

Third Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group

(Arlington, Virginia, 24-26 April 2007)

Agenda Item 5: Air Traffic Management (ATM) issues

Proposal for the harmonization of Lateral Separation Standards utilized within the Polar "Region."

(Presented by the Federal Aviation Administration)

Summary

This working paper proposes that the Cross Polar Working Group undertake as part of its work agenda an effort to harmonize the reduced lateral separation standard utilized by all Air Navigation Service Providers (ANSPs) serving the Polar airspace.

1. Introduction

- 1.1 The definition of "Polar Region" is an extremely complex task due to the many geopolitical issues that affect this area of the globe. This complexity is reflected in various aspects of Air Navigation just as it is in Maritime Navigation, etc. The result of this complexity is the current Air Navigation "plan." In reality, no specific "Air Navigation Plan," as exists for the European Region or the North American Region, has been created for the Polar Region but rather the Polar airspace has been incorporated, by default, into the various plans of the surrounding regions. To date, this "inclusion by default" has satisfactorily served the needs of aviation. The convergence of space based, long range navigation technologies with advances in aircraft endurance performance combined with ever increasing consumer demand for travel is quickly changing the character and depth of aviation needs.

2. Discussion

- 2.1 The Polar airspace¹ is divided among six Flight Information Regions (FIRs). The lack of surveillance capability in this airspace requires air traffic be separated via procedural means. No single common lateral separation standard exists between all of the six FIRs. This lack of a common standard impacts the creation of new routes across FIR boundaries.
- 2.2 Additionally, some of the ANSPs have published *reduced* lateral separation standards for their FIRs and these also are not held in common.
- 2.3 Lack of a common separation standard needlessly complicates the creation of new routes as well as the inter-working relationships between FIRs. It also adds significant cost to the development of advanced Air Traffic Control automation systems.
- 2.2 Based upon the Cross Polar Working Groups' Terms of Reference document (provisional) it appears appropriate for the group to undertake the work to create a common lateral separation standard for the Polar region.

¹ Defined for the purposes of this paper as that airspace above 70 degrees North Latitude.

3. **Action by the meeting**

3.1 The meeting is invited to:

- a. take note of the information in this paper; and
- b. consider undertaking the work to create a single lateral separation standard for the Polar region.