NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N 8900.487

National Policy

Effective Date:
10/15/18

Cancellation Date:
10/15/19

SUBJ: IFR Departure Procedure Climb Gradient Compliance—Performance Planning

1. Purpose of This Notice. This notice provides amended and clarified guidance to Federal Aviation Administration (FAA) Principal Operations Inspectors (POI) and Training Center Program Managers (TCPM) of the improper use of one-engine-inoperative (OEI) performance data and procedures when attempting to demonstrate compliance with instrument flight rules (IFR) climb gradient requirements.

2. Audience. The primary audience for this notice is Flight Standards District Office (FSDO) and certificate management office (CMO) aviation safety inspectors (ASI) who are responsible for the review, approval, and surveillance of air operator procedures and training under Title 14 of the Code of Federal Regulations (14 CFR) parts 121, 135, and 91 subpart K (part 91K). These procedures are highly encouraged for operations under part 91. The secondary audience includes Flight Standards Service Office of Safety Standards policy offices and Safety Assurance offices with 14 CFR part 142 training oversight.

3. Where You Can Find This Notice. You can find this notice on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices. Inspectors can access this notice through the Flight Standards Information Management System (FSIMS) at http://fsims.avs.faa.gov. Operators can find this notice on the FAA's website at http://fsims.faa.gov. This notice is available to the public at http://www.faa.gov/regulations_policies/orders_notices.

4. Background. FAA Order 8900.1, Volume 4, Chapter 3, Section 5, Safety Assurance System: Selected Practices, Paragraph 4-599, Deviation for Obstacle Clearance Data for Certain Turbojet Airplanes in Part 135 Operations, previously implied to inspectors that it was an acceptable practice to use OEI takeoff performance data for compliance with the Terminal Instrument Procedures (TERPS) climb gradient requirements published on a Standard Instrument Departure (SID), Diverse Vector Area (DVA), Obstacle Departure Procedure (ODP), and Missed Approach Procedures (MAP). This method is no longer acceptable because TERPS procedures assume normal all-engines-operating (AEO) climb performance of the airplane and currently do not consider low close-in obstacles when calculating the climb gradient requirements for the procedure. This matter is further complicated, as manufacturers are not required by the FAA to furnish AEO performance data for takeoff.

a. In an effort to meet the AEO takeoff performance requirements for these departure procedures, some inspectors have allowed or expected the use of OEI takeoff performance data as an accepted means of complying with the TERPS climb gradient. Also, with the absence of this manufacturer data, some inspectors have incorrectly considered OEI data to be the best available to meet the climb gradient requirements published on a SID, DVA, ODP, or MAP. Consequently, the incorrect use of OEI data has been mistakenly included in some operating procedures and training programs as an acceptable means of meeting IFR departure procedure requirements. This notice informs inspectors that such practices may neither ensure an aircraft will clear obstacles in every case (e.g., low, close-in obstacles), nor meet the necessary obstacle clearance altitude along the departure routing at the required geographic location.

b. POIs and TCPMs requiring the use of OEI procedures in these instances may be putting their pilots and operators at an unfair competitive disadvantage, compared to the POIs and/or TCPMs who understand that the application of OEI procedures in such cases is beyond the designed purpose of these data and procedures.

5. Guidance. The Safety Standards Flight Technologies and Procedures Division, in cooperation with the Office of Air Carrier Safety Assurance, the Office of General Aviation Safety Assurance, and the Aircraft Certification Service (AIR) Airplane and Flight Crew Interface Section, developed this notice. This notice announces the following changes to Order 8900.1 Volume 4, Chapter 3, Section 5:

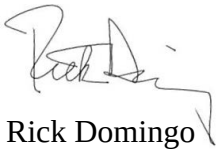
- Removal of superseded inspector guidance regarding the use of OEI takeoff data from Subparagraph 4-599C, Method of Granting the Deviation.
- Addition of Paragraph 4-603, Compliance with IFR Departure and Missed Approach Climb Gradient Requirement; Paragraph 4-604, Use of OEI Special Departure Procedures; and Figure 4-40, Example IFR Climb Gradient and Climb Gradient Surface (Plane).

6. Action. POIs and TCPMs should review the updated guidance and review their operator's or training center's procedures and training program(s) to ensure they comply with the intent of this updated guidance.

a. Point of Emphasis for Operators. Inspectors and training centers should convey to operators that there is no FAA expectation or requirement to use OEI takeoff performance data to meet SID, DVA, ODP or MAP climb gradient requirements. Additionally, POIs and TCPMs should communicate that IFR departure procedures filed or assigned by air traffic control (ATC) are based on normal airplane operation and that OEI takeoff performance data should not be used for this purpose.

b. FAA Performance Planning Training Videos. The FAA has produced four training videos illustrating the proper application of aircraft departure and approach performance requirements, as well as other relevant performance topics. It is recommended that they be included as a part of approved ground training courses for pilots, dispatchers, and flight followers and/or planners of transport category airplanes. These videos may be viewed and/or downloaded at: https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afx/afs/afs400/afs410/obstacle/.

7. Disposition. We will incorporate the information in this notice into Order 8900.1 Volume 4, Chapter 3, Section 5 before this notice expires. Direct questions concerning the information in this notice to the Flight Technologies and Procedures Division, Flight Operations Group, at 202-267-8795.



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