



Federal Aviation Administration

Memorandum

Date: July 24, 2020

To: All Airports Regional Division Managers

From: Michael A.P. Meyers, P.E.
Manager (Acting), Airport Engineering Division, AAS-100

Prepared by: Prepared by: Carlton Lambiasi, P.E., AAS-120

Subject: Engineering Brief No. 100A, Holding Position Sign and Marking for
Runway Approach/Departure Areas

This Engineering Brief addresses FAA's recent completion of a safety risk assessment of the proposed modifications to the instrument departure surface described in FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS). The proposed modifications represent an acceptable risk, and the Flight Technologies and Procedures Division has begun drafting changes to the affected 8260-series directives, the Aeronautical Information Manual (AIM), and the Instrument Procedures Handbook (IPH). This Engineering Brief provides approval for airport operators to implement the new departure surface for locating holding positions on the airfield.

Attachment



ENGINEERING BRIEF #100A

Holding Positions for Runway Approach/Departure Areas

1.0 Purpose.

This Engineering Brief addresses FAA's recent completion of a safety risk assessment of the proposed modifications to the initial climb area (herein referred to as departure surface) described in FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS). The proposed modifications represent an acceptable risk, and the Flight Technologies and Procedures Division has begun drafting changes to the affected 8260-series directives, the Aeronautical Information Manual (AIM), and the Instrument Procedures Handbook (IPH). Because the shape and design of the departure surface described in Advisory Circular (AC) 150/5300-13, Airport Design is modeled upon TERPS criteria, there will be corresponding modifications to the departure surface. This Engineering Brief provides approval for airport operators to implement the new departure surface for locating holding positions on the airfield.

2.0 Applicability

The guidance here is not legally binding in its own right and will not be relied upon by the FAA as a separate basis for affirmative enforcement action or other administrative penalty. Conformity with this guidance, as distinct from existing statutes, regulations, and grant assurances, is voluntary only, and nonconformity will not affect rights and obligations under existing statutes and regulations.

3.0 Background.

The Airport Obstructions Standards Committee (AOSC) requested the Flight Procedures and Airspace Group (AFS-420) to engage stakeholders to assess the current instrument departure surface and evaluate the possibility of modifying the instrument departure surface based on present risk. Modifying this surface while maintaining an acceptable level of safety will optimize locations of approach and departure holding positions and lessen the impact on the National Airspace System (NAS). For example, the modified surface will lessen the impact on parallel taxiways thus enhancing the efficiency of taxi operations. A workgroup of subject matter experts from the FAA, the Department of Defense, and industry completed the evaluation.

4.0 Implementation

The Flight Technologies and Procedures Division estimates it will take more than one year to complete the changes to the affected 8260-series directives, the Aeronautical Information Manual (AIM), the Instrument Procedures Handbook (IPH), and related procedure design tools. Airport operators may implement the new departure surface for locating holding positions on the airfield. Refer to Figures 1 and 2 for dimensions of the surface. Evaluating the most demanding aircraft will ensure proper airspace protection.

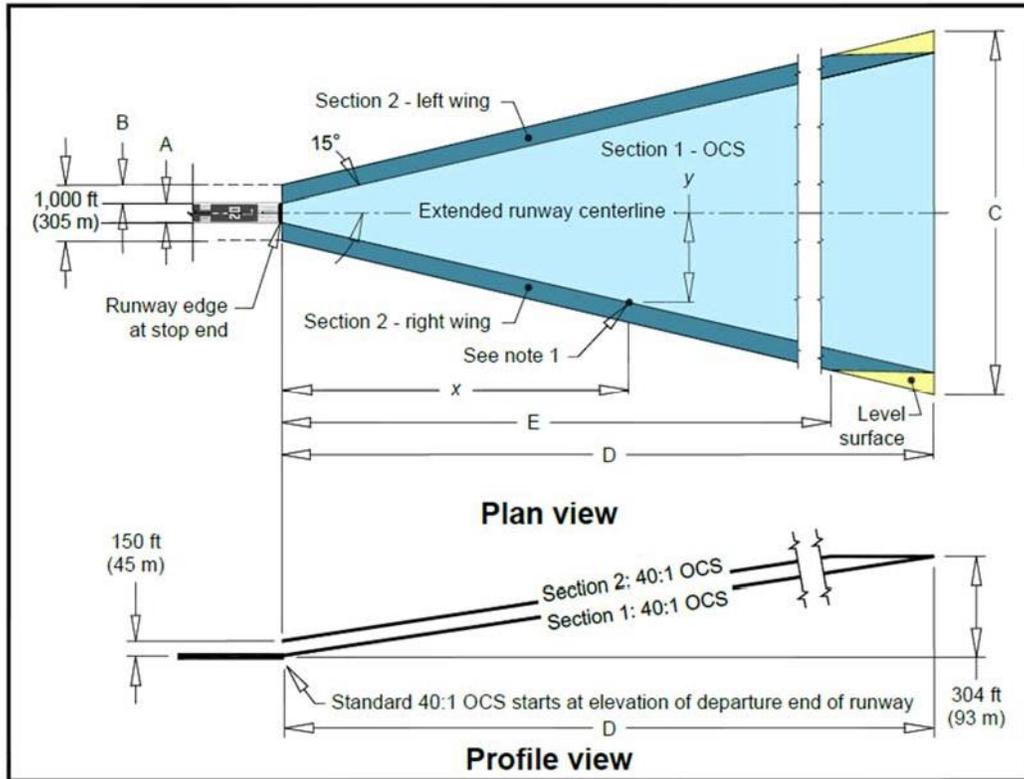
5.0 Questions

Please contact Carlton Lambiasi at 847-294-7552 or by email at Carlton.Lambiasi@faa.gov for any questions about this Engineering Brief.

6.0 Effective Date

This Engineering Brief becomes effective as of the date the associated memorandum is signed by the Manager, FAA Airport Engineering Division, AAS-100.

Figure 1. New Instrument Departure Surface (Plan and profile view)

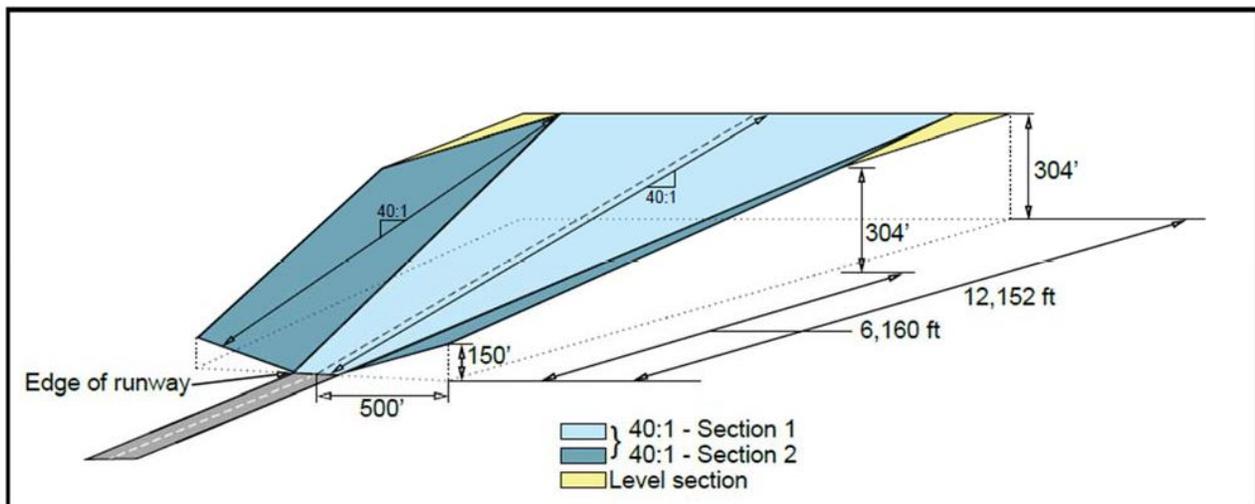


Dimensional Standards Feet (Meters)					Slope
A	B	C	D	E	
Runway Width (RW)	500 (152) - 1/2 RW	7,512 (2290)	12,152 (3704)	6,160 (1878)	40:1

Note 1: The half-width of Section 1 is calculated by the formula:

$$\text{Section 1}_{\text{Half Width}} = (1/2 \text{ RWY Width}) + (\tan 15^\circ * X), \text{ where } X = \text{distance from stop end.}$$

Figure 2. New Instrument Departure Surface (Perspective view)





FAA

Aviation Safety

Memorandum

Date: January 31, 2020

To: Gary Powell, Director, Aeronautical Information Services
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From: Mark Steinbicker, Manager, Flight Technologies and Procedures Division

Prepared by: Thomas J. Nichols, Section Manager, Flight Procedures and Airspace Group

Subject: Initial Climb Area Obstacle Clarification

Overview/Summary: This is to provide clarification to the obstacle definition in FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), Appendix B, Paragraph 88.

Background: Flight Standards clarification is based on the safety risk assessment of proposed modifications to the departure initial climb area (ICA). The clarification will assist in identifying obstacles pertaining to hold lines while implementing proposed modifications to the departure initial climb area

Issues: Per the definition of an Obstacle in FAA Order 8260.3, a taxiing aircraft is considered an obstacle except where operational restrictions prevent taxiing operations during takeoff and landing. Flight Standards considers the hold line placement based on the proposed modification to the ICA as described in SRAR [Proposal for Change to FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), Departure Initial Climb Area (ICA)] (attached) as an operational restriction outlined in the definition. This clarification may be used until Flight Standards processes changes to affected 8260-series directives.

Attachment

cc: Airports Engineering (AAS-100)
Non-FAA Service Providers