

<b>OPERATIONS ADVISORY NOTICE (OAN)</b>		 <b>Transport Malta</b> Civil Aviation Directorate Flight Operations Inspectorate Vjal L-Avjazzjoni Luqa LQA 9023 Malta
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<b>Subject: Aircraft Tracking System – Aeroplanes / Underwater Locating Devices</b>		

## 1.0 INTRODUCTION

This OAN is an advance notice to all affected operators on the requirement to ensure that the requirements established in CAT.GEN.MPA.205 and CAT.IDE.A.285 as implemented by Commission Regulation (EU) 2015/2338 of 11 December 2015, amending Regulation (EU) No. 965/2012 as regards requirements for flight recorders, underwater locating devices and aircraft tracking systems.

### 1.1 Background

#### 1.1.1 Aircraft Tracking Systems

Aircraft tracking systems are meant to prevent circumstances such as those after the disappearance of the Malaysian Airlines flight MH370 on 8 March 2014, where all communications with the aeroplane and its track were lost abruptly. For two weeks, search and rescue (SAR) efforts were focused on an area close to where the aeroplane was last detected by air traffic control (ATC) surveillance systems, while in fact it had most probably kept flying for several hours after being lost. In addition, a very rough determination of the probable flight path of the aeroplane in the last six hours of the flight was only made possible thanks to the analysis of logon messages exchanged automatically between the aeroplane and the satellites of the telecommunication service provider every hour.

The only physical evidence of the aeroplane was floating debris, which was found more than a year after the accident. After having explored 120 000 square kilometres of the sea floor, the Australian and Chinese authorities decided to stop the underwater search operations. To this date, the location of the aircraft wreckage is unknown and this accident remains unexplained. This highlights the need to permanently track commercial air transport (CAT) flights, even beyond radar coverage, so that an alert can be triggered quickly in case of an abnormal situation. Hence, Annex IV (Part-CAT) to Commission Regulation (EU) No 965/2012 CAT.GEN.MPA.205 requires that operators of large aeroplanes establish, as part of the system for exercising operational control over the flight, an aircraft tracking system.

### 1.1.2 Underwater Locating Devices (ULD's)

Point CAT.IDE.A.285 (f) requires some categories of large aeroplanes to be fitted by 1 January 2019 with a ULD that operates at a frequency of 8.8 kHz $\pm$ 1 kHz (hereafter called '8.8 kHz ULD'). However, this ULD is not required to be installed if the aeroplane is equipped with 'robust and automatic means to accurately determine, following an accident where the aeroplane is severely damaged, the location of the point of end of flight' (refer to point CAT.IDE.A.285 (f)(2)). Point CAT.IDE.A.285(f)(2) actually refers to CAT.GEN.MPA.210 'Location of an aircraft in distress — Aeroplanes' in a non-explicit manner. Since confusion with the emergency locator transmitter (ELT) required by CAT.IDE.A.280 is possible EASA will issue AMC's and GM's to clarify the requirements.

## 2.0 APPLICABILITY

### 2.1 Aircraft Tracking Systems (CAT.GEN.MPA.205)

By **16 December 2018** at the latest, the operator shall establish and maintain, as part of the system for exercising operational control over the flights, an aircraft tracking system, which includes the flights eligible to (b) when performed with the following aeroplanes:

- (1) aeroplanes with an MCTOM of more than 27 000 kg, with an MOPSC of more than 19, and first issued with an individual CofA before 16 December 2018, which are equipped with a capability to provide a position additional to the secondary surveillance radar transponder;
- (2) all aeroplanes with an MCTOM of more than 27 000 kg, with an MOPSC of more than 19, and first issued with an individual CofA on or after 16 December 2018; and
- (3) all aeroplanes with an MCTOM of more than 45 500 kg and first issued with an individual CofA on or after 16 December 2018.

### 2.2 ULD (CAT.IDE.A.285(f))

By **1 January 2019** at the latest, aeroplanes with an MCTOM of more than 27 000 kg and with an MOPSC of more than 19 and all aeroplanes with an MCTOM of more than 45 500 kg shall be fitted with a securely attached underwater locating device that operates at a frequency of 8,8 kHz  $\pm$  1 kHz, unless:

- (1) the aeroplane is operated over routes on which it is at no point at a distance of more than 180 NM from the shore; or
- (2) the aeroplane is equipped with robust and automatic means to accurately determine, following an accident where the aeroplane is severely damaged, the location of the point of end of flight.

### **3.0 ADDITIONAL GUIDANCE**

EASA is in the process of issuing AMC and GM to CAT.GEN.MPA.205. This AMC will define the minimum conditions on the aircraft tracking equipment, the performance of the position reporting function, the recording of the aircraft tracking data and the procedures associated with the aircraft tracking system.

Guidance Material to CAT.IDE.A.285 will provide the necessary explanation to correctly interpret point IDE.A.285(f)(2), which as stated in 1.1.2 refers to the requirement of CAT.GEN.MPA.210.

#### **3.1 ICAO Guidance Material**

Operator may refer to ICAO Circular 347, Aircraft Tracking Implementation Guidance for Operators and Civil Aviation Authorities. However operators are urged to treat this information with caution as certain structural differences between ICAO SARPs and EASA regulations exist.

### **4.0 ACTION BY OPERATORS**

All affected commercial aircraft operators are advised to take note of the new requirements in a timely manner to ensure implementation of the procedures or installations of any additional equipment are done before the stipulated time frames.

The CAD has access to additional guidance material, however this will not be released until it is finalised. Any operators requiring further clarifications are invited to contact the flight operations inspectorate.

#### **Flight Operations Inspectorate**