

International Civil Aviation Organization

# Second Meeting of the Asia Pacific Accident Investigation Group (APAC-AIG/2)

(Hong Kong, China, 27-28 May 2014)

Agenda Item 2: Report on recent accident/incident investigation related developments and activities

# REGIONAL COOPERATION IN THE SEARCH AND RECOVERY OF ATR-72 FLIGHT RECORDERS

(Presented by Singapore and France)

### **SUMMARY**

This paper shares the recent experience in the cooperation among France, Lao PDR and Singapore in the search and recovery of the flight recorders of the Laos Airlines ATR-72 aircraft which crashed into Mekong River in Pakse, on 16 October 2013. The flight data recorder and cockpit voice recorder were recovered by the team under good cooperation.

#### 1. INTRODUCTION

- 1.1 A Lao Airlines ATR-72 aircraft en-route from Vientiane to Pakse, Lao PDR, crashed into Mekong River while attempted to land at Pakse Airport during weather condition.
- 1.2 The France BEA was notified of the crash by the aircraft manufacturer. Through the AAIB Singapore, the France BEA contacted the Chief Investigator of Lao PDR and a team of four BEA investigators arrived Pakse on 18 Oct 13 to assist with the investigation.
- 1.3 Under the ASEAN MoU on Cooperation Relating to Aircraft Accidents and Incidents Investigation, the AAIB Singapore was roped to participate in the search of the flight recorders. Two investigators from the AAIB joined Lao DCA and France BEA for the search of the flight recorders.

### 2. DISCUSSION

2.1 The search of flight recorders were led by France BEA using their handheld underwater locator beacon (ULB) detector and triangulation software. The hot weather, low visibility water and strong current flow of 4-7 knots posed great challenges to the investigators. Investigators took turns to listen to the 37.5 KHz signal emitted by the flight recorders and the area of search was narrowed to an area of about 30m radius.

- 2.2 Divers were then sent to look for the flight recorders using the ULB detector and later using their hand to feel for the aircraft wreckage.
- 2.3 With the help of Lao DCA, the French and Singapore investigators were able to communicate with the local divers and taught them how to use the handheld ULB detector to search for the recorders underwater. After each dive, the local divers would provide information to the investigators through the translation of Lao DCA. Drawing board was being used to make explanation clearer.
- 2.4 Halfway through the search, the French ULB detector became unserviceable due to water ingression and the search of flight recorders was suspended. The AAIB Singapore made arrangement for its ULB detector to be sent via Vientiane to Pakse and the search effort was resumed with minimum delay.
- 2.5 The search process repeated itself every day until the location of the flight recorders were finally found on 31 Oct 13. Divers were sent to airport to learn from a same model aircraft on how to remove the flight recorders. The flight data recorder was recovered from underwater on 1 Nov 13 but as the CVR was partially submerged under sand; the aircraft tail section had to be raised from underwater to remove the CVR one day later.
- 2.6 Despite the challenges posed by the difference in languages and the harsh environment, investigators were able to have good team work, to understand the constraints of each other and to get the best out of it. The investigators also reckoned that the good networking that build-up during peace time through attending trainings and workshops contributed greatly to the quick response of the investigation team on site.

## 3. ACTION BY THE MEETING

3.1 The meeting is invited to note the importance of good networking and close regional cooperation during peace time as these can become very useful in time of need.