

Ground Vehicle Operation Training Manual

Section 1. Airport Driving Rules and Regulations

- 1. Authority for Implementation of Rules. The Cheyenne Regional Airport operates under the authority of a Joint Powers Board with appointees from both the City of Cheyenne and Laramie County. This board has granted the Airport Manager, and his/her designee, as the authority to make any rules, regulations, or bylaws for the management and supervision of the Airport.
 - Ground vehicle operations on the Airport Operations Area (AOA) shall be conducted in accordance with this manual, Federal Aviation Regulations, the Airport's Certification Manual, Laramie County Code of Ordinances, and the City of Cheyenne Statutes.
- 2. Applicability. These rules apply to all users of, and person on any portion of, the property owned or controlled by the Cheyenne Regional Airport. No persons are exempt from the Airport's operating training requirements for operating a vehicle on the AOA of the Airport. Tenants shall be responsible for the dissemination of, accessibility to, and compliance with these rules and regulations by their employees.
- 3. These rules and regulations may be amended, changed, or modified by the Airport Manager as necessary.
- 4. Definitions. The following terms are defined as indicated in this section for the purpose of this Ground Vehicle Operation Training Manual:
 - a. <u>Air Operations Area (AOA)</u> That portion of an airport designed and used for landing, taking off, or surface maneuvering of aircraft. Area inside the security fence.
 - b. <u>Air Traffic Control Tower (ATCT)</u> A facility that uses air/ground communications, visual signaling, and other devices to provide air traffic control services to aircraft operating in the vicinity of an airport or on the movement area.
 - c. <u>Apron</u> A defined area on an airport intended to accommodate aircraft for the purpose of loading or unloading passengers or cargo, fueling, parking, or maintenance. Also referred to as ramp.
 - d. <u>Common Traffic Advisory Frequency (CTAF)</u> A frequency designed for the purpose of carrying out airport advisory practices while operating from an airport without an operating control tower. CYS CTAF 118.7 MHz is utilized between the hours of 2200 and 0600 local.



- e. <u>Driver</u> Any person responsible for the direct control of a vehicle while the vehicle is in operation. Also called the operator.
- f. <u>Emergency Vehicle</u> Vehicles of the Police, Sheriff, Fire Departments, Ambulances, and Cheyenne Airport responding to an emergency.
- g. <u>Escort</u> An individual, with a valid airfield driver's permit, taking the responsibility for another individual who does not hold a current drivers permit. The individual providing the escort must be in a reasonable proximity to the individual under escort so as to control that persons actions.
- h. <u>Federal Aviation Administration (FAA)</u> A division of the U.S. Department of Transportation charged with the regulation of civil aviation to promote safety, security, and development of the aviation industry.
- i. <u>Federal Aviation Regulation (FAR)</u> Administrative regulation promulgated by the FAA. Includes regulations on aircraft, airmen, airspace, air carriers, and airports.
- j. <u>Fixed Base Operator (FBO)</u> An on-airport business providing general aviation services usually including aircraft maintenance, aircraft parking/storage, aircraft fueling, aircraft rental, flight instruction, and charter service.
- k. Foreign Object Debris (FOD) Any loose objects or debris on the airport.
- 1. <u>Hold Bar</u> Pair of solid and pair of dashed yellow lines painted on runways and taxiways marking a designated stopping point.
- m. <u>ILS Critical Area</u> Area where instrument landing system (ILS) signal interference may occur from either ground vehicles or aircraft.
- n. <u>Jet Blast</u> High velocity exhaust from turbine engines.
- o. <u>Movement Area</u> The runways, taxiways, and other areas of an airport which are utilized for taxiing, takeoff, and landing of aircraft, exclusive of loading aprons and parking areas. At those airports with a tower, specific approval for entry onto the movement area **must** be obtained from air traffic control.
- p. <u>Navigational Aid</u> Apparatus generally within the AOA, which serves as a guide to landing aircraft.
- q. Non-movement Area Apron (ramp) areas of an airport not under the control of air traffic control.
- r. <u>Non-Movement Markings</u> Designated by a single solid yellow stripe followed by a single broken yellow stripe.
- s. <u>Perimeter Road</u> Vehicle roadway established along the perimeter fence of the airport.
- t. <u>Runway</u> A defined rectangular area on an airport designed for the landing and takeoff run of aircraft along its length.



- u. <u>Safety Area</u> A defined rectangular area extending beyond runways and taxiways, which require air traffic control authorization to enter. Objects placed in a safety area must be necessary for aircraft operations and be mounted on frangible mounting.
- v. <u>Taxiway</u> Paved area for aircraft movement between the runway and parking area.
- w. <u>Terminal</u> A building through which passengers transit between ground and air transportation.
- 5. Severability. If any section, subsection, subdivision, paragraph, sentence, clause, or phrase of these Rules and Regulations or any part thereof is for any reason held to be unconstitutional, invalid, or ineffective by any court of competent jurisdiction or other competent agency, such decision will not affect the validity or effectiveness of the remaining portions of these Rules and Regulations.
- 6. Violation of Rules Penalties and Suspension of Driving Privileges. Any person who does not comply with any part of these Rules and Regulations, or any lawful order issued pursuant thereto, will be subject to progressive penalties for repeat violations. These penalties may also include denied use of the Airport by the Cheyenne Regional Airport in addition to the penalties described pursuant to Federal, state, or local authorities.
 - a. Penalties for failure to comply with the Airside Operations Area (AOA) Regulations shall consist of written warnings, suspension of AOA driving privileges, and/or revocation of AOA driving privileges. Receipt of 3 (three) written warnings by an operator of a vehicle in any 12-month period will automatically result in suspension of AOA driving privileges.
 - b. Any violation of the AOA Rules and Regulations resulting in property damage or bodily injury will be considered severe in nature and can warrant immediate suspension of AOA driving privileges.
 - c. Revocation or suspension of an AOA driver's state driver's license will result in the revocation of AOA driver privileges.
 - d. Based on an evaluation of the circumstances or the severity of a particular incident(s), the Airport Manager reserves the exclusive right to assess any penalty it deems appropriate at any time to any individual authorized to operate a vehicle on the AOA without regard to prior operating history.



- e. The Airport Manager, or his/her designee, 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).
- 7. The Airport Manager will require any individual involved in a runway incursion or other vehicle incident to complete remedial AOA driver training if deemed appropriate.
- 8. Vehicle Operating Requirements.
 - a. All applicants must satisfactorily complete the applicable online driver training course before receiving an AOA driver's permit.
 - b. All applicants must pass the written test of the applicable course with at least a 70% for non-movement driver training, or an 80% for movement area driver training. Applicants who do not pass the written test may retake the test after additional study within a 7-day period.
 - c. Applicants for movement area driving privileges shall be required to successfully complete an airside driving test by a designated representative of the Airport Manager.
 - d. No vehicle shall be operated on the non-movement or movement areas unless:
 - i. The driver is authorized to operate the class of vehicle by an appropriate state-licensing agency or by the driver's employer through a company training/certification program.
 - ii. The driver properly displays an approved, airport-issued driver permit with the appropriate designated area authorized to drive.
 - iii. Unless escorted by a driver permitted to operate in the areas accessed, and as long as the vehicle remains under the control of the escort.
 - e. No person operating or driving a vehicle on any aircraft ramp shall exceed a speed greater than what is considered proper and prudent so as to minimize damage in the event of an accident. Factors including, but not limited to, weather and visibility shall be taken into consideration when determining safe operating speed.



- f. No vehicle shall pass between an aircraft and passenger terminal or passenger lane when the aircraft is parked at a 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 absolutely necessary from any wing or tail section.
- g. Moving aircraft and passenger s enplaning or departing aircraft shall have the right-of-way at all times over vehicular traffic. Vehicle drivers must yield the right-of-way.
- h. No vehicle operator shall enter the movement area
 - i. Without first obtaining permission of the Airport Manager (movement area operator permit) and clearance from the Air Traffic Control Tower (ATCT) to enter the movement area;
 - ii. Unless equipped with an operable two-way radio in communication with the ATCT; or
 - iii. Unless accompanied by an experienced driver who holds a valid Airfield Driver's Permit.
 - iv. Unless escorted by an Airport Operations or Administration vehicle, or a vehicle operated permitted to drive in the movement area, and as long as the vehicle remains under the control of the escort vehicle.
- i. No person shall
 - i. Operate any vehicle that is overloaded or carrying more passengers than for which the vehicle was designated.
 - ii. Ride on the running board or stand up in the body of a moving vehicle.
 - iii. Ride with arms or legs protruding from the body of a vehicle except when the vehicle was designated for such use.
- j. A vehicle guide person is required whenever the vision of the vehicle operator is restricted.
- k. No fuel truck shall be brought into, stored, or parked within 50 feet of a building. Fuel trucks must not be parked within 10 feet from other vehicles.



- 1. Container farriers and tugs shall tow no more carts, pods, or containers than are practical, under control, tracking properly, and safe.
- m. When not serving aircraft or undertaking their intended functions, ramp vehicles and equipment shall be parked only in approved areas.
- n. 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.
- o. No person shall operate a vehicle or other equipment on Airport property under the influence of alcohol or any drug that impairs, or may impair, the operator's abilities.
- p. Each vehicle operator using an airport perimeter (security) 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 AOA while the gate is open.
- q. Vehicle operators shall not operate vehicles in a reckless or careless manner. A reckless or carless manner is one that intentionally or through negligence threatens the life or safety of any person or threatens damage or destruction to property.
- r. Vehicles shall not enter the movement area or cross runways unless the operator of the vehicle has received required training and authorization from the Airport Manager to operate on the movement area. Whenever possible, all airport vehicles shall utilize the airport perimeter and service roads to transition between areas on the Airport.
- s. Each vehicle operator is responsible for the activities of each vehicle passenger on the AOA of the Airport.

9. Vehicle Regulations.

a. No vehicle shall be operated on the AOA unless it has proper registration in the State of Wyoming or is a qualified off-road vehicle that is not normally operated on public streets but has received the approval of the Airport Manager.



- b. All vehicles operated on the AOA must have vehicle liability insurance, as required by the Airport Manager.
- c. The Airport Manager must approve tenant vehicles operated on the movement and non-movement areas. These vehicles must display a Cheyenne Regional Airport AOA permit on the review mirror of the vehicle or an airport-approved company logo that is at least 3 inches in height on the passenger and operator's doors.
- d. No vehicle is permitted on the AOA unless:
 - It meets the markings or lighting requirements as outlined in FAA
 Advisory Circular 150/5210-5, Painting, Marking, and Lighting of
 Vehicles Used on an Airport, for all vehicles requiring access to the
 Movement Areas.
 - ii. It is in sound mechanical condition with unobstructed forward and side vision from the driver's seat.
 - iii. It has the appropriately rated and inspected fire extinguishers (service vehicles and fuel trucks).
 - iv. It has operable headlamps and brake lights.
- e. Vehicles operating on the movement area shall be equipped with operating amber rotating beacon or strobe, mounted on the highest part of the vehicle, with 360-degree un-obstructed rotation.
- 10. Vehicular Accidents. Operators of vehicles involved in an accident on the Airport that results in injury to a person or damage to an aircraft, airport property, or another vehicle shall –
 - a. Immediately stop and remain at the scene of the accident.
 - b. Render reasonable assistance, if capable, to any person injured in the accident.
 - c. Report the accident immediately to the Airport Manager or his/her designee by calling the Airport duty cell phone at 307-638-3872.



d. Provide or surrender the following to any responding Airport personnel: Name and address, Airport AOA Driving Permit, state driver's license, and any information such personnel need to complete a motor vehicle accident report.



Section 2. Driving on the Non-Movement Areas

- Non-movement areas include ramps, aprons, taxi lanes, and other areas not under the
 control of the ATCT. Anyone authorized to operate a motorized vehicle on the AOA
 may do so without being in positive radio contact with the ATCT. These areas
 include:
 - a. Perimeter Road
 - b. T-hangar Complex
 - c. Sky Harbor Ramp
 - d. Terminal Apron
 - e. North Terminal Apron

(Map of authorized areas included in Exhibit 1)

- 2. Driving. Operating within the ramp areas requires the vehicle driver to exercise extreme caution as aircraft are always moving, aircraft passengers may be walking from an aircraft to the gate, and noise levels are high.
 - a. Vehicle drivers should
 - i. Never drive between safety cones or across delineated passenger walkways.
 - ii. Watch cockpit blind spots pilots typically cannot see behind or below the aircraft.
 - iii. Avoid jet blast or prop wash, which can blow debris or overturn vehicles.
 - iv. Be aware and avoid moving propellers that can cause damage, injury, or death.
 - v. Be aware of other vehicle movements you may not hear them approaching due to aircraft engine noise.
 - vi. Yield to aircraft, passengers, and emergency vehicles, which ALWAYS have the right-of-way on any portion of the airport.



b. Nighttime and Poor Weather Driving Conditions. Poor weather conditions (Snow, fog, rain, etc.) might obscure visual cues, roadway markings, and airport signs. Vehicle operators should remain vigilant of their surroundings and operating boundaries. Watch out for snow removal equipment and aircraft operating in the vicinity under low-visibility conditions. There are additional risks present under these conditions.



Section 3. Driving on the Movement Areas

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 non-movement areas. In addition to the principals for driving on 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 with Air Traffic Control (ATC) and be able to follow ATC directions.

- 1. Air Traffic Control. Movement areas at the Cheyenne Regional Airport are defined as the runways, taxiways, and other 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 will need permission from ATC before entering the area. (Movement Areas depicted in Exhibit 2)
- 2. Authorized Vehicles. Only those vehicles necessary for airport operations may enter a movement area. Therefore, fuel trucks, maintenance vehicles, tugs, and other nonessential vehicles should avoid entering these areas unless absolutely necessary to perform duties. Exceptions may include Airport-authorized vehicles with appropriate trained personnel such as Air National Guard Security Forces, Airfield Operations, Aircraft Rescue and Fire Fighting Vehicles, and Air Traffic Control.

3. Taxiways.

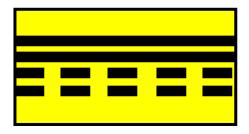
- a. Designations. Aircraft use taxiways to move to and from the aprons and the runways. Taxiways are designated by letters or by a letter/number combination such as A, B, B2, or A3.
- b. Lighting. Taxiways are lighted with BLUE edge lighting.
- c. Signs. The signs used on taxiways are direction, destination, location, and taxiway ending marker signs.
- d. Direction and Designation Signs have BLACK LETTERING and a DIRECTIONAL ARROW or ARROWS on a YELLOW BACKGROUND. The arrow indicates the direction to that taxiway, runway, or destination.



e. Location Signs have YELLOW LETTERING on a BLACK BACKGROUND.

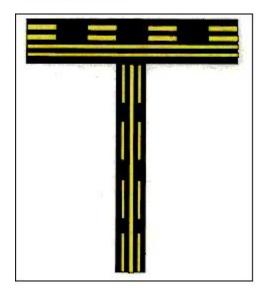


f. Runway Safety Area/Object Free Zone (OFZ). Identify the boundary of the runway and safety area/OFZ or the runway approach area to the pilot and vehicle operator. The driver can use these signs to identify when the vehicle is clear of the runway environment. It has a BLACK INSCRIPTION that depicts the holding marking on a YELLOW BACKGROUND.



- g. Markings. Pavement markings on a taxiway are always YELLOW. The taxiway centerline is painted on all taxiways. On the edges of some taxiways, there is a solid, double yellow line or double-dashed line. If the pavements are usable on both sides of the line, the lines will be dashed; if not, the lines will be solid.
- h. Runway Holding Position Markings are located across each taxiway that leads directly onto a runway. These markings are made up of TWO SOLID LINES and TWO BROKEN YELLOW LINES and denote runway holding position markings. These markings are always co-located with a Runway Holding Position Sign. A vehicle operator must not cross from the solid-line side of the marking without first obtaining clearance.





i. Enhanced Taxiway Centerline Markings will appear before a runway hold line. These parking are intended to serve as an additional warning to flight crews that they are approaching the runway.



j. Non-Movement Area Boundary Markings consist of TWO YELLOW LINES, one solid and one dashed. The solid line is located on the non-movement area side, while the dashed yellow line is located on the movement area side. A vehicle operator is not to cross from the solid-line side without first contacting the ATCT and obtaining a clearance to operate on the movement area.



4. Runways.

a. Designations. Runways are areas where aircraft land and take off. Runways are always designated by a number such as 9 or 27. The number indicates the compass heading of the runway. An aircraft taking off on runway 27 is headed 270 degrees.



- b. Lighting. Runways are lighted with a variety of colored lights.
 - i. Runway Edge-lights are WHITE. If the runway has an instrument approach, the last 2,000 feet of the runway will be AMBER in color.



ii. Runway End/Threshold Lights are split lenses that are red/green.



- c. Signs.
 - i. Mandatory Holding Position Signs for Runways have WHITE NUMBERING/LETTERING on a RED BACKGROUND with a WHITE BOARDER. These are located at each entrance to a runway and at the edge of the runway safety area/obstacle-free zone and are co-located with runway holding position markings. DO NOT PROCEED BEYOND THESE SIGNS UNTIL CLEARANCE IS GIVEN BY THE ATCT TO ENTER ONTO THE RUNWAY!



ii. Holding Position Signs for Runway Approach Areas. The inscription on a sign for a runway approach area is the associated runway designation followed by a dash and the abbreviation APCH for



approach. This sign has WHITE NUMBERING on a RED BACKGROUND with a WHITE BORDER. The sign is installed on taxiways located in approach areas where an aircraft on a taxiway would either cross through the runway safety area or penetrate the airspace required for the approach or departure runway.



d. Markings. Pavement markings on a runway are WHITE.



Section 4. Communications

- 1. Any vehicle driving on the Movement Areas must be in contact with the ATCT or capable of monitoring and transmitting on the CTAF. Vehicle operators must always monitor the appropriate radio frequency when in the movement areas on controlled airports. Permission must be requested and clearance given prior to driving on a movement area. A vehicle that is equipped with a radio may escort vehicles without radios. When a movement area is closed for constriction, vehicles may traverse that area without ATCT contact but must be escorted if their travels require them to cross an active movement area.
- 2. The ATCT controller may use separate or common radio frequency to control all ground traffic, vehicle and aircraft, on the movement areas. The frequency is only to be used to get clearances onto and off the movement areas. When the ATCT is closed, the CTAF should be used to announce a driver's intentions when operating within the movement areas.
- 3. Phraseology. Vehicle operators must contact the ATCT ground controller each and every time they proceed onto or leave the movement area. When proceeding onto a movement area, vehicle operators must tell the controller three things: Who you are, where you are, what your intentions are. Vehicle operators must always acknowledge all communications so ground control and other persons know that the message was received. Vehicle operators must always give aircraft and ground control transmissions priority unless an emergency exists. Very high frequency frequencies are for the primary use of aircraft and ATCT personnel.
 - a. Know the correct phrases that pilots and controllers use. Controllers do not use "ten" codes such as "ten-four".
 - b. Know what you are going to say before you call the controller. If you are uncomfortable talking on the radio, practice a few times before making the transmission.
 - c. Use the proper sequence in calling the controller. Before you begin speaking on the frequency, make sure that no one else is already talking, otherwise the frequency will be blocked and neither transmission will be heard. Also, don't talk until a conversation is over (if someone makes a request, expect a response).
 - d. If you are ever unsure of a transmission **ASK**, before you proceed. Never cross or travel on any part of the movement area unless you are 100 percent sure you have



received *specific* permission for your *exact* intentions. Don't assume anything when in doubt ask!

e. Program your two-way radio to CYS Ground Traffic Control frequency of 121.90. If the radio frequency is clear, state who you are calling, then identify who you are. i.e.:

Driver: "Cheyenne ground, Airport 2."

ATCT: "Airport 2, Cheyenne ground."

Driver: "Airport 2 on the terminal ramp would like to proceed on to 'Bravo 1' crossing 13/31 and 9/27 to the air guard ramp."

ATCT: "Airport 2 proceed onto taxiway 'Bravo 1' hold short of runway 9/27."

Driver: "Airport 2 will hold short of 9/27 on taxiway 'Bravo 1.'"

NOTE: It is mandatory to repeat all hold short instructions to show that you have heard and fully understand the order.

Once traffic has cleared allowing you to cross runway 8/26 tower will contact you.

ATCT: "Airport 2 proceed across runway 9/27 and runway 13/31 via 'Bravo 1' and "Echo" and proceed to the air guard ramp."

Driver: "Airport 2 cleared to cross 9/27 and 13/31 via 'Bravo 1' and 'Echo" to the air guard ramp."

Once off of all movement areas report it to the ATCT controller.

Driver: "Airport 2 is off of all runways and taxiways."

4. ATCT Light Gun Signals. In the event that a radio becomes inoperative, ATCT has a backup system for communicating. A light gun sends out different colored lights that will indicate instructions to the aircraft or vehicle. In the event that your radio becomes inoperative turn your vehicle towards the control tower and begin flashing the vehicle's headlights and wait for light gun signals from the controller. The following is a list of ATCT light gun signals:

Steady Green......Cleared to cross, proceed or go.



Steady Red.....Stop.

Flashing Red.....Clear the taxiway/runway.

Flashing White.....Return to starting point on airport.

Alternating red/green.....Exercise extreme caution.

5. Common Phraseology. Correct phraseology is an important element in communicating with the tower. It makes for short to the point communication that both pilot and controller can easily understand.

What is said What it means

Acknowledge Let me know you have received and understand.

Advise Intentions Tell me what you plan to do.

Affirmative Yes.

Confirm Is this correct?

Correction I made a mistake. This is what I should of said.

Go ahead Continue speaking your message.

Hold Stay where you are.

Hold short Stop at the hold line at the intersection of the taxiway and

runway. Do not proceed onto the runway.

Immediately Right now.

Negative No, permission not granted, or that is not correct.

Out The radio conversion has ended and no response is

expected.

Over My radio transmission has ended and I expect a response.

Proceed You are authorized to begin or continue

moving.

Read back Repeat my message to me.

Roger I have received your last transmission.

Say again Repeat what you just said.
Stand-by Wait, I will get back to you.

Unable I can't do it.

Verify Request confirmation of information. Also, check and

transmit correct information.

Wilco I have received your message, understand it, and will

comply.



6. Phonetic Aviation Alphabet. Because some letters have similar sounds, like B and P, the international aviation industry uses the following words to reduce confusion:

AAlpha	JJuliet	RRomeo
BBravo	KKilo	SSierra
CCharlie	LLima	TTango
DDelta	MMike	UUniform
EEcho	NNovember	VVictor
FFoxtrot	OOscar	WWhiskey
GGulf	PPapa	XX-ray
HHotel	QQuebec	YYankee
IIndia		ZZulu

7. Cheyenne Air Traffic Control Tower directs all operations of aircraft and ground vehicles on the movement area. When the facility closes between the hours of 2200 and 0600 local nightly, all traffic must advise their intentions on Common Traffic Advisory Frequency (CTAF) of 118.70 MHz. It is imperative that **all** drivers be alert while looking for other traffic and to exchange information with all taxiing, landing, and departing aircraft by using the manner of the following phraseology:

Driver: "Cheyenne traffic, Airport 3 is crossing runway 9/27 at taxiway 'Bravo 1' to 'Echo taxiway'. Any traffic in the Cheyenne area please advise."

Aircraft: "Cheyenne traffic, Piper six niner november delta is five miles east landing runway 27."

Driver: "Cheyenne traffic, Airport 3 is holding short of runway 27 on taxiway Bravo 1 for landing traffic."

Aircraft: "Cheyenne traffic, Piper six niner november delta is on short final for runway 27."

Driver: "Aircraft landing runway 27, Airport 3 is holding short of your runway."

Aircraft: "Cheyenne traffic, Piper six niner november delta is clearing runway 27 taxiing to Sky Harbor via taxiway Bravo 2."

Driver: "Cheyenne traffic, Airport 3 is crossing runway 7 at taxiway Bravo 1. Any traffic in the Cheyenne area please advise." Hearing no response you may proceed to cross runway 27.



Driver: "Cheyenne traffic, Airport 3 is off of all runways and taxiways."

NOTE: Always announce your position when clearing.

- 8. Safety. The FAA defines runway incursion as "any occurrence at an airport 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."
 - a. Runway inclusions are primarily caused by error in one or more of the following areas:
 - i. Pilot/ground vehicle/controller communications
 - ii. Airport familiarity
 - iii. Loss of situational awareness
 - b. An example of an incursion is a vehicle at an airport with an operating ATCT straying onto a runway in front of an aircraft causing the pilot to take an action to avoid a collision.
 - c. When driving on the airfield, vehicle operators need to always be aware of their location and the meaning of all pavement markings, lights, and signs. When on the aprons and taxiways, stay away and steer clear of aircraft. Aircraft always have the right-of-way.