

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 realignment of, and RVSM trial along, ATS Route B932

(Presented by the Federal Aviation Administration)

Summary

This working paper presents FAA's proposal for a realignment and extension of ATS Route B932 across the Anchorage / Petropavlovsk-Kamchatsky FIR boundary and the simultaneous implementation of an RVSM trial along the route utilizing cruising levels denoted in feet.

1. Introduction

- 1.1 ATS Route B932 currently ends at the Anchorage / Petropavlovsk-Kamchatsky FIR boundary.¹ The route is only available for westbound traffic. It has been established and coordinated as a trial route with adjoining FIRs. The trial is scheduled to expire in the fourth quarter of 2007. Since its inception, the route has been used very infrequently.
- 1.2 Without modification, the work already completed for the development of the route will be lost at the close of the trial. Anchorage ARTCC has studied the route from the eastern terminus perspective and believes modifications are possible which will make the route far more attractive to airspace users as well as simplify the Air Traffic Management (ATM) issues it presents.

2. Discussion

- 2.1 Current limitations of route B932 include: limited hours of availability, uni-directional flight, limited capacity and ATM complexity due to the necessary altitude conversions, i.e. meters to feet. This proposal addresses many of these issues.
- 2.2 At the eastern terminus of the route, i.e. position KOKES, ATM is complicated because the route terminates immediately north of ATS route R220. R220 is the primary viaduct for westbound North Pacific traffic. R220 is also a uni-directional route and, due to the traffic demand, Controllers are permitted to utilize all altitudes for the westbound traffic. Consequently, route B932 can not be used for eastbound flight due to the immediate conflicts which would occur as traffic crossed the KOKES terminus. Additionally, as currently operated, any eastbound traffic exiting the route would be maintaining a metric altitude which would conflict with two conventional flight levels, i.e. cleared levels denoted in feet.

¹ See Chart 1

- 2.3 Successful modification of B932 as proposed here requires several steps and, fortunately, each of these steps permits some small gain in route efficiency with an accompanying reduction in ATM complexity.
- 2.4 The first proposed step is to begin the realignment of B932 at position PEKUT. From PEKUT the route would flow to position BAMOK and then continue across the Petropavlovsk-Kamchatsky / Anchorage FIR boundary to position MORLY. After MORLY the route would continue eastwards passing as yet to be named waypoints and then terminate at Cape Romanzof (CZF)². Thus realigned, the route is immediately deconflicted from route R220. This yields two immediate gains: eastbound traffic could now be accommodated and the realigned route is now available as a truly alternative route for westbound R220 traffic when prevailing winds and/or traffic conditions require.
- 2.5 The realignment of B932 as described above would engender the necessity for some additional modest route modifications within the Anchorage FIR.
- 2.6 Thus realigned, route B932 now appears to offer a unique opportunity for both a trial of Reduced Vertical Separation Minimum (RVSM) procedures as well as increasing the route capacity thru the use of cleared levels denoted in feet vice meters.

3. **Action by the meeting**

- 3.1 The meeting is invited to:
 - a. take note of the information in this paper; and
 - b. carry out a discourse of discovery to determine the feasibility of the proposed route realignment.

² See Chart 2

