

飛安委員會月報

民國九十一年五月份

壹、飛航事故調查作業

- 一、中華航空 CI611 班機，B747-200 型，編號 B18255，五月廿五日於台北飛往香港途中，墜落澎湖馬公外海。本會接獲通報後即成立調查小組，由執行長擔任主任調查官，美方派遣以國家運安委員會為授權代表，由航空總署、波音公司、普惠公司等組成之團隊共同參與調查作業。
- 二、新航 SQ006 失事調查報告於四月廿六日下午二時舉行說明會正式公布。
 - 星方認為我調查報告不完整及不平衡 (incomplete and unbalanced)。
 - 我國及一般國際媒體之報導傾向以我方與星方之衝突為主。
 - 星方於第二日發布另一分析報告，內容維持其一貫論點，並提起報告是由國際民航組織(ICAO)指定之兩位專家撰寫。本會已去函國際民航組織，要求澄清兩位專家之正式身份(如附件一)。
 - 國際飛行員協會表示本會報告宗旨正確，過程良好，分析可

再加強，原因歸類是玩文字遊戲。

- 美權威性雜誌如 Air Safety Weekly 及 Aviation Weekly 均對我方調查報告持正面報導。
- Air Safety Weekly 主編 Mr. David Evans：
 1. “A most comprehensive treatment for which you and your team deserve heartfelt congratulations!”“I found the alternative analysis by Singapore MOT singularly unconvincing if not self-serving.”
- Aviation Weekly:

The report identifies complex, multiple safety deficiencies uncovered during the 18 month probe.
- 澳洲運輸安全局(ATSB)：

We find the report thorough and the conclusions fully supported by the factual content.
- 美國國家運輸安全委員會(NTSB)：

Our appreciation for the level of participation offered to our team. We also wish to congratulate the Aviation Safety Council for the excellent job of conducting the investigation, the ample consideration given to all parties involved.
- 報告發布日一週後一切已恢復平靜。
- 工作期間，本會全體同仁任勞任怨，充分發揮團隊精神完成此一艱鉅任務。
 - 特別值得獎勵之同仁：梁群、林沛達、王興中。

- 三、 華航 CI642 香港赤鱘角機場失事案件，本會於五月九日開會討論調查報告草案，回覆意見將於六月中送交港民航處，並要求將我方意見納入附錄中。
- 四、 華航 CI011 美安克拉治滑行道起飛事故調查工作進行中。
- 五、 長榮 BR316 事故調查進行中。
- 六、 立榮/華信航機地面碰觸事故調查進行中。
- 七、 凌天 B31135 直昇機失事調查報告草案之均已獲各方回覆意見，經委員會討論通過，將於六月發布。

飛航事故調查表 (九十一年五月)

日期	航空器 使用人	航空器種類/ 註冊號碼	事故簡述	傷亡現況	改善建議
88.04.21	德安航空公司	Kawasaki BK117 B55502	由松山至台東途中，因天候轉變迷失方向撞山(CFIT)失事。	3人(死亡)	已結案。 (ASC/AAR-2000/01) 期中飛安通告四項。 飛安改善建議十四項。
88.08.22	中華航空公司	MD11 B150	由曼谷至香港，於香港赤鱘角機場在颱風天氣情況下降落時翻覆失事。	3人(死亡) 40人 (重傷)	於6月中旬將我方回覆意見送交港民航處。 期中飛安通告一項。
88.08.24	立榮航空公司	MD90 B17912	松山至花蓮，降落後因旅客攜帶危險物品造成爆炸失事。	1人(死亡) 27人 (輕重傷)	已結案。 (ASC/AAR-00-11-001) 期中飛安通告三項。 飛安改善建議十四項。
88.09.02	中華航空公司	B747-200SP B18253	於訓練飛行完成後，滑行時以高速衝出跑道撞上海泥道人孔。	無	已結案。 (ASC/AIR-2000/01) 飛安改善建議四項。
88.11.30	凌天航空公司	UH-12E B31007	完成噴灑農藥任務回基地時，於高屏溪低飛落水，駕駛員於游泳上岸時溺水失事。	1人(死亡)	已結案。 (ASC/AAR-00-10-001) 飛安改善建議七項。

日期	航空器 使用人	航空器種類/ 註冊號碼	事故簡述	傷亡現況	改善建議	
89.05.24	遠東航空公司	MD82 B28011	由松山至嘉義，降落時，於雨中滑出跑道。	無	已結案。 (ASC/AIR-00-10-001)	期中飛安通告一項。 飛安改善建議五項。
89.05.08	中華航空公司	A300-600R B18503	由中正赴越南途中，機長失能，由副駕駛操控返航。	1人 (正機師)	已結案。 (ASC-AIR-00-12-002)	期中飛安通告二項。 飛安改善建議十一項。
89.05.08	德安航空公司	Bell430 B55531	由青山發電廠延大甲溪至求安農場，進場時主旋翼打到流籠鋼索迫降失事。	8人 (輕重傷)	已結案。 (ASC-AAR-01-07-001)	期中飛安通告一項。 飛安改善建議十四項。
89.08.24	立榮航空公司	MD90 B17919	松山至高雄，降落滾行時衝出跑道。	無	已結案。 (ASC/AIR-00-12-001)	飛安改善建議十項。
89.09.06	空警隊	AS365-N2 AP018	於台南曾文溪執行演練任務時落水	1人死亡 (副駕駛)	已結案。 (ASC-AAR-01-04-001)	飛安改善建議十項。
89.10.31	華信航空公司	B737-800 B-18603	中正機場05左泡道降落時滑出跑道	無	已結案。 (ASC-AIR-01-09-001)	飛安改善建議七項。
89.10.31	新加坡航空公司	B747-400 9V-SPK	中正機場起飛時錯入關閉跑道撞擊施工護欄	83人死亡 44人 (輕重傷)	已結案。 (ASC-AAR-02-04-002)	期中飛安通告三項。 飛安改善建議六十項。
89.12.01	海軍總部	S-2T	海總委託S-2T航機機件維修等事故	N/A	已結案(30次委員會決議不正式提供書面技術意見)。	N/A
90.01.15	立榮航空公司	DASH8-300 B15235	金門尚義機場降落時重落地折斷兩主起落架。	無	於2月27日發布。	期中飛安通告三項。 飛安改善建議十六項。
90.09.03	凌天航空公司	Bell 206 B31135	台中市執行台電高壓電纜清洗任務途中墜落	2人死亡	第44次委員會議討論通過，於6月發布。	期中飛安通告二項。
90.09.22	立榮航空公司 & 華信航空公司	MD90/B17920 FK50/B12272	松山機場拖機作業時碰觸	無	7月完成草案。	期中飛安通告二項。
90.11.20	長榮航空公司	MD11 B16101	中正機場重落地造成左鼻輪及周	無	9月完成草案。	

日期	航空器 使用人	航空器種類/ 註冊號碼	事故簡述	傷亡現況	改善建議
			邊結構受損		
90.01.25	中華航空公司	A340 B18805	於安格拉治機場 從滑行道起飛	無	美方主導調查。 調查進行中。 期中飛安通告二項。
91.05.25	中華航空公司	B747-200 B18255	由台北至香港途 中墜落馬公外海	225	已展開調查作業。

貳、 其它業務

- 一、 調查組組長周光燦於五月二日至三日赴美華盛頓特區參加國際調查員協會(ISASI)之執委會會議，並向協會幹事報告年會籌備各項事宜。
- 二、 本會與法務部簽定之「行政院飛航安全委員會與各級法院檢察署辦理航空器失事及重大意外事件應行注意事項」已於五月一日由本會及法務部共同公布生效。(如附件二)
- 三、 本會會址之找尋作業，經與民航局洽商，正進行租賃或撥用松山航站西側原台汽車站所在地共兩層樓 2,000 平方呎。
 1. 規劃工作已展開，遷入時間暫定為九二年四月。
 2. 執行長與周組長於五月二十日拜訪民航局張局長，建議該建築之消防、水電及空調由民航局負責，並告知租用期可能於九十三年元月一日開始承租。張局長表示可商洽。初步估價後，須向行政院要求編列預算或第二預備金。

四、 國際運輸安全協會 (International Transportation Safety Association - ITSA) 之年會於五月廿七日至廿九日在芬蘭首都赫爾辛基舉行。本會原由執行長及周組長代表參加。會後並將轉赴美華盛頓特區參加 ICARUS 年度會議，因華航 CI611 事故而取消行程。

五、 根據第四十二次委員會議決議，本會組織條例草案已於三月廿八日送行政院及人事行政局，現正由各方審核中。

六、 主計處及行政院三組提出下列建議：

1. 是否可將飛安會改成法人之架構；
2. 是否可設立基金支付飛安會之年度預算；
3. 是否由本會提出修改民用航空法第八十四條，改為組織條例，由法律定之。

委員會決議研究各種可能方案，於下次委員會提報。

七、 民航局欲修法增列超輕型載具之相關條例。本會建議增修第八十四條第三項如下：(原第三項改為第四項及第五項)

「經民航局註冊及檢驗合格給證，並依人民團體法完成登記之超輕型載具，如有人員傷亡之失事事故時，應由飛安會調查之。」

參、 九十一年六月份工作重點

一、 失事及重大意外事件調查作業(共六案)

1. 失事調查

- ✓ 華航 CI642(六月中旬將回覆意見送交港方)
- ✓ 凌天 B31135(於六月發布調查報告)
- ✓ 立榮 MD90/華信 FK50(調查進行中)
- ✓ 長榮 BR316(調查進行中)
- ✓ 華航 CI011(調查進行中)
- ✓ 華航 CI611(展開調查作業)

二、對外聯繫(共九案)

1. 國內合作協議書

- ✓ 內政部(尚待回覆)
- ✓ 交通部/民航局(尚無進展)

2. 國外合作協議書

- ✓ 美國NTSB(進行中)
- ✓ 英國 AAIB(進行中)
- ✓ 印尼NTSC
- ✓ 紐西蘭TAIC
- ✓ 新加坡MOT

3. 其他

- ✓ 檢察官講習(籌備中)
- ✓ 2002年ISASI國際年會(籌備中)

三、會內業務(共二案)

1. 調查標準作業程序修正(已完成七章之討論)

2. 内規(内部審核)

附件一

Director, Public Information Office
International Civil Aviation Organization
Montreal, Quebec, Canada

Dear Sir or Madam:

On April 26, 2002, the Aviation Safety Council (ASC) of Taiwan, R.O.C., issued its final report of the aircraft accident involving Singapore Airlines flight 006 (SQ006), which crashed during takeoff on the wrong runway at Chiang Kai-Shek Airport on October 31, 2000. The ASC is an agency of the government of Taiwan, R.O.C., charged with the independent investigation of aircraft accidents and serious incidents and the reporting of the investigations in accordance with internationally accepted practices. Although Taiwan, R.O.C., is a non-Contracting State to the Convention on International Civil Aviation (Chicago Convention), the investigation of the SQ006 accident was conducted by the ASC in accordance with ASC regulation, which is fully compliant with Annex 13 to the Chicago Convention, with only one very minor exception that is explained later. The ASC regulation is attached as appendix to this letter. A copy of the ASC report of the investigation may be obtained from the ASC website at <http://www.asc.gov.tw>.

I fully realize that your organization has some political difficulties dealing with Taiwan on an official, or even unofficial basis; however, I believe that there are some serious international civil aviation safety matters that should be brought to the attention of the International Civil Aviation Organization (ICAO) leadership and its Member States. Specifically, there is misleading information being reported in the international media that could easily adversely overshadow the important safety messages that are contained in the report of the SQ006 accident. I am requesting your immediate attention to these issues and asking for clarification and correction of the misleading information, so that the traveling public and the aviation industry are not further misled.

I am fully aware that there are often major disagreements between States and other organizations involved in the investigation of international major airline accidents because of adverse media coverage, litigation, and other influences that are not directly related to aviation safety. However, I am confident that ICAO wishes to

ensure, to the best of its ability, the objectivity and accuracy of information related to such investigations. I respectfully ask for your assistance to achieve that goal. I raise two issues for your consideration. The first issue pertains to the role of “ICAO-appointed experts,” and the second pertains to “compliance” with Annex 13.

Regarding the first issue, shortly after the ASC released its final report of the SQ006 accident, it was widely reported in the media that Singapore did not agree with the findings of the report. (See <http://www.mot.gov.sg>.) Singapore reported that it intends to release its own “parallel analysis” of the accident and that its analysis will be prepared with the assistance of two “ICAO-appointed experts.”

I can understand and appreciate that Singapore may disagree with the findings of the ASC report and may elect to provide its own views. Annex 13 provides for this alternative in paragraph 6.3, and the ASC has complied fully with this provision by appending the written comments from Singapore and other organizations to the final report, whether they were assenting or dissenting comments. However, I am very concerned that the statements by Singapore about a parallel analysis being prepared by “ICAO-appointed experts”, reference is made to appendix 2 to this letter, imply that ICAO supports the disagreement with, and parallel analysis of, the final report of the SQ006 accident, which is prepared based upon the ASC investigation conducted fully compliant to Annex 13. This gives a strong impression that the experts referred to in the press releases are actually representing ICAO. According to information available to the ASC, the experts assisting Singapore are not ICAO consultants, nor do they report to or speak for, ICAO.

If my understanding is correct, I would like a clarification of this issue to be issued by Singapore and ICAO to include a media release to clarify the misleading implication that ICAO supports the disagreement between Singapore and Taiwan about the results of the investigation. Any clarification that might be issued should be done quickly to repair damage that already has been done to fostering the accident prevention messages that are contained in the ASC final report. If this misleading information is not corrected quickly, a lasting impression will be left with the aviation industry, the accident prevention messages of the ASC report will be severely diminished, and certainly, it will be very detrimental to the safe and orderly development of international civil aviation.

Regarding the second issue, because the ASC has been committed to complying with the full spirit of cooperation envisioned by Annex 13, Accredited Representatives

were appointed by the government of Singapore, as the State of Registry and Operator, and the government of the United States, as the State of Design and Manufacture. Later, the government of Australia assigned an Accredited Representative to assist the ASC with its investigation. The Accredited Representatives and technical advisors from Singapore, the United States, and Australia participated in the investigation and the preparation of the final report of the investigation in accordance with the spirit of cooperation promoted in Annex 13. This was accomplished despite the fact that Taiwan is a non-Contracting State to the Chicago Convention.

Article 16, para.8 of the ASC regulation, deviate from Annex 13 in only one area that pertains to paragraph 5.25 (h). Specifically, the ASC permits full participation in progress meetings concerned with collection and identification of factual data; however, it does not permit full participation in the deliberations related to analysis, findings, causes, and safety recommendations, specified in Annex 13 paragraph 5.25. The ASC elected to restrict full participation in the development of its analysis in order to maintain its independence from outside influence in its findings. This practice is common in other States, including the United States, which has filed a difference to Annex 13, paragraph 5.25 (h).

On the other hand, in some instances, the ASC actually permitted much more participation in the investigation, including input to the ASC analysis, by the Accredited Representatives than specified by Annex 13. The Executive Summary of the final report of the SQ006 accident contains the details of the investigation processes used by the ASC. For example, the ASC provided two opportunities for the Accredited Representatives to review the draft report. First, it issued a Preliminary Draft Report and provided 30 days for review and comment; a practice not required by Annex 13. After reviewing the comments received and amending the report, the ASC gave 60 days for review and comment on the Final Draft Report; per Annex 13, paragraph 6.3. The Accredited Representatives were also offered an opportunity to make oral presentations on the ASC Board Meeting about their comments of the final draft report; a practice not addressed in Annex 13. Singapore has accepted and made their presentation on March 26, 2002.

In summary, the ASC certainly expected controversy to arise from its investigation and final report of the SQ006 accident. The only objective of the ASC in this endeavor was to promote aviation safety through independent and objective investigation and reporting of the safety deficiencies uncovered. However, the

misleading and incorrect information being reported in the international media about ICAO support of Singapore's parallel analysis, and the alleged non-compliance of ASC procedures with the spirit of cooperation envisioned by Annex 13, have the potential to significantly diminish the safety messages intended. I trust that you will take the appropriate actions to resolve these matters in a timely manner. I look forward to your comments about my concerns.

Sincerely,

Dr. Kay Yong
Managing Director, ASC
Investigator-in-Charge, SQ006

附件二

行政院飛航安全委員會與檢察機關辦理航空器失事及重大意外事件應行注意事項
九十一年四月二十四日行政院飛航安全委員會（九一）飛安字第○四○三二號令訂
定發布全文十六點

九十一年四月三十日法務部法令字第○九一○○一一八五○號令訂定發布全文十
六點

自九十一年五月一日施行

- 一 本注意事項依航空器失事及重大意外事件調查處理規則第二十四條訂定之。
- 二 本注意事項所稱失事調查，指航空器失事調查及重大意外事件調查。
- 三 行政院飛航安全委員會（以下簡稱飛安會）與檢察機關進行失事調查，應本
平行調查之原則，尊重雙方之調查職權。
- 四 飛安會與檢察機關平時相互交換工作人員職銜名冊，隨時交換意見，並提供
管轄區域及緊急連絡方法。
進行失事調查時，檢察機關應指定主任檢察官，飛安會應指定主任調查官負
責聯絡事宜。
- 五 現場管制依災害防救法所定空難之中央災害防救主管機關有關法令辦理。
檢察官如需封鎖現場，其範圍與方式應與前項主管機關及飛安會協調之。
- 六 檢察官為搜索、扣押證據，與主任調查官為搜尋、移動、戒護及保全證據
時，雙方應於權限範圍內互相協助。
- 七 檢察官認有可為證據之物，得扣押之；主任調查官為鑑定失事原因，就該扣
押物請求檢察官提交時，檢察官無正當理由不得拒絕。
- 八 飛安會與檢察機關應相互提供有助於研判失事原因之證據資料。
- 九 檢察機關應對飛安會提供必要之許可或協助，以利其進行失事調查。
飛安會應對檢察機關提供必要之說明或協助，以利事實之認定。
- 十 飛安會為進行失事調查，得就死因及相關醫學病理檢查，請求檢察機關協助
進行調查。
檢察官率同法醫或其他機關執行相驗、複驗及解剖事務時，得應主任調查官
之請求提供相驗、複驗證明文書及死因鑑定報告書。
為瞭解失事調查中生還因素之必要，罹難者遺體應在法醫完成相驗、必要之
複驗及解剖並確定可進行死因鑑定後，始可發還。
- 十一 檢察官與法醫對於他人或航空器上之人除進行人身鑑別外，並應注意蒐集
下列資料：
 - 一、駕駛艙內任何遺留之藥物或其他可疑物品。

二、對於事故發生時在駕駛艙之人應立即進行濫用藥物及酒精濃度檢測、生化學、藥物檢測及毒物化學檢查。

三、對於他人或航空器上之人：

(一) 死亡者：應進行相驗、必要之複驗或解剖，並調取相關資料，以利死因鑑定。

(二) 受傷者：應取得因該事故所致傷害接受醫療之病歷摘要。

四、對於主任調查官依失事調查之需求就特定之人或人體，進行必要之檢驗。

十二 檢察官因調查證據及犯罪情形而實施勘驗時，應注意與主任調查官失事調查之配合。

主任調查官進行研判或檢驗作業時，應儘可能避免採取妨礙司法調查之無法回復或破壞性措施。

十三 飛安會與檢察機關於進行調查程序中，發現航空器失事或重大意外事件可能發生之原因時，應即通知對方，並提供相關資料。

十四 主任調查官得依據航空器失事及重大意外事件調查處理規則第十六條、第十七條規定，獨立接受外國代表之保密承諾並指揮其協助失事調查工作，但應立知會檢察官。

十五 飛安會及法務部舉辦各種相關訓練時，應相互邀請適當人員出席演講或講授有關課程。

十六 飛安會與檢察機關，因解釋或執行本注意事項所生之爭議，雙方應本於友好、合理且無礙失事調查之情形下協商解決。