have a yellow centerline with blue edge lights/reflectors.

The airport diagram provides a map of the taxiways and pilots use these diagrams to navigate the airport. Here are the taxiways here at Minden-Tahoe Airport:



TAXIING AIRCRAFT
HAVE THE RIGHT OF WAY

Operating around aircraft that are taxiing can present special challenges and dangers. For this reason, please consider the following while driving on taxiways:

Aircraft Have Limited Visibility: The visibility from the flight deck may not be that great and pilots may have difficulty seeing your vehicle. Always assume that the aircraft cannot see you and yield to them. Make sure that you provide plenty of distance from their wing tips to prevent a collision hazard.

Aircraft Have Limited Maneuverability: Ground vehicles are often much more maneuverable then a taxing aircraft. This is why an aircraft will have the right of way over ground vehicles. Plan and avoid conflicting with an oncoming airplane early so that you do not become a collision hazard.

Pilots can be Distracted: A pilot's attention may be split between taxiing the aircraft and preparing for takeoff. During these times, pilots may be running a checklist, receiving an ATC clearance, or other various tasks involved for piloting the airplane. Again, assume the airplane does not see you and yield the right of way.

EXAMPLE: VISIBILITY FROM THE COCKPIT

Click Above to Play Video

1.5 RAMP AREAS

Ramp areas can be some of the busiest locations on the airport. A multitude of activities take place on the ramp which include activities such as:

- Parked Aircraft
- Passenger loading/unloading
- Cargo loading/unloading
- Fueling
- Aircraft Maintenance

DRIVING ON THE RAMP

REQUIRES UNDIVIDED ATTENTION

With the amount of foot, vehicle, and air traffic on this airport, it is imperative that special caution be taken when driving around the ramp area. People can easily walk out from between aircraft or cargo/packages can be accidently left in an area where your vehicle can hit it. To reduce the risk of an accident please do the following:

Don't Speed: The speed limit on the airport is **15MPH**.

Don't Text And Drive: This is an unnecessary distraction and a State Law. If you need to send or reply to a text, simply stop your vehicle in a way that does not present a hazard to other vehicles or aircraft.

1.6 AIRPORT SIGNS, LIGHTS & MARKINGS

Understanding airport signs, lights and markings are critical for operating safely on the airport. They supply pilots and ground vehicles with information pertaining to their location on the airport, denote runways and taxiways, and identify other hazards.

This section provides a brief overview of the common signs located on the Minden-Tahoe Airport:

RUNWAY BOUNDARY MARKINGS & SIGNS

The runway boundary markings denote the entrance to a runway. They are identified as having four (4) yellow bars, two (2) of which are solid while the other two (2) are broken.

The Broken side signifies the runway side of the marking while the solid side acts as a stop sign. Crossing this marking onto the broken side places you on the runway. Before crossing, ensure that no airplanes are about to land or depart and that you have made the required radio call to alert pilots to your intentions of crossing the runway.

The ground markings are accompanied by a **RED SIGN w/ WHITE LETTERS** identifying which runway you are about to enter. If you are entering the runway at a mid-point intersection, such as in the picture above, you will see two numbers separated with a hyphen. In this case turning either right or left will place you on the respective runway.

TAXIWAY & DIRECTIONAL SIGNS

Taxiway and directional signs provide pilots with not only their location on the airport but directions on how to get to various areas on the airport. These signs commonly have two major parts:

BLACK BOX w/ YELLOW LETTERING - Where you are on the airport. This portion of the sign denotes where you are on the airport. In the picture provided above, you are located on Taxiway "Charlie"

YELLOW BOX w/ BLACK LETTERING - Directions or Information about the airport. This portion of the sigh provides information or directions. These can be directions to another taxiway, a Fixed Based Operator, or simple information such as a radio frequency or procedure.

AIRPORT LIGHTING SYSTEM

Runway edge lights are used to outline the edges of runways during periods of darkness or restricted visibility conditions. These light systems are classified according to the intensity or brightness they are capable of producing. The Minden-Tahoe Airport is equipped with High Intensity Runway Lights (HIRL). Runway lights have a few different colors:

WHITE	Runway Edge Lights that line the sides of the runway
AMBER	Runway Edge Lights that line the last 2,000 feet of the runway
RED	Mark the end of the runway
GREEN	Mark the beginning of the runway
BLUE	These lights, or often times also simple reflectors, denote the edge of a taxiway.

SECTION 2: NON-TOWERED AIRPORT OPERATIONS

Purpose: Provide an overview of operations at a non-air traffic controlled airport. Upon completion of this module, you should be familiar with the FAA rules and regulations governing the flight operation at a non-towered airport allowing you to safely operate around moving aircraft.

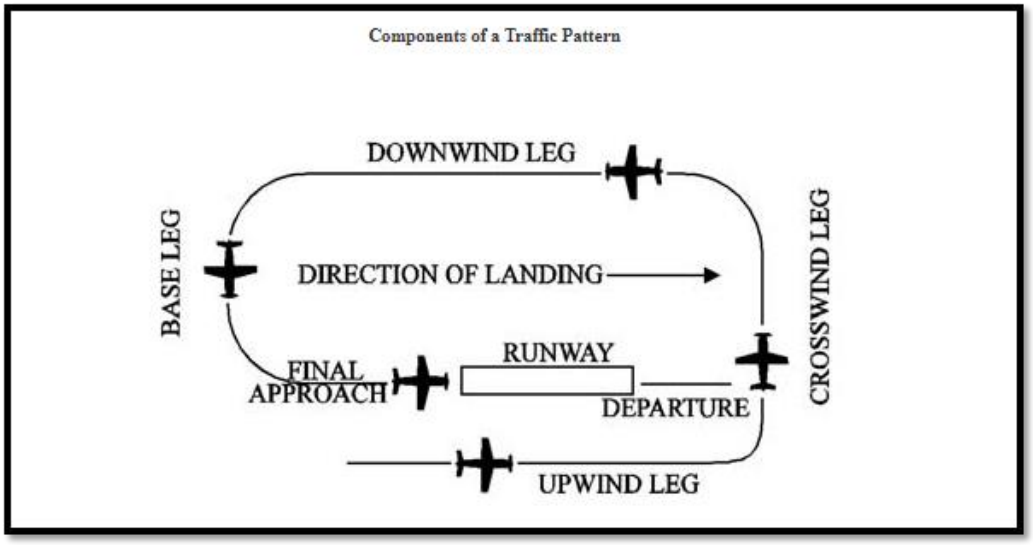
2.1 TYPES OF AIRPORTS

TOWERED: These airports have air traffic controllers, usually located in a tower, that direct air traffic who are arriving and departing the airport. Theses controllers also direct ground movements of taxiing aircraft and ground vehicles.

NON-TOWERED: These airports DO NOT have air traffic controllers directing air traffic. Rather, FAA rules and regulations govern their safe operation. It is paramount the pilots and ground vehicles understand and follow these rules.

MINDEN-TAHOE AIRPORT IS A NON-TOWERED AIRPORT

2.2 TRAFFIC PATTERNS



In an effort to standardize and sequence aircraft arrival at an airport, the FAA has developed and instituted the standard traffic pattern. The pattern is comprised of the following segments:

DEPARTURE/UPWIND: After the airplane departs the runway, or executes a "go around", they are considered to be on the upwind leg of the pattern and the aircraft generally will be gaining altitude.

CROSSWIND: When the airplane makes its first turn and is now perpendicular to the runway.

DOWNWIND: When the airplane is parallel to the runway, but traveling in the opposite direction. This is also where an aircraft will generally enter the traffic pattern.

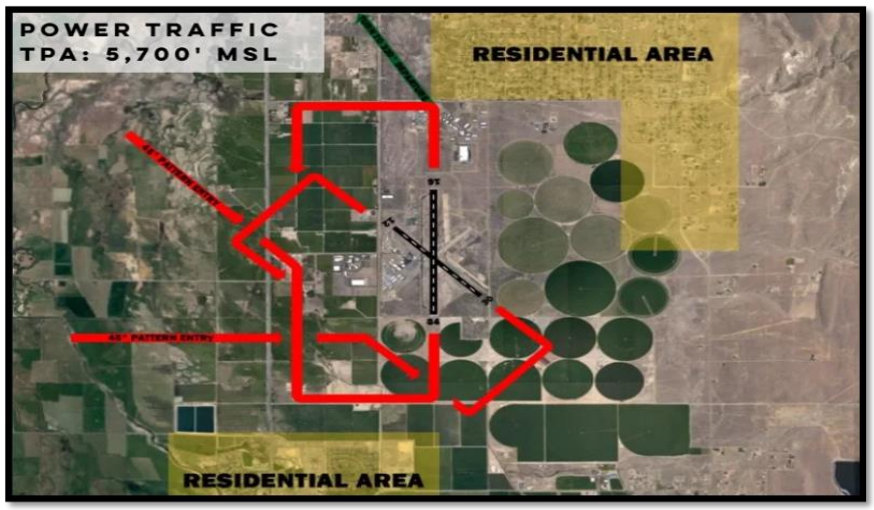
BASE: When the aircraft turns back perpendicular to the runway. At this point, the aircraft already has or will depart from the pattern altitude (approx. 1,000 feet above the runway altitude).

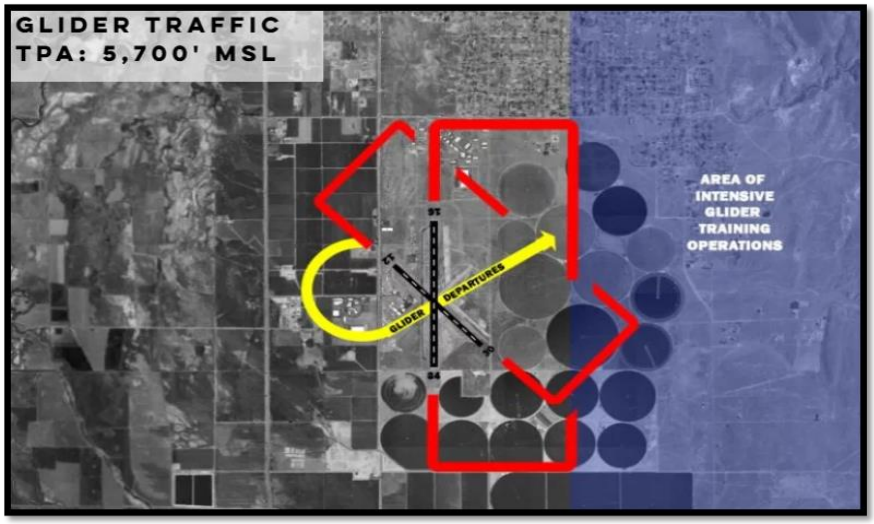
FINAL: This is when the airplane is lined up with the runway and about to land.

2.3 LEFT TRAFFIC VS. RIGHT TRAFFIC

In a normal pattern, all turns are made to the left unless otherwise specified by the airport. Minden-Tahoe uses both left and right traffic patterns to separate powered aircraft from glider traffic. Powered aircraft are kept to the west of the airport while gliders are kept to the east.

	POWERED	**GLIDER**
RUNWAY 34	LEFT	RIGHT
RUNWAY 16	RIGHT	LEFT
RUNWAY 30	LEFT	RIGHT
RUNWAY 12	RIGHT	LEFT
RUNWAY 30G	LEFT (EXTENDED BASE)	RIGHT





2.4 Utilizing the Radio

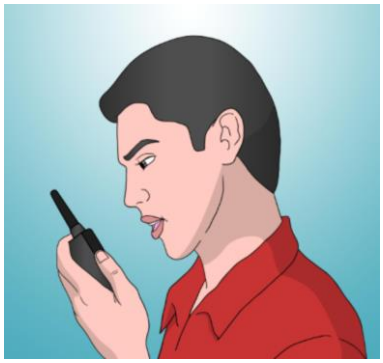
With Minden-Tahoe being a non-towered airport, pilots rely heavily on their radios to alert others to their position, intentions, and deconflict with other aircraft. It is critical in maintaining situational awareness while operating on the airport. Although it is very highly encourage, due the classification of airspace around Minden-

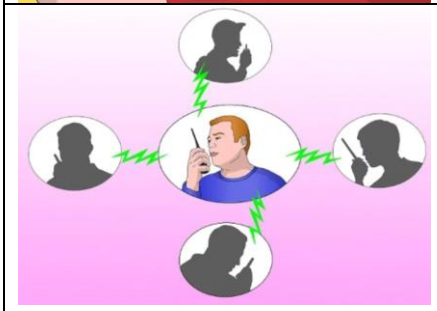
Tahoe, the FAA does not require airplanes to be equipped with a radio or communicate on the airport's frequency.

AC 90-66B, Sec 9.7
Pilots should be aware that procedures at airports without operating control towers generally do not require the use of two-way radios; therefore, pilots should be especially vigilant for other aircraft while operating in the traffic pattern.

Although the FAA may not mandate the use of a radio for aircraft, **MINDEN-TAHOE AIRPORT REQUIRES THE USES OF A RADIO FOR ALL GROUND VEHICLES** as outlined in the airport's rules and regulations. By receiving your access waiver, you are expected to communicate on the airport's Common Traffic Advisory Frequency (CTAF) whenever you are crossing a runway.

2.5 BASIC RADIO OPERATIONS

	ENSURE THE RADIO IS TURNED ON AND VOLUME IS SET	A radio will not serve you any good if you can't hear it. Make sure that you adjust the volume so you will be able to easily hear any pilots who are making their radio calls. One way to check the volume is to turn the squelch down so the radio makes the "hissing" sound. Once you have adjusted the volume, you can turn the squelch back up.
	THINK ABOUT THAT TO SAY THEN SAY IT	Take a moment to think and rehearse what you are going to say before you broadcast over the radio. Filler words like "umm" and/or long pauses can tie up the radio frequency and prevent others from broadcasting their important information or intentions.

	LISTEN, THEN SPEAK	Before jumping on the radio to make a call, listen for a few seconds to ensure that you are not going to interrupt an important conversation. Generally, the CTAF frequency will only be used for position reports, but occasionally pilots will talk to each other to ensure they are not in danger of colliding.
	KEY UP BEFORE TALKING	When you hit the push to talk (PTT) key on the radio, let there be a 1 or 2 second pause before you begin talking into the radio. If you fail to do this there is a chance the beginning of your transmission could be cut off
	LISTEN!!!	Once you have made your call on the CTAF listen for a moment to ensure that nobody is calling you back requesting more information or updates. If a pilot is unsure about where you are or what you are doing, they may reach out to you and ask for clarification. Make sure that you remain available to clear up any potential misunderstandings.

2.6 PHONETIC ALPHABET

Aviation utilizes the phonetic alphabet. This is done to avoid confusion between various letters in the alphabet that can lead to misunderstandings. Below is a chart of the alphabet and their assigned phonetic:

A Alpha	M Mike	Y Yankee
B Bravo	N November	Z Zulu
C Charlie	O Oscar	0 Zero
D Delta	P Papa	1 One
E Echo	Q Quebec	2 Two
F Foxtrot	R Romeo	3 Three
G Golf	S Sierra	4 Four
H Hotel	T Tango	5 Five
I India	U Uniform	6 Six
J Juliet	V Victor	7 Seven
K Kilo	W Whiskey	8 Eight
L Lima	X X-ray	9 Niner

2.7 Foreign Object Debris/Damage:

Foreign Object Debris: A substance or object on the airport that can cause damage to an aircraft. These can range anywhere from bolts, trash, and other objects that if impact an aircraft can cause damage.

Foreign Object Damage: Any damage done to an aircraft cause by an object entering an aircraft's engine, flight controls, of other systems.

DO YOUR PART: Fighting FOD is a community effort. If you come across FOD while operating on the airport, please remove it. If you are unsure about the situation, contact the airport's administration office and notify them of your concerns

SECTION 3: RUNWAY INCURSION

Purpose: To educate about the dangers of inadvertently entering a runway while an aircraft utilizing it for arriving or departing. At the end of this module, the candidate will understand the definition of a runway incursion and how to avoid being involved in this.

Click Above to Play Video

3.1 What is a runway Incursion?

FAA Definition:

"Any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in loss of separation with an aircraft taking off, intending to take off, landing, or intending to land."

In short, a runway inclusion is any situation that could result in a Collison between an aircraft landing/departing and aircraft or vehicles on the ground. **A loss of separation occurs whenever an aircraft or ground vehicle crosses the hold position markers** while an airplane is on the runway or on final approach.

3.2 YOU MAY NOT BE THAT VISIBLE

Here is the view from an aircraft landing on Runway 34. A vehicle towing a glider crosses the runway at midfield causing the aircraft to abort the landing. Notice how difficult it can be for a pilot to see you crossing a runway from the flight deck.

Click Above to Play Video

3.3 MINDEN-TAHOE'S BIGGEST SAFETY CONCERN

Of all the safety challenges the airport faces, runway incursions rank among the highest. Reports of runway incursions at Minden-Tahoe have a few reoccurring similarities:

I'm In A Rush: Often times, the individual is in a rush and fails to see an aircraft or chooses to cross while an aircraft is on final approach. PLEASE SLOW DOWN! Is saving a minute or two really worth the risk increase and possibly jeopardizing the safety of a fellow pilot?

But I Didn't Enter The Runway Itself: It is important to know that the white edge lines on the actual runway are NOT the "hold short" lines. The yellow runway boundary lines are where you need to stop and wait. The space between the yellow boundary line and the actual runway provides a safe area in case the aircraft loses control while on rollout.

But They Took Off Already: Not only does the aircraft need to be airborne, but they need to pass your location on the runway. If the aircraft were to suddenly experience an emergency, such as the loss of the engine, they may need the remaining runway to attempt a landing. If you cross in front of them while they are departing, you have taken away their available runway in the event of an emergency.

I Thought I Had Time To Cross: Sometimes it can be hard to judge the closing speed of an oncoming aircraft. A good rule is when an aircraft turns from base leg to final approach, they own the runway. Once more, is rushing to cross the runway worth jeopardizing the safety of the landing aircraft?

ADVOIDING A RUNWAY INCURSION

- Stop, look and be patient.
- Maintain situational awareness
- Minimize distractions
- Communicate on the radio
- Stop before the hold markings

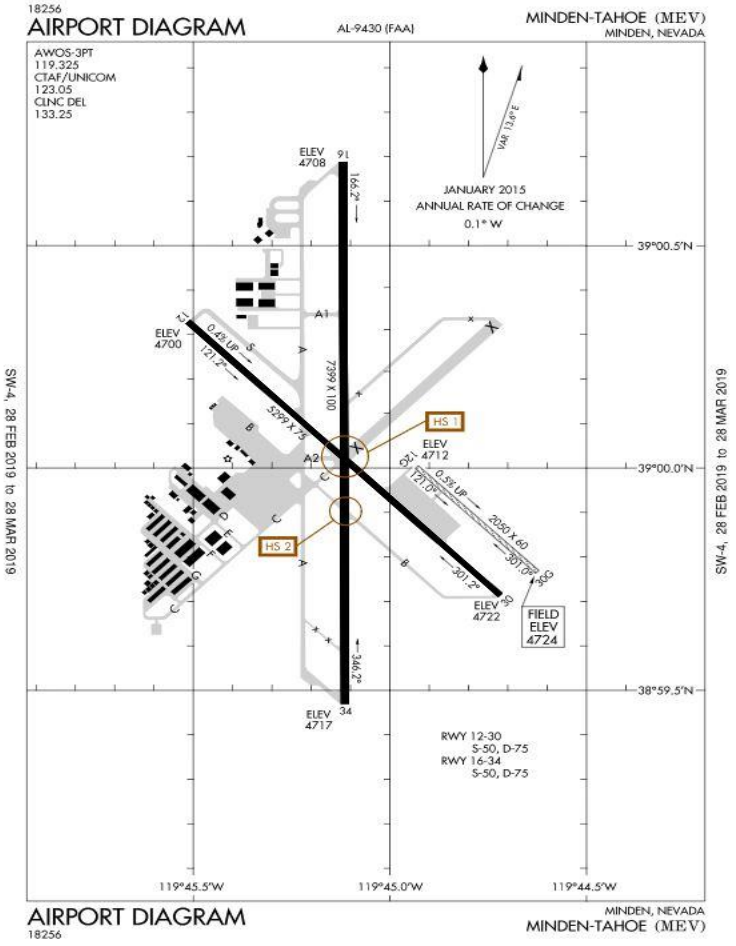
3.4 MINDEN-TAHOE'S HOT SPOTS

The airport has two "hot spots" where the FAA has determined there is an increased risk of runway incursions.

The two locations are:

(1) The intersection of Runway 16/34 and Runway 12/30 - Both runways can be utilized at the same time. This means that aircraft traveling at high rates of speed have the potential of crossing in front of each other. In addition, this is where most vehicles chose to tow their gliders across the runway.

(2) The intersection of Runway 16/34 and Taxiway Bravo - This is the only taxiway leading to the approach end of Runway 30. In the afternoon timeframes, the winds can pick up and favor this runway.



3.5 LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAND AND HOLD SHORT OPERATIONS DO NOT EXIST AT NON-TOWERED AIRPORTS

There is a growing myth that pilots can land and hold short of another runway here at Minden-Tahoe. Although Land and Hold Short Operations do exist, they are an air traffic control procedure that are authorized to occur at towered airports with appropriate FAA ground markings, and approved under specific weather conditions. LAHSO are not recognized by the FAA or insurance companies at non-towered airports. If you choose to coordinate with another pilot and they attempt to land and hold short, be aware that you may be held liable by the FAA and/or insurance companies if they fail to stop short of your location.

Click Above to Play Video

SECTION 4: LOCAL MINDEN-TAHOE AIRPORT PROCEDURES

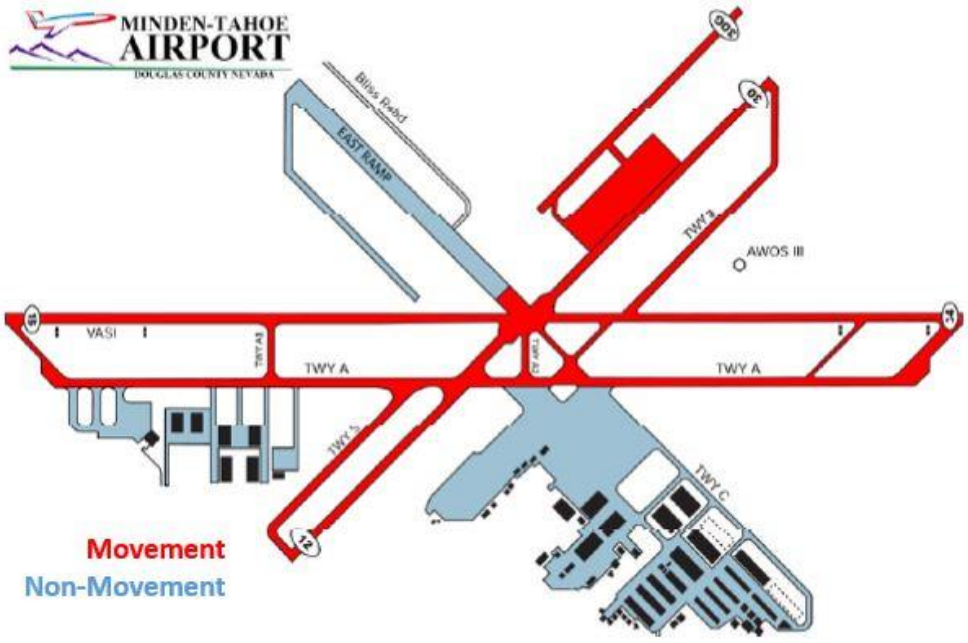
Purpose: To outline the local policies, procedures, and expectations while operating in the airport's access area. Upon completion, candidates will have a comfortable understanding the airport's rules and regulations.

4.1 MOVEMENT AREA

FAA Definition:

"The runways, taxiways, and other areas of an airport that are used for taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and aircraft parking areas"

The **ACCESS WAIVER IS REQUIRED FOR AND INDIVIDUAL TO OPERATE IN THE MOVEMENT AREAS** of the airport in a ground vehicle. The movement areas are identified in RED below:



4.2 ACCESS IS GRANTED BY THE AIRPORT ADMINISTRATION

Request for airport access is reviewed by the airport administration and determined upon individual needs and circumstances. The airport has two (2) levels of access:

Ramp Access: Given to individuals only needed access to the ramp and airport hangar areas. Provide by the administration office through the issuance of a gate card. Access is valid throughout the term of the

Access Waiver: Granted to individuals looking for access that allows the crossing of runways. This access is provided by the administration office and requires a classroom portion and exam covering the safe operation within the access area. The access waiver is valid for 24 months after issuance. Once expired, the individual will need to reapply for an access waiver. The access waiver must be on the individual's person while in the airport's movement areas.

4.3 REQUIRED EQUIPMENT

While in the movement areas, the vehicle will need to be equipped with each of the following:

DAY = Orange/White Flag (minimum 3' X 3' size)
Radio Tuned to CTAF

NIGHT = Amber Strobe (visible for 1SM in fair weather)
Radio Tuned to CTAF

** Airport Rules and Regulations | Chapter I, Section 5*

4.4 REQUIRED ACTIONS

While in the movement areas, individuals are expected to do the following:

Radio Tuned to CTAF: Announcements MUST be made before crossing any runway and upon clearing the runway.

Speed Limits: The speed limit on the airport is 15MPH. Remember, all federal, state, and local traffic laws are enforced on the airport.

Aircraft Have The Right Of Way: All vehicles will yield and give way to all aircraft

Parking: Vehicle must be parking in designated areas. On the main ramp, tie-down lease holders can park on their tie-down location while flying their aircraft or performing maintenance. On the East Side Ramp, vehicles should be parked in the dirt location on the west side of the ramp.

4.5 EMERGENCY PROCEDURES

If there are individuals requiring medical attention or the risk of fire, contact emergency services immediate. If no emergency services are required, or after dispatched, contact either the airport administration office or the non-emergency dispatch line to have an airport representative arrive on scene.

REMEMBER: Unless needed to access injured personnel, the NTSB and FAA request that you DO NOT touch or move any vehicles, debris, or equipment involved in the accident.

Normal Business Hours (Mon-Fri, 8am-5pm)
Emergency: 911
Airport Management: (775) 782-9871

Non-Business Hours & Weekends
Emergency: 911
Douglas County Non-Emergency Dispatch: (775) 782-5126

4.6 REVOKED ACCESS

Operating in the movement areas is a privilege. Your issuance of an access waiver means that an individual has demonstrated sufficient knowledge of non-towered airport procedures and understands Minden-Tahoe Airport's rules and regulations. An individual's access can revoked by airport management for any of the following:

- There is a violation of any airport rule or regulation
- An emergency incident or occurrence involving your access
- After notice, the vehicle impedes or interferes with maintenance of the airport or construction projects
- Vehicle impedes aircraft operations, creates a nuisance or hazard
- Vehicle is not legally registered.

SECTION 5: ACCESS WAIVER EXAM

Now that you have completed the classroom portion, you are now ready to take the exam. The exam covers all of the material covered in this course with a focus on the safe operation in the movement areas and the airport's rules and regulations. A score of 90% or greater is required to pass and be issued an access waiver.

Please click on the link below to take the exam

https://www.mindentahoeairport.com/exam