Section 3. Airport Marking Aids and Signs

2-3-1. General

- **a.** Airport pavement markings and signs provide information that is useful to a pilot during takeoff, landing, and taxiing.
- **b.** Uniformity in airport markings and signs from one airport to another enhances safety and improves efficiency. Pilots are encouraged to work with the operators of the airports they use to achieve the marking and sign standards described in this section.
- **c.** Pilots who encounter ineffective, incorrect, or confusing markings or signs on an airport should make the operator of the airport aware of the problem. These situations may also be reported under the Aviation Safety Reporting Program as described in Paragraph 7–6–1, Aviation Safety Reporting Program. Pilots may also report these situations to the FAA regional airports division.
- **d.** The markings and signs described in this section of the AIM reflect the current FAA recommended standards.

REFERENCE-

AC 150/5340–1, Standards for Airport Markings. AC 150/5340–18, Standards for Airport Sign Systems.

2-3-2. Airport Pavement Markings

- **a. General.** For the purpose of this section, the airport pavement markings have been grouped into four areas:
 - 1. Runway Markings.
 - 2. Taxiway Markings.
 - 3. Holding Position Markings.
 - 4. Other Markings.
- **b. Marking Colors.** Markings for runways are white. Markings defining the landing area on a heliport are also white except for hospital heliports which use a red "H" on a white cross. Markings for taxiways, areas not intended for use by aircraft (closed and hazardous areas), and holding positions (even if they are on a runway) are yellow.

2-3-3. Runway Markings

a. General. There are three types of markings for runways: visual, nonprecision instrument, and precision instrument. TBL 2-3-1 identifies the marking elements for each type of runway and TBL 2-3-2 identifies runway threshold markings.

TBL 2-3-1 Runway Marking Elements

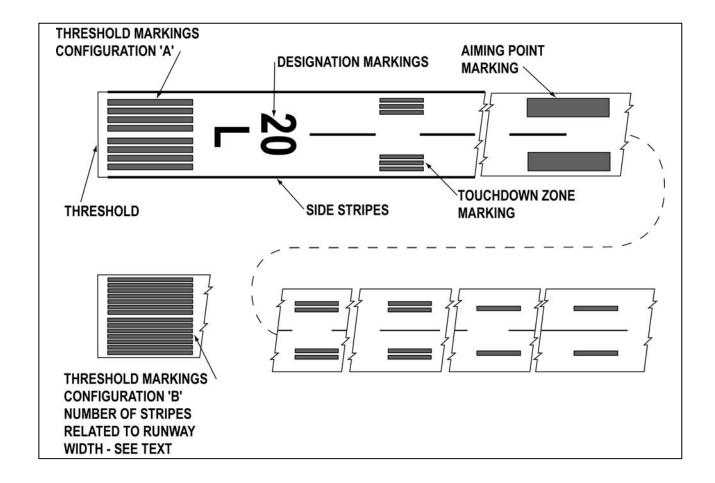
Marking Element	Visual Runway	Nonprecision Instrument Runway	Precision Instrument Runway
Designation	X	X	X
Centerline	X	X	X
Threshold	X ¹	X	X
Aiming Point	X ²	X	X
Touchdown Zone			X
Side Stripes			X

¹ On runways used, or intended to be used, by international commercial transports.

² On runways 4,000 feet (1200 m) or longer used by jet aircraft.

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FIG 2-3-1
Precision Instrument Runway Markings



- **b. Runway Designators.** Runway numbers and letters are determined from the approach direction. The runway number is the whole number nearest one-tenth the magnetic azimuth of the centerline of the runway, measured clockwise from the magnetic north. The letters, differentiate between left (L), right (R), or center (C) parallel runways, as applicable:
 - 1. For two parallel runways "L" "R."
 - 2. For three parallel runways "L" "C" "R."
- **c. Runway Centerline Marking.** The runway centerline identifies the center of the runway and provides alignment guidance during takeoff and landings. The centerline consists of a line of uniformly spaced stripes and gaps.

- **d.** Runway Aiming Point Marking. The aiming point marking serves as a visual aiming point for a landing aircraft. These two rectangular markings consist of a broad white stripe located on each side of the runway centerline and approximately 1,000 feet from the landing threshold, as shown in FIG 2–3–1, Precision Instrument Runway Markings.
- e. Runway Touchdown Zone Markers. The touchdown zone markings identify the touchdown zone for landing operations and are coded to provide distance information in 500 feet (150m) increments. These markings consist of groups of one, two, and three rectangular bars symmetrically arranged in pairs about the runway centerline, as shown in FIG 2–3–1. For runways having touchdown zone markings on both ends, those pairs of markings which extend to within 900 feet (270 m) of the midpoint between the thresholds are eliminated.

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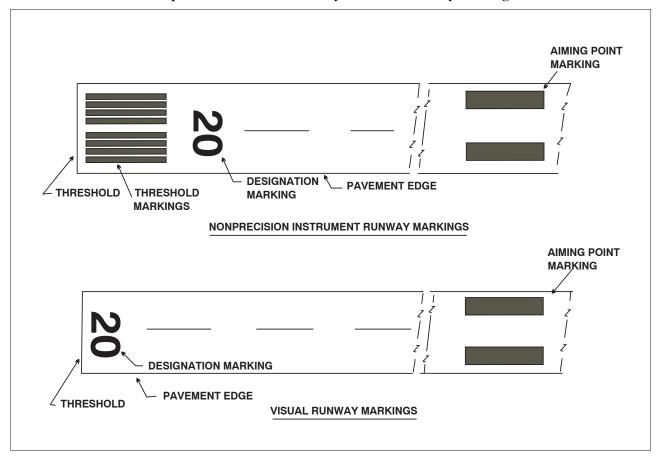


FIG 2-3-2 Nonprecision Instrument Runway and Visual Runway Markings

- **f. Runway Side Stripe Marking.** Runway side stripes delineate the edges of the runway. They provide a visual contrast between runway and the abutting terrain or shoulders. Side stripes consist of continuous white stripes located on each side of the runway as shown in FIG 2–3–4.
- **g. Runway Shoulder Markings.** Runway shoulder stripes may be used to supplement runway side stripes to identify pavement areas contiguous to the runway sides that are not intended for use by aircraft. Runway shoulder stripes are yellow. (See FIG 2–3–5.)
- h. Runway Threshold Markings. Runway threshold markings come in two configurations. They either consist of eight longitudinal stripes of uniform

dimensions disposed symmetrically about the runway centerline (as shown in FIG 2–3–1) or the number of stripes is related to the runway width as indicated in TBL 2–3–2. A threshold marking helps identify the beginning of the runway that is available for landing. In some instances, the landing threshold may be relocated or displaced.

TBL 2-3-2 Number of Runway Threshold Stripes

Runway Width	Number of Stripes	
60 feet (18 m)	4	
75 feet (23 m)	6	
100 feet (30 m)	8	
150 feet (45 m)	12	
200 feet (60 m)	16	

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1. Relocation of a Threshold. Sometimes construction, maintenance, or other activities require the threshold to be relocated towards the rollout end of the runway. (See FIG 2-3-3.) When a threshold is relocated, it closes not only a set portion of the approach end of a runway, but also shortens the length of the opposite direction runway. In these cases, a NOTAM should be issued by the airport operator identifying the portion of the runway that is closed (for example, 10/28 W 900 CLSD). Because the duration of the relocation can vary from a few hours to several months, methods identifying the new threshold may vary. One common practice is to use a ten feet wide white threshold bar across the width of the runway. Although the runway lights in the area between the old threshold and new threshold will not be illuminated, the runway markings in this area may or may not be obliterated, removed, or covered.

2. Displaced Threshold. A displaced threshold is a threshold located at a point on the runway other than the designated beginning of the runway. Displacement of a threshold reduces the length of runway available for landings. The portion of runway behind a displaced threshold is available for takeoffs in either direction and landings from the opposite direction. A ten feet wide white threshold bar is

located across the width of the runway at the displaced threshold. White arrows are located along the centerline in the area between the beginning of the runway and displaced threshold. White arrow heads are located across the width of the runway just prior to the threshold bar, as shown in FIG 2–3–4.

NOTE-

Airport operator. When reporting the relocation or displacement of a threshold, the airport operator should avoid language which confuses the two.

- i. Demarcation Bar. A demarcation bar delineates a runway with a displaced threshold from a blast pad, stopway, or taxiway that precedes the runway. A demarcation bar is 3 feet (1m) wide and yellow, since it is not located on the runway, as shown in FIG 2–3–6.
- **1. Chevrons.** These markings are used to show pavement areas aligned with the runway that are unusable for landing, takeoff, and taxiing. Chevrons are yellow. (See FIG 2–3–7.)
- **j. Runway Threshold Bar.** A threshold bar delineates the beginning of the runway that is available for landing when the threshold has been relocated or displaced. A threshold bar is 10 feet (3m) in width and extends across the width of the runway, as shown in FIG 2–3–4.