Federal Aviation Administration

Memorandum

Date: MAY 28 2013

To: Bruce DeCleene, Manager, Flight Technologies and Procedures Division, AFS-400

From: Mark W. Bury, Acting Assistant Chief Counsel, International Law, Legislation, and Regulations Division, AGC-200

Prepared by: Dean E. Griffith, Attorney, AGC-220

Subject: Legal Interpretation regarding 14 C.F.R. § 97.3, Aircraft Approach Category

This memorandum is in response to your request for legal interpretation on the meaning of "aircraft approach category" as defined 14 C.F.R. § 97.3[1] dated September 24, 2012. Specifically you ask if the phrase "maximum certificated landing weight" as used in § 97.3 applies to aircraft grouped by speed of V_{REF}.[2] The answer to your question is "yes" the phrase "maximum certificated landing weight" applies to both aircraft grouped by speed of V_{REF} as well as aircraft grouped by 1.3 V_{S0}.[3]

In 1972 the FAA implemented the U.S. Standard for Terminal Instrument Procedures (TERPS). The TERPS rule changed the way the FAA defined aircraft approach categories from one based on the number of engines to new criteria based on stall speed in landing configuration or aircraft weight. Specifically "aircraft approach category" was defined as a "grouping of aircraft based on a speed of 1.3 V_{S0} (at maximum certificated landing weight) or on maximum certificated landing weight." *See* 32 Fed. Reg. 13909, 13911-12 (Oct 6, 1967); 32 Fed. Reg. 6938, 6939 (May 5, 1967). Section 97.3 was amended later to remove the option for basing aircraft approach categories strictly on maximum certificated landing weight. *See* 44 Fed. Reg. 15659 (Mar. 15, 1979). The only remaining way to make this determination was "1.3 V_{S0} (at maximum certificated landing weight)." *Id.*

In 1996 the FAA proposed replacing "1.3 V_{S0}" with "V_{REF}" in the definition of "aircraft approach category" in § 97.3. *See* 61 Fed. Reg. 1260, 1263 (Jan. 18, 1996). The proposed definition specified that aircraft would be grouped "based on a speed of V_{REF} at the maximum certificated landing weight." *Id.* at 1268. After additional review, the FAA determined that

---

[1] Section 97.3 provides in pertinent part: "*Aircraft approach category* means a grouping of aircraft based on a speed of V_{REF}, if specified, or if V_{REF} is not specified, 1.3 V_{S0} at the maximum certificated landing weight."

[2] V_{REF} means reference landing speed. 14 C.F.R. § 1.2.

[3] V_{S0} means the stalling speed or the minimum steady flight speed in the landing configuration. 14 C.F.R. § 1.2.

application of the V_{REF} standard "to aircraft certificated using V_S"[4] could cause confusion for users of the airspace system and that some airplane flight manuals would not be consistent with the new V_{REF} terminology. *See* 67 Fed. Reg. 70812, 70822 (Nov. 26, 2002). Therefore, the FAA revised § 97.3 in the final rule to "continue to reference 1.3 V_{S0} for use in those cases where V_{REF} is not specified." *Id.*

The regulatory history demonstrates that the FAA intended the "maximum certificated landing weight" qualifier to apply to aircraft for which either V_{REF} or 1.3 V_{S0} are used to determine approach category. The new V_{REF} standard as proposed in 1996 required "maximum certificated landing weight" to be part of the determination. The FAA revised the final rule so that aircraft approach categories could still be determined using the existing "1.3 V_{S0} at maximum certificated landing weight" standard in addition to the V_{REF} standard proposed in the NPRM. The preamble to the final rule contained no discussion of removing the reference to maximum certificated landing weight for the V_{REF} standard proposed in the NPRM. We therefore conclude that for aircraft grouped by speed of V_{REF} aircraft approach category must be determined using speed of V_{REF} at the maximum certificated landing weight.

This interpretation was coordinated through the Flight Technologies and Procedures Division of Flight Standards Service. Please contact my office at (202) 267-3073 with any questions.

---

[4] V_S means the stalling speed or the minimum steady flight speed at which the airplane is controllable. 14 C.F.R. § 1.2.