U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Chief Counsel

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

AUG 14 2008

Mr. Paul Arrambide
Chief Instructor
Sino Swearingen
1770 Skyplace Boulevard
San Antonio, Texas 78216

Dear Mr. Arrambide:

This is in response to your letter of March 7, 2008, requesting an interpretation of the Title 14 of the Code of Federal Regulations (14 CFR) part 91 operating requirements when flying a standard instrument departure (SID) or departure procedure (DP). Specifically, you question whether a crew must fly a 3.3% climb gradient when flying an SID or DP that does not otherwise specify a climb gradient. You state that FAA inspectors have stated that crews only have to maintain 3.3% climb gradient to 1,500 feet above the airport runway and from that point on only maintain a positive rate of climb until the minimum enroute altitude.

Instrument departure procedures are preplanned instrument flight rule (IFR) procedures, which provide obstruction clearance from the terminal area to the appropriate enroute structure. There are two types of DPs: (1) Obstacle Departure Procedures (ODPs) provide obstruction clearance via the least onerous route from the terminal area to the appropriate en route structure. When conducting Part 91 operations, ODPs are recommended for obstruction clearance protection and may be flown without ATC clearance unless an alternative departure procedure (SID or radar vector) has been specifically assigned by air traffic control; and (2) SIDs are designed for system enhancement and to reduce pilot/controller workload. ATC clearance must be received prior to flying a SID.

SIDs and ODPs are developed and designed according to criteria set forth in the *United States Standard for Terminal Instrument Procedures (TERPS),* FAA Order 8260.3, Volume 4. If the airport's 40:1 obstacle clearance surface is obstacle free, an ODP is not necessary and the flight crew is expected to use the standard climb gradient of 200 feet per nautical mile (NM) until reaching the minimum IFR altitude for the route of flight. (Maintaining a 3.3% climb gradient equates to operating the aircraft at a climb gradient of 200 feet per NM.) If there are obstacles that penetrate the 40:1 obstacle clearance surface, then an ODP is developed that can have a route established to avoid those obstacles and/or a greater than standard climb gradient. For ODPs and SIDs, a standard climb gradient is not specified in the procedure. If a nonstandard climb gradient is necessary (greater than 200 feet per NM), it will be specified on the ODP or SID. Therefore, either a 200 feet per NM or higher specified climb gradient must be complied with until reaching the MEA to ensure adequate obstacle clearance.

We hope this response has been helpful to you. Please contact us if you have further questions. This interpretation was prepared by Lorelei Peter, a staff attorney in the Regulations Division of the Office of the Chief Counsel and has been coordinated with the Flight Standards Division.

Sincerely,

Rebecca MacPherson
Assistant Chief Counsel Regulations Division, AGC-200