

## **BULLETIN CORRIGENDUM**

<b>AAIB File:</b>	EW/C2000/12/6
<b>Aircraft Type and Registration:</b>	Cessna 152, G-BHPX
<b>Date &amp; Time (UTC):</b>	13 December 2000 (time unknown)
<b>Location:</b>	Enroute Inverness to Benbecula
<b>Information Source:</b>	AAIB Field Investigation

The Bulletin on the above accident was published in AAIB Bulletin 7/2001 and should be amended as follows:

**History of the flight** paragraph 3 line one, delete 1500 hrs insert 1600 hrs.

Delete paragraph headed '**Emergency locator transmitters**' and replace with the following:

### **Emergency Locator Transmitters**

Radio distress beacons designed to assist SAR operations fall into three broad categories, each being named according to its main use. ELTs are aviation beacons, generally fitted to aircraft; emergency position indicating radio beacons (EPIRBs) are maritime beacons fitted to vessels and personal locator beacons (PLBs) are generally intended for land use although they may also be carried on a person, both at sea and in the air.

ELTs are of four basic types: Automatic Fixed (ELT (AF)), Automatic Portable (ELT(AP)), Survival (ELT (S)) and Automatic Deployable (ELT (AD)).

ELT (AF) are intended to be permanently attached to the aircraft before and after a crash and will operate automatically. ELT (AP) are intended to be attached to the aircraft before a crash but are removable after a crash. An ELT (AP) may function as an ELT (AF) during the crash sequence but may be removed after the crash and attached to a survivor or liferaft using an auxiliary antenna. ELT (S) are intended to be removed from the aircraft by survivors after a crash. Activation is usually manual, but may be automatic. ELT (AD) are intended to be attached to the aircraft before a crash and ejected and deployed either manually or automatically.

These beacons are compatible with the COSPAS/SARSAT system, an international organisation that uses satellites to detect active distress beacons operating on the frequency of 121.5MHz and/or within the 406.0 to 406.1 MHz band. Some satellites also detect beacons operating on the NATO distress frequency of 243.0 MHz. Beacons operating on 121.5 and 243 MHz transmit a modulated carrier wave that, apart from being able to be detected by satellite, can be heard by any aircraft

listening out on the emergency frequencies and also can be homed onto by SAR aircraft using their direction finding equipment. The characteristics of a 406 MHz beacon are very different from those using 121.5 and/or 243 MHz. These beacons transmit only for half a second every 50 seconds, their signal being a pulse of data containing information unique to that beacon such as a country code, whether it is a maritime or aviation beacon or a PLB and a unique identifier. 406 MHz beacons should be registered on a database held in the country as coded, together with such information as beacon owner, the vessel or aircraft carrying the beacon and a 24-hour point of contact. The information provided by these newer beacons is of great value to SAR agencies in expediting a rescue or in eliminating unnecessary action in the event of a false alarm.

On 1 Feb 2009 the COSPAS/SARSAT system will stop the satellite processing of the 121.5 and 243 MHz frequencies and will only detect beacon transmissions in the 406.0 to 406.1 MHz band. Homing equipment operating within that band is being obtained for fitment to SAR aircraft and helicopters. In any event, 406 MHz beacons invariably have a lower-powered auxiliary transmitter fitted. Operating on 121.5 MHz, the auxiliary transmitter enables SAR aircraft to conduct the final homing to a beacon once the aircraft has arrived at the beacon location reported by the satellite system.

The CAA requires that all ELTs comply with EUROCAE Standard ED62.