

**Twenty Fourth Meeting of the
Informal South Pacific ATS Co-ordinating Group (ISPACG/24)**

**FANS Interoperability Team Meeting (FIT/17)
Brisbane, Australia, 9-10 March 2010**

Agenda Item 6: Progress Toward the GOLD Standard

**PROPOSED ADOPTION OF *GOLD ADS-C EMERGENCY REPORT WITHOUT A
CPDLC EMERGENCY MESSAGE PROCEDURES***

Presented by the Federal Aviation Administration

SUMMARY

This paper proposes to adopt the procedures in the GOLD regarding the inadvertent activation of ADS-C emergency messages.

1. INTRODUCTION

- 1.1 There have been many occasions where aircrews have inadvertently activated the Automatic Dependent Surveillance – Contract (ADS-C) Emergency messages. The aircrews are unaware that the flight is transmitting ADS-C emergency messages. The FANS Operations Manual (FOM) contains procedures to covertly check if an aircraft has inadvertently activated ADS emergency messaging. Most aircrews are unaware of the FOM procedures and fail to provide the correct response or become aware that their ADS-C emergency mode has been activated. This creates extra workload at ATC facilities.

2. DISCUSSION

- 2.1 As the Global Operational Data Link Manual (GOLD) was being developed, it was recognized that the current FOM procedures regarding inadvertent activation of ADS-C emergency messages were not working as designed. New procedures have been written into the GOLD which are clearer to aircrews. The new procedures will allow aircrews to recognize that ADS-C emergency messages have been activated and take appropriate action.
- 2.2 The procedures in GOLD v.55 are as follows:

4-7-3 ADS-C emergency report without a Controller-Pilot Data Link Communications (CPDLC) emergency message

4.7.3.1 When an ATSU not having control responsibility for the aircraft receives an indication of an ADS-C emergency, they should coordinate with the controlling authority to ensure that they received the emergency report.

4.7.3.2 When an ATSU having control responsibility for the aircraft receives an indication of an ADS-C emergency report without either a CPDLC emergency message or voice confirmation, then it is possible that the aircraft may be subject to unlawful interference or inadvertent activation of the ADS-C emergency mode. If a subsequent ADS-C report indicates that the aircraft is maintaining normal operations (i.e. the aircraft is operating in accordance with its clearance), the controller should confirm the ADS-C emergency using CPDLC or voice.

4.7.3.3 To check for covert or inadvertent activation of the ADS-C emergency mode using CPDLC, the controller should send the following CPDLC free text uplink. (If voice is used for confirmation, the same message text should be used in the voice transmission).

Controller	<u>UM 169ak</u> CONFIRM ADS-C EMERGENCY
<i>If the emergency mode has been activated inadvertently, the flight crew will cancel the ADS-C emergency and advise the controller either by voice or the following CPDLC free text downlink.</i>	
Flight crew	<u>DM 3</u> ROGER, then <u>DM 67ab</u> ADS RESET

If the aircraft continues with the ADS-C emergency mode activated, the controller should assume the aircraft is in emergency conditions and follow normal alerting procedures.

Note. The aircraft may not send the ADS-C CANCEL EMERGENCY message until the next ADS-C periodic report is due.

2.3 This paper proposes that the ISPACG states adopt the **GOLD ADS-C emergency report without a CPDLC emergency message** procedures, effective on 3 June 2010, or another date, that is acceptable to the meeting.

3. ACTION BY THE MEETING

3.1 The meeting is invited to consider this proposal and adopt the **GOLD ADS-C emergency report without a CPDLC emergency message** procedures.