



Federal Aviation Administration

Memorandum

Date: DEC 02 2010
 To: Distribution List
 From: ~~for~~ David H. Hempe, Manager, Aircraft Engineering Division, AIR-100 *symCahler*
 Prepared by: Moin Abulhosn, Avionics Systems Branch, AIR-130
 Subject: Revision to Advisory Circular (AC) 20-140A
 Memo No. AIR100-10-03

Recently it has come to our attention that a revision to AC 20-140A, *Guidelines for Design Approval of Aircraft Data Link Communication Systems Supporting Air Traffic Services (ATS)*, is necessary to ensure standardized compliance with the European Data Link Services Implementing Rule. This policy memorandum provides clarification to AC 20-140A to address this shortcoming. The contents of this policy memorandum are applicable to aircraft type certificated under Title 14 Code of Federal Regulations (CFR) Parts 23, 25, 27 and 29.

AC 20-140A, Table 5-1, *Interoperability Criteria for the Aircraft Data Link System*, identifies acceptable means of compliance for the Aeronautical Telecommunications Network (ATN B1) application interoperability designator. This ATN B1 designator should be modified to include reference to EUROCONTROL-SPEC-0116, *EUROCONTROL SPECIFICATION on Data Link Services*, Edition Number 2.1, dated January 28, 2009. From this point forward, all type design submittals for ATN B1 designator compliance should meet the criteria contained in this policy memorandum, in lieu of that contained in AC 20-140A.

AC 20-140A, Table 5-1, is hereby amended by this policy memorandum to state (changes noted as underlined text in column 2 below):

ATN B1	DO-280B/ ED-110B, as <u>modified by</u> <u>Eurocontrol</u> <u>Specification on</u> <u>Data Link Services</u> <u>(EUROCONTROL-</u> <u>SPEC-0116)</u>	<ul style="list-style-type: none"> • Annex B, para. B.2.1, Airborne System CM P/OICS. • Annex B, para. B.4.1, Airborne System CPDLC P/OICS except that: <ol style="list-style-type: none"> (1) UM 135 (CONFIRM ASSIGNED LEVEL), and UM 233 (USE OF LOGICAL ACKNOWLEDGMENT PROHIBITED), will not be used by the ground systems; and (2) DM 38 (ASSIGNED LEVEL) is not required by the aircraft.
--------	--	---

	Sub-network Interop Designator.	Viable sub-networks associated with ATN B1: 1) VDL M2. a) TSO-C160 for (Class X) or (Class Z and Y). b) ARINC 631-5.
--	---------------------------------	---

The AIR-130 Branch intends to incorporate this change in the next revision of AC 20-140A. If you have any questions regarding this memorandum, please contact Moin Abulhosn, AIR-130, at (202) 385-4645.

Distribution List

Patrick (Pat) Mullen, Manager, Kansas City, Small Airplane Directorate, ACE-111
Melvin Taylor, Manager, Atlanta Aircraft Certification Office, ACE-115A
Chuck Smalley, Manager, Chicago Aircraft Certification Office, ACE-115C
Ronald Rathgeber, Manager, Wichita Military Certification Office, ACE-115M
Greg Holt, Manager, Anchorage Aircraft Certification Office, ACE-115N
Jerry Baker, Manager, Wichita Aircraft Certification Office, ACE-115W
Kevin Hull, Manager, Los Angeles Aircraft Certification Office, ANM-100L
Jeff Duven, Manager, Seattle Aircraft Certification Office, ANM-100S
Ron May, Manager, Denver Aircraft Certification Office, ANM-100D
Robert Duffer, Manager, Seattle Aircraft Certification Office, ANM-111
Tyrone Millard, Acting Manager, Ft. Worth Office, Regulations Group, ASW-111
Lance T. Gant, Manager, Ft. Worth Rotorcraft Certification Office, ASW-170
S. Frances Cox, Manager, Ft. Worth Special Certification Office, ASW-190
Colleen D'Alessandro, Acting Branch Manager, Engine and Propeller Directorate, ANE -111
Robert Mann, Manager, Boston Aircraft Certification Office, ANE-150
Thomas Boudreau, Manager, Boston Engine Certification Office, ANE-140
Anthony Socias, Manager, New York Aircraft Certification Office, ANE-170
Tim Shaver, Manager, Avionics Maintenance Branch, AFS-360