The Short Course Airport Signs

By Jim Sweeney

Airport pavement markings and signs are very important in navigating the airport surface and in preventing runway incursions. Last month we discussed runway pavement markings at uncontrolled airports. This month the topic is airport signs that we are likely to see at uncontrolled airports.

Airport signs are used in addition to pavement markings to advise the pilot of his position on the runway or taxiway, emphasize pavement markings (Runway Holding Position Marking - "Hold Short Lines") and point the direction to locations on the airport. The signs are standardized in shape, color and meaning, but there use at uncontrolled airports will vary. In general, the larger the airport, the more signs used.

Airport signs are positioned next to the runway, taxiway or ramp area. Airport markings are painted on the pavement. For mort information on airport pavement markings, see The Short Course - Airport Pavement Markings, June "08.



Airport Signage

Types of Airport Signs

There are six types of signs installed on airfields: mandatory instruction signs, location signs, direction signs, destination signs, information signs, and runway distance remaining signs.

Mandatory Instruction Signs - have a red background with a white inscription. These signs denote an entrance to a runway, a critical area, or a prohibited area. The pilot is expected to comply with the requirements of the sign.

Runway Holding Position Sign

This sign is located at the holding position on taxiways that intersect a runway. The runway numbers on the sign are arranged to correspond to the runway orientation. For example, "15-33" indicates that the threshold (departure end of the runway) for Runway 15 is to the left and the threshold for Runway 33 is to the right.

The holding position sign provides the pilot with a visual cue as to the location of the Holding Position Marking. As a reminder, no portion of the aircraft should cross, or extend over, the Holding Position Marking of an active runway until the PIC has determined that the runway, base leg and final approach leg are clear of conflicting traffic. The PIC's decision to take the active runway applies to uncontrolled airports. At controlled airports, clearance from the tower must be received before the aircraft crosses the Holding Position Marking.

When positioning the aircraft for "run up" and departure check, make sure that no portion of the aircraft crosses or extends over the Holding Position Marking and that you are well clear of the marking. There is no need to crowd the "Hold Short Line", even with other aircraft behind you.



Runway Holding Position Sign
Used in conjunction with the Runway Holding Position Marking



Runway Holding Position Sign
You are nearing the Runway 15-33 Holding Position Marking



Runway Holding Position Sign

You are nearing the Holding Position Marking at the departure end of Runway 33



Runway Approach Area Holding Position Sign

You are nearing the Holding Position Marking for the approach area of Runway 15 (See the Airport Diagram below)

No Entry Sign

This sign prohibits an aircraft from entering an area. Typically, this sign would be located on a taxiway intended to be used in only one direction or at the intersection of vehicle roadways with runways or taxiways where the roadway may be mistaken as a taxiway.



Location Signs - are black with yellow inscription and a yellow border and do not have arrows. They are used to identify a taxiway or runway location. Taxiways are designated by letters. Runways are designated by numbers.



You are located on Taxiway Alpha

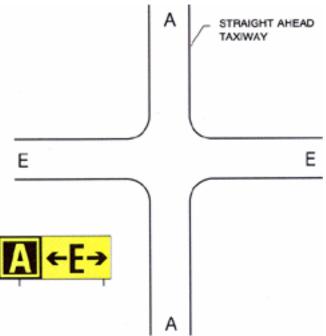


Taxiway Location Sign combination with a Runway Holding Position Sign You are located on Taxiway Tango and nearing the Runway 18-36 Holding Position Marking



Runway Location Sign You are located on Runway 22

Direction Signs - have a yellow background with black inscription. The inscription identifies the designation of the intersecting taxiway(s) leading out of an intersection or exiting a runway. Arrow(s) point in direction of the intersecting taxiway.



Taxiway Direction Sign combined with a Taxiway Location Sign You are located on taxiway Alpha Nearing Taxiway Echo



Taxiway Direction Sign combined with a Taxiway Location Sign
You are located on taxiway Alpha
Nearing taxiway Charlie
Taxiway Alpha bears right ahead (dog leg right)



Destination Signs - have a yellow background with black inscription and also contain arrows. These signs provide information on locating things such as runways, ramps, FOB, parking, fuel, etc.



Destination Sign

Runway 27 and Runway 33 - Turn right FBO - Bear right ahead (dog leg right)



Destination SignRunway 5 - Turn left
Runway 13 -Straight ahead



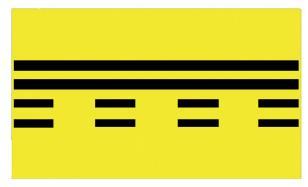
Runway Distance Remaining Signs - have a black background with white numbers. The numbers indicate the distance of the remaining runway in thousands of feet.



Runway Distance Remaining Sign

3,000 feet of runway remaining

Runway Boundary Signs - have a yellow background with a black inscription and a graphic depicting the Holding Position Marking. The sign faces the runway and is visible to the pilot exiting the runway. It is located adjacent to the Holding Position Marking and is another visual cue indicating when the aircraft is exiting the Runway Safety Area and is "Clear of the Runway".



Runway Boundary Sign

Used in conjunction in conjunction with the Holding Position Marking
An aircraft is "Clear of the Runway" when all parts of the aircraft have passed this
sign and the Holding Position Marking

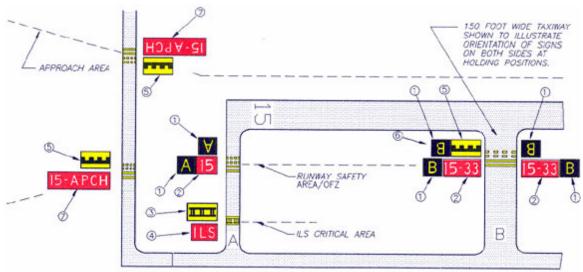
Information Signs - are used to provide the pilot with information on such things as applicable radio frequencies and noise abatement procedures. The airport operator determines the need, size, and location for these signs.

Airport Diagram

The Airport Diagram shows the placement of Mandatory, Location and Runway Boundary signs. Also shown is the location of Runway Holding Position Markings relative to the signs.

The Runway Approach Area Signs and Markings for Runway 15 are shown in detail. Although not very common, it is important to understand the approach area and respect it while operating at airports with a taxiway crossing through a runway approach area. The danger is a conflict between an aircraft on very short final and an aircraft taxiing through the approach path. As required by the sign at an uncontrolled airport, the PIC must make sure the final approach path is clear before crossing the Runway Holding Position Marking.

Instrument Landing System (ILS) signs and markings are also shown. These are installed on runways with published ILS approaches. They are appropriate when the weather conditions are less than Visual Meteorological Conditions (VMC). For more information, consult the Aeronautical Information Manual, Chapter 2, Section 3.



Airport Diagram

- 1. Taxiway Location Sign Taxiway Alpha or Bravo as marked
- 2. Runway Holding Position Sign Runway 15 at the departure end or Runway 15 33 mid runway.
- 3. ILS Critical Boundary Sign
- 4. ILS Critical Area Holding Position Sign
- 5. Runway Boundary Sign Exiting the Runway Safety Area or "Clear of the Runway"
- 6. Taxiway Location Sign Taxiway Bravo
- 7. Runway Approach Area Holding Position Sign Runway 15 Approach Area

You can review the signs and markings with flash cards from the Air Safety Foundation and in other publications. More signs, markings and detail descriptions can be found in the Aeronautical Information Manual (AIM). A personal copy of the FAR/AIM is a good investment. Links can be found in the References.

Safety on the airport surface is just as important as safety in the air. Know the airport signs and markings. Respect and adhere to them.

References

Airport Signs & Markings http://www.aopa.org/asf/publications/flashcards/flashcards.pdf

AOPA - Air Safety Foundation pdf Runway Safety Flash Cards http://www.aopa.org/asf/publications/flashcards/flashpdf.pdf

Aeronautical Information Manual Chapter 2, Section 3. Airport Marking Aids and Signs http://www.faa.gov/airports-airtraffic/air-traffic/publications/ATpubs/AIM/Chap2/aim0203.html

Photographs

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