

# SERVICE BULLETIN EIII

SB No.

152

Issue No.

TITLE

AIRBORNE ILS (LOCALISER) VOR AND VHF COMMUNICATIONS -IMPROVED FM BROADCAST INTERFERENCE IMMUNITY STANDARDS/PLACARDING

**CLASSIFICATION** 

This Service Bulletin has been classified by SAL as Essential

**COMPLIANCE** 

Within next 50 flying hours

# APPLICABILITY:

T67A, T67B, T67C Series, T67M, T67M-MkII, T67M200, T67M260 and T67M260-T3A operating within Europe, Africa, Russia or the Middle East.

# **INTRODUCTION:**

The 1979 World Administrative Radio Conference (WARC-79) of the International Telecommunication Union extended the VHF FM sound broadcasting band from an upper limit of 100 MHz to 108 MHz in ITU Region 1 and parts of Region 3, ie Europe, Africa, Russia and the Middle East. Use by broadcasters of the extended band increases the risk of interference to the aeronautical VHF navigation (ILS localiser and VOR) and VHF communication services.

## **REQUIREMENTS:**

By 1 January 2001, all ILS Localiser and VOR receivers installed in UK registered aircraft, except those CAA approved in the LA Class 3 category, must be of a type that have been approved as complying with the FM broadcast immunity standards by 1 January 2001.

From 1 January 1998, means shall be provided to identify to flight crews, those navigation receivers installed in the aircraft that do not meet the improved immunity standards, so that any consequential operating restrictions may be observed. A cockpit placard identifying the affected navigation systems is an acceptable means of compliance.

The requirements applied to ILS Localiser and VOR receivers approved in the Light Aircraft (LA) Class 3 category (see CAP 208 Volume 2) will not be changed. Operating limitations for these equipment must continue to be observed.

Compliance with the improved immunity standard for VHF communications receivers may be postponed until equipment meeting new requirements for 8.33 kHz channel separation is installed.

For aircraft which are not UK registered, check local airworthiness regulations. Note:

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for and on behalf of SLINGSBY AVIATION LIMITED

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#### **ACTION:**

Check ILS (Localiser) VOR VHF navigational receivers installed in applicable aircraft to ascertain whether
or not they comply with the improved FM ICAO broadcast interference immunity standards, outlined in
this document and detailed in ICAO Annex 10 (Volume 1, Radio Navigation Aids, Fifth Edition, dated
July 1996, Chapter 3, Paragraphs 3.1.4, 3.3.8 and Volume III, Part 11, Voice Communications Systems,
Paragraph 2.3.3).

Manufacturers of the radio equipment will have a modifications policy intended to address immunity standards. The modification state of the equipment should be checked for compliance or non-compliance with the required immunity standards. The equipment manufacturer or an approved aircraft radio equipment repair organisation, should be consulted on the availability of modification kits or replacement equipment meeting the improved immunity standards.

# 2. Up to January 1st 2001

For equipment which does not comply with the required immunity standards carry out the following actions:

Either:

1. Have the equipment modified by an approved organisation.

Or:

 Identify the affected equipment by means of a cockpit placard fixed as closely as practicable to the equipment. Suitable wording for this placard has been agreed between Slingsby Aviation and the UK CAA for Slingsby manufactured UK registered aircraft as follows:

> THE VOR/LOC SYSTEMS INSTALLED IN THIS AIRCRAFT DO NOT COMPLY WITH THE FM BROADCAST IMMUNITY STANDARD (REF AN84 iss 3/ICAO ANNEX 10)

A placard with the above wording measuring 71 x 19.5mm will be available from SAL Product Support Department. The Part No. is T67B-83-353. The fitting of this placard invokes SAL Mod M834.

Annotate Log Book SB 152 carried out and Mod M834 incorporated if applicable.

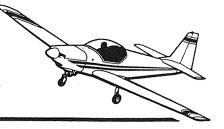
## 3. After January 1st 2001

 Unless specifically notified otherwise by the relevant Airworthiness Authority (CAA in the case of UK registered aircraft), all ILS (localiser) VOR VHF navigational receivers (except those approved by the CAA in the LA Class 3 category), installed in aircraft must be of a type that has been approved as complying with FM immunity standards. Therefore placard (Post Mod M834) may then be deleted.

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# CONSEQUENCES OF NON-COMPLIANCE WITH THE ICAO STANDARDS:

- 1. The continued operation after 1 January 1998 of aircraft ILS Localiser and VOR receivers not meeting the FM immunity standards will render those receivers liable to interference which could lead to a serious degradation in navigation performance. Action is being taken by European states to identify areas where a risk of interference may exist and to publish this information in Aeronautical Information Publications (AIP) until 1 January 2001. Aircraft with ILS Localiser or VOR receivers which do not meet the FM immunity standards may be subject to operating restrictions that deny those aircraft the use of routes, terminal area and instrument approach.
- 2. For full details of agreed performance standards see ICAO Annex 10, Volume 1 Radio Navigation Aids, Fifth Edition dated July 1996, Chapter 3, Paragraphs 3.1.4, 3.3.8 and Volume III, Part 11 Voice Communications Systems, Paragraph 2.3.3).
- 3. For UK registered aircraft, CAA Airworthiness Notice No.84 (latest issue) is applicable.

Approved:

Date: 12-2-98:

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