

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. Ofcom² issue and distribute Radio Licences 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 Spectrum Licensing division of Ofcom.

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 <https://ardis.iomaircraftregistry.com/> 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 spectrum.licensing@ofcom.org.uk. You will receive an automated email which will contain a case reference number. Please take a note of this case reference/and/ or customer number and quote it in any correspondence with Ofcom. You will be invoiced by Ofcom at a later date; payment must be made prior to the radio licence being issued. A member of the Ofcom team may contact you to clarify the requirements of this application. Under usual circumstances Ofcom processes licences on a first come first serve basis. Please allow 5 working days for issue of a radio licence where you have indicated your communication preference as 'Email', 14 working days for delivery by post if you have identified your preferred method of communication as 'Letter' in section 2 of this form.

- If the aircraft has a Mobile Communication services on Aircraft (MCA) system (see below), include this information in your covering email submission to Spectrum 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

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

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.

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 Ofcom. 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: spectrum.licensing@ofcom.org.uk.

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