

Eighteenth Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group (CPWG/18)

(Paris, France, 16-19 December 2014)

Agenda Item 5: Provide Status on CPWG/17 Actions

**Route Change Message for in-flight status aircraft
(Action Item CP17-01)**

(Presented by Civil Aviation Bureau, Japan)

SUMMARY

This paper presents information of change message for in-flight status aircraft. Route Change message for in-flight status aircraft causes various issues. JCAB would like to express an opinion about CHG message for in-flight status aircraft.

1 Introduction

1.1 At the debrief meeting of the VOLKAM14 in March 2014 in Paris, airlines expressed a desire to inform the Air Traffic Service Unit (ATSU) of a re-routing of in-flight aircrafts by sending Route Change messages (CHG messages) and pointed out that the system is not ready to receive those messages in Fukuoka FIR.

1.2 Due to the system specifications, JCAB does not receive CHG messages for in-flight aircrafts because the messages may cause gaps in a flight plan, which is a common information shared among a pilot, Aeronautical operational Control (AOC) and ATSU. JCAB called for opinions as for CHG messages for in-flight aircrafts at the seventeenth meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group (CPWG/17). Considering the opinions provided by the participants via e-mail, JCAB shows its view about CHG messages for in-flight aircrafts in the later part of this paper.

2 Discussion

2.1 JCAB made the following four inquiries to the participants at CPWG/17:

- a. Does the Flight Data deal with CHG message or is it automatically updated in flight plan?
- b. Do AOC and the pilot agree with each other when CHG message is sent to ATSU?
- c. In Russia and the United States, do they issue re-route clearance when they receive CHG message from in-flight aircraft? If so, how do they issue clearance when the aircraft change its route outside of the controlled airspace?
- d. Is there any disadvantage when an ATSU directly receive a route change request from in-flight aircraft?

2.2 The Federal Aviation Administration (FAA) in the United States responded to the above inquiries. According to FAA, it does not receive CHG messages for in-flight aircrafts according to its system specifications, though some exceptions exist.

2.3 During the coordination procedures of re-routing from AOC to ATSU via CHG messages for in-flight aircrafts or other methods, JCAB consider some problems as follows:

- Duplication of flight plans;
- Gaps in flight plans; and
- Refusal against an ATC re-routing instruction by a pilot due to lack of coordination between the pilot and AOC

2.4 JCAB consider that gaps in flight plans due to read-back/hear-back errors can be avoided over the oceanic airspace within Fukuoka FIR as re-routing requests and route approvals are done using the Controller-Pilot Data-Link Communications (CPDLC) in the airspace.

2.5 However, in fact, the current system at JCAB does not allow re-routings using CPDLC except for Dynamic Airborne Reroute Procedure or DARP and an operation method different from FAA has been taken.

3 Conclusion

3.1. It is a significant problem that there is a possibility to have gaps in flight plans which should be shared as a unique common information among pilot, AOC and ATSU, in case system specifications are improved to be able to receive CHG messages for in-flight aircrafts. Therefore, once an aircraft becomes in-flight, the best procedure for re-routing is as follows from the viewpoint of uniformity of flight plans shared among a pilot, AOC and ATSU as well as ensuring the safety:

- pilot requesting a re-routing to ATSU;
- air traffic controller approving the pilot's request; and
- the aircraft changing its route

3.2. The Meeting is invited to :

- a. review the information contained in this Working Paper;
- b. endorse the information provided in this Working paper.