

Welcome back!

# (FAR 139.329) Vehicle Operations and Pedestrian AOA Movement Area Rules and Regulations

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Revised 2024

#### **Forward**

Houghton County Memorial Airport operates under the authority of Federal Aviation Regulation (FAR) Part 139 "Certification of Airports". Houghton County has granted the Houghton County Airport Committee the authority to make rules and regulations for the management and supervision of its airport affairs.

FAR 139.329 "Pedestrians and Ground Vehicles" applies to all users of, and persons on any portion of, the property owned or controlled by Houghton County Memorial Airport. No persons are exempt from airport operating training requirements for moving on foot or operating a vehicle in movement areas or safety areas on the airside of an airport.

The Federal Aviation Administration (FAA) and Department of Homeland Security – Transportation Security Administration (TSA) require the management of the Houghton County Memorial Airport to provide procedures for the operation of vehicles and pedestrians inside the fence (see Appendix 2) on the Air Operations Areas (AOA). These procedures are established to provide a safe and secure environment for tenants, employees, and users of the airport. Everyone's cooperation is necessary to prevent potentially serious accidents or security breeches that would endanger life.

These rules and regulations may be amended, changed, or modified by the Houghton County Airport Committee, as necessary.

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# **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.

Airside – Those areas of an airport that support aircraft activities.

**Apron or Ramp** – A defined area on an airport intended to accommodate aircraft for the purposes of parking, loading and unloading passengers or cargo, refueling, or maintenance.

Common Traffic Advisory Frequency (CTAF) – Radio frequency designed for the purpose of carrying out airport advisory practices while operating from an airport without an operating air traffic control tower. The CTAF may be a UNICOM, MULTICOM, FSS, or tower frequency and is identified in appropriate aeronautical publications.

**Fixed Base Operator (FBO)** – A person, firm, or organization engaged in a business that provides a range of basic services to general aviation.

Flight Service Station (FSS) – Air traffic facilities that provide pilot briefings, en route communications, and visual flight rules, search and rescue services, assist lost aircraft and aircraft in emergency situations, relay air traffic control clearances, originate NOTAMS, broadcast aviation weather and National Airspace System information, receive and process instrument flight rules, flight plans, and monitor NAVAIDS.

**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.

ILS Critical Area – An area provided to protect the signals of the localizer and glideslope.

*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 takeoff of aircraft.

Jet Blast – Jet engine exhaust or propeller wash.

Movement Area – The runways, taxiways, and other 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.

**Non-movement Areas** – Taxiways, aprons, and other areas not under the control of air traffic or at airports without an operating airport traffic control tower.

**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 in Use or Active runway** – Any runway or runways currently being used for takeoff or landing.

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.

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

Uncontrolled Airport – An airport without an operating airport traffic control tower.

**UNICOM** – A non-Federal communication facility that may provide airport information at certain airports.

Very High Frequency Omni Directional Radio Range (VOR) – A ground based electronic navigation aid transmitting very high frequency navigation signals, 360 degrees in azimuth, oriented from magnetic north. Used as the basis for navigation in the National Airspace System.

# **Air Operations Area (AOA)**

The Air Operations Area, commonly known as the AOA, can be a confusing, congested place for a vehicle operator. Many different types of vehicles operate simultaneously to service aircraft as well as maintain the airfield and navigational aids. Vehicle operations could have an adverse impact on aviation safety if a driver does not follow established safety procedures and practices on the AOA. It is important to remember that you, as a vehicle operator, have the same accountability and responsibility as that of a pilot taxiing an aircraft.

The AOA consists of all restricted ground areas of the airport, including taxiways, runways, loading ramps, and parking areas. In other words, everything inside the perimeter fence. The AOA is usually divided into two distinct areas; the movement area and the non-movement area. Both of these areas will be discussed in detail later in this guide.

The AOA is strictly limited to those individuals that require access to the Houghton County Memorial Airport AOA such as based tenants, based employees, and technicians/contractors that support the facilities. They must have permission from the Airport Manager or designee.

### General Points to Remember When Driving on an AOA......

- ✓ Know and understand vehicle-operating procedures at Houghton County Memorial Airport and never deviate from them.
- ✓ Be patient, observant, and non-assuming.
- ✓ Always know your exact location and be aware of activity around you.
- ✓ Never drive under any part of an aircraft or allow its wing to pass over your vehicle.
- ✓ Maintain a safe distance from parked or taxing aircraft.
- ✓ Aircraft always have the right of way.
- ✓ Be aware of emergency vehicles-always yield to them.
- ✓ Report any accident, no matter how minor, to the Airport employee's
- ✓ Use extreme caution when driving at night and/or in poor weather conditions.
- ✓ Realize that you can become disoriented even in the best conditions- when disoriented, stop and request assistance.
- ✓ Be alert to any foreign object debris (FOD) either pick it up or notify someone who can. FOD is any debris on the airfield that can cause damage to an aircraft. A few examples are tools, plastic packing material, cans, rocks, or discarded parts from maintenance activities. Any of these objects can shred internal parts if sucked

into a jet engine and can become deadly projectiles. FOD can create a hazard during taxiing, takeoff, and landing. Therefore, it is crucial that everyone on the airfield be alert to FOD and remove it immediately.

# **Limited access**

Limitations on vehicle and pedestrian access to portions of the AOA are dependent on the need to access certain areas of the airport. For example, hangar owners are restricted to General Aviation areas of the airport, such as taxi-lanes to hangar and GA ramps.

The air carrier ramp is the most restricted area during air carrier operations. When an airline aircraft is on the air carrier ramp only authorized personnel are allowed inside of the restricted area. Refer to **Appendix 1** that shows the restricted area.

# Training.

All tenants, employees, and technicians/contractors that require access to the AOA require training. After initial training, recurrent will be conducted every 12 consecutive calendar months.

# **Non-Movement Areas**

Areas such as parking areas, loading ramps, and maintenance ramps are known as non-movement areas. The majority of vehicle operations on the AOA occur in the non-movement area, and most drivers on the AOA are only authorized to operate in the non-movement area.

Before driving anywhere on the AOA, know the location of the boundary between the non-movement area and the movement area.

#### Ramps/Aprons

These are areas where aircraft are parked, loaded and unloaded, and serviced between flights. Vehicles and aircraft operate in close proximity in these areas, so it is vital to maintain a safe distance between your vehicle and aircraft. Always yield to aircraft and never drive under an aircraft or its wings. Slow speed and extreme caution are required in these areas.

#### Perimeter Roads

Perimeter roads provide vehicle access from one area of the airfield to another. Even though the travel distance and time may be longer, always use a perimeter road when it is available.

#### Markings on Non-Movement Areas

Ramps/aprons may contain a variety of markings for aircraft parking, tie-downs, or vehicle lanes. You may also see markings that identify the boundary between the non-movement area and the movement area. These markings consist of two yellow lines — one solid, one dashed. The dashed line is located on the movement side. The solid line is on the non-movement side. Always stay in the non-movement area unless the Airport Manager or Airport personnel give you authorization to enter the Movement Area.

#### Driving on Non-Movement Areas

- ✓ Know where the boundary is between movement and non-movement areas.
- ✓ Always use perimeter roads.
- ✓ Unless otherwise posted, the speed limit is 15mph or less.
- ✓ Never drive behind an aircraft that is being pushed back or is powering back.
- ✓ Do not drive through fuel spills-they can ignite.
- ✓ Do not block fire lanes.
- ✓ Beware of the danger of jet blast and prop wash.

J Watch for flashing beacons on aircraft to indicate the engine is running or about to start.

**Warning:** Do not get too close to aircraft as damage or injury could occur if the engine is started. Jet blast or prop wash can be extremely dangerous. Flashing beacons located 01 the tail, top, or bottom of the aircraft indicate that the engine is running or about to start.

# **Movement Areas**

The movement area consists of taxiways, runways, and other designated areas as determined by the Airport. You are required to have authorization from Airport Management to drive in these areas.

"You must monitor your radio at all times and get permission from the Airport to enter and drive on any movement area."

#### Runways

Runways are rectangular-shaped, paved surfaces designed for the landing and takeoff of airplanes. Only drive on runways when necessary for airport operations. Do not enter or cross a runway unless you have authorization from airport management.

Runway Identifications: Runways are numbered from 1 to 36 based on their magnetic direction rounded off to the nearest 10 degrees. For example, a runway aligned to the magnetic heading of 320 degrees would be Runway 32. Each runway will have two identifications based upon the direction of travel. For example, if one end of the runway is numbered "32," the other end will be numbered "14."

Runway Markings: Runway markings are white. Each runway will have a

centerline and a runway identification marking located at each end. Runways

may also have other markings such as side stripes, thresholds, aiming points,

and touchdown zone markings.

Runway Lights: Edge lights on runways are white but may change to yellow for

the last 2,000 feet. Threshold lights are located at each runway end; these are

green on the approach side and red on the runway side.

Safety Areas: If you are required to drive on or work in areas adjacent to

runways and taxiways, be aware that aircraft wings and engines may extend over

these areas. These safety areas are also designed to be used by aircraft in

emergency situations if the aircraft leaves the pavement. If it is necessary to

park you vehicle, always park it outside the safety area. FAA and Houghton

County Memorial Airport regulations prohibit vehicle operations in the runway

safety area while aircraft are using the runway.

Taxiways

Taxiways are used by aircraft to get to and from the ramp/apron and the runway.

Taxiway Markings: Taxiway markings are yellow. They have a solid yellow

centerline stripe and may also have solid or dashed double edge lines. Each

taxiway that enters the runway will have a hold position marking (see discussion

on hold markings) indicating where you should stop to remain clear of the

runway.

Taxiway Lights: Taxiway edge lights are blue.

#### Movement Area Signs

There are three basic types of signs that you may encounter on the movement are – mandatory instruction, location, and guidance signs. These signs are color-coded for easy recognition and are located adjacent to runways and taxiways. These signs may also be painted on the pavement.

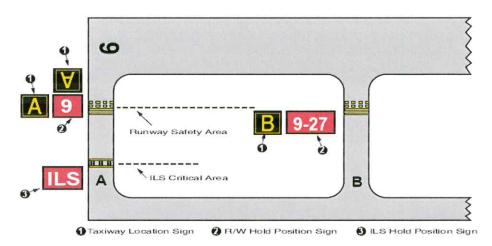
**Mandatory Instruction Signs:** A red sign with a **white** inscription is a mandatory instruction sign – do not proceed past one of these signs without announcing your intentions on Unicom and listening for and confirming location of any aircraft in the area. The most common form of this sign is the runway **hold position.** Both runway identifications are usually included on the sign with the numbers arranged to indicate the direction of each threshold. For example, 14-32 indicates that the threshold for runway 14 is to the left and the threshold for runway 32 is to the right.

**Location Signs:** A black sign with yellow inscription is a location sign that identifies the taxiway or runway that you are on.

**Guidance Signs:** A yellow sign with a black inscription is a guidance sign. These signs always have arrows. The arrow shows the direction to turn onto the indicated taxiway. Sometimes, these signs may be co-located with a location sign and/or other guidance signs in an array.

#### Hold Position Markings on the Movement Area

Runway hold position markings (also called hold lines) identify the location on the movement area where a vehicle must stop when the operator does not have clearance to proceed on the runway. They consist of four yellow lines – two solid and two dashed extending across the width of the taxiway or runway. Vehicles must stop short of the first solid line. A red and white runway hold position sign will always accompany these lines.



#### **Driving on Movement Areas**

- ✓ Do not enter a movement area unless you have authorization from Airport Management.
- ✓ Monitor your aviation two-way radio at all times.
- ✓ After announcing your intentions, proceed slowly only after you have looked in all directions, including up. Always yield the right-of-way to aircraft.
- ✓ Never drive your vehicle on or across runways unless absolutely necessary and you have authorization from airport management.
- ✓ If you have to cross a runway and an aircraft is about to land, stop and yield to the aircraft. Do not enter the runway until the aircraft has landed and either exited the runway or passed the point on the runway where you wish to cross.

#### Radio Communication Procedures

Remember, aircraft at Houghton may not be radio equipped or the pilot may not be making radio position reports. Therefore, **always** consider **all** runways to be active in both directions.

- ✓ Use an aviation two-way radio with the Houghton County Memorial Airport
  Unicom frequency on it.
- ✓ Think about what you are going to say before speaking.
- ✓ Know and use the proper phraseology. (Refer to the Aviation Phraseology and Aviation Alphabet tables at the end of this section.) Never use Citizen's Band (CB) lingo or law enforcement "ten" codes.

Before you start talking, make sure that no one else is already talking. Then key your microphone and do the following:

- State whom you are calling and identify yourself by using your call sign.
- > State your location on the AOA.
- State your intentions.
- Monitor radio transmissions on Unicom

**Warning:** If you are ever working on a runway or taxiway and your radio quits, move your vehicle off the runway or taxiway.

#### Aviation Phraseology

- Acknowledge Let me know you have received and understand this message.
- > Advise intentions Tell me what you plan to do.
- Affirmative Yes.
- Confirm My version is. Is that correct?
- Correction An error has been made in the transmission, and the correct version follows.
- Go ahead State your request (never means "proceed")
- ➤ Hold Stop where you are.
- Hold short of Proceed to, but hold short of a specific point.
- > Negative No, or permission is not granted, 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. (It should not be used to answer a yes or no question.)
- > Say again Repeat what you just said.
- Standby Wait.... I will get back to you. (Standby is not an approval or a denial. The caller should reestablish contact if the delay is lengthy.)
- ➤ **Unable** Indicates inability to comply with a specific instruction, request, or clearance.
- > Verify Request confirmation of information.
- Wilco I have received your message, understand it, and will comply.

#### The Aviation Alphabet

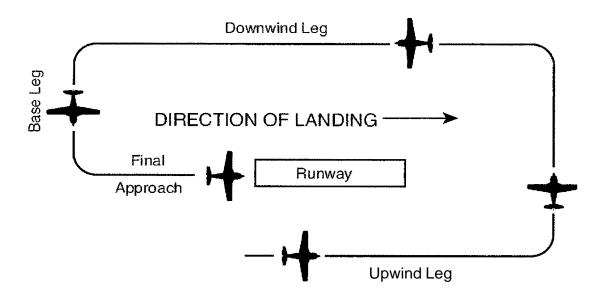
The following is the International Civil Aviation Organization (ICAO) phonetic alphabet that is used in radio communications. Use the words in place of letters to reduce confusion. For example, Taxiway B would be referred to as Taxiway Bravo.

A	Alpha	AL-FAH	N	November	NO-VEM-BER
В	Bravo	BRAH-VOH	0	Oscar	OSS-KAH
C	Charlie	CHAR-LEE	P	Papa	PAH-PAH
D	Delta	DELL-TAH	Q	Quebec	KEH-BECK
E	Echo	ECK-OH	R	Romeo	ROW-ME-OH
F	Foxtrot	FOXS-TROT	S	Sierra	SEE-AIR-RAH
G	Golf	GOLF	Т	Tango	TANG-GO
H	Hotel	HOH-TEL	JU -	Uniform	YOU-NEE-FORM
1	India	IN-DEE-AH	$\mathbf{V}$	Victor	VIK-TEH
J	Juliett	JEW-LEE-ETT	W	Whiskey	WISS-KEY
K	Kilo	KEY-LOH	X	X-ray	ECKS-RAY
L	Lima	LEE-MAH	Y	Yankee	YANG-KEY
M	Mike	MIKE	Z	Zulu	ZOO-LOO

1	One	WON	6	Six	SIX
2	Two	TOO	7	Seven	SEV-EN
3	Three	TREE	8	Eight	AIT
4	Four	FOW-ER	9	Nine	NIN-ER
5	Five	FIFE	0	Zero	ZEE-RO

# **Traffic Pattern Terminology**

Aircraft approaching a runway for landing follow a pattern. The standard patter is a rectangular box with the pilot making all turns to the left. Each side of the pattern has a name, as shown in the diagram. Pilots use these names to repor their position on the radio when they are in the traffic pattern. For example, pilot may say, "Entering downwind for runway 32," or, "Turning base for runway 14." Familiarity with these names will help you locate an aircraft when the pilot reports his/her position on the radio.



For both pilots and vehicle operators, extra vigilance is the key to operating at airports without an operating control tower. Your eyes and ears are two of the most important safety features you have. Although Houghton County Memorial

Airport may not be very busy, don't be lulled into complacency. Just because there is normally very little traffic, do not assume that this is always the case. Always use your vehicle's rotating beacon, if equipped, anytime you are moving about the airport surface.

# Stop and wait procedure.

Individuals with access to the AOA must insure they use the stop and wait procedure that prevents unauthorized access by vehicles or pedestrians from entering the AOA. The procedure is simple, when accessing a vehicle or pedestrian gate you must stop and wait until the gate has completely closed before you proceed.

# **Escorting of unauthorized persons or vehicles**

A qualified individual must escort all unauthorized persons or vehicles. All authorized tenants; technicians/contractors and employees are considered Escorting of persons or vehicles is restricted to the qualified individuals. individual's access area(s) only. Unauthorized person(s) must be supervised at all times while inside the fence.

# **Driver Regulations on the Airside of the Airport**

- All applicants must satisfactorily complete the applicable training class before receiving authorization to operate on the AOA. 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 safe operating speed. This restriction is not applicable to emergency vehicles and snow removal vehicles.
- Moving aircraft and passengers enplaning or deplaning aircraft shall
  have the right of way at all times over vehicular traffic. All vehicles are
  to yield the right of way to aircraft, emergency vehicles, and airport
  maintenance vehicles/equipment.
- 3. No vehicle shall pass between an aircraft and passenger terminal or passenger lane when the aircraft is parked at the gate position except those vehicles servicing the aircraft. All other vehicles must drive to the rear of the aircraft and shall pass no closer than 50 feet from any wing or tail section.
- 4. No vehicle operator shall enter the AOA unless authorized by the Airport Manager, designee, or unless the vehicle is properly escorted.
- Vehicles operating on the movement area shall be equipped with an operable two-way radio in communication with the CTAF. (UNICOM)
- Vehicles operating on the movement area shall be equipped with operating amber rotating beacon or equivalent located on the highest point of the vehicle visible for 360 degrees.

- 7. Never drive between safety cones or across delineated passenger walkways.
- 8. Watch cockpit blind spots pilots typically cannot see behind or below the aircraft.
- Avoid jet blast or prop wash, which can blow debris or overturn vehicles
- 10. Be aware and avoid moving propellers that can cause damage, injury, or death.
- 11. Be aware of other vehicle movements you may not hear them approaching due to aircraft engine noise.
- 12. No person shall park a vehicle in an aircraft parking area, or safety area in a manner that obstructs or interferes with operations in the aircraft movement area or apron area.
- 13. 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.
- 14. No person shall park a vehicle or equipment within 30 feet of a fire hydrant or in a manner that prohibits a vehicle from accessing the fire hydrant.
- 15. No person shall operate a vehicle or other equipment within the airside under the influence of alcohol or any drug that impairs, or may impair, the operator's abilities.

- 16. Each vehicle operator is responsible for the activities of each vehicle passenger on the airside of the airport.
- 17. Driving close to buildings, around vehicles, or aircraft is prohibited. This policy ensures visibility to aircraft and other vehicles.

# Consequences of Non-Compliance.

Any person who does not comply with any of the provisions of these Rules and Regulations, or any lawful order issued pursuant thereto, will be subject to progressive penalties for repeat violations. These penalties may include denied use of the Airport in addition to the penalties pursuant to Federal, State or local authorities.

Penalties for failure to comply with the AOA Vehicular Traffic Regulations shall consist of written warnings, suspension of AOA driving privileges, and/or revocation of AOA driving privileges. Receipt of 3 written warnings by an operator of a vehicle in any 12-month period will automatically result in suspension of AOA driving privileges. The person will be given remedial "Airport Ground Vehicle Operations" training, and upon satisfactorily completion, driving privileges will be re-instated. Receipt of 6 written warnings in any 12-month period will automatically result in revocation of AOA driving privileges for 1 year.

Based on an evaluation of the circumstances or the severity of a particular incident or incidents, the Airport Manager reserves the exclusive right to assess any penalty deemed appropriate at any time to any individual authorized to operate a vehicle on the AOA without regard to prior operating history.

Suspension of AOA driving privileges shall be no less than 30 calendar days and no greater than 90 calendar days.

The Airport Manager will provide a copy of all written warnings issued to an operator to the local manager of the company owning or in possession and control of the vehicle or vehicles involved in the violation(s).

The Airport Manager may require any individual involved in an incursion or other vehicle incident to complete remedial AOA driver training.

Each person authorized access to the AOA agrees to comply with Transportation Security Administration part 1542 (Airport Security) and Airport Policies pursuant to FAA regulations, FAR Part 139. If non-compliance results in a monetary penalty being assessed against Houghton County Memorial Airport, then, the person shall be responsible and shall reimburse the airport in the full amount of any such monetary penalty or other damages. i

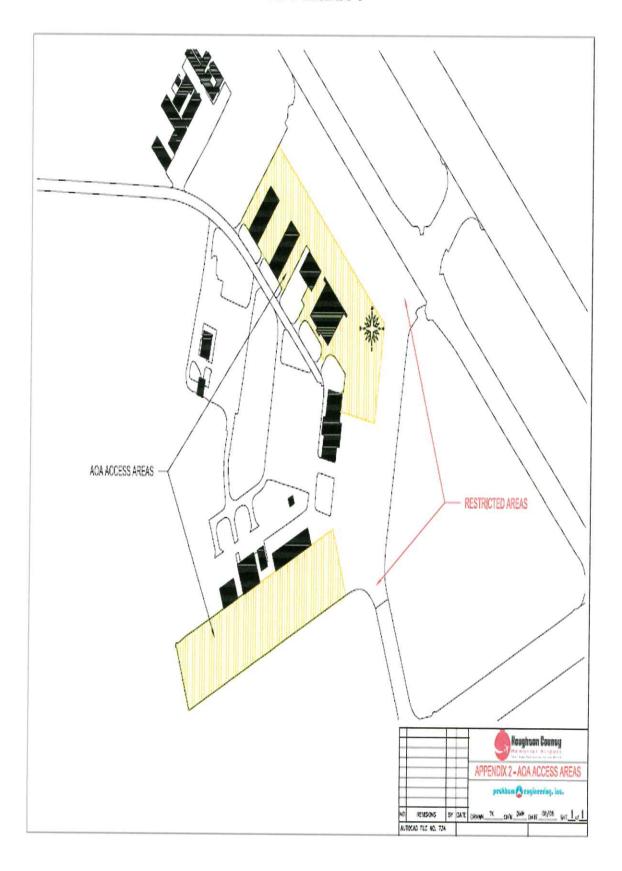
A fee of \$25.00 per person will be charged for remedial training.

# Reporting an Incident or accident.

If an incident or accident occurs:

- 1. Immediately stop and remain at the scene of the accident.
- 2. Render reasonable assistance, if capable, to any person injured in the accident.
- 3. Report the accident immediately to the Airport before leaving the scene, if possible. Contact the Airport Administrative office at 906-482-3970 or 906-281-0216. If there is no answer contact County Maintenance at 906-487-5975.
- 4. Provide and surrender the following to any responding Airport employee. Name, address, airport identification, state driver's license, and any information needed to complete a motor vehicle accident report.

#### **APPENDIX 1**



# **APPENDEX 2**

