



International Civil Aviation Organization

Thirteenth Meeting of the APANPIRG

ATS/AIS/SAR Sub-Group (ATS/AIS/SAR/SG/13)

Bangkok, Thailand, 23 – 27 June 2003

Agenda Item 4: Consider problems and make specific recommendations concerning the provision of ATS/AIS/SAR in the Asia/Pacific Region

COVERT AND OVERT UNLAWFUL INTERFERENCE OPERATIONAL COMMUNICATION PROTOCOLS

(Presented by Australia)

SUMMARY

This paper introduces another paper on the same subject, presented by Australia at the seventeenth meeting of the Informal South Pacific Air Traffic Services Coordinating Group [ISPACG] held in Auckland New Zealand 12-14 March 2003.

1. Background

- 1.1. Current procedures for the notification and resolution of emergencies as outlined in various regional documents are inadequate and do not address all of the key issues.
- 1.2. The attached paper proposes a concept for the notification and resolution of covert and overt unlawful interference emergencies by data link. The current procedures for notification and subsequent ATS response for resolving emergencies and unlawful interference are inadequate and the various regional and local procedures do not satisfactorily address the issues.

2. ISPACG discussion

- 2.1. During discussion after the presentation of the attached paper at ISPACG, it was noted that there was an “apparent discrepancy in the application and interpretation of current procedures in relation to unlawful interference”. ISPACG recorded two action items:
 - 2.1.1. Collate and distribute current means to indicate, and ATC confirmation of unlawful interference [this would then provide a baseline reference to see what variations in procedures are currently in existence]; and
 - 2.1.2. Develop CPDLC procedures to indicate unlawful interference [assigned to the South Pacific FIT (FANS Interoperability Team)].

3. Considerations

- 3.1. We must ensure that the application and interpretation of current procedures are consistent across all ATSPs. From an Australian perspective, anecdotal evidence suggests that airline operators are also inconsistent in the application of unlawful interference procedures.

4. Recommendation

- 4.1. The meeting is invited to consider:
- 4.1.1. It is recommended that members propose amendments to Annexes 11 and 17 to ensure that there are no discrepancies with the interpretation and application of unlawful interference procedures by both ATSPs and airline operators.

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**17 MEETING OF THE
INFORMAL SOUTH PACIFIC AIR TRAFFIC SERVICES COORDINATING
GROUP
(ISPACG/17)**

(Auckland, New Zealand, – 12-14 March 2003)

Agenda Item:

Covert Signals

CPDLC/ADS/Voice/SSR Covert and Overt Operational Communication Protocols

SUMMARY

Airservices Australia presents a concept for the notification and resolution of covert and overt emergencies by data link.

Overview

This paper presents a concept for the notification and resolution of covert and overt emergencies by data link. It details Australia's view of the current imbroglio surrounding the operational situation, outlines desired outcomes and details logical heuristics for discussion by the group.

Background

Current procedures for the notification and resolution of emergencies as outlined in various regional documents are inadequate and do not address all of the key issues.

Several incidents have occurred in the South Pacific region that indicate that considerable ambiguity and misunderstanding exist about what should be standard operating practices for the management of Emergencies and Unlawful Interference. Given the current world security environment the need to address the covert/overt signal protocols in an operationally satisfactory way must have a high priority.

Failure to address the latent issues related to ADS/CPDLC unlawful interference and emergency notification issues will expose all states in the region to Pilot and ATC inconsistencies of response in situations where misunderstandings could have potentially significant consequences.

Australia has a commissioned ADS and CPDLC system in TAAATS and sees our expertise in this area as providing a window of opportunity to propose a logical process that will form the foundation of State procedural development.

Issues

1. Pilots and operational ATC need to know when we use the procedures for datalink notification. The procedures must be unambiguous, and capable of verification. It must be determined when ATC's are to use datalink as a secondary means of unlawful interference confirmation.
2. If a CPDLC Emergency message is used can this be assumed to be related to an aircraft malfunction or emergency as opposed to a hijack.
3. If the emergency is only a malfunction then communication is deemed easier than if the hijack scenario is valid and needs confirmation for subsequent response.
4. Should covert signaling inside RADAR coverage using ADS emergency should be considered to indicate hijack?

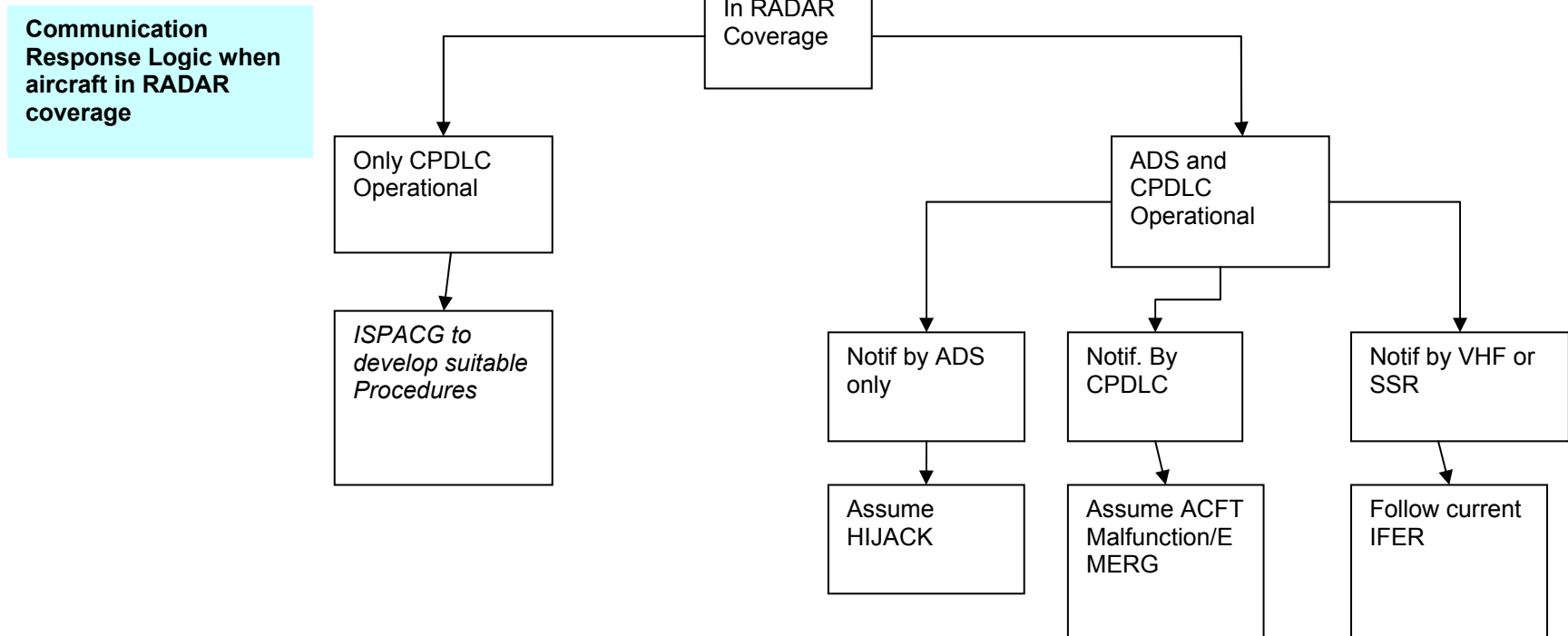
Outcomes expected

Australia proposes that the following outcomes be achieved as a result of ISPACG 17 working group meetings:

1. The development of clear and concise overt and covert procedures that detail when to use CPDLC, ADS, Voice or SSR surveillance mediums in specific situations. eg RADAR coverage procedures and non-RADAR coverage procedures;
2. The formalization of these procedures to enable individual Air Traffic Service Providers and Airlines to develop training and implementation strategies with a high degree of standardisation;
3. The incorporation of these procedures in the local Pacific Operations Manual and to communicate to the ICAO ANC the agreed procedures for future incorporation in relevant ICAO Documents or Annexes;
4. The ISPACG 17 Co-chair to sponsor the outcome to ICAO
5. That ISPACG design and implement a formal review process of the agreed procedures;
6. That a high priority be assigned to development and implementation of these standards;
7. That an implementation timeline for training of flight crews and operational ATC's be developed;
8. That a covert CPDLC message suite be developed;
9. That unambiguous confirmation procedures for covert signaling be developed;
10. That a "When to use what" flow chart of process/procedures/communications logic be drafted for States guidance in the development of procedures and training.

Conclusion

Australia requests the ISAPCG 17 forum discuss the issues and expected outcomes and produce a definitive, implementable strategy for Pacific and future worldwide ICAO promulgation.



**Communication
Response Logic when
aircraft not in RADAR
coverage**

