



**FANS Interoperability Team Meeting
(FIT/20)**

**Auckland, New Zealand
26 – 27 February 2013**

Agenda Item 5 – Working Papers

Airbus A380 FANS Operations on L888 Route

Presented by Airbus

SUMMARY

During a World Tour campaign carried out last December with the A380 msn4 flight test aircraft, FANS A+ operations were exercised on the Chinese L888 FANS route during a Hong Kong / Toulouse flight. The goal of the paper is to report factual operations that were noted, not to mock them, but so as to promote standardised practices as recommended in the GOLD

1. INTRODUCTION

- 1.1 In December 2012, a flight Hong Kong / Toulouse was carried out with the A380 msn4 flight test aircraft. The flight identification number (call-sign) as reported in the filed F-PLN was AIB101.
Part of the route was the L888 airway (which was cleared only while taxiing out in Hong Kong!) . The L888 route is a FANS 1/A restricted route with very high MSA (Minimum Safe Altitudes) of up to 28500ft, and crosses the four FANS 1/A Chinese centres of Kunming ZPPP, Chengdu ZUUU, Lanzhou ZLLL and Urumqi ZWWW.

2. DISCUSSION

- 2.1 The following observations were recorded during the flight and after analysis of ground traces:
- Connections with Kunming (ZPPP), Chengdu (ZUUU), Lanzhou (ZLLL) and Urumqi (ZWWW) had all to be manually exercised. No automatic transfer from one centre to the other. VHF voice requests for manual disconnection and notification to next centre.
 - While connected to ZUUU, notification to ZLLL was not possible. Upon ZUUU ground disconnection, the notification was immediately possible.
 - Whereas ADS-C was operative with ZPPP (successful logon, and CPDLC indicated as active), Kunming control requested (through VHF voice) to change the call-sign from AIB101 to AIB103, which causes both ADS and CPDLC to be lost!!

- ADS-C services were available with all 4 ATSU's.
- CPDLC services were not provided by ZPPP and ZWWW. Although CPDLC was reported active (on-board) (and confirmed available, after ground traces analysis), ZPPP never replied to CPDLC requests.
ZWWW never activated this service.
- CPDLC is almost reduced to free text with non standard clearances. (e.g. ETO MUMAN TEMOL LEBAK TONAX)
- A great number of CPDLC connections (CR1) were launched by ZUUU whereas both CPDLC + ADS-C were already nominally exercised
- ZUUU set up an ADS-C contract to the aircraft router, which worked correctly, but also tried to set up ADS contract directly to the a/c FMS which, obviously failed.
- ZLLL did not send the FN-ACK (numerous cases)
 - While under Urumqi FIR services, two ADS contracts were set: ZWWW (Urumqi) and an unknown LHWE1YA to be explained.

2.2 The above mentioned points are factually reported in a positive way to promote standardized operations of FANS services throughout the world as recommended in the GOLD document.

2.3 Finally, and with a smile, as two flight numbers were requested by the Kunming ATSU and used (AIB101 / AIB103) , we got an invoice for the FANS Datalink services for.....two flights (twice the price) !!

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Note the reported FANS operations over the Himalayans Chinese route L888
- b) Consider ways for promoting standardized practices for FANS operations as recommended in the GOLD throughout the world