

TABLE OF CONTENTS

GACAR PART 36 – NOISE STANDARDS: AIRCRAFT TYPE AND AIRWORTHINESS CERTIFICATION

SUBPART A – GENERAL				
§ 36.1 Applicability.		•••••		···· 2
§ 36.3 Requirements as of	Date of Application.	•••••	•••••	2
§ 36.5 Compatibility with	Airworthiness Requ	irements.		3
SUBPART B – NOISE CERTII § 36.11 Noise Certification				4
SUBPART C – DOCUMENTA	TION, OPERATING	LIMITATION	S AND INFORMAT	ION
§ 36.21 Procedures, Noise	Levels and Other Inf	formation.		6
§ 36.23 Manuals, Marking	gs, and Placards.	••••	• • • • • • • • • • • • • • • • • • • •	6



SUBPART A – GENERAL

§ 36.1 Applicability.

- (a) This part prescribes noise standards for the issue of the following certificates:
 - (1) Type certificates, and changes to those certificates, and standard airworthiness certificates, for subsonic transport category large airplanes, and for subsonic jet airplanes regardless of category except those airplanes that are designed for aerial work operations.
 - (2) Type certificates and changes to those certificates, standard airworthiness certificates, and restricted category airworthiness certificates, for propeller-driven, small airplanes, and for propeller-driven, commuter category airplanes except those airplanes that are designed exclusively for aerial work operations.
 - (3) Type certificates, and changes to those certificates, for rotorcraft except those rotorcraft that are designated exclusively for aerial work operations.
- (b) Each person who applies under GACAR Part 21 for a type of airworthiness certificate specified in this part must show compliance with the applicable requirements of this part, in addition to the applicable airworthiness requirements. A noise certification statement for an individual aircraft is indicated by annotations on the airworthiness certificate issued to the aircraft under Subpart F of GACAR Part 21.
- (c) Each person who applies under GACAR Part 21 for approval of an acoustical change must show that the aircraft complies with the applicable provisions of this part in addition to the applicable airworthiness requirements.
- (d) Aircraft in compliance with the applicable sections of Part 36 of Title 14, Code of Federal Regulations of the United States are considered by the President to be in compliance with this part.

§ 36.3 Requirements as of Date of Application.

Unless otherwise specified, the date to be used in determining the applicability of the standards in this part must be the date of application submitted to the State of Design for a type certificate, or the date of application under an equivalent prescribed procedure by the certificating authority of the State of Design except in special cases where the certificating authority accepts an extension of this



period.

§ 36.5 Compatibility with Airworthiness Requirements.

It must be shown that the aircraft meets the airworthiness regulations constituting the type certification basis of the aircraft under all conditions in which compliance with this part is shown, and that all procedures used in complying with this part, and all procedures and information for the flight crew developed under this part, are consistent with the airworthiness regulations constituting the type certification basis of the aircraft.



SUBPART B – NOISE CERTIFICATION STANDARDS

§ 36.11 Noise Certification Standards.

The standards for noise certification are as specified below:

- (a) Subsonic jet Airplanes Application for Type Certificate submitted before 6 October 1977. The noise certification standards are as specified in Part II, Chapter 2 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (b) Subsonic jet airplanes Application for Type Certificate submitted on or after 6 October 1977 and before 1 January 2006. The noise certification are as specified in Part II, Chapter 3 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (c) Propeller-driven airplanes over 5 700 kg Application for Type Certificate submitted on or after 1 January 1985 and before 17 November 1988. The noise certification are as specified in Part II, Chapter 3 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (d) Propeller-driven airplanes over 8 618 kg Application for Type Certificate submitted on or after 17 November 1988 and before 1 January 2006. The noise certification are as specified in Part II, Chapter 3 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (e) Subsonic jet airplanes Application for Type Certificate submitted on or after 1 January 2006. The noise certification are as specified in Part II, Chapter 4 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (f) Propeller-driven airplanes over 8 618 kg Application for Type Certificate submitted on or after 1 January 2006. The noise certification are as specified in Part II, Chapter 4 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (g) Propeller-driven airplanes over 5 700 kg Application for Type Certificate submitted before 1



January 1985. The noise certification are as specified in Part II, Chapter 5 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.

- (h) Propeller-driven airplanes not exceeding 8 618 kg Application for Type Certificate submitted before 17 November 1988. The noise certification are as specified in Part II, Chapter 6 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (i) *Propeller-driven STOL airplanes*. The noise certification are as specified in Part II, Chapter 7 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (j) *Helicopters*. The noise certification are as specified in Part II, Chapter 8 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (k) *Auxiliary Power Units*. The noise certification are as specified in Part II, Chapter 9 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (l) Propeller-driven airplanes not exceeding 8 618 kg Application for Type Certificate or derived version submitted on or after 17 November 1988. The noise certification are as specified in Part II, Chapter 10 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (m) *Helicopters not exceeding 3 175 kg maximum certificated take-off mass.* The noise certification are as specified in Part II, Chapter 11 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.
- (n) Reserved.
- (o) *Tilt-rotor aircraft*. The noise certification are as specified in Part II, Chapter 13 and associated appendices of Annex 16 to the Convention on International Civil Aviation, Volume I, "Aircraft Noise," as amended.



SUBPART C—DOCUMENTATION, OPERATING LIMITATIONS AND INFORMATION

§ 36.21 Procedures, Noise Levels and Other Information.

- (a) All procedures, mass, configurations, and other information or data employed for obtaining the certified noise levels prescribed by this part, including equivalent procedures used for flight, testing, and analysis, must be developed and approved by the President or another authority acceptable to the President. Noise levels achieved during type certification must be included in the Aircraft Flight Manual.
- (b) Where supplemental test data are approved for modification or extension of an existing flight data base, such as acoustic data from engine static tests used in the certification of acoustical changes, the test procedures, physical configuration, and other information and procedures that are employed for obtaining the supplemental data must be developed and approved by the President or another authority acceptable to the President.

§ 36.23 Manuals, Markings, and Placards.

- (a) If an Aircraft (Airplane or Rotorcraft) Flight Manual is approved, the approved portion of the Aircraft Flight Manual must contain the following information. If an Aircraft Flight Manual is not approved, the procedures and information must be furnished in any combination of approved manual material, markings, and placards.
 - (1) For transport category large airplanes and jet airplanes, the noise level information must be one value for each flyover, lateral, and approach as defined and required by this part, along with the maximum takeoff mass/weight, maximum landing mass/weight, and configuration.
 - (2) For propeller driven small airplanes, the noise level information must be one value for takeoff as defined and required by this part, along with the maximum takeoff mass/weight and configuration.
 - (3) For rotorcraft, the noise level information must be one value for each takeoff, flyover, and approach as defined and required by GACAR § 36.11(j), or one value for flyover as defined and required by GACAR § 36.11(m), at the maximum takeoff mass/weight and configuration.
- (b) If supplemental operational noise level information is included in the approved portion of the



Aircraft Manual, it must be segregated, identified as information in addition to the certificated noise levels, and clearly distinguished from the information required under GACAR § 36.21(a).

- (c) For transport category large airplanes and jet airplanes, for which the mass used in meeting the takeoff or landing noise requirements of this part is less than the maximum mass established under the applicable airworthiness requirements, those lesser mass/weights must be furnished, as operating limitations in the operating limitations section of the Aircraft Flight Manual. Further, the maximum takeoff mass must not exceed the takeoff mass that is most critical from a takeoff noise standpoint.
- (d) For propeller driven small airplanes and for propeller-driven, commuter category airplanes for which the mass used in meeting the flyover noise requirements of this part is less than the maximum mass by an amount exceeding the amount of fuel needed to conduct the test, that lesser mass/weight must be furnished, as an operating limitation, in the operating limitations section of an approved Aircraft Flight Manual, in approved manual material, or on an approved placard.
- (e) For primary, normal, transport, and restricted category helicopters, if the mass used in meeting the takeoff, flyover, or approach noise requirements as defined and required by GACAR § 36.11(j), or the mass used in meeting the flyover noise requirement as defined and required by GACAR § 36.11(m) is less than the certificated maximum takeoff weight established under either GACAR § 27.25(a) or § 29.25(a), that lesser mass/weight must be furnished as an operating limitation in the operating limitations section of the Aircraft Flight Manual, or on an approved placard.
- (f) Except as provided in paragraphs (c), (d), and (e) of this section, no operating limitations are furnished under this part.