Airfield Driver Training Program

*This handbook is provided by the Abilene Regional Airport to acquaint all employees with the local procedures for operating vehicles on the airport. These rules and regulations are subject to change should circumstances dictate a need to revisit these procedures. It is the responsibility of airport management to disseminate pertinent changes and additions to this handbook. It is the responsibility of the tenant, employee, or contractor to ensure that all employees are properly trained in the policies and procedures for the operation of ground vehicles at the Abilene Regional Airport.

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Richard Middleton

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Introduction

This handbook presents guidelines and procedures designed to enhance the safety and efficiency of ABI's Airport Operating Area (AOA). In addition, this program is intended to assist in the elimination of runway incursions. This handbook contains information which should be thoroughly understood by all persons who intend to operate on the AOA.

It is extremely important that all persons who conduct AOA operations have a thorough understanding of the runway and airfield layout at the Abilene Regional Airport (ABI) as well as familiarity with applicable Air Traffic Control Tower (ATCT) procedures and movement within the AOA when the AOA is classified as an uncontrolled airport. Formal AOA training and the successful completion of all mandatory evaluations are required for all persons exercising AOA driving privileges at ABI.

Only individuals who have successfully completed the AOA Drivers Training Program will be permitted to conduct AOA Driving operations. Persons who successfully complete the Class II evaluation may operate in uncontrolled areas of the AOA only. Class I operators may operate vehicles and equipment on the controlled areas of the AOA. Any violation of the Rules & Regulations can result in the loss of your driver's classification and ID badge.

ALL DRIVERS START HERE

Drivers Training consists of both initial and recurrent instruction. Training can be scheduled throughout the year. Recurrent training is conducted annually or at the direction of Airport administration. The applicant should have complete knowledge of the material and good practical knowledge of operating on the airfield. Please contact Airport Staff (325) 734-5309 if you have any questions regarding the training process or make a testing appointment.

Initial Training

ABI has two types of driving privileges that are issued based on information provided by the applicants badge Authorizer during the badging process. Driving privileges will only be granted after the successful completion of all security background requirements. The two types of driving privileges are:

Class I - Authorizing movement within the Movement Area (Runways and Taxiways).
Class II - Authorizing movement only in Non-Movement Areas (Ramps).

All initial Training will be conducted at the Airport Terminal. This training is computer based with interactive participation and testing. Class I drivers will also be required to pass an Airport practical driving and communication test prior to driving privileges being authorized.

In order to successfully complete the initial training, the applicant must successfully complete the computer training with a passing score of 80% or better and all Class I drivers must pass the practical driving test as determined by a designated Examiner.

Recurrent Training

To maintain Airport driving privileges, each authorized Driver must also complete annual recurrent training based on the generation of the Airport's security badge. This recurrent training is intended to refresh drivers of the operating hazards and any special conditions that may exist.

Failure to participate in this required recurrent training will result in the revocation of AOA access and driving privileges. The individual who fails to renew the Airport access badge will be required to reapply and pass all phases of security badging and AOA drivers training to earn back their AOA driving privileges.

All Drivers should study and review this handbook prior to recurrent training. Recurrent training will be in a manner sufficient to allow the driver to maintain knowledge and proficiency to safely and effectively operate on the Airport.

Retesting after Failure

All driver applicants and badged individuals renewing their badge must successfully pass all parts of the driving test. Applicants who fail any portion of the test are not permitted to operate on the Airport. Retesting can be performed after 3 days.

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An applicant who fails the practical driving evaluation will immediately be critiqued on the areas of deficiency by the examiner. He or she may schedule a retest only after they complete training in the areas of deficiency with their employer and/or department supervisor.

Non-Compliance

Enforcement of the pedestrian and ground vehicle procedures and rules are applicable to airport employees, tenants and contractors and all instances of non-compliance shall be handled by the Airport Security Coordinator (ASC) and referred to the Director of Transportation Services for final disposition. The Director of Transportation Services has the final say on all non-compliance issues

Surveillance shall be maintained to ensure that only authorized vehicles and persons operate on the Airport and regulations are followed.

When violations are observed or reported, appropriate action will be taken. In the event a report is received of unauthorized vehicles or persons on the Airport, an Airport Operations officer, or Airport Law Enforcement officer will be dispatched to intercept and escort the violator from the area. A report will be prepared and kept on file concerning all incidents. Appropriate corrective action will be taken as determined by Airport Management.

Consequences

1. **First Offense:**
   Airport Officials will verbally warn the person of the violation.

2. **Second Offense:**
   The Director of Transportation Services will provide written warning to the person and their authorizer of the violation. Recurrent training will be conducted.

3. **Third Offense:**
   The Director of Transportation Services may revoke unescorted airport access.

Note: Any violation determined serious enough by the Director may result in immediate loss of all Airport driving and access privileges.

Records Retention

The Airport maintains a description and date of training completed by each individual operating in the movement areas, safety areas or aprons. To maintain AOA driving privileges, each authorized AOA Driver must also attend recurrent training. This recurrent training is conducted to refresh drivers of the operating hazards and any special conditions that may exist.

Accidents/Incidents

The Airport maintains records of accidents or incidents involving air carrier aircraft and/or ground vehicles. Records of each accident or incident are maintained INDEFINITELY.

Definitions

Accident – A collision between one aircraft or vehicle and another aircraft, vehicle, person, or object that results in property damage, personal injury, or death.

Air Carrier or Terminal Ramp – A ramp for air carriers. Only authorized personnel and vehicles may operate on this ramp. Private vehicles and aircraft are prohibited from operating on it without specific approval from the Director.

Aircraft – A device that is used or intended to be used for flight in the air.

Aircraft Rescue & Firefighting (ARFF) – Specialty equipment and personnel trained to respond to airport emergencies for airport rescue and firefighting.

Airport Operations Area (AOA) and Airside – The AOA consists of all restricted ground areas of the airport, including taxiways, runways, loading ramps, and parking areas. In other words, everything that is inside the perimeter fence. The AOA is divided into two distinct areas: the 'Movement' area and the 'Non-movement' area.

Airport – Abilene Regional Airport, owned and operated by the City of Abilene Texas.

Airport Traffic Control Tower (ATCT) – A facility using air to ground communications, visual signaling and other devices to provide air traffic control services to aircraft operating in the vicinity of the airport or aircraft or vehicles on the movement area.

Apron or Ramp – Area designed for loading or unloading passengers and/or cargo, refueling, catering, parking or maintenance of aircraft.

Common Traffic Advisory Frequency (CTAF) – Radio frequency designed for the purpose of carrying out airport advisory practices while operating to or from an airport without an operating ATCT or when the tower is closed. The common traffic advisory frequency at the Abilene Regional Airport is 122.95 MHz.

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Federal Aviation Administration (FAA) – The federal agency charged with the administration and oversight of the national airspace system, including, but not limited to, air traffic control and airport operators.

Fixed Base Operator (FBO) – A person, firm, or organization engages in a business that provides a range of basic services to general aviation. Services may include the sale and dispensing of fuel, line services, aircraft parking and tie-down, pilot and passenger facilities, airframe and power plant maintenance, aircraft sales and rental, and pilot instruction.

Foreign Object Debris (FOD) – Debris that can cause damage to aircraft engines, tires, or skin from rocks, trash, or the actual debris found on runways, taxiways, and aprons.

General Aviation (GA) – That portion of civil aviation that encompasses all facets of aviation except air carriers holding a certificate of public convenience and necessity.

Ground Vehicle – All conveyances, except aircraft, used on the ground to transport persons, cargo, fuel, or equipment.

Hold Short Line – A pavement marking made up of two solid yellow stripes followed by two broken (dashed) stripes located across a taxiway. The solid stripes of this marking must be considered like a STOP sign. The marking means you are near an active runway. You must receive clearance via radio from the Air Traffic Control Tower to cross a hold line and enter a runway.

ILS Critical Area – An area provided to protect the signals of the localizer and Glide-slope.

Incursion – Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.

Jet Blast – Jet engine exhaust or propeller wash (thrust stream turbulence).

Law Enforcement Officer (LEO) – Any person vested with police power of arrest under Federal, State, County, or City authority and identifiable by uniform, badge and other indication of authority.

Light Gun – A hand held, directional light-signaling device that emits a bright narrow beam of white, green, or red light, as selected by the tower controller. The color and type of light transmitted can be used to approve or disapprove anticipated pilot or vehicle actions where radio communication is not available. The light gun is used for controlling traffic operating in the vicinity of an airport and on the airport movement area.

Mobile Fueler – A vehicle owned and/or operated by authorized agents to transport and dispense Jet A and 100LL fuel at ABI.

Movement Area – The runways, taxiways, and Safety Areas of an airport that aircraft use for taxiing, takeoff, and landing, exclusive of loading ramps and parking areas, and that are under the control of an air traffic control tower.

Navigational Aids (NAVAIDS) – Electronic equipment located near runways and taxiways. They provide horizontal and/or vertical guidance to aircraft.

Non-Movement Areas – Taxiways, aprons, and other areas not under the control of air traffic.

Operator – Any person who is in actual physical control of an aircraft or motor vehicle.

Owner – A person who holds the legal title of an aircraft or motor vehicle.

Pedestrian – Person on foot.

Restricted Areas – Areas of the airport posted to prohibit or limit entry or access by the general public. All areas other than public areas

Runway - A defined rectangular surface on a land airport prepared for the landing and takeoff run of aircraft along its length.

Runway in Use or Active Runway – Any runways or runway currently being used for takeoff or landing. When multiple runways are in use, they are all considered active runways.

Runway Safety Area - 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.

Security Identification Display Area (SIDA) - A TSA designated restricted area. Each person must wear an airport issued or airport approved identification medium on your outermost garment unless under airport approved escort.

Taxiway – Those parts of the airside designated for the surface maneuvering of aircraft to and from the runways and aircraft parking areas.

Tie Down Area – An area used for securing aircraft to the ground.

Uncontrolled Airport – An airport without an operating airport traffic control tower or when airport traffic control tower is not operating.

Vehicle Service Road/Perimeter Road – A designated roadway for vehicles in a non-movement area.

Wake Turbulence – Phenomenon resulting from the passage of an aircraft through the atmosphere. The term includes vortices, thrust stream turbulence, jet blast, jet wash, propeller wash, and rotor wash both on the ground and in the air.

The AOA

In order to understand the differences between movement and non-movement areas we must first understand what the Airport Operations Area (AOA) is. The AOA consists of all restricted ground areas of the airport, including taxiways, runways, loading ramps, and parking areas. In other words, everything that is inside the perimeter fence. The AOA consists of both Movement Area and a Non-Movement Area, see Appendix B-1, 2, and 3. The boundary between the Movement Area and the Non-Movement Area is marked with a surface painted Non-Movement Area Boundary Marking. This marking consists of two yellow lines (one solid and one dashed).

AOA Access Gates

All of the AOA is enclosed by the airport perimeter fence. The portions that are not fenced are bordered by various Abilene Regional Airport tenant buildings. The vehicle and Pedestrian gates along the perimeter that are controlled by the Abilene Regional Airport use a variety of access control systems, computer access system, Best Key System.

Warning signs are posted at each vehicle gate allowing direct access to the secured area. At least one sign is visible from any point along the perimeter fence, (adjacent to the secured area) with no more than 150 feet between signs.

It is the responsibility of anyone that enters or leaves a gate to ensure that is has closed and is secured completely before driving away from it. In the event you find that the gate does not close properly or if you find a gate that has inadvertently been left unlocked or will not close, contact the Airport Operations at (325) 676-6369. The phone number to Airport Operations is printed on the bottom of your badge.

Do not leave an opened gate unattended.

Airport badges shall not be transferred to other users and any misconduct in the use of access badges shall be grounds for revocation of AOA access privileges.

All persons operating on the Abilene Regional Airport AOA are governed by the procedures and rules set forth by the Abilene Regional Airport, Transportation Security Administration, and Federal Aviation Administration. Any deviation from these regulations is grounds for suspended or revoked AOA privileges. Security is not optional!

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AOA Hazards

Many hazards are associated with the AOA environment. Anyone who operates on the AOA must be able to detect and avoid these dangerous hazards and situations. Further, they should know the proper procedures to take in regards to safety for themselves and others.

Propellers

Moving propellers pose danger to personnel, vehicles, and equipment. You should never walk or park equipment within the operating arc of a propeller. When the aircraft engines are running personnel should always stay in the pilot's field of vision. A good way to tell if an aircraft engine is about to start, or is already running, is to see if the aircraft's anti-collision lights are operating. These lights are red flashing beacons, and can usually be found on the tail or belly of the aircraft.

Jet blast and weather hazards

A jet using takeoff power can blast hurricane force winds over 200 feet behind the aircraft. Jet engines at idle thrust can produce winds of at least 35 mph. Engine blast can damage or even overturn an airplane or vehicle. To avoid excessive jet blast, you should stay a safe distance behind a jet with its engine operating, even when it is at idle thrust.

Inclement weather hazards

A variety of atmospheric and terrain conditions can produce visual illusions and a hazardous AOA operating environment. Weather hazards encountered on the AOA may include reduced visibility, thunderstorms, and snow and ice conditions. Rain, snow, and ice can obscure important visual markings and signs. AOA operators should be able to recognize and be familiar with these hazardous situations.

Reduced visibility

When visibility is reduced the ability to judge distances of other object is greatly affected. Vehicle operators should use headlights, parking lights, and beacons (if equipped), on all areas of the AOA, to increase their visibility to others. In addition, driving speeds should be adjusted so that the operator can accommodate greater reaction time.

Just as visibility affects vehicle drivers and personnel, poor visibility is also a challenge for pilots. Vehicle operators and ramp personnel should be aware that pilots may not see you while taxiing. Ramp personnel should always wear high-visibility clothing and utilize appropriate marshaling equipment such as lighted wands.

Thunderstorms

Thunderstorms are a significant threat to operators on the AOA. Thunderstorms can produce hazardous conditions such as poor visibility, heavy rain, strong winds, hail, lightning, and even tornados. Persons on the AOA should remain vigilant by monitoring weather forecasts for severe thunderstorms. When a severe thunderstorm warning is issued, AOA operators should immediately commence procedures to exit the AOA and take shelter.

Statistically, lightning contributes for more injuries and deaths than any other weather related phenomenon. Lighting will typically tend to strike the tallest object. Unfortunately, to a lightning bolt, you are the tallest object on the AOA. When you hear/see lightning is in the airport vicinity, you should immediately exit the AOA. Fueling operations shall be terminated if lightning is detected within five (5) miles of the Abilene Regional Airport. This is critical at the FBO's self-fueling site.

Winter operations

Snow & ice contributes to another weather hazard. These conditions produce slippery pavement surfaces. Signs and markings are usually obscured, making navigation on the AOA more difficult. Vehicle operators should give themselves greater stopping distances and give way to accommodate snow removal equipment. Also, operators should be aware of their vehicle limitations, especially in regards to its capability of maintaining traction. The use of traction devices, such as tire-chains or tire-studs, are prohibited on the AOA.

During a snow storm event, snow removal crews make the clearing of runways and taxiways their first priority. Vehicle operators should use good judgment on whether their vehicle can handle operation on all surfaces.

Foreign Object Debris

Foreign object debris (FOD) at airports includes any object found in an inappropriate location that -- as a result of being in that location -- can damage equipment or injure airplane or airport personnel. The resulting damage is estimated to cost the aerospace industry over $4 billion a year. Airports, airlines, and airport tenants can reduce this cost by taking steps to prevent airport FOD.

Sources of FOD

FOD includes a wide range of material, including loose hardware, pavement fragments, catering supplies, building materials, rocks, sand, pieces of luggage, and even wildlife. FOD is found at terminal gates, cargo aprons, taxiways, runways, and run-up pads. It causes damage through direct contact with airplanes, such as by cutting airplane tires or being ingested into engines, or as a result of being thrown by jet blast and damaging airplanes or injuring people.

Airlines and airport tenants generate much of the FOD found in gate areas, service roads, and baggage makeup areas. Refueling, catering, cabin cleaning, and baggage and cargo handling can produce broken materials. Personal belongings, such as pens, coins, identification badges, hats, soda cans, paperwork, and any other object that airport or airline personnel carry can become FOD if inadvertently left in an inappropriate location.

The deterioration, maintenance, and construction of the airport infrastructure can contribute to FOD. For example, pieces of concrete can break loose from holes in pavement or from fatigue corner cracks, and building materials can fall from construction vehicles or be blown from gate areas onto airplane maneuvering areas.
Broken pieces of pavement can collect at the edge of the gate area and be carried onto the airplane maneuvering area by the tires of vehicular ground support equipment (GSE).

FOD typically peaks during the early spring, when airports often begin construction activities, and during the winter because of operations in snow and ice.

FOD prevention

Identifying the sources of FOD is the first and most important step in preventable measures. It is particularly important to alert personnel of the safety hazards created by debris. In addition, employees and tenants should be trained to recognize the causes and contributing factors to FOD that are related to their work routine. Personnel on the AOA should create good work habits and follow correct procedures. Designated storage areas for ladders, hoses, tools, and other work aids should be established. Personnel should practice good housekeeping technique and account for all tools, hardware, and equipment.

Vehicles should be inspected for traces of mud, dirt, and debris prior to entering the AOA. These FOD producing materials should be washed off the vehicle before being used on the AOA. If your vehicle inadvertently leaves debris on the AOA you are responsible to clean it up. Contact Airport Operations and report all instances of FOD generation.

You can help make Abilene Regional Airport safer by placing all your trash in a sturdy, covered container that cannot be blown over by wind, prop wash, jet blast. Also, get in the habit of looking for, stopping and picking up any FOD lying on the ground. Keep an eye out for nails, bolts and other items that can puncture tires or be sucked into a jet engine. If you discover a serious debris problem greater than what you can alleviate yourself, report it immediately to the Airport Operations at (325) 676-6369.

Accidents and emergencies

If immediate emergency response is needed, such as the need for medical services, a 911 call should be made without delay. Operators involved in or in witness to an accident on the airport that results in injury to a person or damage to an aircraft, airport property, or another vehicle shall report the accident immediately to 911. After reporting the incident to 911, contact Airport Operations at (325) 676-6369. The vehicle operator will immediately stop and remain at the scene of the accident. Render reasonable assistance, if capable, to any person injured in the accident. Provide the following to any responding Airport Operations Officer: name and address, airport badge number, and any information such personnel need to complete an incident report.

IN ALL CASES OF EMERGENCY CALL 911
And
Airport Operations
(325) 676-6369

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Types of driving privileges

Now that we have an understanding of what the AOA is and the hazards within the AOA, let discuss the two types of Licensing privileges here at the Abilene Regional Airport.

CLASS II Driving Privilege

Class II driving privileges authorize pedestrian and vehicle movement within specific per-approved non-movement areas of the Airport only. Class II driving privileges does not authorize unlimited access to non-movement areas of the Airport; only that specific area your Authorizer requested for you.

Non-movement area operations

Non-movement areas include ramps, aprons and other areas not under the control of ATCT. Anyone authorized to operate a motorized vehicle on the AOA may do so on the non-movement areas without being in positive radio contact with ATCT. Class II vehicle operators are not authorized to enter the movement area.

Operating within the ramp areas requires the vehicle driver to exercise extreme caution as aircraft are moving, aircraft passengers may be walking from an aircraft to a gate, and noise levels are high. Parked aircraft may still have their engines running, so be aware of the hazards of jet blast or prop wash, which may overturn vehicles. Propellers and jet engines can cause significant injury or death to personnel. The flashing beacon on an aircraft indicates that an aircraft is running or about to start.

Vehicle drivers should yield to, aircraft and emergency vehicles; aircraft ALWAYS have the right-of-way on any portion of the airport. Be aware of cockpit blind spots. Cockpit visibility prohibits the pilot from seeing under the nose or behind the aircraft limiting the pilot's ability to avoid ground vehicles. Driving close to buildings, around vehicles, or aircraft is prohibited. Drivers shall obey all signs and markings.

There are additional risks present under nighttime and poor weather conditions. Poor weather conditions might obscure visual cues, roadway markings, and airport signs. Vehicle operators should remain vigilant of their surroundings and operator boundaries. Watch out for snow removal equipment and aircraft operating in the vicinity under low-visibility conditions.

General

1. All State of Texas and City of Abilene traffic laws and codes shall apply on the Non-Movement Area.
2. Vehicle operators and pedestrians shall comply with all operating procedures and rules established by the FAA and the Abilene Regional Airport.

Pedestrian Requirements

1. No pedestrian shall be permitted on the non-movement area unless authorized by their badge or under positive control while being escorted by an individual badged and authorized to be in that specific non-movement area. Positive control is defines as under visual observation and within distances to ensure verbal communication.

Vehicle Operator Requirements

1. No vehicle shall be operated on the non-movement area unless the driver has, in his or her possession, an approved, airport issued badge marked Class II and a valid state driver's license.
2. No person operating or driving a vehicle on any aircraft ramp shall exceed a speed greater than 15 miles-per-hour. Factors including, but not limited to, weather and visibility shall be taken into consideration when determining a safe operating speed. Designated emergency vehicles responding to an incident are exempt from this requirement.
3. All other vehicles must drive to the rear of the aircraft and shall pass no closer than 10 feet from any aircraft.
4. Vehicle drivers shall yield to, aircraft and emergency vehicles, which ALWAYS have the right-of-way on any portion of the airport.
5. No Class II vehicle operator or pedestrian shall enter the movement area.
6. No person shall operate any motor vehicle that is in such physical or mechanical condition as to endanger persons or property or that the Abilene Regional Airport considers an endangerment.
7. When not serving aircraft or undertaking their intended functions, ramp vehicles and equipment shall be parked only in approved areas.
8. No person shall park, or leave unattended, vehicles or other equipment that interfere with the use of a facility by others or prevent movement or passage of aircraft, emergency vehicles, or other motor vehicles or equipment.
9. No vehicle operator shall park any vehicle or equipment within ten (10) feet of either side of the airport perimeter security fencing except in approved parking areas.
10. No person shall park a vehicle or equipment within 25 feet of a fire hydrant or in a manner that prohibits access to a fire hydrant.
11. No person shall operate a vehicle or other equipment while under the influence of alcohol or any drug that impairs, or may impair, the operator's abilities.
12. Each vehicle operator using our non-movement areas access gate shall ensure the gate closes behind the vehicle prior to leaving the vicinity of the gate. The vehicle operator shall also ensure no unauthorized vehicles or persons gain access to the airside while the gate is open.
13. Vehicle operators shall not operate vehicles in a reckless or careless manner. A reckless or careless manner is one that intentionally, or through negligence, threatens the life or safety of any person or threatens damage or destruction of property. Airport Staff has the authority to identify and classify any reckless or carless vehicle or equipment operations.
14. Vehicles operated by a person with Class II driving privileges shall not enter the movement area.

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15. Personal vehicles are not authorized on the Terminal Ramp unless specifically authorized by the Director.
16. Class II operators is responsible for the activities of escorted vehicle passenger.
17. At no time is a vehicle authorized to leave any paved surface.
18. A Class II authorized person shall not enter a Movement Area as a pedestrian.

Vehicle Regulations

1. All street legal vehicles operated on the airside must have current valid vehicle liability insurance, as required by the State of Texas for that type of vehicle.
2. Vehicles operated on the movement area shall be approved by the Abilene Regional Airport.
3. No Vehicle shall be permitted on the non-movement area unless it is in sound mechanical condition. This includes a vehicle leaking fluids, unable to self-start, or any other mechanical condition that prohibits the vehicles immediate movement.
4. Vehicles shall not have any objects that obstruct vision from the driver's seat.

Non-movement area boundary markings

A non-movement area boundary marking delineates a movement area under air traffic control. These markings are yellow and located on the boundary between the movement and non-movement area. They normally consist of two yellow lines (one solid and one dashed). The area designated on the dashed yellow line side is the Movement Area. As a Class II operator NEVER CROSS A SOLID YELLOW LINE.

(MOVEMENT AREA)

(NON-MOVEMENT AREA)

Use of Perimeter Road

Class II vehicle operators are NOT authorized to use the Perimeter Road between the FBO Ramp and the Northwest Side.

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Class II operators are ready for their exam located in Appendix E.

ONLY CONTINUE IF YOU ARE APPLYING FOR CLASS I DRIVING PRIVILEGES.

CLASS I Driving Privilege

Movement Area Operations

Movement areas are defined as the runways, taxiways, and security areas of the airport that are used for taxiing, hover taxiing, air taxiing, and takeoff and landing of aircraft, exclusive of loading ramps and aircraft parking areas. Movement areas are considered "positive control," meaning that all vehicle operators and pedestrians will need permission from ATCT before entering the area. See Appendix B-3.

Only those vehicles necessary for airport operations may enter a movement area. Nonessential vehicles shall not be permitted to enter these areas. Exceptions may include authorized vehicles and appropriately trained personnel that are permitted by the Abilene Regional Airport.

Drivers who are authorized to drive on the movement area require more training and vigilance since there are dangers associated with this area that are not present on the non-movement areas. In addition to the principles and procedures for operating in the non-movement area, drivers who have access to the movement area must be cognizant of the meaning of airfield signs, markings, and lighting configurations. Additionally, they must be able to communicate proficiently with air traffic control (ATC) and be able to follow ATC instructions.

Limiting Access - Personnel and Equipment

Pedestrians and ground vehicles with Class I privileges are authorized by the Abilene Regional Airport, to operate on movement areas and safety areas at the airport are limited to those Class I pedestrians and vehicles necessary for airport operations and include the following type of vehicles:

1. Airport owned vehicles equipped with ground-to-air (ATCT) radio and roof top beacon;
2. FAA Facilities vehicles authorized for maintenance of FAA equipment and equipped with ground-to-air (ATCT) radio and roof top beacon;
3. Abilene Aero owned vehicles equipped ground-to-air (ATCT) radio and equipped with roof top beacon;

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4. Authorized construction vehicles: Other individuals who need access to the movement areas are escorted by qualified personnel or they are required to complete the airport's ground vehicle training program prior to operating a vehicle equipped with a roof top beacon or flag, on the aircraft movement area. Copies of the airport's ground vehicle procedures are distributed to all employees authorized to operate a vehicle on the movement areas or safety areas;
5. Pedestrians must wear a safety yellow or orange reflective vest and carry a working ground-to-air radio.

Controls

All of the AOA is enclosed by the airport perimeter fence. The portions that are not fenced are bordered by various Abilene Regional Airport tenant buildings. The vehicle and Pedestrian gates along the perimeter that are controlled by the Abilene Regional Airport use a variety of access control systems, computer access system, Best Key System.

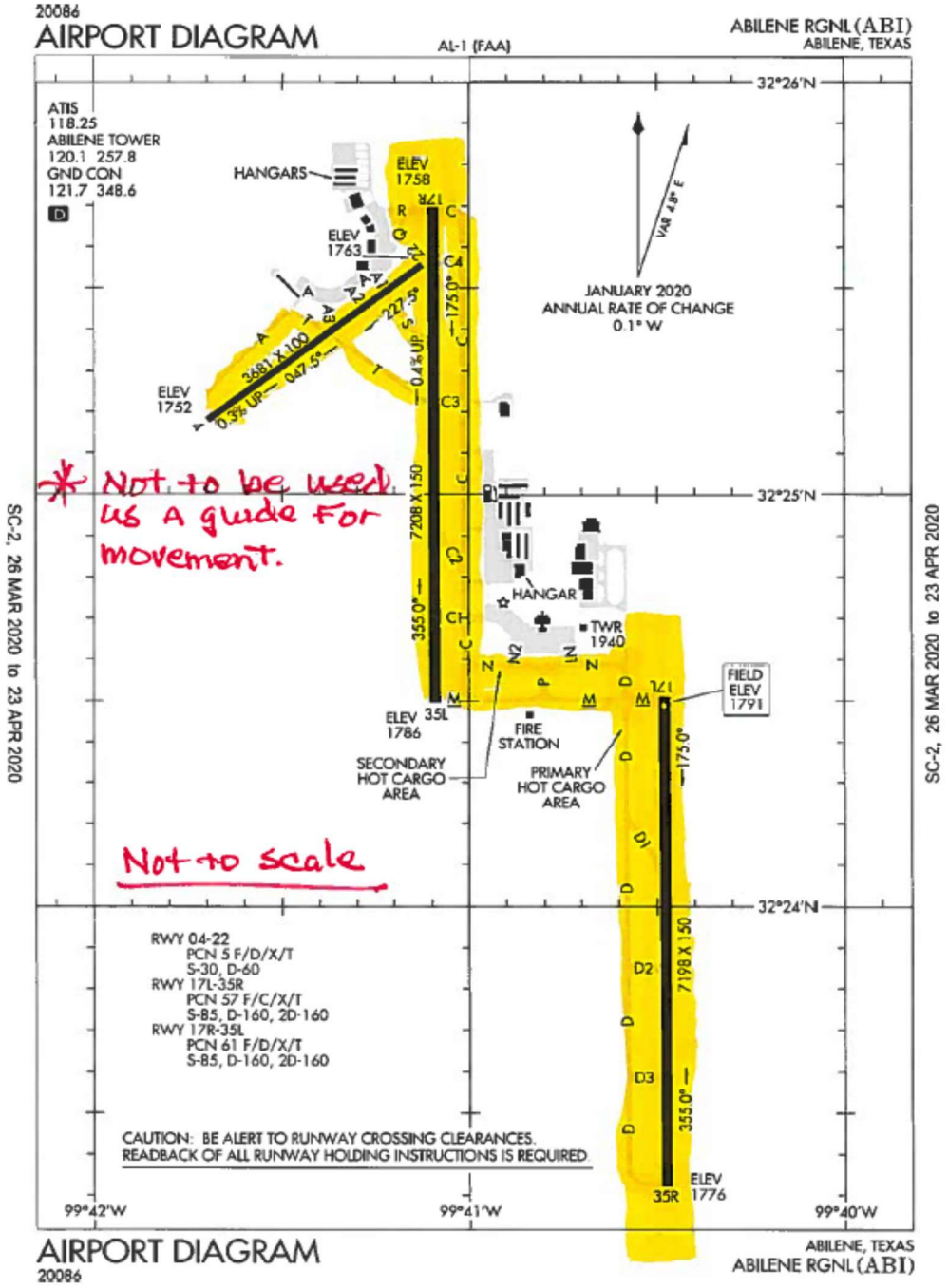
Warning signs are posted at each vehicle gate allowing direct access to the secured area. At least one sign is visible from any point along the perimeter fence, (adjacent to the secured area) with no more than 150 feet between signs.

Procedures

When the Abilene Regional Airport FAA Air Traffic Control Tower is in operation, each pedestrian and ground vehicle in the movement or safety areas is controlled by one of the following:

1. Two-way radio communications between each pedestrian, or vehicle and tower;
2. An escort with two-way radio communications with the tower that is accompanying a pedestrian, or vehicle without a radio;
3. Measures authorized by the ABI FAA Tower Manager and Director of Transportation Services for controlling pedestrians and vehicles; such as signs, signals, or guards, when it is not operationally practical to have two-way radio communications between the tower and the pedestrian, vehicle or escort.
4. The driver is the sole radio operator and is responsible for vehicle and ATC radio communications.

Example of Movement Area



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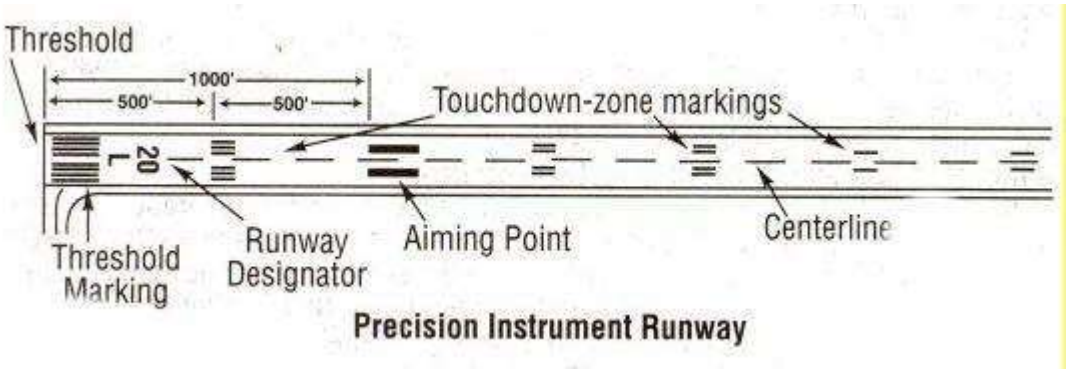
Airport Visual Aids

Just as you learn how to interpret traffic signals, road signs, and highway markings, you will soon become familiar with the visual aids at an airport that help you maintain orientation. There are markings and signs used at airports, which provide directions and assist pilots and vehicle operators in airport surface operations.

Runway markings are painted white and vary depending on the type of operations conducted at the airport. Visual runways usually are marked with only the runway number and a dashed centerline, while instrument runways may have additional reference markings to assist pilots in locating the landing portion of the runway.

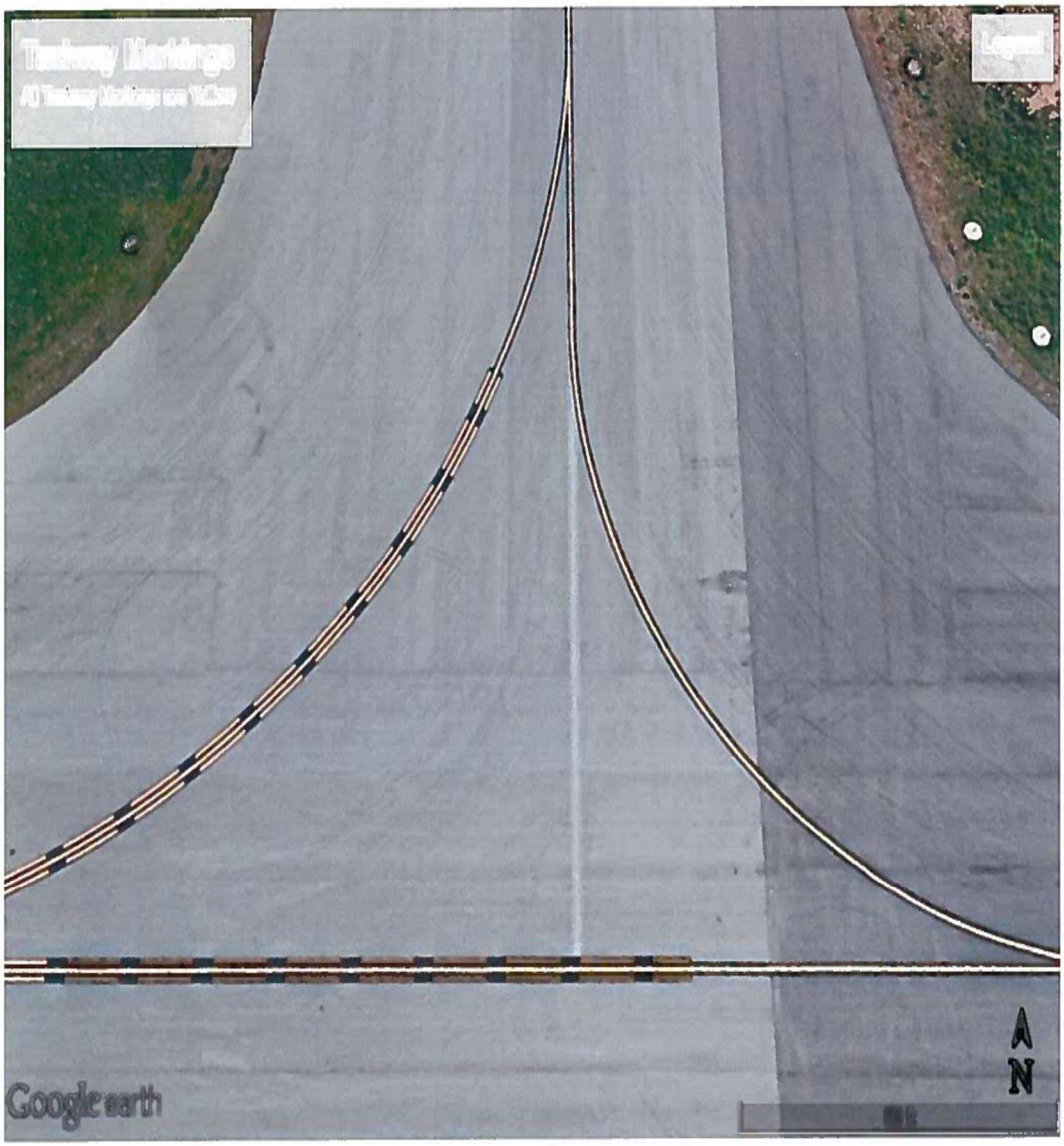


Precision Instrument Runway

Since aircraft are affected by the wind during takeoffs and landings, runways are laid out according to the local prevailing winds. The numbers that you see on runways are not arbitrary, but correspond to magnetic degrees of a north reference. The runway's magnetic direction is rounded off to the nearest 10 degrees, with the last zero omitted. A runway with a magnetic direction of 220 degrees becomes Runway 22. The runway numbers marked at the opposite ends of a runway are 180 degrees from each other. For example, our runways labeled 17 on one end is labeled 35 on the opposite end. Runway numbers are typically painted just beyond the threshold markings. Runway threshold markings identify the beginning of the runway that is available for landing.

Taxiway markings

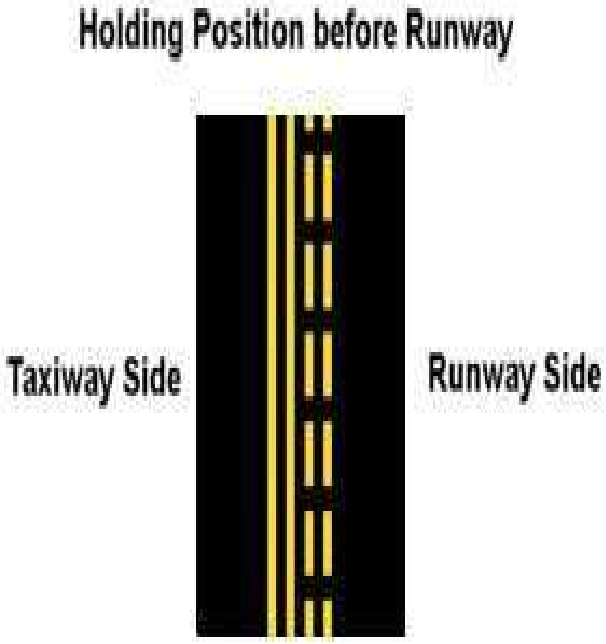
Airplanes use taxiways to transition between parking areas and the runway. Taxiways are identified by a continuous yellow centerline stripe. A taxiway may include edge markings to define the edge of the taxiway. This is usually done when the taxiway edge does not correspond with the edge of the pavement.



Taxiway Mike- Charlie Intersection

Hold position markings

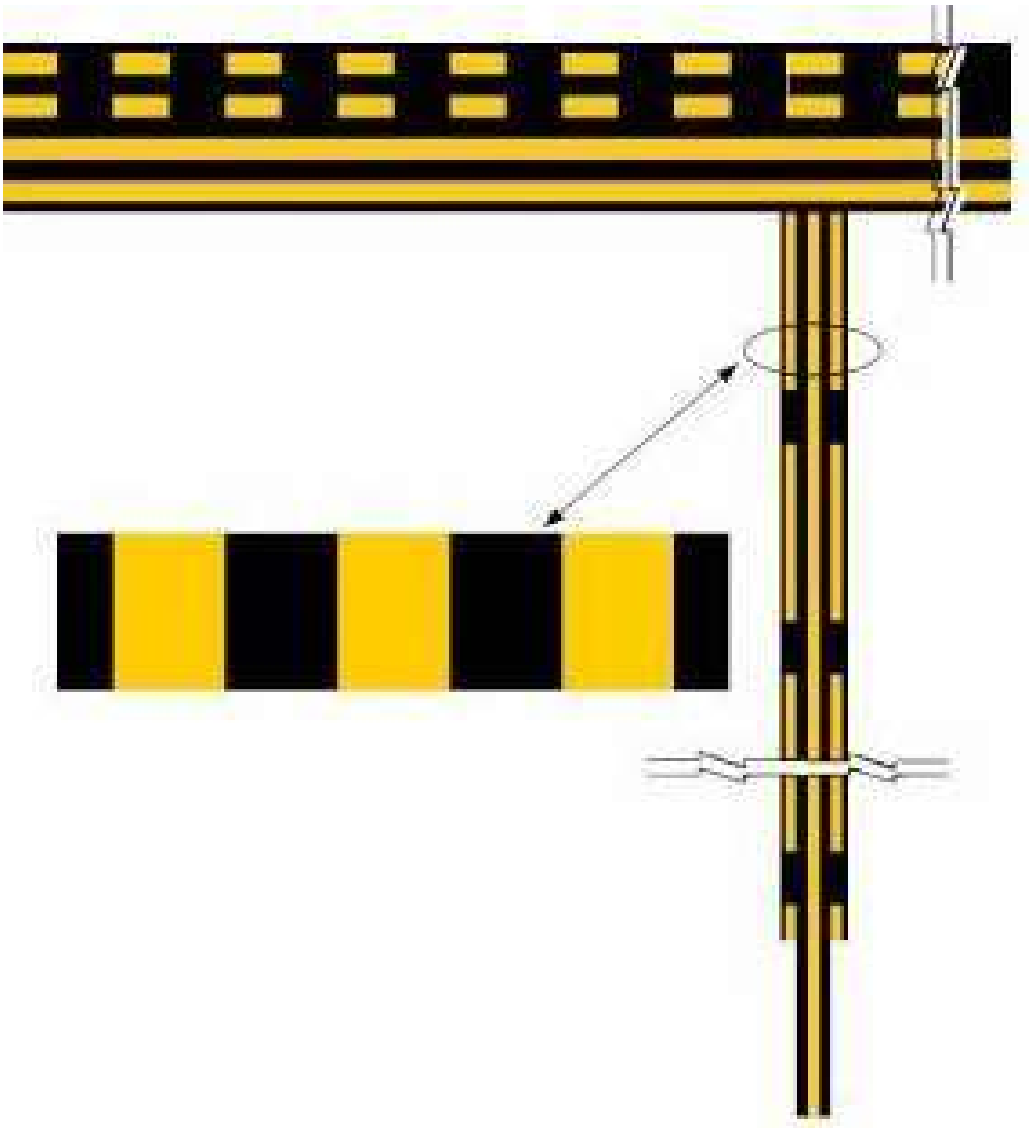
Hold position markings consist of four yellow lines (two solid and two dashed). Hold position markings are painted at a determined distance to keep vehicle operators, pedestrians, or pilots from entering the runway safety area, jeopardizing both the safety of you and the aircraft using the runway for takeoff or landing. The side of the hold position marking with the two solid lines is where aircraft and vehicles are to hold. Where hold position markings are present, there will always be an accompanying hold position sign.

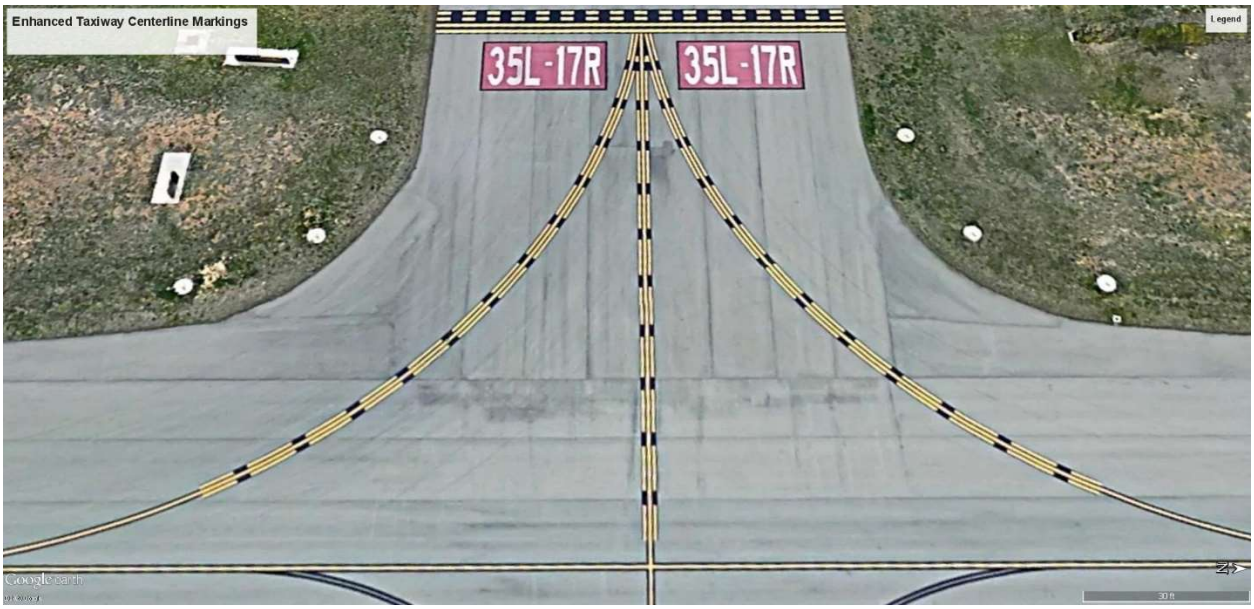


When ATCT is in operation, the controller may ask you to hold short of the runway. In this case, you must stop before the hold line and proceed only after you are cleared to do so by the controller, and you have checked for traffic. During the periods that ATCT is closed, you should stop and check for traffic, make a radio call on 122.95 stating intentions and ensure no aircraft is operating in the area. Cross the hold line only after ensuring that no aircraft is using the runway for landing, takeoff, or taxi. When exiting the runway, do not stop until you have cleared the hold line. Then make a radio call that you are clear of that runway. More specific guidance can be found on page XX.

Enhanced Taxiway Centerline Markings

May be present at some airports, and will appear before a runway hold line, as illustrated below. These markings are intended to serve as an additional warning to flight crews that they are approaching the runway.

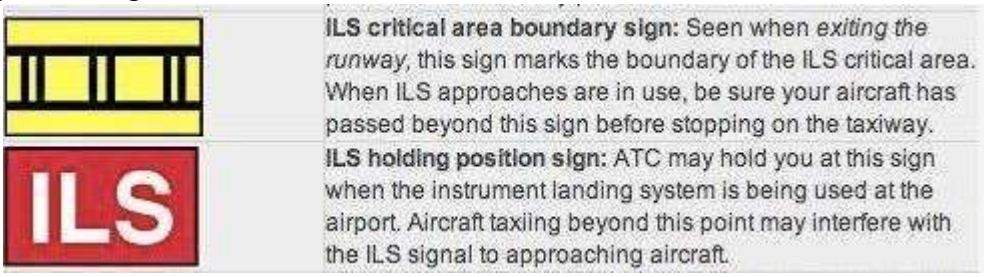




Enhanced Taxiway Centerline Markings at Charlie 3

ILS critical area markings

On the runways equipped with an instrument landing system (ILS), it is possible for vehicles or aircraft near the runway to interfere with the ILS signal. The Abilene Regional Airport is equipped with ILS Approaches on Runways 35R. When ILS approaches are in progress, you may be asked by the controller to "…hold short of the ILS critical area." At the Abilene Regional Airport ILS signage is to the east of 35R along the service road. If the controller asks you to "…hold short of the ILS critical area" you must hold short at this signage. Normally, where ILS holding position markings are present, there will always be an accompanying ILS holding position sign.



Airport signs

There are generally six types of signs found in an Airport movement area. These signs are also illuminated during nighttime operations. The six types of signs are:

1. Mandatory Instruction Signs – have a red background with a white inscription. These signs denote an entrance to a runway, a critical area, or a prohibited area. An example of a mandatory instruction sign is a runway holding position sign which is located at the holding position on taxiways that intersect a runway or on runways that intersect other runways.

2. Location Signs – are black with yellow inscription and a yellow border and do not have arrows. They are used to identify the taxiway where you are located.

3. Direction Signs – have yellow background with black inscription and always contain arrows which show the approximate direction of turn. These signs indicate directions of taxiways leading out of an intersection.

4. Destination Signs – have black inscriptions on a yellow background and always contain an arrow. These signs indicate the general direction to a location on the airport, such as civil aviation areas, or FBO's.

5. Informational Signs – have yellow backgrounds with black inscriptions. These signs advise such things as areas that cannot be seen from the control tower and applicable radio frequencies.

6. Runway Distance Remaining Signs – have a black background with white numbers. These signs are used to provide distance remaining information, in thousands of feet, to pilots during takeoff and landing operations. The signs are located along the sides of the runway.

Examples of signage you can expect to see.

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Airport lighting
Airports use FAA-approved lighting systems and colors to guide pilots during nighttime operations. Vehicle operators should use extreme caution when driving on the AOA during night operations. The eye's ability to judge distance and recognize hazards is greatly reduced during the periods of darkness. The eye may take up to 30 minutes to adjust to night conditions. Additionally, other visual cues that can normally be seen during the day cannot be seen at night, causing navigating on the airport more difficult. Vehicle operators need to be extra vigilant and thoroughly familiar with the airport lighting system so that they can safety navigate during nighttime operations.

Airport Beacon
The airport beacon helps pilots identify and locate the airport at night. The airport beacon at the Abilene Regional Airport is located to the West of the terminal building. The beacon is normally operated from dusk till dawn and during times of reduced ground visibility. The beacon is coded with a rotating white and green light combination, indicating that the Abilene Regional Airport is a civilian airport.

Runway Edge Lights
Runway edge lights consist of a single row of white lights bordering each side of the runway and lights identifying the runway threshold. Runway edge lights can be classified according to three intensity levels. High intensity runway lights (HIRLs) are the brightest runway lights available. Medium intensity runway lights (MIRLs) and low intensity runway lights (LIRLs) are, as their names indicate, dimmer in intensity. When ATCT is in operation the lights are adjusted by the air traffic controller. When ATCT is closed you can turn on and adjust the intensity of the runway lights by tuning your transmitter to the common traffic advisory frequency (122.95) and keying the microphone three times to turn on then five and seven for each step increase in brightness.

Our runways edge lights incorporate amber runway remaining lights on the last 2,000 feet. These lights are two-sided, so they appear white when viewed from the opposite end of the runway. At night, there are ways a pilot can determine where the runway begins. There is a row of green lights across the threshold. These lights are two sided. If you were approaching on the opposite end, they would appear red to mark the end of the runway that is usable for aircraft.

Taxiway lighting
Omni-directional taxiway lights outline the edges of the taxiway and are blue in color. They also lead into ramps and aprons. You can have blue taxiway lights in non-movement areas. So be cautious and always know you location.

Obstruction lighting
Obstructions are marked at the Abilene Regional Airport to warn pilots of hazardous objects during both daytime and nighttime operations. These obstructions are marked with a steady burning red color light.

Wind direction indicators

Pilots normally use the runway in which the wind is most favorable and will provide the best aircraft performance for takeoff and landing. The Abilene Regional Airport utilizes wind socks to assist pilots by providing wind direction and velocity information. The wind sock extends out straighter in strong winds and will tend to move back and forth when the wind is gusty. The wind sock may be helpful for vehicle operators during the periods when ATCT is closed since the wind sock will usually point to the runway that would be favorable for use by most pilots. Vehicle operators, however, should not rely solely on wind sock information to estimate the direction of other aircraft traffic, since the airport is considered "uncontrolled" during the times when ATCT is closed. Vehicle operators must exercise extreme vigilance when operating in the runway environment and always monitor and perform common traffic advisory frequency communications and procedures. Our primary Wind Indicator is located east of the fire station and is collocated with our segmented circle. They are also located at the approach end of 35R and 17R.

Runway safety

Runway incursion avoidance

The official definition of a runway incursion is "any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft." Runway incursions are primarily caused by errors associated with clearances, communication, airport surface movement, and positional awareness. Incursions take place in a complex and dynamic environment where root causes are difficult to isolate.

Runway incursions are further classified with respect to severity. The severity categorizations of runway incursions are listed below:

1. ***Category A*** - A serious incident in which a collision was narrowly avoided.
2. ***Category B*** - An incident in which separation decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision.
3. ***Category C*** - An incident characterized by ample time and/or distance to avoid a collision.
4. ***Category D*** - Incident that meets the definition of runway incursion such as incorrect presence of a single vehicle/person/aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.

A surface incident is defined as any event where unauthorized or unapproved movement occurs within the movement area at non-runway locations such as taxiways,

Avoiding Runway Incursions

There are several procedures that you can follow and precautions that you can take to avoid a runway incursion.

1. Before entering the AOA movement area, you should study the airport layout by reviewing the airport diagram and your intended route.
2. Strive for clear and unambiguous communication. Read back (in full) all clearances involving runway crossings, hold short, and hold instructions.
3. While driving, know your precise location and concentrate on your primary responsibilities. Don't become absorbed in other tasks, or conversation, while the vehicle is moving.
4. If unsure of your position on the airport, stop and ask for assistance.
5. Always look both ways before crossing or proceeding on a runway and if possible cross at the ends of runways.
6. Monitor the appropriate radio frequencies for information regarding other aircraft cleared onto your runway for takeoff or landing. Be alert for aircraft which may be on other frequencies or without radio communication.
7. Always remain on the appropriate frequency, unless instructed by ATC.
8. Always use all available vehicle lighting including headlights, parking lights, and beacons. Especially during periods of reduced visibility or at night.
9. Report deteriorating or confusing airport markings, signs, and lighting to Aiport Operations.
10. Make sure you understand any instructions or procedures required by ATC.

Runway safety area

A runway safety area (RSA) is a defined area comprised of the surrounding surfaces of a runway that is prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from a runway. Aircraft, vehicles, and personnel are prohibited from entering the RSA unless having specific clearance from ATCT. Vehicles operators or personnel which mistakenly enter an RSA, or do not comply within the instructions given by ATCT for being in the RSA, will automatically be reasoned as a runway incursion.

It is important that personnel and vehicle operators understand the dimensional aspects of the RSA in the location that they will be working. On a taxiway or runway a holding position sign and/or holding position marking will indicate the beginning of the runway safety area for the adjacent runway.

Authorized RSA Activity

ATCT's primary objective is to maintain the full RSA free of objects, including large equipment and vehicles. Vehicles, mowing equipment and other large equipment (not including hand tools or small equipment that will not cause damage to an aircraft in case of a collision) are not considered acceptable objects in the safety area during air carrier aircraft operations except for the areas described as "Authorized RSA Activity.

Before allowing personnel or equipment in the RSA the Abilene Regional Airport is expected to make a runway closure a priority. However, in some cases, based on weather, traffic, and other factors, it may be necessary to gain access to the RSA without closing the runway to continue aircraft operations. Maintenance activity may be authorized in the RSA under the following conditions:

1. Activity in the RSA parallel to the runway sides –
    a. Access by vehicular, mowing and other equipment is limited to areas more than 250 feet from the runway centerline or the current RSA unless the runway is closed or air carrier aircraft operations are restricted.
    b. During air carrier operations, no personnel may enter this area. If necessary to drop off light or small equipment, a vehicle may be brought into the area between air operations, provided it is then removed from the RSA immediately.
2. Activity in the RSA beyond the runway ends –
    a. Access by vehicular, mowing and other equipment is limited to areas more than 1,000 feet from the runway end unless the runway is closed or aircraft operations are restricted.
    b. During air operations, no personnel may enter this area. If necessary to drop off light or small equipment, a vehicle may be brought into the area between air operations, provided it is then removed from the RSA immediately.

The Abilene Regional Airport is responsible for ensuring that personnel working in or adjacent to the RSA know the boundaries of the RSA and the type of operations, so that they keep vehicles, mowing equipment and other large equipment clear of the RSA during aircraft operations. Aside from the authorized RSA activity described above, vehicles, mowing equipment and other large equipment in the RSA during an aircraft operation will be viewed as a violation.

Critical Area

Since the accuracy of the guidance signals provided by the ILS is significant to safety; the Abilene Regional Airport has a designated critical areas to protect aircraft from radio signal interference. ATC may ask you to hold short of the ILS Critical Area. No activities, such as airfield mowing, will be allowed in critical areas during times when instrument approaches are in effect. Regardless of the weather conditions, personnel that need to perform work inside critical areas should always check with ATCT for permission before entering.

Radio Communications

Movement areas are defined as the runways, taxiways, and safety areas of the airport that are used for taxiing, hover taxiing, and takeoff and landing of aircraft, exclusive of loading ramps and aircraft parking areas. Movement areas are considered "positive control," meaning that all vehicle operators will need permission from ATC before entering the area, or follow uncontrolled Airfield procedures.

Radio communications are a critical link in the ATC system. The link can be a strong bond between you and the controller or it can be broken with surprising speed and disastrous results. To make communication with ATC as effective as possible, specific procedures and terminology have been developed. <u>All Movement Area requires radio contact with ATCT</u>, so you need to learn this unique way of communicating.

Using the radio

When you are using the radio, it is important to speak in a professional manner which ensures that others understand the message you are trying to convey. Slang, CB jargon, and incorrect radio procedures can compromise your safety and the safety of others.

Radio transmissions should be as brief as possible to help avoid frequency congestion. Before you depress the microphone button (key the mike), think of what you will say and listen for a few moments to make sure that someone else is not already talking or waiting for a response. You should state who you are, where you are, and what you want to do. Any other information may be excessive, especially when the airport environment is busy.

When you are ready to talk, hold the mike very close to your lips. Then, key the mike and speak into it in a normal, conversational tone. When communicating with ATCT, it may take a few moments for the controller to respond. If you do not receive any response, try again. If there is no sound coming from your speaker, check your radio to see if it is working properly. Make sure the mike is not stuck in the transmitting position, since this can block other transmissions and disrupt communications for an extended period of time.

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Phonetic alphabet

Since letters such as B, C, D, and E have similar sounds, they can easily be mistaken for one another, especially during radio transmissions. The phonetic alphabet was developed to avoid misunderstandings of this type. You will use the phonetic alphabet as a routine measure of communication on the airport. Operators on the movement area will use the phonetic alphabet to identify taxiways on the AOA. For example, Taxiway "A" is pronounced as taxiway "alpha".

A – Alpha (AL-FAH)
B - Bravo (BRAH-VOH)
C – Charlie (CHAR-LEE)
D – Delta (DELL-TAH)
E – Echo (ECK-OH)
F – Foxtrot (FOKS-TROT)
G – Golf (GOLF)
H – Hotel (HOH-TEL)
I – India (IN-DEE-AH)
J – Juliet (JEW-LEE-ETT)
K – Kilo (KEY-LOH)
L – Lima (LEE-MAH)
M – Mike (MIKE)
N – November (NO-VEM-BER)
O – Oscar (OSS-KAH)
P – Papa (PAH-PAH)
Q – Quebec (KEH-BECK)
R – Romeo (ROW-ME-OH)
S – Sierra (SEE-AIR-RAH)
T – Tango (TANG-GO)
U – Uniform (YOU-NEE-FORM)
V – Victor (VIK-TEH)
W – Whiskey (WISS-KEY)
X - X-ray (ECKS-RAY)
Y – Yankee (YANG-KEY)
Z – Zulu (ZOO-LOO)

Using numbers on the radio

When you transmit or receive numbers over the radio, each number is spoken the same way you are used to saying it, with the exception of the number nine (9). It is spoken as "niner". When you state radio frequencies, the decimal is pronounced as "point."

Aviation phraseology

The following are communication phrases used by pilots and air traffic controllers. It is absolutely necessary that vehicle operators, in the AOA movement area, be familiar with these phrases and meanings.

Acknowledge - Let me know you have received and understand this message
Affirmative – Yes
Confirm - What I heard is (message)..... Is that correct?
Correction - An error has been made and the correct version follows
Expedite - Used when prompt compliance is required to avoid the development of an imminent situation
Go ahead - State your message (IT NEVER MEANS PROCEED)
Hold - Stop where you are
Hold short of (designated runway or taxiway intersection) - Proceed to, but hold short of a specific point
How do you hear me? - How well is this radio working
Negative - No, or permission denied, or that is not correct
Proceed - You are authorized to begin or continue moving
Read back - Repeat my message back to me
Roger - I have received all of your last transmission (Should not be used to answer a yes or no question)
Say again - Repeat your last transmission

Stand by - Wait a moment, I will call you back (Used when a delay in transmitting is requested by the caller)
Unable - I cannot comply with a specific instruction, request, or clearance
Verify - Request confirmation of information
Wilco - I have received your message, understand it, and will comply

Controlled –VS- Uncontrolled

There are two types of airport environments that you will operate in. A controlled airport is an airport that has an operating control tower and is sometimes referred to as a tower airport. Since all aircraft in the vicinity, as well as those aircraft and vehicles on the ground, are subject to instructions issued by air traffic control (ATC), a two-way radio is required for you to operate in the controlled airport environment.

AT times, the Abilene Regional Airport can be controlled or uncontrolled, depending on ATCT Tower operations. The Abilene Regional Airport is considered uncontrolled during the periods when the ATCT is not in operation. At uncontrolled airports, or non-tower airports, control of traffic in the air or on the ground is not exercised. During uncontrolled operations, pilots and vehicle operators use the common traffic advisory frequency (CTAF) to transmit their intentions to others. Also, you are responsible for determining what actions to take to avoid other airport traffic. The CTAF at ABI is 122.95.

If you not sure if the control tower is open during a period when you need to go on the movement area, you should always attempt to contact the control tower on the ground control frequency prior to entering the movement area. Contact Airport Operations if you are unsure of the Airport's ATCT status.

Abilene Regional Airport Frequencies

There are many frequencies that pilots use to communicate with ATC during different segments of their flight. Vehicle operators must memorize three distinct VHF frequencies. These are the ground control frequency and the tower control frequency, and CTAF. All operators should refer to a current Airport Diagram for the Abilene Regional frequencies.

Under most cases, you will communicate while tuned to the ground control frequency. However, there are certain circumstances when you will be asked by ATC to change over to the tower frequency. This is usually the case when you are requesting access to an active runway. Normally, if you are just crossing a runway at a taxiway intersection and not needing to spend any length of time on the runway, you will not need to change frequencies. If you are asked by ATC to "contact tower" you must acknowledge and change to the tower frequency when told to do so.

Radio communication procedures
When ATCT is open, a vehicle driver must obtain permission from the air traffic controller prior to entering the movement area. During periods when the control tower is closed vehicle operators must advise their intentions on the Abilene CTAF frequency. Only trained and authorized drivers may enter the AOA movement area. This area includes runways, taxiways, safety areas and ILS critical areas.

When ATCT is open (Controlled) The
following steps should be used:

1. Study the airport diagram to determine you location and the proposed (or anticipated) route to your destination.
2. Turn on your vehicles rotating beacon.
3. Tune your two-way radio to ground control frequency as listed on your Airport Diagram.
4. Before making a transmission, listen. Don't step on someone else's transmission and don't jump in the middle of another communication. Think about what you will say.
5. In most communications the following RULES OF THUMB are a good way to remember how to talk on the radio. When the frequency is clear, tell the ground controller:
    a. Who you are
    b. Where you are
    c. What you want to do

A typical radio conversation/transmission would go like this:
Vehicle Operator - "Abilene Ground, Airport 2"
ATC Controller - "Airport 2, Abilene Ground"
Vehicle Operator - "Abilene Ground, Airport 2, on the terminal ramp, request clearance to drive on taxiway Charlie, north on Charlie thru Runway 22 Approach, across Approach End of 17R to Taxiway R existing on the NW Side."
ATC Controller - "Airport 2, proceed on taxiway Charlie north on Charlie thru Runway 22 Approach, hold short of Approach end 17R"
Vehicle Operator - "Airport 2 is driving on taxiway Charlie, north on Charlie thru Runway 22 Approach, hold short of Approach end 17R"

You should always read back all of your clearance from the air traffic controller. THIS IS MANDATORY. A blank notepad or a copy of the Airport Diagram is very handy for jotting down long route clearances. Common procedure is to state your call sign after reading back your clearance.

Entering a movement area without prior permission from ground control constitutes deviation and may result in an incursion. This act is a violation of FAA and Airport Rules and Regulations and is punishable by suspension, and/or revocation of driving privileges.

When ATCT is Closed (Uncontrolled midnight-0600)
The following procedures apply at Abilene Regional Airport when the ATCT is closed.

When operating at an airport while the ATCT is closed, you should broadcast your intentions on the CTAF (122.95), prior to movement on the movement area. Operators, who remain on the movement area for prolonged periods of time such as during snow removal or a lighting inspection, should continually announce their presence on the movement area every few minutes. In all situations, the vehicle operator is ultimately responsible for the safe movement on the movement area. Broadcast your intentions, look and LISTEN for other traffic, and most importantly, be aware of the movement area environment before proceeding.

A typical radio conversation would go like this:
Vehicle Operator – "Abilene Traffic…Airport 3 is located on the Terminal Ramp at November 1. I am proceeding November to Delta and Holding Short of Runway 17L/35R at Taxiway Mike…..at ABI, Abilene Traffic". Used the full runway name so it's clear what runway you will be on.
Note: you should always start and end your intentions with the location of "Abilene Traffic"
Aircraft Operator – "Abilene Traffic…Cessna 2345U on left downwind landing runway 35R…at ABI, Abilene Traffic"
Note: There is traffic using runway 35R!
Vehicle Operator – "Abilene Traffic…airport vehicle will hold short of runway 17L/35R for landing traffic…at ABI, Abilene Traffic"
Aircraft Operator – "Abilene Traffic…Cessna 2345U is clear of Runway 17L/35R and taxiing to the FBO…at ABI, Abilene Traffic"
Note: the aircraft has landed and cleared the runway and is taxiing to the FBO. You must have a visual of this aircraft to avoid any movement conflicts. The aircraft always has the right of way.
Vehicle Operator – "Abilene Traffic…Airport 3 is proceeding runway 17/35R full length for a runway inspection…at ABI, Abilene Traffic"
Note: Only proceed onto the runway when you are certain there are no other traffic conflicts! Look both directions. Always monitor your radio and remember not all pilots remember or properly perform to this standard.

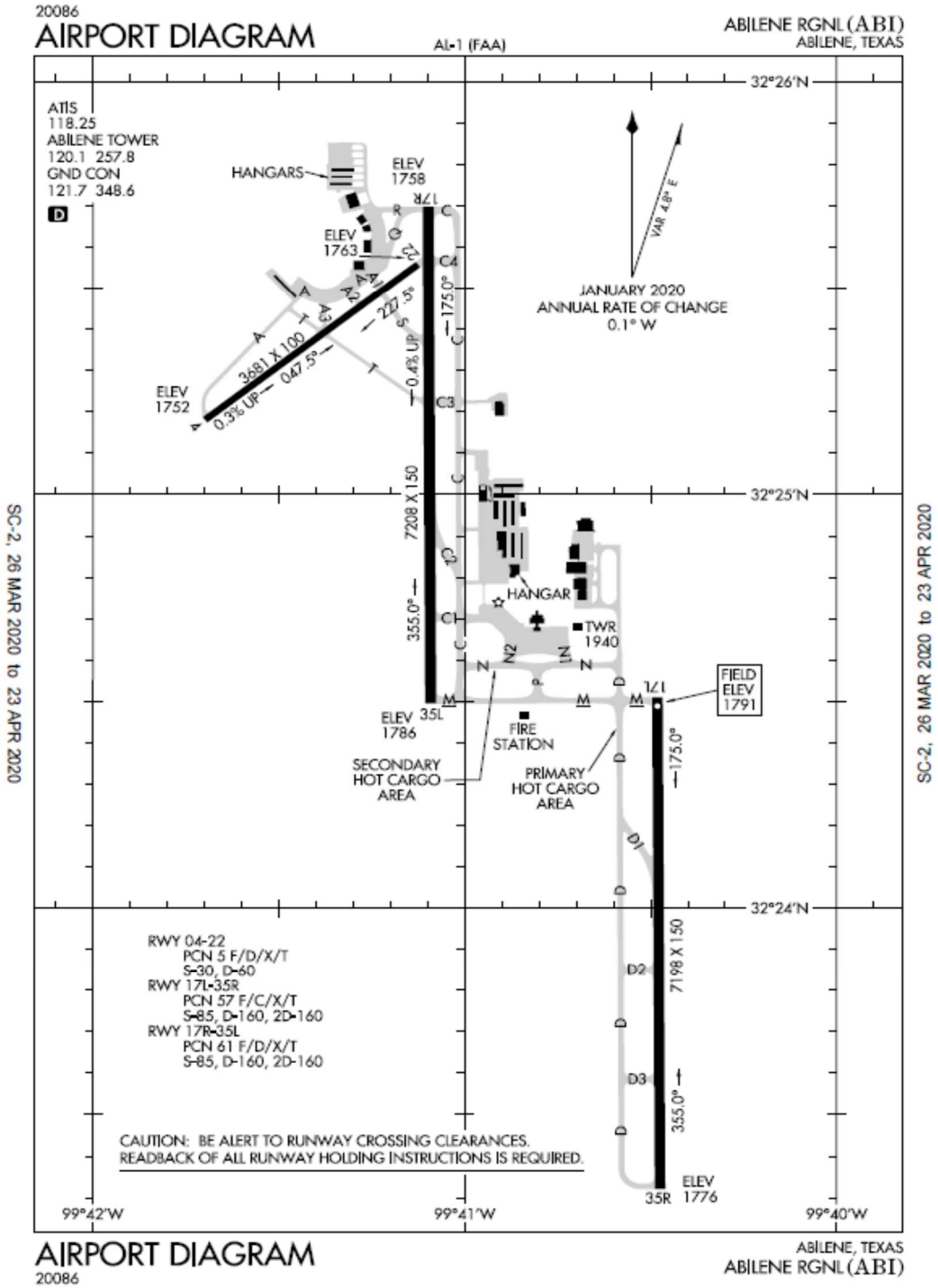
Lost communications procedures
If you lose two-way radio capability with the ground controller while in the movement areas DO NOT PANIC. Check the radio volume, channel, or squelch level. If you are still unable to communicate with ground control, perform the lost communication procedure as follows:

1. If you are on a runway, clear the runway surface and safety areas. Exit at the closest exit taxiway or even take the grass if necessary.
2. Point the vehicle headlights towards the control tower.
3. Flash the vehicle headlights to attract the controller's attention
4. Wait for a light gun signal and comply with the signal sent by the controller
5. You can call Airport Operations for escort back to your origin point.

Light gun signals

When you get the ground controllers attention with the vehicle headlights, he/she will point a light gun at your vehicle. Different colored signals have different meanings. The following signals are universally accepted:

Appendix A – Airport diagram



EXTRACT, DO NOT USE FOR MOVEMENT

Appendix A

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Appendix B – Movement/Non-Movement area map
Non-Movement area HIGHLIGHTED YELLOW, B-1, 2, and 3
Movement area WITHIN RED LINES areas, B-3,

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Non-Movement Area Northwest Side

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Non-Movement Area Terminal and EASI

Appendix B-3

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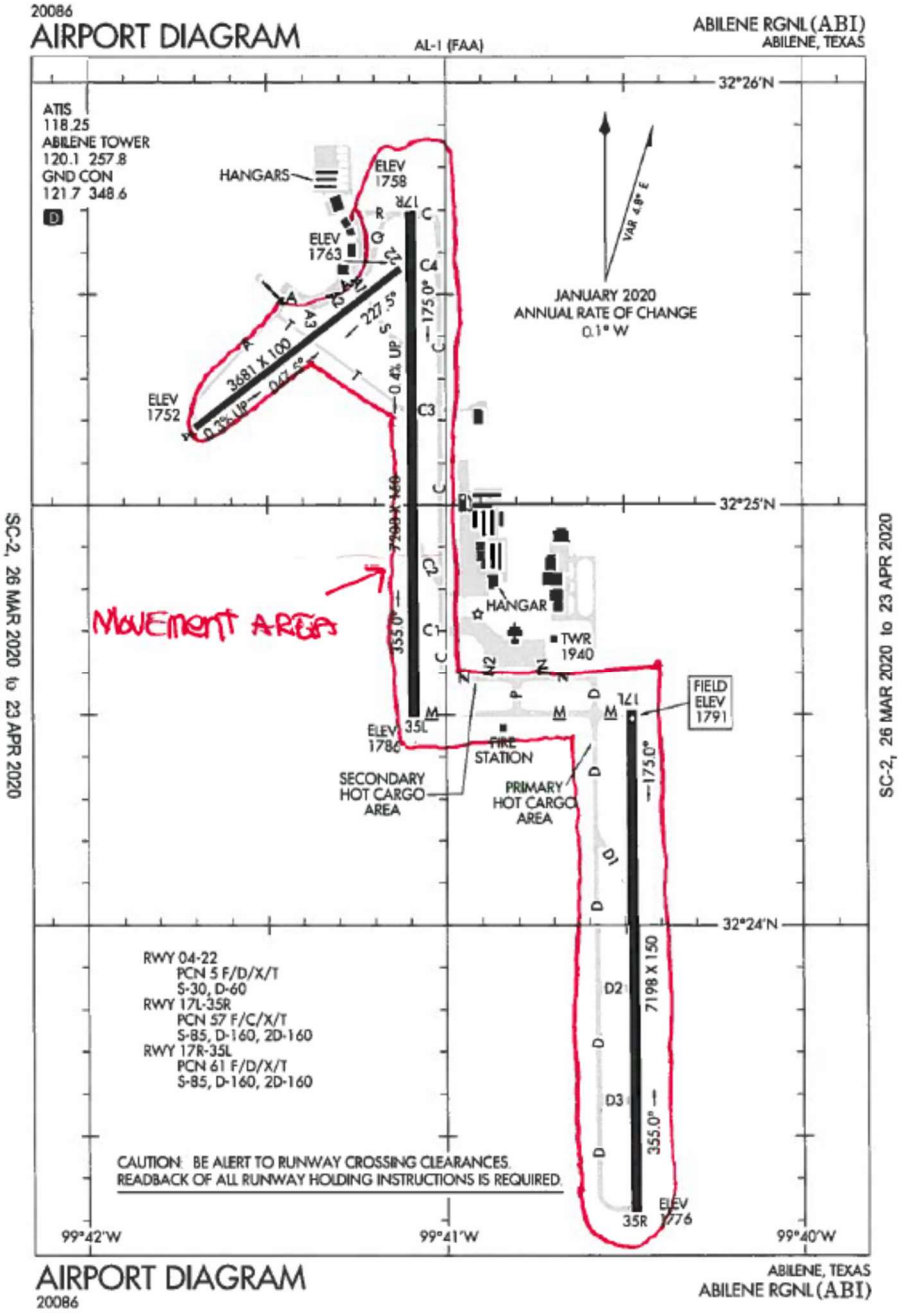
Movement Areas, Within Red Lines



Movement Area

Appendix B-3

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Appendix C – Movement Area Driver Practical Evaluation Standards

The AOA Driver Practical Evaluation Standards was developed to establish standards for applicants taking the practical portion of the AOA Drivers Evaluation. Designated examiners shall conduct practical evaluations in compliance with these standards. Applicants should find these standards helpful during training and when preparing for the practical evaluation.

The examiner is not required to follow the precise order in which these tasks appear. The examiner may change the sequence or combine tasks with similar objectives to have an orderly and efficient flow of the practical evaluation. The examiner is expected to use good judgment during all portions of the practical evaluation.

Tasks

The AOA Driver Applicant shall –

1. Follow AOA rules and procedures including speed limits and right-of-way
2. Exhibit knowledge of the elements related to radio communications and ATC light signals
3. Select appropriate frequencies
4. Transmit using recommended phraseology and technique
5. Acknowledge radio communications and comply with ATC instructions
6. Exhibit knowledge of the elements related to runway safety. This shall include prevention of runway incursions, collision avoidance, access to, and operation in, movement areas & safety areas, and ILS critical areas.
7. Comply with airport taxiway and runway markings, signs, lighting, ATC clearances, and instructions.
8. Recognize and avoid potential hazards
9. Exhibit knowledge of the elements related to night orientation, lighting systems, and the safety precautions unique to night operations.

Appendix D - Practical Skills Evaluation Evaluators guide

Note: as the evaluator if you feel there is any unsafe operation or conditions you will immediately take control of the situation and if necessary assume control of all communications and operations of the vehicle to ensure safe operation. As the evaluator you may terminate the practical skills examination at any point in time.

- Evaluator will have a portable aviation radio to be used for emergency ATCT communications and the evaluator will verify the operation prior to taking the examination.
- Evaluator will have an airport layout map
- Evaluator will contact ATCT and inform the ground controller that you will be conducting a AOA drivers practical skills examination at least 5 minutes before beginning the examination.
- Evaluator will conduct ID and vehicle inspection before the operator's vehicle enters the airport regardless of location.
- Evaluator will verify the operators state issued driver's license
- Evaluator will verify operators company vehicle insurance and registration
- Evaluator will verify the operators vehicle has current inspection
- Evaluator will verify the operators vehicle amber beacon operation
- Identify the vehicle call sign
- Verify aviation radio is operational
- Does operator know how to operate the radio (circle) YES or NO
- Verify operator knows ground frequency (circle) YES or NO
- Instruct the operator conduct a radio check with ATCT ○ Was the transmission clear and readable (circle) YES or NO ○ Did operator transmit on the correct frequency (circle) YES or NO ○ Did the operator identify the vehicle call sign (circle) YES or NO
- Using the airport layout map have the operator identify the current location ○ Does the operator identify the current location (circle) YES or NO
- Using the airport layout map identify the P Hangar and instruct the operator to obtain ATCT clearance to drive to and stop at the P hangar. ○ Did the operator transmit in a clear and concise manner (circle) YES or NO ○ Did the operator read back instructions properly (circle) YES or NO
    - Did the operator drive the vehicle in a safe manner at an acceptable speed amd contacted ATCT that they were clear all movement areas (circle) YES or NO

- Using the airport layout map identify the approach end of runway 35L ○ Instruct the operator to obtain ATCT clearance to drive to pproceed to the approach end of runway 35L.
    - Did the operator transmit in a clear and concise manner (circle) YES or NO ○ Did the operator read back instructions properly (circle) YES or NO

- Did the operator drive the vehicle in a safe manner at an acceptable speed (circle) YES or NO
- Did the operator stop at the hold short lines? (circle) YES or NO

- Using the airport layout map identify the terminal ramp.
  - Instruct the operator to obtain ATCT clearance to drive to and stop on the terminal ramp traveling on taxiways M, P, N, N2. Did the operator transmit in a clear and concise manner (circle) YES or NO. Did the operator read back instructions properly (circle) YES or NO
  - Did the operator drive the vehicle in a safe manner at an acceptable speed (circle) YES or NO. Did the operator report clear of the movement area (circle) YES or NO.
- Have operator explain in detail procedures for operating while the Airport is classified as Un-controlled. Did operator show a complete understand of the procedures? Yes or No _____. If not, end evaluation, the operator has failed.

Review the driving skills examination with them.

- Evaluator and operator sign and date the examination form and the instructor will indicate pass or fail.
- Inform the badging office the results of the examination.
- Evaluator will provide the Administrative Assistant the original AOA Drivers Training Practical Skills Examination Form.

Evaluator's printed name_____

Evaluator's signature and date_____

Is the operator eligible to receive driving privileges (circle) YES or NO If NO indicate reasons, using a separate sheet if needed

Operators printed name_____

Operator's signature and date_____

Remarks:_____
_____
_____
_____
_____
_____

Appendix E – Non-Movement Class II Exam

Name:_____Date:_____

1. The operator of a vehicle entering or exiting the air operations area (AOA) must stop and wait until the gate closes behind him/her before moving such vehicle. This requirement is:
   a. Waived if accompanied by an TSA inspector
   b. Waived during peak traffic hours
   c. Waived during daylight hours
   d. Never waived

2. As an operator with valid driving privileges, you are permitted to drive onto a taxiway from the ramp, without clearance from the tower, because the ramp and the taxiway share the same area.
   a. True
   b. False

3. Any person operating a vehicle within the AOA may be required to show his/her Airport Badge and driver's license to any authorized representative from the Airport Staff. Failure to do so may result in ejection from the AOA.
   a. True
   b. False

4. Aircraft in motion shall at all times have the right of way.
   a. True
   b. False

5. A Class II operator are NOT authorized to use the perimeter road for movement between the GA Ramp and the NW Side.
   a. True
   b. False

6. Any person violating any rule and/or regulation while in the AOA may lose all or part of their airport access privileges for any one violation.
   a. True
   b. False

7. Vehicles may cross hold short lines without clearance from the tower if the operator looks in both directions before crossing any runway.
   a. True
   b. False

8. What color lights are used for designating the edge of a taxiway?
   a. Blue
   b. White
   c. Red
   d. Green

9. What is the MAXIMUM speed allowed in non-movement areas?
   a. 10 MPH
   b. 25 MPH
   c. 15 MPH
   d. All speed limits are marked by signage

10. What is this marking?

   a. Center Line for driving on RAMPS
   b. Ground markings painted on the ramp to separate moment from non-movement areas
   c. A trick marking that means nothing.

11. Class II drivers may drive on the runways_____:
   a. After getting clearance from the ATCT
   b. After looking both ways.
   c. Never.

12. FOD should be prevented and _____:
   a. Removed
   b. Thrown in the grass
   c. Ignored

13. Ramps are Non-movement Areas.
   a. True
   b. False

14. The flashing beacon on an aircraft indicates_____:
   a. Nothing to a vehicle operator.
   b. The engine is warming up.
   c. The engine is running or about to start

APPROVED
12:27 pm, Apr 17 2020
Richard Middleton

Appendix F – Movement Area Exam

Class I Exam

Name:_____Date:_____

1. The operator of a vehicle entering or exiting the air operations area (AOA) must stop and wait until the gate closes behind him/her before moving such vehicle. This requirement is:
    a. Waived if accompanied by an TSA inspector
    b. Waived during peak traffic hours
    c. Waived during daylight hours
    d. Never waived

2. As an operator with valid driving privileges, you are permitted to drive onto a taxiway from the ramp, without clearance from the tower, because the ramp and the taxiway share the same area.
    a. True
    b. False

3. Any person operating a vehicle within the AOA may be required to show his/her badge and driver's license to an authorized representative from the Airport Authority. Failure to do so may result in ejection from the AOA.
    a. True
    b. False

4. Aircraft in motion shall at all times have the right of way.
    a. True
    b. False

5. ABI's Ground Frequency is:
    a. 118.100
    b. 121.7
    c. 121.950
    d. 121.900

6. Any person operating a vehicle involved in an accident shall immediately report the accident to the Airport Police:
    a. If it caused an injury to any person
    b. If it caused the death of any person
    c. If it caused damage to any property
    d. All the above

7. Any person violating any rule and/or regulation while in the SIDA/AOA may lose all or part of their airport access privileges for any one violation.
    a. True
    b. False

8. Vehicles may cross hold short lines without clearance from the tower if the operator looks in both directions before crossing any runway.
    a. True
    b. False

9. When issued a route to follow, the operator of a vehicle may not deviate unless a new clearance is received.
    a. True
    b. False

10. What color paint is used on taxiways?
    a. White
    b. Yellow
    c. Red
    d. None

11. What color paint is used on runways?
    a. White
    b. Yellow
    c. Red
    d. None

12. What color are obstruction lights?
    a. White
    b. Red
    c. Blue
    d. Green

13. What color lights are used for designating the edge of a taxiway?
    a. Blue
    b. White
    c. Red
    d. Green

14. What color lights are used for designating the edge of a runway?

    a. Blue
    b. White
    c. Red
    d. Green

15. Match the following, tower controlled, light gun signals:

a.	_____Steady green	1. N/A to vehicles
b.	_____Flashing green	2. Stop
c.	_____Steady red	3. Exercise extreme caution
d.	_____Flashing red	4. Cleared to cross or go
e.	_____Flashing white	5. Return to starting point
f.	_____Alternating red/green	6. Clear taxiway or runway

16. What color is used to designate a taxiway directional sign?

    a. Black letter on yellow background
    b. Yellow letter on black background
    c. Red letter on white background
    d. White letter on red background

17. What color is used to designate a taxiway location sign?

    a. Black letter on yellow background
    b. Yellow letter on black background
    c. Red letter on white background
    d. White letter on red background

18. What color is used to designate a runway mandatory hold sign?

    a. Black letter on yellow background

    b. Yellow letter on black background

    c. Red letter on white background

    d. White letter on red background

19. A controller who says “go ahead” means

    a. Proceed as requested

    b. Continue straight ahead

    c. State your message

20. FOD is caused by

    a. Bad weather conditions

    b. The airport manager

    c. Trash and debris

21. If a controller gives you permission to do something which appears unsafe

    a. You must comply or face disciplinary action

    b. You should comply and then call your supervisor as soon as practicable

    c. You should tell the controller your concerns and get clarification before proceeding

    d. Flash your headlights and proceed

22. Aircraft usually land and takeoff

    a. Into the wind

    b. With the wind at their back

    c. Both a and b

23. If the air traffic controller signals me with a steady red light, I should

a. Stop

b. Clear the runway or taxiway

c. Ignore the signal as it is for aircraft only

24. When is it necessary to self-clear onto a Runway or Taxiway?

a. When the ATCT is closed

b. When runway lights are on

c. When an aircraft departs