U.S. Department
of Transportation

**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

January 13, 2006

Captain Pedro Rivas
Director, Charting and Instrument Procedures Committee
Air Line Pilots Association, International
535 Herndon Parkway
Post Office Box 1169
Herndon, VA 20172

RE: Climb Gradient Information for Air Carrier Pilots

Dear Captain Rivas,

We received a copy of your letter requesting a legal interpretation of the Federal Aviation Regulations. In summary, you asked:

1. whether an air carrier operating in accordance with parts 121 or 135 is required to provide flight crewmembers with data necessary to assure that an aircraft can comply with the climb gradients specified in published instrument flight rules (IFR) departure procedures and standard instrument departure (SID) procedures; and
2. whether pilots operating under parts 121 or 135 are required to follow a published IFR departure procedure even when Air Traffic Control (ATC) assigns a SID to a departing aircraft.

First, please accept our apologies for the delay in issuing a response to your inquiry. As you are aware, the FAA has been working internally and with the Government/Industry Aeronautical Charting Forum (Forum) on this issue. We appreciate your efforts in resolving this aviation safety matter.

Regarding the first issue, there is presently no requirement in the Federal Aviation Regulations mandating air carriers or commercial operators to provide climb gradient data to flight crewmembers. Therefore, it would be necessary for the FAA to conduct rulemaking proceedings in order to impose this requirement. Section 5 of the Administrative Procedure Act defines rulemaking as the agency process for formulating, amending, or repealing a rule.[1] FAA rules are subject to public notice and comment prior

[1] 5 U.S.C. § 551 (2004).

to implementation. You may file a petition for rulemaking in accordance with 14 C.F.R. part 11.

Your second area of concern involved the requirement for pilots to follow published IFR departure procedures. Specifically, you asked which procedure a pilot should follow if ATC issues a SID that differs from the published IFR departure procedure for a particular airport.

As an initial matter, it is helpful to clarify that a "published IFR departure procedure" may be a SID developed for ATC purposes or an obstacle departure procedure (ODP) developed for obstacle clearance purposes. ODPs are developed by the Aviation System Standards Division (AVN) within the FAA Flight Standards Service.[2] According to Flight Standards, ATC historically developed SIDs for purposes of expediting air traffic and maintaining aircraft separation. SIDs did not contain an assessment for obstacle clearance beyond the first en route navigational fix. Instead, the obstacle assessment along the SID route was terminated at the first en route airway fix even if the SID procedure had transition routes beyond that point. The SIDs contained a standard 200 feet per nautical mile climb gradient that provided obstacle clearance for most airports. Procedures requiring greater climb gradients were specifically tested and documented in the Terminal Procedures Publication as part of the procedure. Therefore, flight crews are provided with adequate obstacle clearance climb gradients, even when using a SID developed by ATC.

In recent years, AVN and ATC began developing ODPs that establish climb gradients for obstacle clearance beyond the first en route navigational fix. All airports with instrument approach procedures are assessed to determine if an ODP should be published. ODPs are published for airports with a required climb gradient of more than 200 feet per nautical mile for obstacle clearance. The ODPs are valid for all directions of flight unless otherwise stated in the ODP.

According to your letter, the question regarding which procedure a pilot must follow stems from FAA Interpretation 1993-30.[3] In that interpretation, the FAA stated that part 121 or 135 operators are required to follow "any published IFR departure procedure" regardless of the weather conditions. A SID issued by ATC and an ODP developed by AVN are both "published IFR departure procedures." Therefore, it is consistent with the 1993 interpretation and regulatory requirements for an operator to comply with either procedure. The pilot in command (PIC) has the authority to determine which procedure

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[2] The FAA also notes that more restrictive departure procedures may be imposed on an air carrier via Operations Specifications. A carrier must always comply with the more restrictive procedures mandated by the Operations Specifications unless an emergency exists or the deviation is in response to a traffic alert and collision avoidance system resolution advisory. If a more restrictive procedure is mandated by the Operation Specifications, the pilot in command must seek an amended clearance from air traffic control. *See* 14 C.F.R. § 91.123 (2006).

[3] *See* Federal Aviation Decisions, published by West Publishing Company.

is most appropriate based on the circumstances of the flight. However, if the PIC desires to use an ODP instead of the SID issued by ATC, the PIC must request an amended clearance in accordance with § 91.123.

We trust that the foregoing interpretation is responsive to your inquiry, and we apologize again for the delay in its issuance. This interpretation was prepared by the Operations Law Branch of the Office of the Chief Counsel, and coordinated with the Air Transportation and Flight Operations Divisions of the Flight Standards Service. Please contact us if we can be of further assistance.

Sincerely,

Rebecca MacPherson
Assistant Chief Counsel for Regulations