



AIRPORT CERTIFICATION MANUAL – SECTION 15 - 139.329

**GROUND VEHICLE OPERATIONS
RULES AND REGULATIONS**

REGULATIONS: PEDESTRIANS & GROUND VEHICLES 139.329

A. Only pedestrians and vehicle and equipment operators who have been trained in accordance with this section, and with an operational need, are allowed to operate on airport movement areas and their associated safety areas. **Movement Areas** are the runways, taxiways, and other areas of the airport that are used for taxing, takeoff and landing of aircraft, exclusive of loading ramps and aircraft parking areas. **Runway Safety Areas** are defined surfaces 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.

B. Hancock County Bar Harbor Airport has no air traffic control tower. Any vehicle authorized to operate on the airport runways, taxiways, or safety areas used by air carrier aircraft applicable as per CFR Part 139.1 shall be equipped with a two way VHF radio capable of transmitting and receiving on the airport's Common Traffic Advisory Frequency (CTAF) frequency 123.00. Any vehicle not equipped with such a radio and operating in these areas shall carry with it a hand-held portable radio with the same frequency capabilities. Prior to entering these movement areas, the vehicle or equipment operator shall notify aircraft in the vicinity of the airport of his /her intentions. Upon clearing the movement areas the operator shall also notify the air traffic on CTAF. Self-announcements shall be made frequently while operating and working in the movement area. In addition to two-way radio, all vehicles in the movement area must have a flashing beacon during periods of darkness and inclement weather or orange and white flag during daytime hours, and the name and/ or company logo displayed on the vehicle.

C. Private air cargo/courier services, air carriers, F.B.O.'s and all other vehicles having authorized access to the airport shall confine their operations to their areas of business as designated by the Airport Manager. Under no circumstances shall their ground vehicles be permitted on air carrier movement areas or safety areas thereto unless the vehicles are equipped as herein specified and the operators have received the training called for in this section. The Airport Manager shall annually review these ground vehicle policies with all tenant operators.

D. Should an incident or accident occur on the air carrier movement area or in the safety areas adjacent to the air carrier movement areas between an air carrier aircraft and ground vehicle or two ground vehicles, the Airport Manager shall compile an accident report. Reports of all such accidents shall be kept on file and available for inspection by the FAA. These records will be available for 12 consecutive calendar months after the date of the accident.

E. Should rules outlined in this section be violated, the following consequences will result:

1st Offense: The operator's driving privileges will be suspended until remedial training is completed.

2nd Offense: The Airport Manager will suspend airport driving privileges of the offending driver for a period of not less than 5 days and the driver shall take remedial training.

3rd Offense: The driver's rights to operate a motor vehicle on the airport will be revoked.

All airport tenants with driving privileges, employees of tenant operators, airport maintenance personnel, technical operations personnel, and contractors with vehicle access to Air Carrier Movement Areas or the safety areas for air carrier movement areas shall receive training in accordance with AC150/5210-20.

F. A record shall be maintained for all training given to ground vehicle operators with access to the movement areas and safety areas. These personnel shall receive initial as well as recurrent training every 12 consecutive calendar months. Training shall incorporate at least the material in AC 150/5210-20 and the BHB Ground Vehicle Operations Manual. Persons not trained must be escorted by currently trained personnel at all times of vehicle operation on the airside of BHB.

BHB GENERAL INFORMATION

ADDRESS:

Hancock County Bar Harbor Airport
Airport Manager's Office
115 Caruso Drive
Trenton, Maine 04605

AIRPORT OPERATOR:

The Hancock County-Bar Harbor Airport is owned and operated by the County of Hancock, Maine.

RUNWAY AND TAXIWAY IDENTIFICATION SYSTEM:

The runways at the Hancock County – Bar Harbor Airport carry the standard magnetic heading identification and are as follows:

Runway 04-22: 5,200 feet by 100 feet
Runway 17-35: 3,253 feet by 75 feet

Taxiways are identified by a single letter and include the following:

Taxiway A: 1,980 feet by 50 feet
Taxiway B: 675 feet by 35 feet
Taxiway C: 970 feet by 35 feet
Taxiway D: 1,025 feet by 35 feet
Taxiway E: 230 feet by 35 feet
Taxiway F: 250 feet by 35 feet
Taxiway G: 850 feet by 35 feet
Taxiway H: 5,600 feet by 35 feet
Taxiway J: 225 feet by 35 feet

APRONS:

The two apron areas at the airport are as follows:

Main Terminal Ramp (in front of FBO and Terminal) – 450 X 550 feet
Lower General Aviation Ramp – 300 X 375 feet

LAW ENFORCEMENT PROTECTION:

Law enforcement protection is provided by the Hancock County Sheriff's Department and the Maine State Police. Officers periodically patrol the airport and respond to any requests for law enforcement assistance. In addition, Airport Security Officers patrol the terminal building area during normal working hours seven days per week.

KEY AIRPORT PERSONNEL:

Airport Manager	Brad Madeira	207-667-7329
Airport Maintenance Director	Richard L. Gray	207-667-7432
Columbia Air Service Manager	Leroy Muise	207-667-5534
Cape Air / PenAir Station Manager	Barbara Butler	207-664-5297

COMMERCIAL AIRPORT TENANTS:

- Acadia Air Tours
- Cape Air
- Pen Air
- Columbia Air Services-BHB-LLC
- Maine Coastal Flight Center
- Enterprise Rent-A-Car
- Hertz Rent-A-Car
- Morris Yachts

VEHICLE & SAFETY STANDARDS

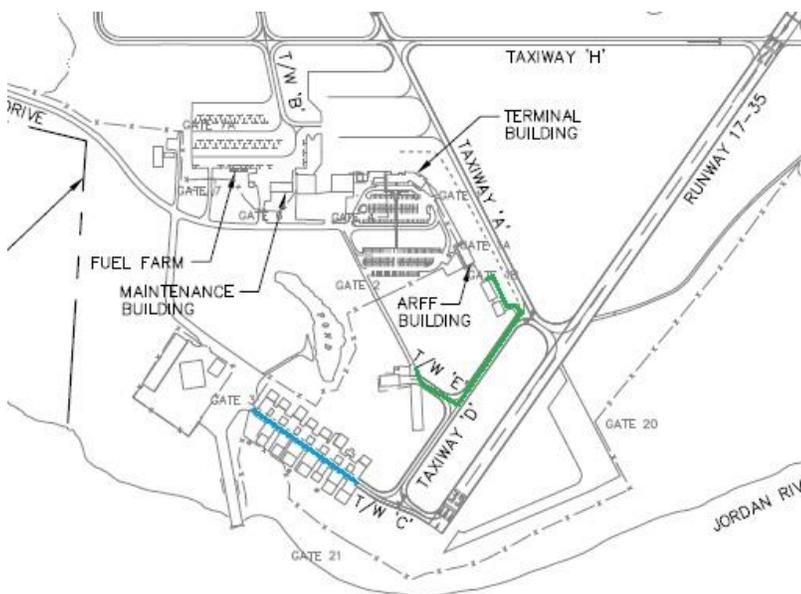
VEHICLE STANDARDS

Vehicles operated on the airport, must meet the following safety standards:

- a) Tires free from excessive wear
- b) Foot brake and park brake on motorized equipment
- c) Park brake or wheel lock for carts and non-motorized equipment
- d) Headlights and tail lights for motorized equipment
- e) Reflectors visible front and rear for non-motorized equipment

f) Additional Requirements: Except for private hangar tenants on specifically designated routes*, or while under escort, vehicles operating on the movement and safety areas on the airport must be equipped with either an FAA approved checkered flag or an operating flashing amber beacon during daylight hours. Additionally, all vehicles must have an operating flashing amber beacon during night hours, and the operator must have a radio tuned to the airports local Unicom Frequency (123.0) in order to monitor all air traffic that is maneuvering.

* Note: There are ONLY two specifically designated routes on the airport where vehicle traffic with an operational need are allowed to travel on taxiways or taxilanes in order to access private hangars without the equipment mentioned under item (f) above.



Tenants of private hangars that are located on taxiway Alpha southeast of the ARFF building are allowed to enter the airport through gate 2 traveling along the green line (shown to the left) in order to access their hangars by vehicle.

Tenants of Private hangars that are located along taxilane Charlie are allowed to enter the airport through gate 3 and travel along the blue line (shown to the left) in order to access their hangars by vehicle.

NOTE: Vehicle Operators must use extreme caution when driving in these areas and must always give way to aircraft.

GENERAL SAFETY RULES & REQUIREMENTS FOR GROUND VEHICLE OPERATION at BHB:

1. Equipment hand brakes should be set whenever vehicles are left unattended.
2. All equipment must be positioned in appropriate parking areas when it is not being used.
3. Ground vehicle speed must not exceed **5 MPH** when within fifty (50) feet of an aircraft. In addition, vehicle speed must not exceed **15 MPH** inside the fence on the airport.
4. No ramp vehicle should be driven under any portion of an aircraft.
5. Any damage caused to an aircraft or any other property, no matter how slight, must be reported, in writing, to the airport manager.
6. The operator of any vehicle is charged with the responsibility for its safe operation.
7. Regular inspection and maintenance of equipment should be performed and logged.
8. Riders shall not be permitted on any vehicle unless a seat is provided. The driver of the vehicle shall be responsible for enforcing this rule.
9. In all cases, Aircraft and Pedestrians shall have right-of way.
10. During low visibility weather conditions, drivers should use extreme caution.
11. Vehicles and Equipment must never be parked and left inside an active Safety area or Object Free area.
12. Each vehicle operator using an airport perimeter gate shall ensure that the gate closes behind the vehicle prior to leaving the vicinity of the gate. The vehicle operator shall ensure that no unauthorized vehicles or persons gain access to the airside while the gate is open.
13. Any suspicious vehicle or persons should be reported to the Airport Manager, or to the Hancock County Sheriff's office by calling 9-1-1.
14. 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 to property.
15. When operating a vehicle or equipment on movement areas, operators must avoid distractions. AM/FM radios, MP3 Players, and texting is NOT allowed during vehicle or equipment operations on aircraft movement areas.
16. Cell phones may ONLY be used for an operational need while driving or operating equipment on aircraft movement areas.

RADIO COMMUNICATIONS:

1. All airport equipment that is used on the AOA is equipped with an aviation radio and a radio capable of receiving and transmitting on the airport's private company frequency. This allows personnel to monitor activity on the airport's common traffic advisory frequency (CTAF) 123.0, communicate with pilots both on the ground and in the air, and communicate with other airport personnel on the field using the private company radio.
2. All operators on the movement area should self-announce frequently on the CTAF any time that they are NOT under escort.
3. Any operator performing as the Escort must verify that they are able to conduct two-way radio communications on both the CTAF radio and the company frequency prior to moving out onto the AOA.

FAILED RADIO COMMUNICATION

If radios fail, the operator is to immediately proceed back to the maintenance facility while exercising extreme caution, and then shall notify the maintenance director or the acting maintenance director of the problem. The equipment may go back into use once the radio is operating correctly.

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ESCORT PROCEDURES:

Authorized and properly trained personnel may escort vehicle(s) or equipment operators on movement areas at BHB. Occasionally, construction work is performed that requires the entire airport or a specific movement area to be closed with a prior permission required (PPR) NOTAM. During these times, one properly trained member from Airport Operations will assume the role of the "Air Boss". This person assumes the responsibility for escorting work crews and any other airport operations personnel inside movement areas. Air Boss responsibility can be transferred to other qualified members of airport ops as long as all personnel under escort acknowledge the change. The Air Boss is responsible for all radio communications with inbound/outbound aircraft and is responsible for the proper separation between any persons and equipment operating inside the AOA with aircraft operators. When operating under a PPR, the Air Boss shall NOT give permission to aircraft operators to use movement or safety areas unless they are certain that ALL personnel and equipment are OFF of those areas AND will remain OFF of those areas until the operation has commenced. The Air Boss must visually be able to verify the location of other vehicle or equipment operators AND/OR receive a positive reply from each operator that they are outside the movement and safety areas being requested for use. The Air Boss should never assume the actions of other persons (pilots or airport ops). They must provide direction to other operators through clear communications and must always understand their verbal reply and concurrence with their directives/requests.

AVOIDING DISTRACTIONS

1. When operating a vehicle or equipment on the movement area, operators must avoid distractions. AM/FM Radios and MP3 players are NOT allowed for use during vehicle or equipment operations at BHB.
2. Cell phones may ONLY be used for an operational need (in order to receive PPR requests or as a backup means of communication with the Air Boss should an operator encounter a complete radio failure). NO PERSONAL PHONE CALLS WHILE WORKING ON THE AOA!

THE BHB AIRPORT DRIVING ENVIRONMENT

ACCESS

Vehicle access to the airport for airport tenants is either through Gate 2, (which comes off the lower terminal parking lot in order to access the private hangars on taxiway A) or via Gate 3 off ramp road in order to access the private hangar row on taxiway C, or via Gate 7 which provides access to the lower general aviation ramp. Vehicle access is granted ONLY for those with an operational need, and therefore, vehicle access through these gates is restricted to these respective areas. Example 1: Hangar tenants on taxiway C should NOT drive beyond the last hangar towards taxiway D and the threshold of runway 35. Example 2: Tie-down customers in the lower general aviation ramp are not to drive beyond the limits of the lower GA ramp. Once your vehicle pulls inside an airport gate, STOP, and wait for the gate to close before you proceed in order to prevent un-authorized access. This rule applies either when entering or leaving the airport through a vehicle gate.

RUNWAYS

A runway is the area where an aircraft lands or takes off. It can be grass, packed dirt, or a hard surface such as asphalt or concrete. Runways have special markings on them to help a pilot in the air tell that it is a runway (and not a road) and to help them when they are landing or taking off. Runway markings are white. Most runways have numbers on the end. The number is the runway's compass direction. (For example, a runway numbered 36 would be aligned to the north or 360 degrees.) The other end of the runway is pointing in the opposite direction, so it gets a different number. The reciprocal to runway 36 is runway 18 (for 180 degrees).

Runways may have other markings besides the end number on them. They may have white stripes down the middle of them, and solid white lines on the edges. The most important thing for you to understand is that you should never drive your vehicle on a runway unless you are authorized to do so. At BHB there are four runways on two sections of pavement; runways 17,35,4 & 22.

Runways are protected by safety areas. **Runway Safety Areas** are defined surfaces 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. You must ensure adequate separation from any aircraft prior to entering any runway safety area. Generally, safety areas are marked with specific pavement markings and signs, which we describe later in this document.

Runway 4-22 is 5,200' X 100' and is the airport's primary runway with precision and non-precision instrument approaches to runway 22, and a non-precision approach to runway 4. Runway 4/22 is lighted for night operations. The safety area surrounding runway 4-22 extends 200' out from the runway centerline and 1000' beyond the ends of the runway. The pavement condition is good with the runway having been reconstructed in 1995 and 1996. Due to the topography, there is a hump in the middle of runway 4/22 which prevents a vehicle operator or a pilot from being able to see from one end of the runway to the other. This requires extra vigilance by vehicle operators to ensure that the entire runway is clear before proceeding into the safety area. Stop at all runway hold position markings, make the proper radio transmissions, and know before you go!

Runway 17-35 is a basic runway 75' wide and 3,253' long. The runway is not lighted. Runway 17 has a 684' displaced threshold. Runway 35 has a 111' displaced threshold. The safety area surrounding runway 17-35 extends 75' out from the runway centerline and 300' beyond the ends of the runway. The pavement condition is good.

TAXIWAYS

Taxiways are areas used by aircraft to travel from their parking location to the runway. Taxiways look a lot like runways, but they usually aren't as wide as the runway, and they don't have the same kind of markings. Taxiway markings are yellow. Instead of numbers, taxiways use letters (like A, E or C) for names. Never drive your vehicle on a taxiway unless you are authorized to do so. BHB has nine taxiways lettered A through J. Please note: there is no taxiway I. As a general rule, these taxiways are 35' to 50' wide.

APRONS / RAMPS

Aircraft aprons are the areas where the aircraft park, load, and unload. Aprons are also often called ramps and they vary in size. Watch out for aircraft that are moving as they have the right of way. Don't assume the pilot will see you and stop - he or she may be busy with other things like radio communications or checking the aircraft instruments. Every year around the country there are many accidents involving vehicles and aircraft that result in property damage, personal injury, and, in even death. Don't let this happen to you! In addition to watching out for moving aircraft, be careful not to get too close to a parked aircraft. Aside from the potential for aircraft damage, you could be hurt if an aircraft suddenly started its engine and you were too close. You should also be aware of jet blast and prop wash which can knock you down or even burn you. There have been several cases where vehicles have been overturned by jet blast from large aircraft. One way to tell if an aircraft is about to start its engine or if the engine is already running is to look for a flashing red light on top of the fuselage (body) of the aircraft.

VEHICLE SERVICE ROADS

Here at BHB, we have a number of vehicle service roads which intersect with various movement and/or safety areas on the field. These include the gate 13 access road and the runway 4/22 safety area, the glideslope building/AWOS access road and the runway 4/22 safety area, the gate 15 MALS access road and the runway 22 approach area, the MALS tower road and the taxiway H movement area, the MALS tower road and the runway 22 approach area, the waste area service road and the runway 17/35 safety area, the airport stockpile area and the runway 17/35 safety area, and the gate 2 access road and the taxiway E movement area. In all of these cases, vehicle operators shall stop and ensure adequate separation before proceeding into a movement or safety area. While aircraft operations are taking place, vehicle operators shall remain outside of the safety areas of any runways currently in use.

NAVIGATIONAL AIDS

The Hancock County Bar Harbor Airport is equipped with an instrument landing system (ILS). An ILS is a piece of equipment that sends out an electronic signal to help guide a pilot in the air to the approach end of a runway. It is actually made of several pieces of equipment that are placed along the side and near the end of the runway. The small red and white buildings near the RWY 22 threshold and near Caruso drive on the RWY 4 end, as well as the antenna array on the approach end of RWY 4 are all part of the ILS system.

The Hancock County Bar Harbor Airport also has a Visual Approach Slope Indicator (VASI) for Runways 4 and 22. This airport also has an Automated Weather Observation System (AWOS). When driving near these pieces of equipment, especially the electronic signal equipment, you must stay out of the protected areas around them to avoid interfering with their signals. There is an airport map in this guide which shows the restricted or critical areas and the locations of the Navigational aids.

OTHER IMPORTANT INFORMATION

FOREIGN OBJECTS AND DEBRIS (FOD)

FOD can be ingested into a jet engine and cause damage, powerplant failure, and/or loss of directional control, which could be deadly if the aircraft is just starting to takeoff. Trash can puncture tires, and dent or puncture wings and other parts of an aircraft, making the aircraft unsafe.

Rocks can be just as serious. A rock ingested into a jet engine can shred parts of the engine in seconds. A rock caught by a propeller can damage the propeller, as well as become a deadly projectile that can hurt anyone standing nearby. In aviation language, rocks and other debris are called "FOD" - Foreign Objects and Debris.

You can help make our airport a safer place by following these basic rules:

- * Put all your trash in a covered container that won't be blown over.
- * Get in the habit of picking up any trash and rocks lying around on the ground.
- * Keep an eye out for nails, bolts and other small metal pieces that can puncture tires easily.
- * Pick up plastic bags instead of letting them blow away.
- * Avoid tracking mud and rocks onto the pavement surfaces.

VEHICLE/AIRCRAFT ACCIDENTS

Several collisions between vehicles and aircraft happen each year around the country, and often times they could have been avoided with some common sense and with the proper training. Aircraft have the right of way so it is up to you to stay out of their way. Give aircraft plenty of room to pass by you. The pilot may

have a limited view from the cockpit. Never assume that the pilot sees you. If you must work near or next to a parked aircraft, approach the aircraft slowly and remain far enough away from it that you do not block its path or the path of other vehicles, especially fueling or emergency vehicles. Never attempt to drive under any part of an aircraft. If you do accidentally contact an aircraft, or any other property, immediately report it to the airport manager and to the proper authorities.

SECURITY

When most of us think about security and airports, we think about hijackers and terrorists. But airport security involves much more than protecting against these hostile acts. We must protect the airport against the everyday small problems too. The person who gets lost and drives on the wrong place is a serious safety threat at the airport. Each person who has access to or works on our airport is responsible for making the security plan work. If you see a gate left open and unattended, please close it, and/or report it to the airport manager or airport maintenance director. Please ensure that security gates close behind your vehicle and that no one gains access to the airport that is not authorized to be here. If you see a strange vehicle on the apron that doesn't look like it belongs there, report it immediately. Again, security must be everyone's concern!

HOW TO REPORT AN EMERGENCY.....CALL 911

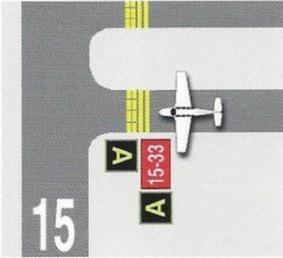
In addition, see above for a list of key airport personnel and their telephone numbers. The important thing to do is to report an emergency either if you witness one or if you are involved in one, so that the proper emergency personnel can be called for help.

INCLEMENT WEATHER DRIVING

Snow, rain, freezing rain, and even fog can affect the operation of the airport as well as affecting your ability to maneuver safely on the airport. Here are a few precautions to remember when driving in inclement weather:

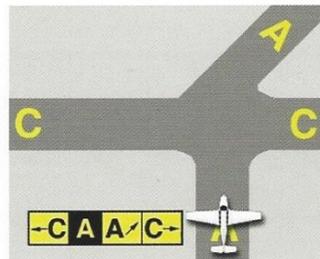
- * Give yourself plenty of time to get wherever you are going.
- * Drive slower than you normally would.
- * If your vehicle has a rotating beacon, use it - it helps others see you.
- * Test the brakes, headlights and windshield wipers on the vehicle before you leave.
- * Make sure you know how to read airport signage and markings, and know where you are on the airfield at all times. – see next page.

KNOW HOW TO UNDERSTAND AIRPORT SIGNS AND MARKINGS



Taxiway Location Sign:
Indicates the taxiway you are on. (May be co-located with direction signs or runway holding position signs, as shown in graphic.)

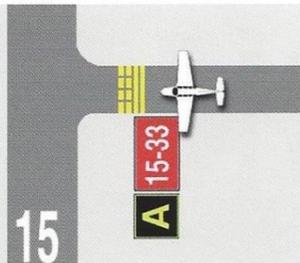
Ref. AIM Para. 2-3-9



Direction Signs and Location Sign:

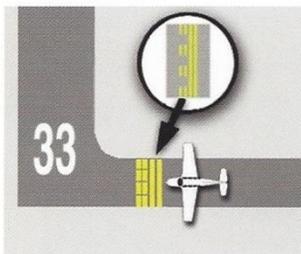
The black location sign indicates you are on taxiway Alpha. The yellow direction signs indicate the direction of intersecting taxiways. In this example, taxiway Charlie is to the left, Alpha takes a turn to the right ahead, and Charlie is to the immediate right. Taxiway Charlie crosses Alpha ahead.

Ref. AIM Para. 2-3-9 and 2-3-10



Runway Holding Position Sign:
Hold here. In this example, the threshold for runway 15 is to your left and the threshold for runway 33 is to your right. This sign is located next to the yellow holding position marking painted on taxiways that intersect runways and on runways that intersect other runways.

Ref. AIM Para. 2-3-8



Runway Holding Position Markings:

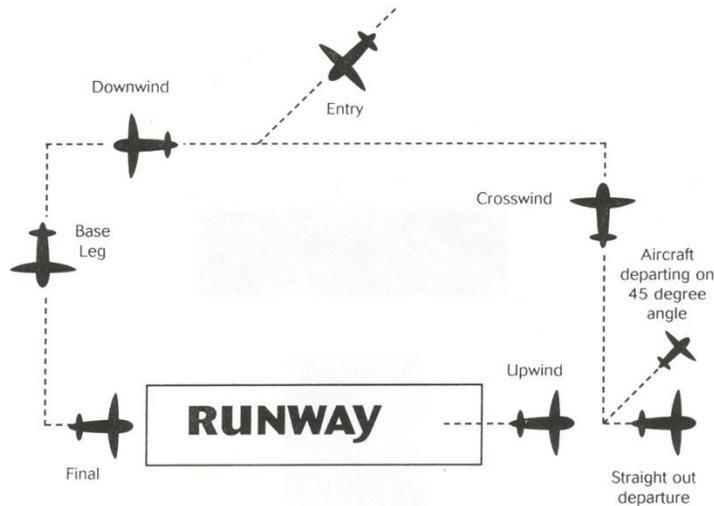
This painted marking is found on taxiways at runway intersections and indicates where an aircraft is to stop. The solid lines are on the side where the aircraft is to hold and the dashed lines are always on the side toward the runway. Do not cross the markings until clear.

Ref. AIM Para. 2-3-5

UNDERSTAND TRAFFIC PATTERNS

Aircraft approaching a runway for landing follow a pattern. In most cases, the pattern 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 report their position on the radio when they are in the traffic pattern. Familiarity with these names will help you locate an aircraft when the pilot reports his/her position on the radio.

Standard Left Hand Traffic Pattern



KNOW THE PHOENETIC ALPHABET

Because some letters have similar sounds, like B and P the aviation industry uses the following words to reduce confusion. For example, Taxiway B would be referred to as Taxiway Bravo on the radio.

<u>LETTER</u>	<u>WORD</u>	<u>LETTER</u>	<u>WORD</u>
A	Alpha	N	November
B	Bravo	O	Oscar
C	Charlie	P	Papa
D	Delta	Q	Quebec
E	Echo	R	Romeo
F	Foxtrot	S	Sierra
G	Golf	T	Tango
H	Hotel	U	Uniform
I	India	V	Victor
J	Juliet	W	Whiskey
K	Kilo	X	X-Ray
L	Lima	Y	Yankee
M	Mike	Z	Zulu

PHRASES PILOTS, CONTROLLERS, AND GROUND VEHICLE OPERATORS USE

WHAT IS SAID

WHAT IT MEANS

Acknowledge	Let me know you have received this message
Advise Intentions	Tell me what you plan to do
Affirmative	Yes
Confirm	My version is is that correct?
Correction	I made a mistake. The message is
Go Ahead	Continue speaking your message
Hold your Position	Stay where you are
Hold Short...	Hold Short of a designated area.
How do you Hear?	How well is this radio working?
Immediately	RIGHT NOW
Negative	No, permission not granted, or not correct
Out	The radio conversation is ended and no response is expected.
Over	My radio transmission is 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
Speak Slower	Speak slower
Stand By	Wait a moment, I will call you back
That is correct	The understanding you have is correct
Unable	I can't do it
Verify	Request confirmation of information
Wilco	I have received your message, understand it and will comply