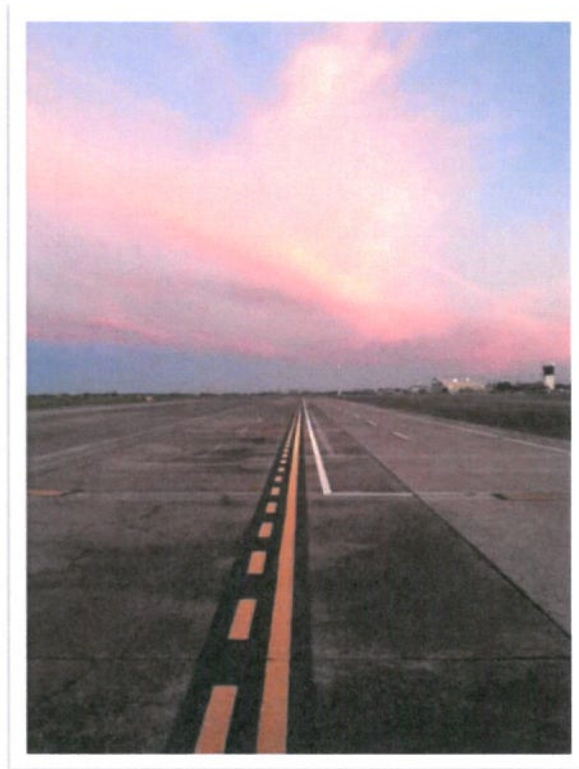
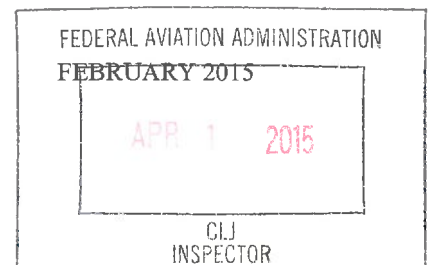


**CHICO MUNICIPAL
AIRPORT
NON-MOVEMENT AREA
DRIVER TRAINING
PROGRAM
STUDY GUIDE**



PRODUCED BY
CHICO MUNICIPAL AIRPORT



Introduction

In an effort to provide the safest and most efficient operating environment for tenants and users of the Chico Municipal Airport (CIC), and to meet Federal Aviation Administration (FAA) Part 139 regulations, CIC has developed this Non-movement Area Driver Training Program to teach individuals who may occasionally operate a vehicle on the Airport Operations Area (AOA), for instance to access their General Aviation hangars, the correct procedures for driving safely. This training program will familiarize drivers with the layout of the runways and taxiways at CIC, airport signage, marking and lighting and general procedures for operating vehicles on the airport. A written examination is included as part of this training to assist in ensuring the information provided has been thoroughly understood and retained.

FAA regulations require initial and recurrent (every 12 consecutive calendar months) airport driver training for all individuals requesting vehicle access to the AOA. In order to obtain a new gate access card or to renew an existing gate access card individuals must complete this Non-movement Area Driver Training Program and pass the written examination prior to being issued an airport gate access card.

NOTE: This Non-movement Area Driver Training Program is not intended for individuals who require authority to drive in the movement area (runways, taxiways, etc.). In order to be authorized to drive in a movement area a driver must complete the more detailed Movement Area Driver Training Program.

The implementation of this driver training program is intended to assist in the elimination of “Surface Incidents” and “Runway Incursions” with the goal of increasing overall safety and efficiency.

Surface Incident is defined as any movement area activity by a vehicle or pedestrian that has not been authorized by the Air Traffic Control Tower (ATCT).

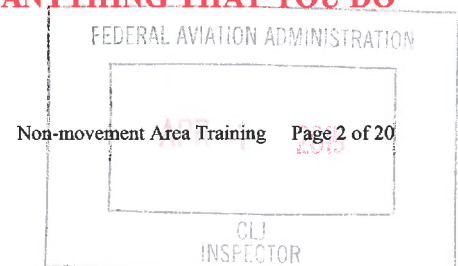
Runway Incursion is defined as any occurrence at an airport involving an aircraft, vehicle, person or object on the ground, that enters a protected area of a surface designated for the landing and take-off of aircraft.

These events can result in an aircraft collision which are often deadly and always expensive.

In order to minimize the risk of a surface incident or runway incursion, it is extremely important that all persons who operate a vehicle on the airport have a thorough understanding of the airport Rules and Regulations, standard procedures for operating a vehicle on the airport, the runway and airport layout and a general understanding of the various items they may encounter while driving on the airport.

The key to safely operating a vehicle on any airport is “Situational Awareness.” Being constantly aware of your surroundings and anticipating what will take place next is a critical aspect to operating a vehicle safely on an airport.

DO NOT HESITATE TO ASK QUESTIONS IF THERE IS ANYTHING THAT YOU DO NOT UNDERSTAND.



Terms and Definitions

Air Operations Area (AOA) – the area of the airport located within the perimeter fence line used or intended to be used for landing, takeoff or surface maneuvering of aircraft. The AOA includes the active runways, taxiways, apron/ramp and the infield turf areas. The AOA is considered a restricted area and is off-limits to the general public.

Air Traffic Control Tower (ATCT) – a service operated by an appropriate authority to promote the safe, orderly and expeditious flow of air traffic.

Aircraft Apron or Ramp – an area of the airport used or intended to be used for aircraft surface maneuvering, parking, fueling and the transport of passengers to and from aircraft.

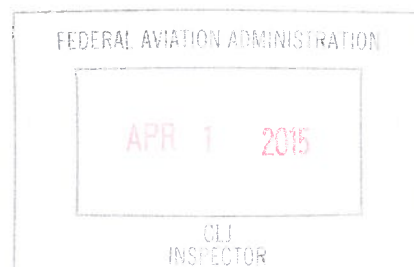
Foreign Object Debris/Damage (FOD) – debris on the airfield that can cause damage to aircraft engines, tires or skin. FOD can be rocks, tools, birds, screws, washers or any object that can cause damage to aircraft or persons.

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

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 the ATCT** and which **require clearance from the ATCT prior to entering**.

Non-movement Areas – those areas of the airport where aircraft taxi or are towed or pushed without radio contact with the ATCT, such as taxiways, aprons and other areas not under the control of the ATCT or at airports without an operating ATCT.

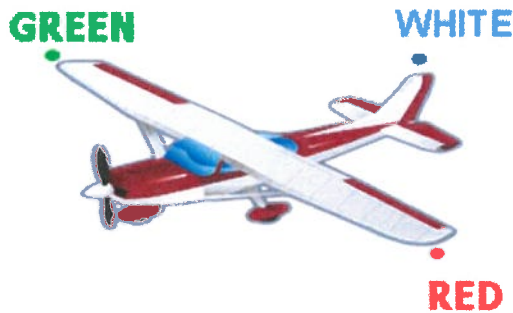
Restricted Area – areas of the airport posted to prohibit or limit entry or access by the general public such as the area where air carrier operations take place.



Airport Safety and Regulations

Vehicle Operations in the Vicinity of Aircraft

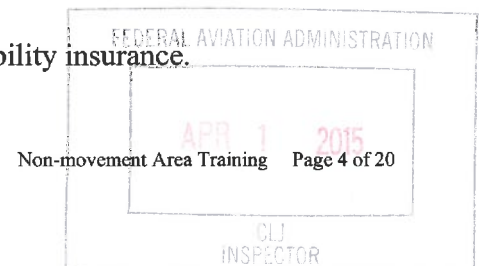
- **Always yield the right-of-way to aircraft.** Vehicles operating on airport property must always yield the right-of-way to aircraft being taxied, towed, hovered or otherwise moved in any way. Drivers must be extremely vigilant at all times particularly since aircraft do cross the vehicle travel lane at many locations along the airfield.
- **Never drive under any portion of an aircraft.** Be aware of and avoid moving propellers and jet blast or prop wash which can cause damage, injury or death.
- Aircraft wingtip position lights are red on the left wing tip, green on the right wing tip and white on the tail. This provides other aircraft and vehicles with a reference as to the direction the aircraft is moving. *For instance, an aircraft moving toward you will have a red light on the right side and a green light on the left side.*



Motor Vehicle Rules and Regulations

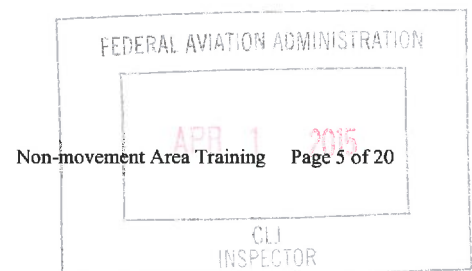
The rules and regulations for motor vehicles on the airport are established in the California Vehicle Code and the City of Chico Municipal Code, Chapter 11R.12, entitled Motor Vehicle Regulations. Frequent or serious violations of any of these rules and regulations may lead to suspension or permanent revocation of the privilege to operate a motor vehicle on the airport or even revocation of airport access altogether.

- No vehicle shall be operated on the airport unless the driver has a valid California Driver license in their possession **and** they have successfully completed the applicable airport driver training program **within the last 12 consecutive calendar months.**
- No vehicle shall be operated on the airport unless it has valid California vehicle registration and license plates or is a qualified “aircraft service vehicle” that is not normally operated on public streets.
- All vehicles operated on the airport must have vehicle liability insurance.



Airport Safety and Regulations

- No person operating a vehicle on the airport shall exceed a speed limit of **25 miles per hour**. When driving around aircraft the speed limit reduces to **5 miles per hour**.
- No vehicle shall pass another vehicle in the vehicle travel lane.
- No vehicle may enter onto a movement area without authorization from Airport Management **and** clearance from the ATCT via two way radio, unless the vehicle is escorted by CIC Airport Operations.
- No person shall operate a motor vehicle on airport property that is in such poor physical or mechanical condition as to endanger persons or property. Vehicles must be in sound mechanical order with adequate lights, horn and brakes and clear vision from the driver's seat.
- No person shall operate a vehicle on the airport in a careless or negligent manner, in disregard of the rights or safety of others or in any manner for which the vehicle was not designed.
- Trailers and semi-trailers shall not be permitted unless they are equipped with reflectors and proper brakes and/or are adequately secured so that neither aircraft prop wash, jet blast, nor wind will cause them to become free rolling when disengaged from a towing vehicle. Positive locking couplings shall be required for all towed equipment.
- No person shall stop, park or leave unattended, a vehicle on any area of airport property that is not specifically designated for vehicle parking or in a manner that obstructs operations of aircraft, emergency vehicles or other motor vehicles or equipment. **Personal vehicles shall never be parked on the apron/ramp at any time.**
- No person shall park a vehicle within 15 feet of a fire hydrant, in a manner that prohibits a vehicle from accessing a fire hydrant or in a designated fire lane.
- No person shall operate a vehicle on the airport under the influence of alcohol or drugs that impair or may impair the operator's abilities.
- **Driving on the airport at night or during periods of poor visibility should be avoided.** If, however, it is absolutely necessary then vehicles must display headlights on low beam from one-half hour after sunset to one-half hour before sunrise. Driving without lights, with parking lights only or with high beam headlights is prohibited. Any rear-shining spotlights, other than taillights, must be in the "OFF" position when driving on aprons/ramps and service roads.



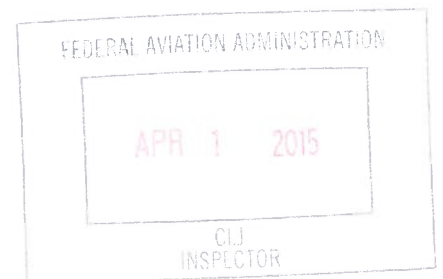
Airport Safety and Regulations

Vehicle Accidents and Incidents

- In the event of a vehicle accident, immediately stop, remain at the scene and report the accident to Chico Police Department at 911 or (530) 895-4911.
- Vehicles involved in an accident that also involves an aircraft in any way shall not be moved from the scene of the accident until approved by CIC Airport Operations or Chico Police Department.
- Drivers should remain with a disabled vehicle, attempt to delineate the vehicle with cones or hazard markers, report the disabled vehicle to Airport Operations and make arrangements to have the vehicle promptly removed.
- Immediately report any hazard or obstruction to aircraft or vehicular traffic to Airport Operations (530) 624-1342 or Chico Police Department (530) 895-4911.

Airport Security

- When entering the airport through any gate (vehicle or pedestrian) it is your responsibility to ensure the gate closes and no one gains access behind you.
- Allowing another driver to enter the airport through a vehicle gate behind you (“piggybacking”) is considered a serious violation and may result in the loss of your airport access privileges.
- When exiting, more than one vehicle may exit provided that the last vehicle stops and waits for the gate to close completely.
- If you bring someone onto the airport you are responsible for them and their actions at all times.
- If an airport gate fails to close **it is your responsibility** to immediately report the issue to CIC Airport Operations (530) 624-1342 or Chico Police Department (530) 895-4911.



Airport Familiarization

Non-Movement Area

A *non-movement area* is an area that is not under the control of the ATCT. Aircraft and vehicle operations on a non-movement area are done so at the operator's own risk.

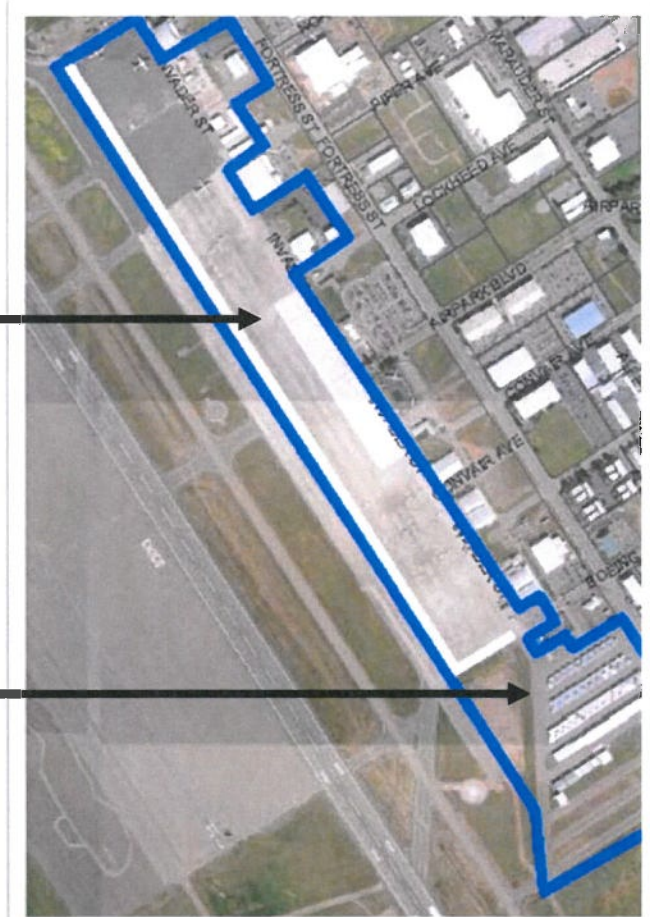
The diagram to the right shows the locations and designations of the non-movement area at CIC.

At CIC, the non-movement areas include:

Apron/Ramp – a paved surface which is designed for the parking of aircraft for the purposes of loading, unloading, fueling, and servicing.

Taxilane – a paved surface that is not under the control of the ATCT, taxilanes connect ramp/apron areas to the main taxiways.

Vehicle Travel Lane – is a paved surface delineated by a solid white line on each side and a broken white line in the center.



Airport Familiarization

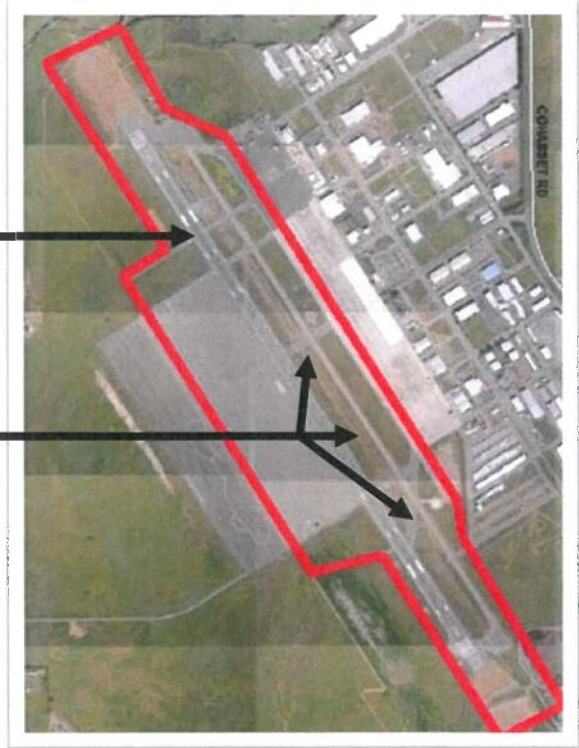
Movement Area

The *movement area* consists of the runways, taxiways and other areas on the airport, which are used for taxiing, takeoff and landing of aircraft, and that are under the control of the ATCT. **Completion of this Non-movement Area Driver Training Program does not authorize you to drive within a movement area.**

Following are the types of movement areas found on the airfield at CIC.

Runway – a defined, rectangular, paved surface on an airport designed for the landing or takeoff of aircraft.

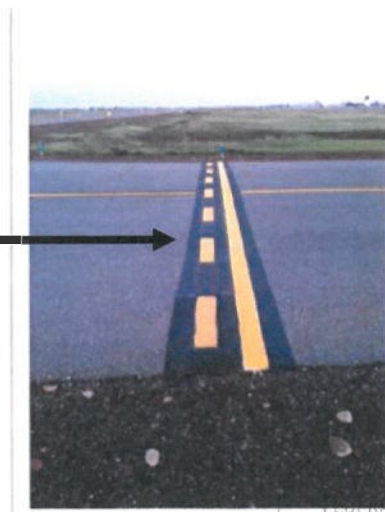
Taxiway – a paved surface designed for the movement of aircraft from one part of an airport to another, including to and from the runways.



The Movement Area is within the red lined area.

Movement / Non-Movement Area Boundary

The *movement / non-movement area boundary* delineates the movement area that is under the control of the ATCT from the non-movement area that is not under the control of the ATCT.



Movement / Non-Movement area boundary marking.

Non-movement Area Training Page 8 of 20 2015

CLI
INSPECTOR

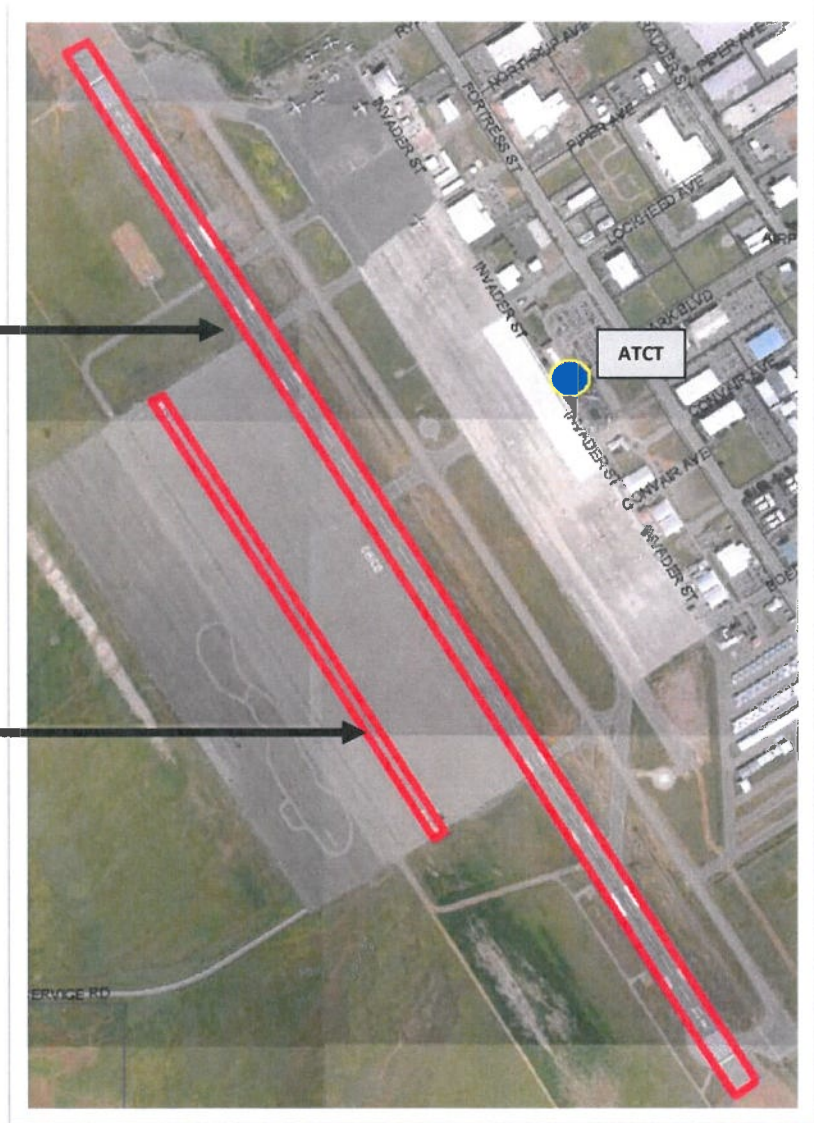
Airport Familiarization

CIC Runway Layout

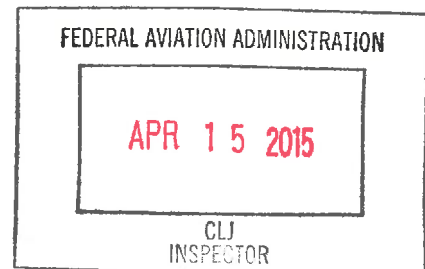
CIC has two parallel runways as shown in the diagram.

Runway 13 Left / 31 Right – is the precision instrument runway (PIR) which is the longer of the two runways. It is used by both propeller and jet aircraft, with jet aircraft having the majority of operations.

Runway 13 Right / 31 Left – is a basic runway and is referred to as the short runway. This runway is used by small propeller aircraft and helicopters.



CIC Runway Layout



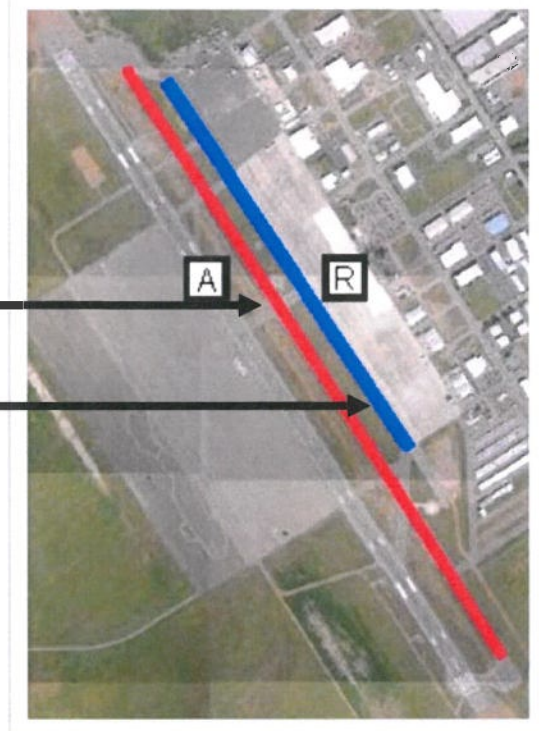
Airport Familiarization

Taxiways

CIC has two main taxiways which are north-south oriented and run parallel to the runways. These taxiways are designated Alpha (A) and Romeo (R).

Taxiway Alpha (A) is located on the east side of Runway 13 Left / 31 Right.

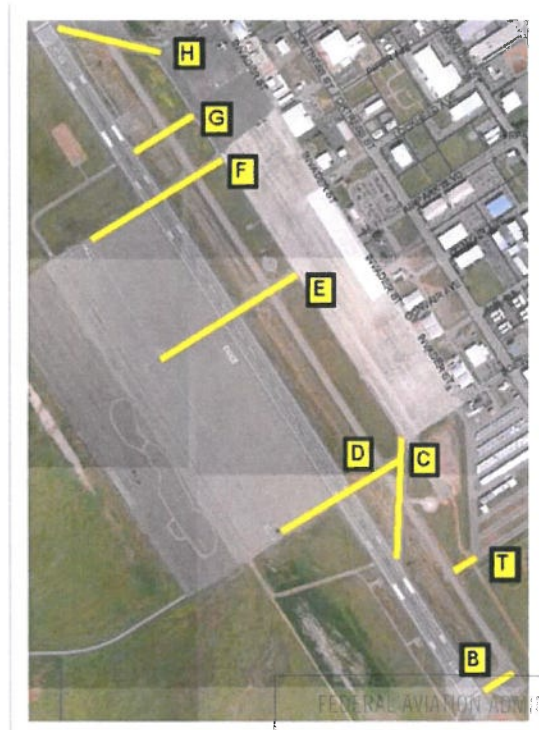
Taxiway Romeo (R) is located on the west side of the apron/ramp.



Main Taxiways

Connector Taxiways (Tie-ins)

The taxiways that cross the runways are known as *connector taxiways* or “tie-ins”. They are used by aircraft to taxi on, off or across the runways. The image below shows the designations and locations of the connector taxiways found at CIC.



Connector Taxiways

Airport Familiarization

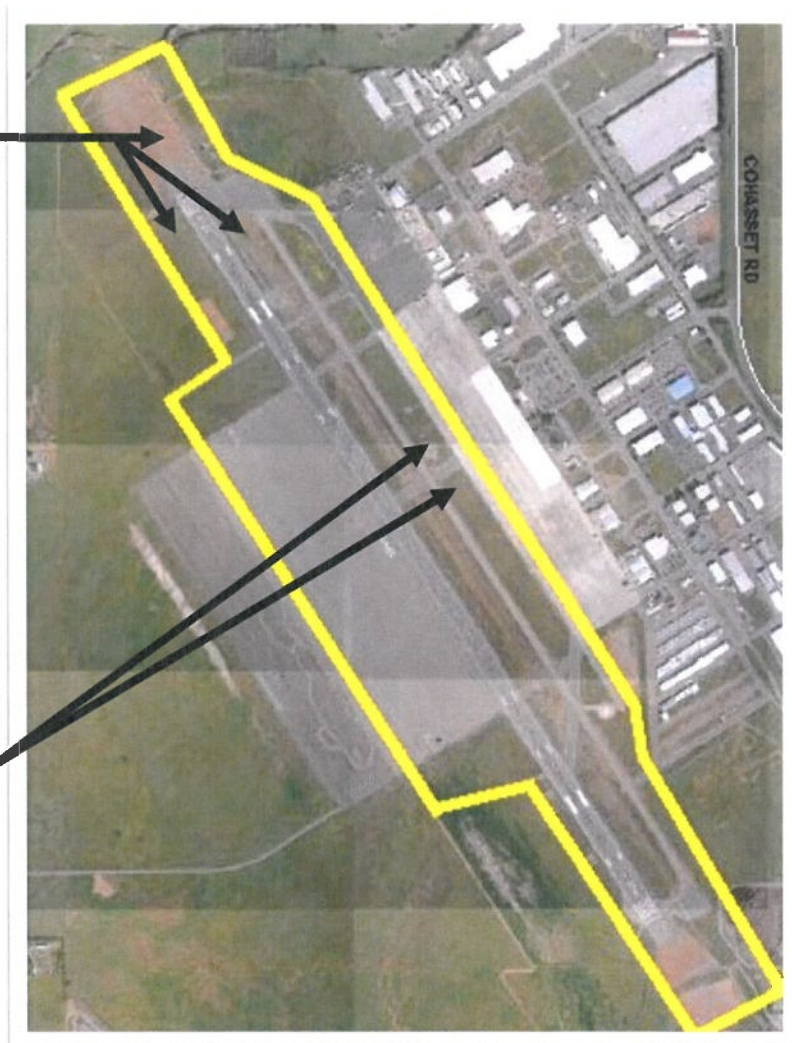
Safety Areas

A *safety area* is the surface surrounding the runway and/or taxiway which is prepared to be suitable for the occasional passage of an aircraft without undue risk of damage to the aircraft. Ground vehicles are prohibited from entering the safety area.

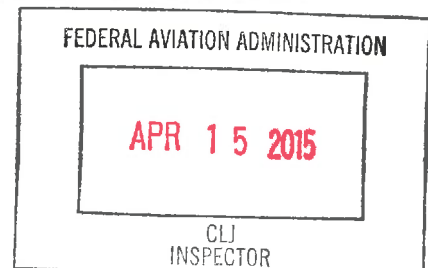
At CIC the safety areas are the dirt and grass infield areas adjacent to the runways and taxiways as depicted in the diagram below.

At CIC the **runway safety area** (RSA) is centered on the runway centerline. At CIC, the RSA is the standard 500 feet wide (250' each side of the runway centerline) and 1000 feet long (from the runway end). The RSA enhances the safety of aircraft which undershoot, overrun, or veer off the runway and it provides greater accessibility for fire-fighting and rescue equipment during such incidents.

The **taxiway safety area** is 118' centered on every taxiway (59' on each side of the taxiway centerline).



CIC Runway and Taxiway Safety Areas



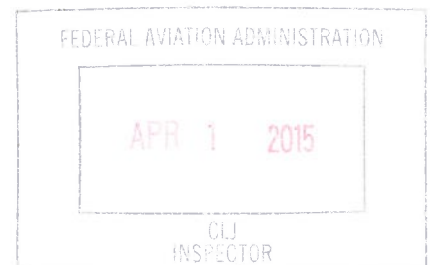
Airport Familiarization

Restricted Area

The *Restricted Area* is that portion of the AOA where air carrier operations occur. The Restricted Area is the most secure area on the airport and all persons who operate within the Restricted Area have special security clearance.



The *Restricted Area* at CIC is located adjacent to the passenger terminal building and is delineated by a red line in the shape of a box painted on the apron/ramp with white inscription stating “Restricted Area.”



Airport Familiarization

Runway Surface Markings

Surface painting markings that denote a runway are **white** and include **centerline**, **edge-lines**, **runway designation**, **threshold** and **threshold bar markings**. (See images below.)



Runway Centerline Marking

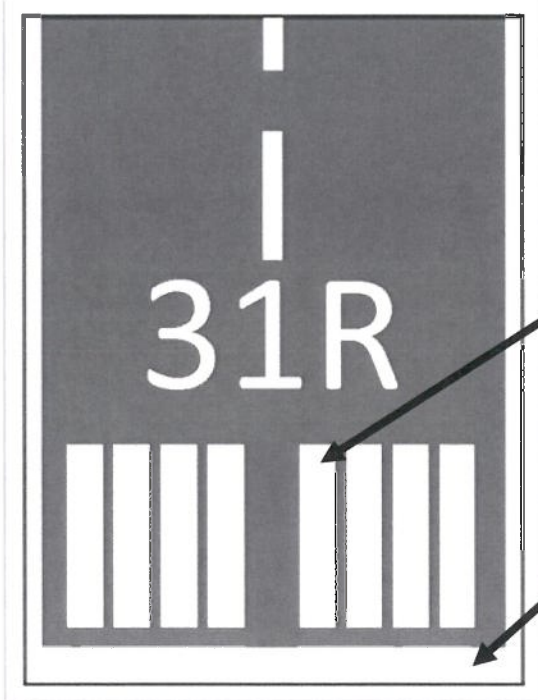
- ✓ White in color
- ✓ Wide dashed stripe
- ✓ Indicates the center of the runway
- ✓ Provides alignment guidance for aircraft

Runway Edge-lines

- ✓ White in color
- ✓ Single solid wide stripe
- ✓ Indicates edge of the usable runway as well as the edge of the full-strength pavement

Runway Designation

- ✓ White in color
- ✓ Numbers and letters that identify runway

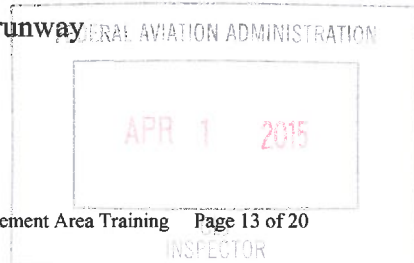


Runway Threshold Marking

- ✓ White in color
- ✓ Identifies the beginning of the runway which is available for landing

Runway Threshold Bar

- ✓ White in color
- ✓ Identifies the runway threshold



Airport Familiarization

Runway Holding Position Markings

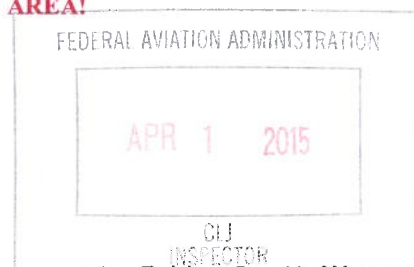
- ✓ Yellow in color
- ✓ Located at the intersection where a taxiway meets a runway
- ✓ Made up of *two solid and two dashed yellow lines*
- ✓ Denote a runway holding position
- ✓ When approaching this marking from the solid side, an operator must **“Hold Short”** and may not cross without first obtaining clearance from the ATCT
- ✓ When approaching this marking from the broken side of the line, the operator must cross the solid lines to be clear of the runway



Runway Holding Position Marking

NOTE: AT CHICO MUNICIPAL AIRPORT CROSSING OF THE RUNWAYS IS NOT ALLOWED BY GENERAL SERVICE ROAD VEHICLE TRAFFIC.

IF YOU FIND YOURSELF LOOKING AT THESE MARKINGS YOU ARE IN THE WRONG PLACE! THIS IS THE INTERSECTION OF AN ACTIVE RUNWAY AND A TAXIWAY! SERVICE ROAD TRAFFIC IS NOT PERMITTED TO BE IN THIS AREA!



Airport Familiarization

Movement / Non-Movement Area Boundary Marking

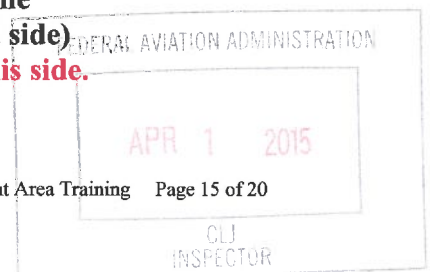
- ✓ Yellow in color
- ✓ Located on the boundary between the movement and non-movement area
- ✓ Delineates the movement area that is under control of the ATCT from the non-movement area



**Taxiway Romeo
(movement area side)
It is not OK
to drive on this side.**



**Vehicle Travel Lane
(non-movement area side)
It is OK to drive on this side.**



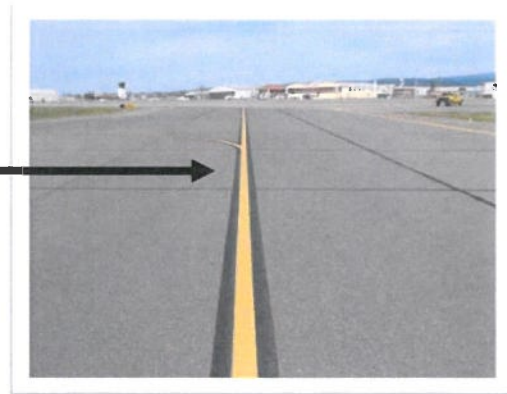
Airport Familiarization

Taxiway Surface Markings

Taxiway surface markings are **yellow**. Markings include the **single solid yellow centerline** and a **double solid yellow edge line** marking. Shoulder areas beyond the **solid double yellow edge lines** are not intended for aircraft use.

Taxiway Centerline Marking

- ✓ Yellow in color
- ✓ Solid line
- ✓ Denotes the center of the taxiway and to provides alignment and guidance for aircraft



Taxiway Edge Line Marking

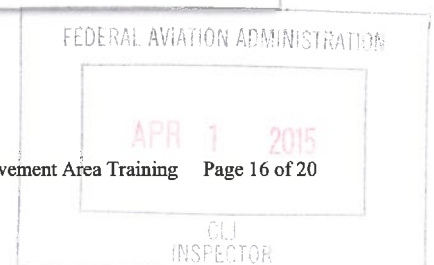
- ✓ Yellow in color
- ✓ Solid double line
- ✓ Defines the edge of the full-strength pavement

DO NOT CROSS A SOLID DOUBLE EDGE LINE



Enhanced Taxiway Centerline Marking

- ✓ Yellow in color
- ✓ Solid line with dashed lines on each side
- ✓ Warns pilots that they are approaching a runway holding position marking



Airport Familiarization

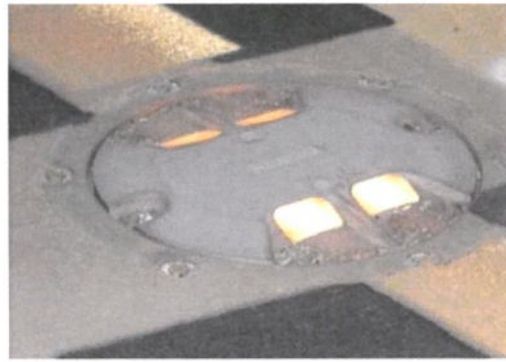
Runway Lighting

Runway Edge Lights

- ✓ White in color
- ✓ Runway lighting at CIC consists of white edge lighting only, there are no runway centerline lights
- ✓ These edge lights exist in two different forms as pictured below



Elevated Runway Edge Light Fixture



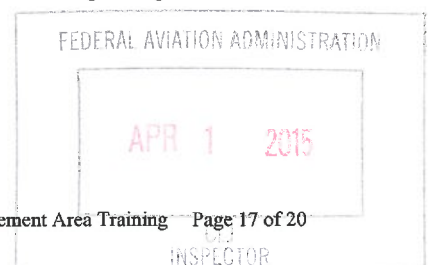
Flush-mounted Runway Edge Light Fixture

Runway Threshold Lights

- ✓ Red/Green in color
- ✓ Used to ensure that pilots of both landing and departing aircraft know exactly where the runway begins and ends



Runway Threshold Lighting



Airport Familiarization

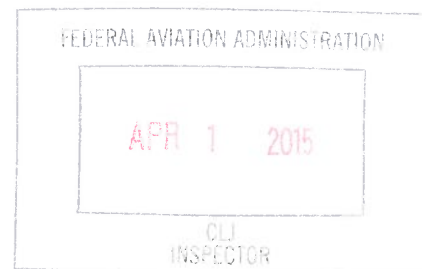
Taxiway Lighting

Taxiways Edge Lights

- ✓ Blue in color
- ✓ Define the edge of a taxiway during periods of darkness and reduced visibility



Taxiway Edge Light (elevated)



Airport Familiarization

Airport Signage

Airport signs are visual aids designed to guide operations on the movement areas. The colors and inscriptions of the signs are significant to the meaning of the information that the sign conveys.

Mandatory Instruction Signs

- ✓ Red background with white inscriptions
- ✓ Denote the entrance to a runway or other critical area
- ✓ Mandatory instruction signs are often co-located with location signs



Location Signs

- ✓ Black background with yellow inscriptions and a yellow border
- ✓ Identify the taxiway an operator is currently on
- ✓ Location signs are often co-located with other types of signs



Direction Signs

- ✓ Yellow background with black inscriptions and always include arrows
- ✓ Indicate the name and direction of other taxiway(s) leading out of an intersection
- ✓ There are two kinds of direction signs, Taxiway Exit and Runway Exit signs (the exit sign depicted at right is a runway exit sign)
- ✓ Direction signs are often co-located with location signs



Information Signs

- ✓ Yellow background with black inscriptions
- ✓ Provide various types of general advisory information



CONCLUSION

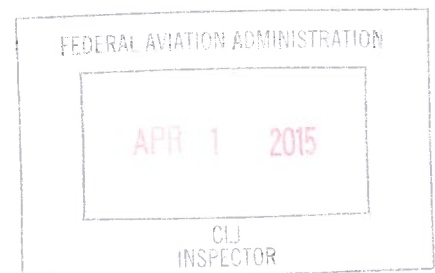
When driving on the airfield:

- Exercise forethought, proper planning, and continuous situational awareness;
- Follow established procedures to ensure safe vehicle operations; and
- Only drive on the airfield when absolutely necessary.

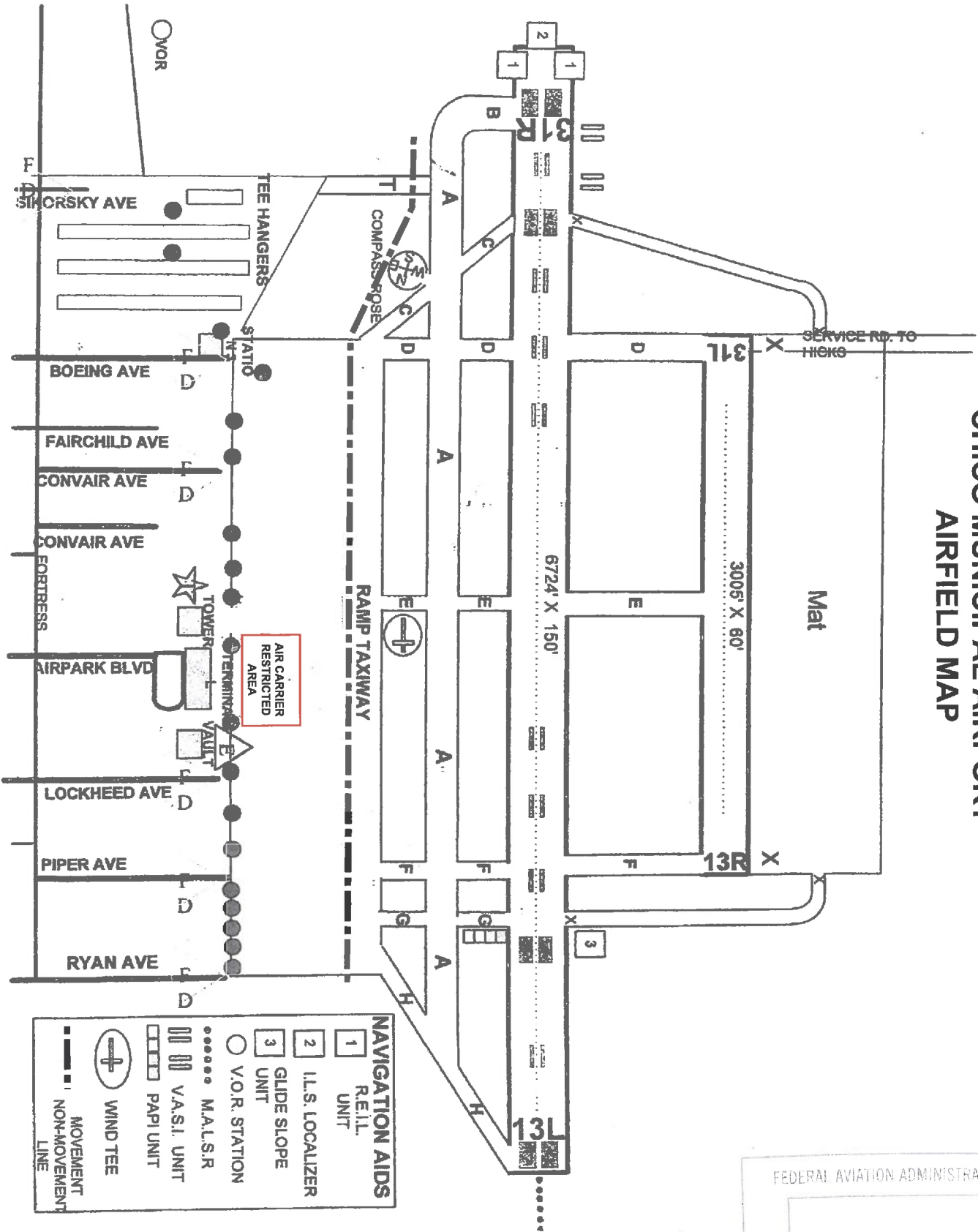
Operating a vehicle on the airport is a privilege that may be revoked at any time for serious or frequent violations of CIC Rules and Regulations.

Please forward questions or comments to:

**Chico Municipal Airport Administration
(530) 896-7200**



CHICO MUNICIPAL AIRPORT AIRFIELD MAP



NAVIGATION AIDS	
1	RE.I.L. UNIT
2	I.L.S. LOCALIZER
3	GLIDE SLOPE UNIT
○ (with dot)	V.O.R. STATION
○ (with vertical line)	M.A.L.S.R.
○ (with horizontal line)	V.A.S.I. UNIT
○ (with vertical line)	PAPI UNIT
○ (with cross)	WIND TEE
---	MOVEMENT
- - -	NON-MOVEMENT LINE

FEDERAL AVIATION ADMINISTRATION
 APR 1 2015
 CLI INSPECTOR