



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**FIFTEENTH MEETING ON THE IMPROVEMENT OF AIR TRAFFIC SERVICES
OVER THE SOUTH ATLANTIC (SAT/15)
(Lisbon, Portugal, 19-21 May 2010)**

Agenda Item 3: Communications, navigation and surveillance / Air traffic management (CNS/ATM) Systems

CPDLC Operational Issues by Airlines and Pilots

(Presented by IFALPA)

SUMMARY

ADS-C AND CPDLC AS CURRENTLY USED IN OTHER REGIONS AND THE SAT IS STILL NOT STANDARDIZED AND CAN POSE POTENTIAL SAFETY RISKS AND OPERATIONAL ERRORS.

1. INTRODUCTION

- 1.1. Airlines globally have been using ADS-C and CPDLC resulting in major efficiencies and safety enhancements. This efficiency and safety is not lost on operations in the SAT and surrounding regions. This region has the benefit of adopting best practices from around the world.
- 1.2. My employer airlines and fellow pilots have shared some operational issues as potential lessons and specific issues to be resolved.

2. DISCUSSION

- 2.1. Issue 1: Non-Standard or unclear procedures on operational control during ADS-C reporting and radar control. *“flying on a random route that crossed three Atlantic Tracks. Our plane was equipped with CPDLC and ADS-C which we were using and was working properly. We were also in contact with Icelandic ATC on the VHF Radio. We were assuming that they were communicating with each other and collaborating on our clearances. We were receiving clearances from both the VHF Radio and CPDLC without understanding which one was the primary controller. Besides that, the workload increased because we had to put in at least twice the effort for communication. Around 6920N Icelandic asked if we could climb to FL370 and we responded that we were too heavy. Minutes later we received a CPDLC to climb to leave FL350 and climb to FL360 and slow from Mach .80 to Mach .79. We complied with the clearance and sent a CPDLC message when we reached FL360 at .Mach .79. Minutes later we received a reroute on VHF from Icelandic to go further South. Then Icelandic said that there was a mistake with the CPDLC message which was very disturbing”*

Issue 2: Non-published procedures for CPDLC logon procedures in Abidjan region.

“The CPDLC logon for Abidjan is DIII but is not published in any documentation that we can



We came across the Abidjan logon by accident but we have published the Abidjan logon on the JNB route tips for the crews to use.”

- 2.2. Issue 3: Intermittent connectivity of CPDLC in Dakar and Abidjan regions and lack of notification when not available. *“The connection needs to be maintained and monitored by ATC at all times. “*
- 2.3. Issue 4: Not all regions in the SAT use CPDLC. *“I would want to see more FIR’s using CPDLC. As described above, if VHF communications is not available and HF has too much static to be usable, then CPDLC would be a logical choice.”*
- 2.4. Issue 5: Not all countries update their AIP for CPDLC availability and log-on information. *“countries to update their AIP to indicate whether they have CPDLC and the logon identifier for CPDLC”*
- 2.5. Issue 6: Work to improve reliability of HF communications in the region. *“CPDLC is the only real way to communicate with ATC. There are times when CPDLC will drop off due to connectivity issues and we have to resort to HF communications. While I cannot vouch for the fidelity of the HF equipment that is being used in parts of Africa, I can say that HF communication is impossible sometimes. Therefore, the only way to communicate with ATC is with SATCOM. You may have noticed that SATCOM is required for our African operation and this is the reason why.”*

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) Note the information in this paper;
 - b) Adopt the GOLD as the region standard.
 - c) Address the issues above to understand and work together with the operators, regulators, pilots and controllers to fix the shortcomings.