



# Federal Aviation Administration

---

---

## Memorandum

Date: NOV 16 2010

To: Elizabeth L. Ray, Director of Systems Operations Airspace and Aeronautical Information Management, AJR-3

From: Leslie H. Smith, Manager, Flight Technologies and Procedures Division, AFS-400

Subject: Low Close-In Obstacles and Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) Mitigation

---

---

**PURPOSE.** Establish policy and understanding regarding Low Close-In obstacle analysis for OE/AAA.

**BACKGROUND.** Low Close-In obstacles are explained in Order 8260.46D, Departure Procedure (DP) Program. Departure procedure design standards are located in Order 8260.3B, United States Standard for Terminal Instrument Procedures (TERPS), and Order 8260.44A, Civil Utilization of Area Navigation (RNAV) Departure Procedures. Order 8260.46D defines Low Close-In obstacles and describes when an Obstacle Departure Procedure (ODP) must be developed for obstructions penetrating the 40:1 departure obstacle clearance surface (OCS). Order 8260.46D directs charting of Low Close-In obstacle as an Obstacle Departure Procedure note in U.S. Terminal Procedures publications. This note provides the Pilot in Command (PIC) with obstacle type, location relative to DER, height (AGL), and elevation (MSL). Operationally, the PIC must account for Low Close-In obstacles in departure planning. Low Close-In obstacles may result in additional required climb performance, low altitude maneuvering, increased critical phase workload, and the offload of cargo, fuel and/or passengers.

The criteria which directs obstacle notification to pilots, has created a loophole in OE/AAA case analysis. While increased Instrument Flight Rules (IFR) minima and increased climb gradient are easily quantified and can be evaluated as part of an aeronautical study, Low Close-In obstacle assessment is more complex. Study of a Low Close-In obstacle requires operational experience and subjective analysis of its impact. On numerous occasions, structures identified as Low Close-In obstacles have been issued Determinations of No Hazard with the suggestion that the chart note mitigates the IFR Effect. In fact, a chart note is the prescribed action as directed in Order 8260.46D and is not mitigation and justification for "No Hazard" determinations.

Consider the Airport Improvement Program (AIP). Grants are awarded for obstruction removal when structures penetrate critical surfaces. In the Federal Aviation Administration's Report to Congress, 25<sup>th</sup> Annual Report of Accomplishments (2008), removal of obstructions to critical surfaces is singled out as one of the key elements in its Safety category. Critical surface

penetrations affecting departure operations are a significant part of this program. Some of the funded projects were the result of runway additions or extensions. The rest of the grants were for critical surface penetrations at unaltered runways. This indicates structures, which passed through OE/AAA and received "No Hazard" determinations, were later determined to be a critical safety concern worth funding and removal.

**POSITION.** A Low Close-In obstacle classification does not provide rationale to enable construction of structures within the confines of an instrument procedure Obstacle Evaluation Area. Proliferation of Low Close-In obstacles results in potential degradation of safety by increasing procedure complexity and adding obstructions in the critical initial climb area. Therefore Low Close-In obstacles should not be added to existing procedures, as a function of OE/AAA mitigation, without concurrence from the All Weather Operations Program Manager.

If you have any questions concerning this recommendation, please contact Mr. Harry J. Hodges, Manager, Flight Procedure Standards Branch, AFS-420, at (405) 954-4164.