

Memorandum

Date:

To:

MAR **2 9** 2012 All Regional Airports Divisions Managers

From:

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Subject:

INFORMATION: Engineering Brief No. 89, Taxiway Nomenclature

Convention

This Engineering Brief (EB) provides clarification for taxiway designation convention standards contained in Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5340-18F, Standards for Airport Sign Systems.

Attachment

ENGINEERING BRIEF NO. 89

TAXIWAY NOMENCLATURE CONVENTION

PURPOSE:

This Engineering Brief provides clarification for taxiway designation convention standards contained in FAA Advisory Circular (AC) 150/5340-18F, Standards for Airport Sign Systems.

BACKGROUND:

This Engineering Brief (EB) addresses two items:

First, on February 9, 2011, the Office of Airport Safety and Standards distributed a memorandum entitled, "Taxiway Naming Conventions," that provided additional information and clarification on taxiway designation convention. This EB will supersede that memorandum.

Second, a recommendation posted on the FAA Idea Hub, Idea 2320 "Naming airport ramps and aprons", raised concerns about taxiways that have the same names as airport ramps and aprons. Taxiways that have the same name as aprons, ramps, or gate areas have the potential to cause communication problems between pilots and air traffic controllers. For instance, airport XYZ may designate an apron and airfield taxiway as Quebec. Confusion may arise if a pilot contacts the controller to indicate that he or she has turned onto Taxiway Quebec after landing, while at the same time, another aircraft could be taxiing on or leaving Apron Quebec. Also, the International Federation of Airline Pilots' Associations (IFALPA) shares this safety concern by presenting its policy paper to ICAO Working Group in 2009 that stated: "Taxiway related incidents and accidents have increased significantly during the last few years. The majority of them have happened in a complex taxiway environment, where illogically designated taxiways have been used or where taxiways have similar or the same designations in different parts of the airport."

The information in the "RECOMMENDATIONS" section of this EB is intended to replace Paragraph 4, "Developing Taxiway Designations," in the next revision of AC 150/5340-18F, Standards for Airport Sign Systems."

APPLICATION:

The FAA recommends using the guidelines and standards in this EB when developing, or revising an airport signage plan, an airport layout plan and for all new development projects. Until such development or revision, existing taxiways not conforming to the guidance below do not need be changed as a result of this EB.

RECOMMENDATIONS:

DEVELOPING TAXIWAY DESIGNATIONS.

The first step in designing a taxiway guidance sign system is to develop a simple and logical method for designating taxiways. The following general guidelines should be followed:

- **a.** Keep it simple and logical.
- **b.** Use letters of the alphabet for designating taxiways. Optimally, designation of the taxiways should start at one end of the airport and continue to the opposite end, e.g., west to east or north to south (see Figure 1a).
- c. A single alphabet letter (for example, A, B..., Z) must be utilized first for designating taxiways. Note that parallel taxiways to a runway must use single alphabet designations. For the purpose of this EB, a parallel taxiway is defined as a taxiway parallel to a runway that is either the full length or a partial length of the runway.
- (1) Numbers by themselves, and the letters "I" and "O" must not be used because they could be mistaken for a runway number.
- (2) The letter "X" must not be used because a sign with an "X" could be misconstrued as indicating a closed taxiway or runway.
- **d.** After all available single alphabet letters have been utilized, then designate taxiways with double-same alphabet letters (for example, AA, BB, ..., ZZ). Double-different alphabet letters (e.g., AB, CD,.... ZW) taxiway designations are not allowed.
- **e.** After all available single and double-same alphabet letters have been utilized, taxiways should use two-character alphanumeric designations such as "A1." (See Figure 1a) The numeric character used should be a single digit from 1 to 9. (See paragraph **f** for the use of two-digit designators).
- (1) An exception to this taxiway naming standard is for major taxiways with numerous stub taxiways. For the purposes of this EB, a stub taxiway is defined as a taxiway that connects a runway to a parallel taxiway or a taxiway to an adjacent apron area. In such instances, the stub taxiways are designated as "A1", "A2", A3", etc. to promote positive location identification and reduce the risk of runway incursions.
- (2) For a runway with a parallel taxiway, the entrance and exit taxiways located at the ends and along the runway must use alphanumeric designators and follow an increasing, sequentially numbered pattern from one runway end to the other runway end, such as A1, A2,, A5.
- (3) For a runway with parallel taxiways on opposite sides of the runway, entrance taxiways at the same runway end must use their respective parallel taxiway's single alphabet designation with the addition of a numeric designation, such as A1 and B1. In this situation, the

numeric designation on opposite sides of the runway can be the same or different, (for example A1 and B1, or A1 and B5).

- (4) For busy or high-traffic crossing taxiways, the taxiway designator on each side of the runway should be the same. The airport operator, in consultation with the local Air Traffic Control Tower (if applicable), are to determine the high-traffic crossing taxiways. For all other taxiways that connect to or cross a runway, the taxiway names on each side of the runway should be different.
- (5) Number and letter combinations should not result in confusion with runway designations. For example, if an airport has a runway "4L," a taxiway designation of "L4" should not be used.
- f. When all available two-character alphanumeric names have been used, three-character alphanumeric names such as A12, A11, etc. can be used. However, the use of these three-character alphanumeric designators is not recommended unless the total number of entrance, stub, by-pass, crossing, and exit taxiways for a runway or apron (terminal) exceeds nine.
 - **g.** Designate all separate, distinct taxiway segments.
 - **h.** Ensure no separate, distinct taxiway has the same designation as any other taxiway.
- i. Do not change taxiway designations if 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; such changes should be made only at intersections. See Figure 12c and d in AC 150/5340-18F.
- **j.** Avoid designating taxiways that have same names as aprons, terminal ramps, or other parking areas, especially taxiways entering an apron or ramp area.
- **k.** Do not designate taxiways by referencing a direction of travel or a physical object. This includes the use of terms such as "inner," "outer," "parallel," and "bridges." Such informal nicknames or abbreviations are not used on taxiway guidance signs. Designations for inner and outer taxi routes around a terminal should follow a logical progression into the airfield environment. For example, an inner taxiway should be designated "A", an outer taxiway should be designated "B", etc.
- **l.** In a Notice to Airmen (NOTAM) regarding taxiways, refer to the actual designation that appears on the taxiway guidance sign.

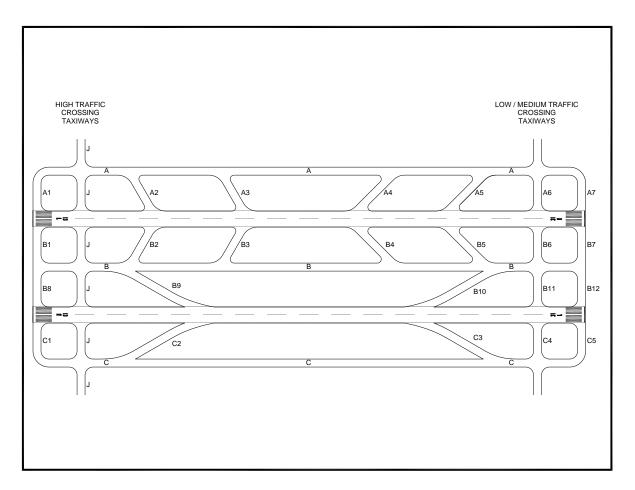


Figure 1a