

**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

**STATUS OF 30 NM LATERAL AND 30 NM LONGITUDINAL (30/30)
SEPARATION IN OAKLAND OCEANIC CONTROL AREA (CTA)**

(Presented by Federal Aviation Administration)

SUMMARY

This paper presents a review of the operational trial of 30 nautical miles (NM) lateral and longitudinal separation in the Oakland Oceanic Control Area. It reviews the policies being applied and includes a brief review of the findings of the Oceanic Separation Reduction Working Group (OSRWG).

1. INTRODUCTION

- 1.1 In December 2005, the U.S. Federal Aviation Administration (FAA) began an operational trial of 30 NM lateral and 30 NM longitudinal (30/30) separation in Oakland Oceanic Control Area (CTA) Sector 3. In March 2007, the trial was expanded, with limitations, to all Oakland oceanic sectors. At that time, 30/30 and 50 NM longitudinal separation were applied only between eligible aircraft to enable same direction aircraft to climb or descend through the altitude of other aircraft and to enable opposite direction aircraft to climb or descend through or cruise at the altitude of other aircraft.
- 1.2 Since June 2007, the Oakland Air Route Traffic Control Center (ARTCC) has applied 30 NM lateral and 30 NM longitudinal (30/30) separation and 50 NM longitudinal separation between appropriately authorized and equipped aircraft throughout the Oakland Oceanic CTA. The policies for the application of the separation minima are detailed below:
- 30/30 and 50 NM longitudinal separation is applied to “targets of opportunity” throughout the Oakland Oceanic CTA. “Targets of Opportunity” are proximate pairs of aircraft that are both eligible for either 30/30 separation or 50 NM longitudinal separation.
 - Published ATS routes and other tracks (e.g. Pacific Organized Track System) continue to be laterally separated by a minimum of 50 NM.

- 50 NM remains the minimum Automatic Dependent Surveillance (ADS)-based lateral and longitudinal separation applied between 30/30 eligible aircraft and Required Navigation Performance 10 (RNP 10) aircraft. Lateral and longitudinal separation standards applied between RNP-10 and non-RNP aircraft also remain unchanged.
- Oakland ARTCC accommodates operators that are not eligible for 30 NM separation throughout Oakland Oceanic CTA. Lateral, longitudinal and vertical separation minima for aircraft not eligible for 30 NM separation are unchanged.

1.3 The FAA Oceanic Separation Reduction Working Group (OSRWG) evaluates the operational and technical issues related to 30/30 operations including the performance of the satellite data link system. It includes subject matter experts from air traffic, flight standards, aircraft certification and safety analysis. The OSRWG was responsible for recommending to FAA managers the readiness to start 30/30 operational trials and the policies to be applied. The OSRWG meets at regular intervals to assess the status of operations.

2. DISCUSSION

2.1 At the 18–19 November 2008 OSRWG meeting, the group evaluated the following data:

2.1.1 The Oakland Oceanic CTA averages 615 flights per day. 41% of these flights use ADS and 16% of total flights are eligible for application of 30/30.

2.1.2 On major individual traffic flows, the following approximate percentage of flights is 30/30 eligible:

- 52% of flights between North America and South Pacific destinations
- 25% of flights between North America and Northern Asia destinations
- 7% of flights between Japan and Hawaii
- 13% of flights between Japan and South Pacific destinations
- 9% of flights between the U.S. mainland and Hawaii

2.1.3 From January through October 2008, the target of 1% missing basic (BAS) periodic reports was met.

2.2 Between 0000 Coordinated Universal Time (UTC) on 7 February 2008 and 0000 UTC on 7 February 2009, there were 19 outages for a total of 25.42 hours of total outage time reported by the two data link service providers in the Pacific Oceanic Region (POR). Based on a 366 day year (2008 was a leap year), the total number of hours in this time period was 8784.

2.2.1 Data link service availability was 99.71% with outages experienced at rate of 25.42 hours per year. (Availability is defined as the ability of the network data link service to perform a required function under given condition at a given time).



- 2.2.2 Data link service reliability was 99.78% with a mean time between service outages of 462.32 hours. (Reliability is defined as the ability of the data link system to perform a required function under given conditions for a given time interval).
- 2.3 The OSRWG concluded that neither the availability nor the reliability met the established criteria during this time period.
- 2.4 The OSRWG recommended that current data link performance does not justify near-term planning for an expanded application of 30/30 including the operation of a 30 NM route structure within the Oakland Oceanic CTA; however, the operational trial and application should continue to provide further data for evaluation.
3. **ACTION BY THE MEETING**
 - 3.1 The meeting is requested to note the information in this paper.