



Federal Aviation Administration

MMEL Policy Letter (PL)106, Revision 5 GC

Date: **June 6, 2014**

To: All Region Flight Standards Division Managers
All Aircraft Evaluation Group Managers

From: Manager, Air Transportation Division, AFS-200

Reply To: Manager, New Program Implementation and International Support Branch, AFS-240
Attn Of:

MMEL GLOBAL CHANGE (GC)

This GC is an approved addendum to all existing MMEL documents. The operator may seek use of the specific relief contained in the PL by revising the Minimum Equipment List (MEL). In doing so, the sample proviso stating the relief in the PL must be copied verbatim in the operator's MEL. Approval of the revised MEL is gained through the assigned Principal Operations Inspector (POI) utilizing the established procedure. GC expiration date **6/6/2018**.

Subject: **High Frequency (HF) Communications**

MMEL CODE: 23 (COMMUNICATIONS)

REFERENCE: **PL-106, Revision 4, dated January 18, 2012**
PL-106, Revision 3, dated October 7, 2005
PL-106, Revision 2, dated March 16, 2004
PL-106, Revision 1, dated January 18, 2001
PL-106, Original, dated October 18, 2000

PURPOSE:

To provide standardized Master Minimum Equipment (MMEL) requirements for HF communication systems.

DISCUSSION:

Revision 5 introduces International Civil Aviation Organization (ICAO) Satellite Voice (SATVOICE) Guidance Material (SVGM) as a basis for Long Range Communications System (LRCS) relief; clarifies that data link alone is not suitable for non-routine and emergency communications; removes the note from bottom of provisions requiring SATVOICE to be used only as a backup to HF communications; added a proviso that the ICAO Flight Plan is to be updated (as required) to annotate the operating communications equipment onboard the aircraft to include the specific SATVOICE filing information in item 10 and 18; added a policy statement preventing MEL relief for aircraft SATVOICE systems accessible via direct dial commercial numbers as these systems do not include the necessary security switch function.

Revision 4 revised proviso (d) - clarifying statements regarding short codes (INMARSAT) or Public Switch Telephone Network (PSTN), normally referred to as commercial direct dial numbers (IRIDIUM), and must be available for the intended route of flight. ATS facility has been clarified by adding FIR (Flight Information Region).

Revision 3 revised proviso (d) to clarify that coordination of INMARSAT Codes is only required when SATVOICE is used.

Revision 2 revises DISCUSSION and MMEL provisions to address acceptability of using SATVOICE as a backup when one HF is inoperative.

Revision 1 revises the subject title to clarify that more than one HF may be inoperative. The purpose statement is revised to clarify that the PL also addresses HF relief when HF is not required by Title 14 of the Code of Federal Regulations (14 CFR). The (O) procedure was deleted in the first proviso since no changes to flight crew procedures are needed. In the second proviso, the phrase "while conducting extended overwater" was deleted since the requirement for LRCS can exist over land. Proviso a) was changed to delete "and ACARS" since the term "data link" includes ACARS and other sub systems on the airplane needed to communicate data. Proviso b) was revised to clarify that data link communication must be operational, not just SATCOM coverage. FAA MMEL relief is provided for HF communication systems. The current proviso states: "Any in excess of those required by FAR may be inoperative."

In 1996, the FAA recognized technological advances in communications by a rule change that included use of a new term: Long Range Communication System (LRCS). 14 CFR § 1.1 defines LRCS as "A system that uses satellite relay, data link, high frequency, or other approved communication system which extends beyond line-of-sight." Examples of **LRCSs** are: HF-voice, SATVOICE, and data **link capable of operating outside the coverage area of line-of-sight systems and includes Aeronautical Operational Control (AOC) communications and Controller-Pilot Data Link Communications (CPDLC).**

The regulations now address long-range communication requirements in terms of LRCS. With that as a basis, an aircraft on extended range segments unable to utilize line-of-sight systems must have at least two operational LRCSs to honor regulatory communication requirements (unless specifically excepted under the operational rules).

While CPDLC enhances ATS communications for normal use, it is not adequate for non-routine and emergency communications and therefore not appropriate as a basis for MMEL relief of HF communication systems (ref. FAA Legal Interpretation dated 06 Dec 2011 regarding 14 CFR § 121.99 data/com in lieu of voice requirements). In addition, some ATS facility may not be capable of providing SATVOICE services as a LRCS. HF-voice is the only LRCS currently available for Air Traffic Control communications in many areas. Therefore, in areas requiring two operational LRCSs, at least one must be HF-voice when the MEL is applied. In areas requiring one LRCS, that system must be HF-voice.

ICAO recently published the **Satellite Voice (SATVOICE) Guidance Material (SVGGM), First Edition.** The SVGGM provides guidance on SATVOICE services and their use as a LRCS. When SATVOICE services are available, States will notify operators of the appropriate SATVOICE telephone numbers through the Aeronautical Information Publication (AIP) or equivalent publication. Additionally, the AIP shall contain any restrictions to LRCS through the airspace relevant to the route of flight. Therefore, as provided by AIPs (or equivalent publication) and the SVGGM, the operators may seek MMEL relief for HF communications on a given route of flight based on utilizing SATVOICE services as one of the operational LRCSs, when two are required. When SATVOICE numbers are published in AIPs indicating that SATVOICE services are available, the FAA would expect SATVOICE services to be provided at a minimum performance level characterized by Required Communication Performance (RCP) 400 and Required Surveillance Performance (RSP) 400 specifications, which are defined in the SVGGM, and individual MEL requirements.

POLICY:

Aircraft SATVOICE systems accessed from ground operators by direct dial commercial numbers vice the aircraft address will not be considered for HF MEL relief.

The following standard MMEL proviso and repair category is adopted to provide standardization among all MMELs:

ATA 23 COMMUNICATIONS	Repair Interval	Number Installed	Number Required for Dispatch	Remarks or Exceptions
23-XX High Frequency (HF) Communications System	D	-	-	Any in excess of those required by 14 CFR may be inoperative.
	C	-	1	(O) May be inoperative while conducting operations that require two LRCS provided: a) Aircraft SATVOICE system operates normally, b) SATVOICE services are available as a LRCS over the intended route of flight, c) The ICAO Flight Plan is updated (as required) to notify ATC of the communications equipment status of the aircraft, and d) Alternate procedures are established and used.

Each Flight Operations Evaluation Board (FOEB) Chair should apply this Policy to affected MMELs through the normal FOEB process.

Jodi L. Baker for
Leslie H. Smith
Manager, Air Transportation Division