ICAO Action

ICAO is currently participating in the Joint EUROCAE WG-98/RTCA SC-229 Working Group, *406 MHz Emergency Locator Transmitters (ELTs)*. The terms of reference for this group includes specific guidance to review Cospas-Sarsat beacon requirements, and from an aviation perspective, develop technical standards for both first and second generation Cospas-Sarsat 406 MHz beacon systems which include antenna, cabling specifications and crash safety specifications in order to update industry specifications ED-62A and DO-204A. This work is expected to be completed by December 2017.

Subsequently, ICAO will consider a consequential amendment to Annex 10 — *Aeronautical Telecommunications*, Volume III — *Communication Systems*, Part II — *Voice Communication Systems*, Chapter 5, Emergency Locator Transmitter (ELT) for Search and Rescue, in light of the above work.

ICAO is also coordinating closely with the International Cospas-Sarsat Programme on the development of second generation beacon specifications to enhance the effectiveness of the ELT. These specifications are expected to be completed by 2018 in time for implementation with the new Medium Earth Orbit Search and Rescue (MEOSAR) satellite detection system. A further consequential amendment to Annex 10 should also be conducted after completion of this work.

Subsequent Action

The terms of reference of the Joint EUROCAE WG-98/RTCA SC-229 Working Group, *406 MHz Emergency Locator Transmitters (ELTs)* includes specific guidance to review Cospas-Sarsat beacon requirements, and from an aviation perspective, develop technical standards for both first and second generation Cospas-Sarsat 406 MHz beacon systems which include antenna, cabling specifications and crash safety specifications, in order to update industry specifications ED-62A and DO-204A.

Completion of this work was delayed from 2017 to December 2018, when it was published as EUROCAE ED-62B/RTCA DO-204B Minimum Operational Standard (MOPs) for Aircraft Emergency Locator Transmitters (406 MHz). As a result, crash-survivability of ELT systems has improved, reducing the likelihood that impact forces sustained during an aviation occurrence will render the systems inoperative. This can be seen in increased fire resistance requirements, expansion of the vibration tests, and additional crash-shock tests for off-axis G-forces. All conclusions derived from a NASA study.

Certain States have already included the new MOPs into their national regulations, including the FAA as TSO-C126c, since 3 July 2019. On this basis, ICAO is in the process of evaluating the need for a consequential amendment to Annex 10 — *Aeronautical Telecommunications*, Volume III — *Communication Systems*, Part II — *Voice Communication Systems*, Chapter 5, Emergency Locator Transmitter (ELT) for Search and Rescue.

This assessment was expected to be completed during the early part of 2019; however, RTCA and EUROCAE are currently working on a revision in the form of ED-62B, Change 1. ICAO will be in a better position to determine what changes to ICAO provisions are necessary once this revision is finalized.