

Aircraft Radio Licensing and Mobile Communication Services

Introduction

Aircraft registered in the Isle of Man are required by regulation¹ to hold an Aircraft Radio Licence. The UK Civil Aviation Authority (UK CAA) has been appointed to distribute Radio Licences on behalf of Ofcom², including those licences relating to aircraft on the Isle of Man Aircraft Register (IOMAR). Please note that no direct IOMAR involvement is required in the aircraft radio license process and your immediate point of contact is the Aeronautical Radio Licensing division of the UK CAA.

Radio License Applications and Changes

The following steps should be followed for initial applications or changes to an aircraft radio license:

- Refer to the Radio Equipment List online at ardis.aircraft.im and identify the specific approval number for the radio equipment manufacturer, model and part number.
 - If you cannot find an approval number for a specific piece of equipment, perform an internet search to establish whether the equipment was granted a pre-EASA approval (grand-father rights from a current EASA member state).
 - If you continue to have difficulty locating the appropriate radio equipment/approval number(s) you should contact either the manufacturer or retailer of the specific equipment or your maintenance provider who should be able to assist.
- Complete and submit [Form 5](#) to radio.licensing@caa.co.uk or by post to: Aeronautical Radio Licensing, Safety and Airspace Regulation Group, CAA House, 45-59 Kingsway, London, WC2B 6TE, United Kingdom.
- If the aircraft has a Mobile Communication services on Aircraft (MCA) system (see below), include this information in your covering email submission to Aeronautical Radio Licensing.

Renewals of aircraft radio licenses are the responsibility of the aircraft owner/operator and managed directly with Ofcom.

Mobile Communication Service on Aircraft

MCA enable passengers to use mobile apparatus (mobile devices such as handsets, tablets, laptops etc.) during their flight without connecting directly with land mobile networks. MCA systems consist of an aircraft Base Transceiver Station (BTS) and a Network Control Unit (NCU)³ to which mobile apparatus used by air passengers must connect. The MCA system operates, in essence, similar to that of a land base station. The aircraft BTS and NCU (where fitted) are designed to ensure that the mobile apparatus within the aircraft cabin does not connect with land mobile base stations and that the mobile apparatus on the aircraft only transmits at a height of 3,000m + above ground.

¹ [The Wireless Telegraphy Act 2006](#) as extended to the Isle of Man by the [Wireless Telegraphy \(Isle of Man\) Order 2007](#) (SI 2007 No 278)

² Ofcom is the communications regulator in the UK

³ NCU are mandatory for Universal Mobile Telecommunications System (UTMS) technologies and optional for Global System for Mobile Communications (GSM) and Long Term Evolution (LTE) technologies

The deployment and use of both the BTS and NCU on an aircraft is subject to wireless telegraphy regulation⁴ and the issuance of a variation to the aircraft radio licence. However, there is no mandatory requirement to install MCA systems.

The regulation specifies the technical standards that must be met by a MCA system, including:

- the need to comply with European Telecommunications Standards Institute (ETSI) standards listed in the Regulation;
- spectrum limitations;
- minimum operating heights;
- power limits for the apparatus;
- maximum external radiated power limits;
- fuselage shielding or NCU requirements.

The use of a MCA system shall be authorised via an Ofcom Notice of Variation (NoV) to the existing aircraft radio licence administered by the UK Civil Aviation Authority. Requests for a NoV made either as part of an initial license application or at a late date when it is intended to install a MCA system should be made to: radio.licensing@caa.co.uk or by post to: Aeronautical Radio Licensing, Safety and Airspace Regulation Group, CAA House, 45-59 Kingsway, London, WC2B 6TE, United Kingdom.

⁴ [The Wireless Telegraphy \(Mobile Communication Services on Aircraft\) \(Exemption\) Regulations 2017](#) (SI 2017 No669)