



U.S. Department
of Transportation
**Federal Aviation
Administration**

Advisory Circular

REPRINT INCORPORATES CHANGE 1

Subject:

Date: 7/31/91

AC No: 150/5340-18C

Initiated by: AAS-4

Change:

STANDARDS FOR AIRPORT SIGN SYSTEMS

1. **PURPOSE.** This advisory circular contains the Federal Aviation Administration standards for the siting and installation of signs on airport runways and taxiways.

2. **CANCELLATION.** Advisory Circular 150/5340-18B, Standards for Airport Sign Systems, dated August 21, 1984, is cancelled.

3. **PRINCIPAL CHANGES.** Several new sign applications have been added as follows:

- a. A sign has been added to identify the taxiway or runway on which the aircraft is located.
- b. A sign has been added to indicate the boundary of the runway safety area/object free zone for aircraft exiting the runway.
- c. A sign has been added to indicate the boundary of ILS critical areas for aircraft exiting the ILS critical area.
- d. A sign has been added to denote a holding position on taxiways crossing runway approach areas.
- e. A marker has been added to indicate that a taxiway ends at the intersection.

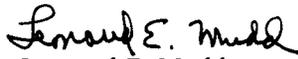
4. **APPLICATION.**

a. It is recommended that all airports install a system of taxiway guidance signs in accordance with the standards in Chapter 1 of this circular. Installing the components of the taxiway guidance sign system in accordance with paragraph 3 of Chapter 1 represents an acceptable means of compliance with the requirements of Federal Aviation Regulation, Part 139, for those airports that are certificated under this regulation.

b. A taxiway designation system in accordance with the standards of Chapter 1 should be the goal of every airport. However, it is recognized that such a change at many airports could create a major problem if accomplished all at once. Therefore, airports should develop an implementation plan to change over to the standardized taxiway designation system in incremental steps to prevent confusion and operational safety problems.

c. Runway distance remaining signs in accordance with the standards of Chapter 2 of this circular are recommended for all runways used by turbojet aircraft.

d. Generally, signs should be lighted if the runway or taxiway on which they are installed is lighted. Holding position signs and any collocated location signs should be lighted if the runway for which they are installed is lighted even if the taxiway on which they are installed is unlighted.

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CHAPTER 1. TAXIWAY GUIDANCE SIGNS

1. GENERAL. A properly designed and standardized taxiway guidance sign system is an essential component of a surface movement guidance control system necessary for the safe and efficient operation of an airport. It should:

- a. Provide the ability to easily determine the designation or name of any taxiway on which the aircraft is located.
- b. Readily identify routes toward a desired destination.
- c. Indicate mandatory holding positions.
- d. Identify boundaries for approach areas, ILS critical areas, and runway safety areas/obstacle free zones (OFZ).

2. PLANNING. Users of this advisory circular should recognize that the functional layout of each airport is different. Although two airports may have similar runway and taxiway configurations, the number of signs needed to provide the pilot with the necessary taxiway guidance information may differ. This difference can be attributed to such factors as ground traffic patterns, presence of an air traffic control tower, location of terminals, fixed-base operators and other facilities, the airport's instrument weather capability, number of aircraft operations, and types of operators. In view of the differences in each airport's functional layout, the airport operator should work with the Federal Aviation Administration (FAA) to ensure that a taxiway guidance sign system in accordance with the standards of this advisory circular is achieved whenever practicable. In developing the taxiway guidance sign system, it is advisable and strongly recommended that the airport operator consult with the airport users.

3. COMPONENTS OF A SIGN SYSTEM. Overall safety is enhanced by a standardized system of signs at all airports. Paragraphs 5, 6, 7, and 9 contain standards for different types of taxiway guidance signs and along with paragraphs 12, 13, 14, and 16 provide information on their installation. Figures included in this chapter, as well as appendix 1, show graphic depictions of these signs and common applications. However, except for holding position signs, it is virtually impossible to prescribe the location and types of signs that should be installed as part of a taxiway guidance sign system at a particular airport due to the varying functional layouts discussed in paragraph 2. In this regard, the signs described in the aforementioned paragraphs should be viewed as the inventory of signs available to develop a taxiway guidance sign system on an airport. In deciding where signs should be installed as part of a taxiway guidance

sign system at a particular airport, the following guidelines should be applied to the airport:

a. A holding position sign and taxiway location sign should be installed at the holding position on any taxiway that provides access to a runway.

b. A holding position sign should be installed on any taxiway at the boundary of the ILS critical area or the runway approach area when it is necessary to protect the navigational signal, airspace, or safety area for a runway.

c. A holding position sign should be installed on any runway where that runway intersects another runway.

d. A sign array consisting of taxiway direction signs should be installed prior to each taxiway/taxiway intersection if an aircraft would normally be expected to turn at or hold short of the intersection. The direction signs in the array should include a sign panel (taxiway designation and an arrow) for each taxiway that an aircraft would be expected to turn onto or hold short of. A taxiway location sign should be included as part of the sign array unless it is determined to be unnecessary. If an aircraft normally would not be expected to turn at or hold short of the intersection, the sign array is not needed unless the absence of guidance would cause confusion.

e. A runway exit sign should be installed along each runway for each normally used runway exit.

f. Destination signs may be substituted for the signs described in paragraphs 3d and 3e at uncontrolled airports.

g. Standard highway stop signs should be installed on vehicle roadways at the intersection of each roadway with a runway or taxiway. For roadway intersections with taxiways, a standard highway yield sign may be used in lieu of the stop sign.

h. Additional signs should be installed on the airfield where they are necessary to eliminate confusion or provide confirmation. For example, it may be necessary to install a taxiway location sign at the entrance to a taxiway from an apron area where there are several such entrances. Similarly, on runway exit taxiways where air traffic control regularly requests pilots to report clear of the runway, it may be beneficial to install a runway safety area/OFZ boundary sign to assist the pilot in making this report. Another situation involves complex intersections or intersections along low visibility routes, where it may be benefi-

cial to install location signs on the far side of the intersection so that the pilot can confirm that the correct turn has been made.

4. DEVELOPING TAXIWAY DESIGNATIONS. The first step in designing a taxiway guidance sign system is developing a simple and logical method for designating taxiways. The following general guidelines should be followed:

- a. Keep it simple and logical.
- b. Letters of the alphabet should be used for designating taxiways. Optimally, designation of the taxiways should start at one end of the airport and continue to the opposite end, e.g., east to west or north to south (see figure 2 for an example).
- c. Where there are more taxiways than letters of the alphabet, then double letters such as "AA" should be used. An exception is permitted for a major taxiway having numerous stub exits such as a taxiway parallel to a runway or a taxiway adjacent to a ramp area. In such instances the short taxiways could be designated "A1," "A2," "A3," etc. Numbers alone and the letters "I" and "O" should not be used since they could be mistaken for a runway number. Also, the letter "X" should not be used since a sign with an "X" could be misconstrued as indicating a closed taxiway. Number and letter combinations should not result in confusion, whereby, the taxiway designation could be mistaken for that of a runway. For example, if an airport has a runway "4L," a taxiway designation of "L4" should not be used.
- d. All separate, distinct taxiway segments should be designated.
- e. No separate, distinct taxiway should have the same designation as any other taxiway.
- f. Taxiway designations should not be changed when there is no significant change in direction of the taxiing route. However, when the overall system design indicates a need, such a change can be made and appropriately signed (see figures 20c and 20d). Such changes should be made only at intersections.
- g. Designating taxiways by reference to a direction of travel or to a physical object should be avoided. This includes the use of terms such as "inner," "outer," "parallel," and "bridges." Such informal nicknames or abbreviations should not be used on taxiway guidance signs.
- h. NOTAMS regarding taxiways should refer to the formal designation that appears on the taxiway guidance sign.

5. MANDATORY INSTRUCTION SIGNS. Mandatory instruction signs have white inscriptions on a red background. They denote an entrance to a runway or critical area. At controlled airports, vehicles and aircraft are required to hold unless cleared by air traffic control. At uncontrolled airports, these signs are intended to be proceeded beyond only after appropriate precautions are taken. Arrows should not be used on these signs except as discussed in paragraph 5a. Mandatory signs are installed on the left side of the taxiway or runway and include the following:

a. Holding Position Signs for Taxiway/Runway Intersections. The inscription on a holding position sign at a taxiway/runway intersection is the runway number(s), such as "15-33" as shown in figure 1. The runway numbers are separated by a dash and their arrangement indicates the direction to the corresponding runway threshold. For example, "15-33" indicates that the threshold for runway "15" is to the left and the threshold for runway "33" is to the right. The sign at each takeoff end contains the inscription only for the takeoff runway while all other signs contain both runway designation numbers. However, both runway designation numbers may be used on signs at runway ends where there is an operational need, such as where a taxiway crosses the runway at the runway end. Application examples for holding position signs are shown in figure 3. Arrows are used on these signs only for identifying intersecting runways at a taxiway/runway/runway intersection (see figure 4). Note that in figure 4b, the holding position signs have both runway numbers to avoid confusion as to the runway direction. In some geometrical configurations of runways and taxiways, it is necessary to install hold position signs on both sides of the taxiway. These configurations include:

- (1) Taxiways that are 150 feet or greater in width (see figure 3).
- (2) Taxiways where the painted hold position markings extend across an adjacent holding bay, etc., as shown in figure 8a.

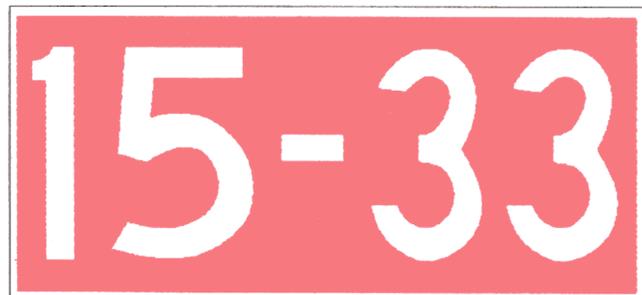


Figure 1. Typical Holding Position Sign for Runways

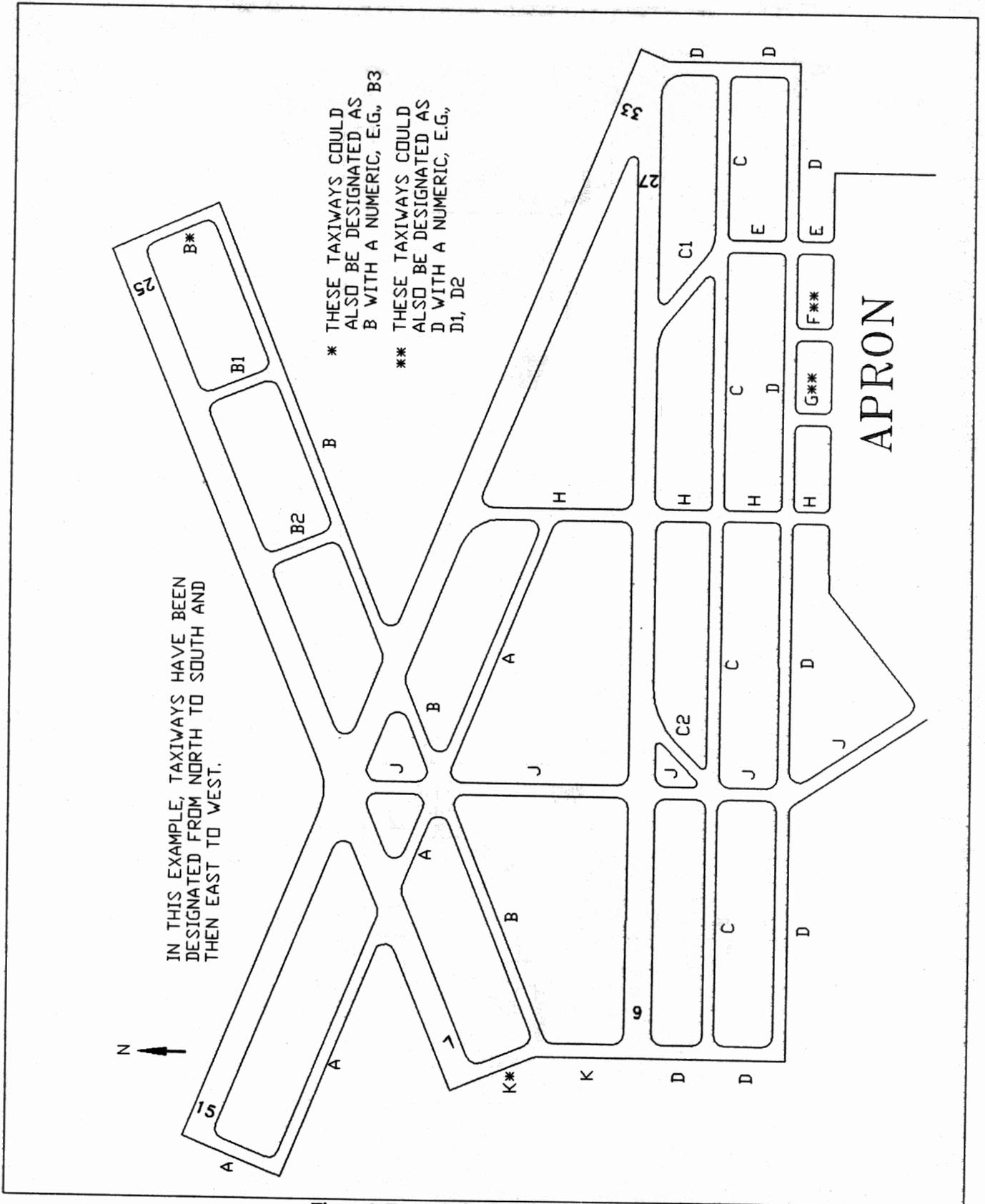


Figure 2. Example for Designating Taxiways

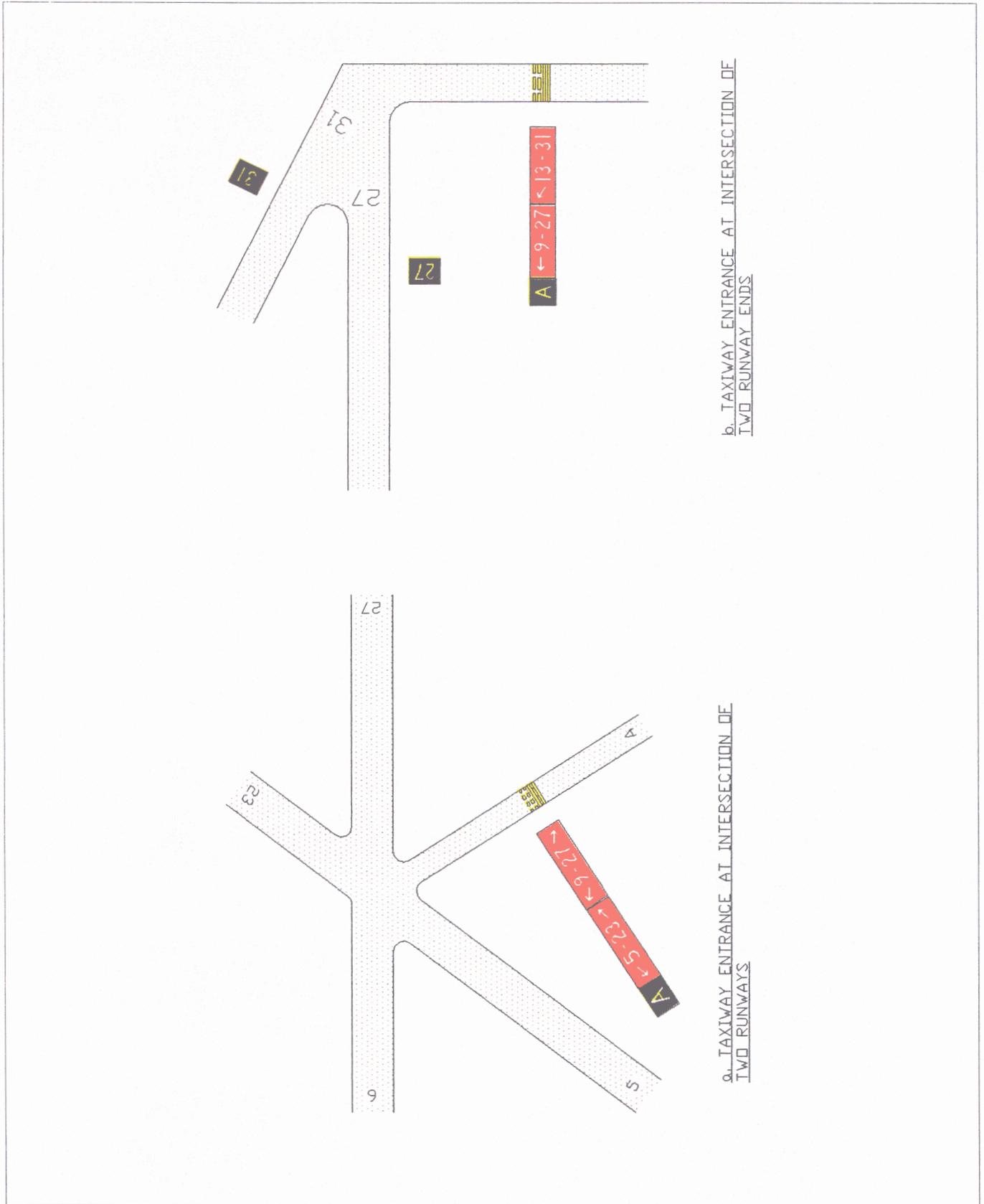


Figure 4. Runway Location Signs and Arrows on Holding Position Signs