Twenty Third Meeting of the
Informal South Pacific ATS Co-ordinating Group (ISPACG/23)

Santiago, Chile, 26-27 March 2009

Agenda Item 4: Review Open Action Items

REPORT ON DARP EXPANSION

(Presented by Federal Aviation Administration)

SUMMARY

The expansion of Dynamic Airborne Reroute Procedures (DARP) is a high priority for ISPACG. While the ISPACG Planning Team has made significant progress on DARP, numerous obstacles remain for full utilization. DARP has been identified as a "Best Practice" under the Asia and South Pacific Initiative to Reduce Emissions (ASPIRE) and is a key component of the ASPIRE Work Program through the ISPACG.

1. INTRODUCTION

1.1 At ISPACG/20 in 2006, a series of "breakout sessions" were held to identify top priority work items under ISPACG. A special airline/industry session created a prioritized list of items to be addressed. This list identified full availability and implementation of DARP as second in priority only to SatCom stability. The DARP actions were delegated to the newly created ISPACG Planning Team for further analysis and action.

2. DISCUSSION

2.1. Since it's formation in 2006, the Planning Team has addressed numerous issues associated with DARP expansion. As of February this year, 13 of 70 planning team actions have dealt specifically with DARP. Availability of DARP continues to increase. Oakland Center allows DARP in both directions with New Zealand. DARP between Oakland and Tahiti is under development, pending implementation of the TIARE system. Although no DARP agreement exists yet with between Oakland, Nadi and Brisbane, testing has shown that it is possible to complete a southbound DARP before the transfer (EST) is completed. DARP is not yet possible between Oakland and Papua New Guinea.

2.2. In response to requests for guidance associated with DARP, the Planning Team initiated the development of DARP guidance materials. This DARP procedural guidance document has been distributed for revision on several occasions and is nearing completion, pending approval from the full ISPACG.

2.3. Despite the increasing availability of DARP, the actual utilization of DARP procedures remains infrequent. In 2008, the Planning Team conducted an informal survey of air carriers to determine frequency of use, plans for DARP usage and non-ATC related factors limiting the use of DARP procedures. The survey indicated that less than 5% of flights between North America and Australasia executed a DARP procedure. From an air carrier perspective, all respondents to the survey indicated that dispatcher workload is the factor most limiting frequent usage of DARP. The respondents indicated that to varying levels, efforts were underway to mitigate this limitation through automation, training and other means.

2.4. The potential for fuel and emissions savings from full implementation of DARP is well understood. During the last quarter of calendar year 2008 the FAA, Airservices Australia and Airways New Zealand conducted a series of three gate-to-gate demonstration flights with Air New Zealand, Qantas and United Airlines. Each of these flights executed, or planned at least one DARP during flights between the US and New Zealand or Australia. The fuel and emissions savings were significant. For example, ASPIRE - Air New Zealand reported fuel savings of 212 kilograms and emissions savings of 669 kilograms from the DARP procedure alone. The development and proliferation of dynamic rerouting is a key element in the ASPIRE South Pacific Work Program and is included in ASPIRE Best Practices.

2.5. In order to fully realize the potential for efficiency based on the DARP procedure, Pacific service providers must continue to identify and where possible remove constraints to DARP procedures. Testing of DARP procedures is planned or underway among ISPACG providers. However, as the DARP survey of air carriers indicated, availability of Dynamic Reroutes must be uniform and consistent throughout the Asia Pacific Region.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a. Support the continued efforts under ISPACG to identify constraints, both from air navigation service providers and internal to air carriers, and increase the availability and usage of DARP.

b. Support the efforts under ASPIRE to proliferate the use of DARP throughout the Pacific Rim and beyond as a “Best Practice”.