



International Civil Aviation Organization

**The Second Meeting of the ICAO Asia/Pacific Search and Rescue Task Force
(APSAR/TF/2)**

Singapore, 27 – 30 January 2014

Agenda Item 4: Asia/Pacific and inter-regional SAR planning, coordination and cooperation

NON DETECTION OF ELT – HELICOPTER ACCIDENTS

(Presented by INDIA)

SUMMARY

This paper is intended to bring the difficulties in search of Helicopter accident sites due to non-detection of ELT signal.

Strategic Objectives:

A: *Safety – Enhance global civil aviation safety*

C: *Environmental Protection and Sustainable Development of Air Transport – Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

Global Plan Initiatives:

GPI-9 Situational awareness

GPI-12 Functional integration of ground systems with airborne systems

GPI-16 Decision support systems and alerting systems

GPI-17 Data link applications

GPI-21 Navigation systems

GPI-22 Communication infrastructure

1. INTRODUCTION

- 1.1 There has been a traffic growth centered at Asia Pacific Region resulting in large number of aircraft movements primarily from east to west direction and vice-versa. Besides the growth in aircraft operations, the helicopter operations have also registered phenomenal growth for general aviation, VIP movement and oil explorations in India. Most of the helicopters operate at low levels in VFR/Special VFR conditions. There have been number of helicopter accidents due to various reasons wherein locating the accident site was difficult due to non-activation of ELT and site being at remote place. Although the preventive actions are required to avoid accidents but such instances are not inevitable.
- 1.2 This necessitates a need to take measures for effective Search to save lives and property, in case of an accident.

2. DISCUSSION

- 2.1 There has been delay in locating the site of accidents due to non-availability of ELT signals. In the investigations of Helicopter accidents in India, the delay in locating the site of accident was due to non-activation of ELT on account of following reasons:
 - a) ELT was not activated as the impact forces were less than 2G.
 - b) ELT antenna got detached and ELT was destroyed with the impact and fire.

- 2.2 ELTs are required to operate in severely challenging environments. ELT signal receptions are found to be restricted due to damage of ELT antenna, damage to ELT due to fire, immersion of ELT or antenna in water or any other reasons.

- 2.3 The possibility of insufficient impact to activate the ELT, particularly when the helicopter/light aircraft accident is over dense forest area, should also be taken into account.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the information contained in this paper;
 - b) discuss the requirement to develop the improvised ELT equipment overcoming the above mentioned limitations or any other alternative to complement the existing ELT equipment for achieving the foolproof SAR.
 - c) discuss any relevant matters as appropriate.

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