

## Twenty Second Meeting of the Informal South Pacific ATS Co-ordinating Group (ISPACG/22)

Papeete, Tahiti, 12-14 March 2008

### Agenda Item 4: Review Progress on Open Action Items

#### Operational Trial of 30 NM Separation and Use of 50 NM Longitudinal Separation in the Oakland Oceanic Control Area

(Presented by the Federal Aviation Administration)

# **SUMMARY**

This information paper provides a status update on the use of 30 NM lateral / 30 NM longitudinal separation (30/30) and 50 NM longitudinal separation between appropriately authorized and equipped aircraft throughout the Oakland Oceanic Control Area.

- 1. Initial Operational Trial Phases. In December 2005, the FAA began an operational trial of 30 nautical mile (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. 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.
- 2. Current Operational Trial Policies. 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.

## **3.** FAA Operational Policy Notice.

3.1 The operational policies, requirements and recommendations for operators planning for 30 nm separation in the Oakland Oceanic CTA are published in an FAA notice entitled "Oakland Oceanic Control Area (CTA): Continuation of Operational Trials for 30 nm Separation And Use of 50 Nautical Mile (nm) Longitudinal Separation". The notice is posted on the "Pacific CNS Requirements/Options" webpage:

### http://www.faa.gov/about/office\_org/headquarters\_offices/ato/service\_units/enroute/oce anic/pacific\_cns/

- 3.2 The notice details the operator/aircraft equipage requirements for 30/30 eligibility: FANS 1/A package (or equivalent), satellite Controller-Pilot Data Link Communications, RNP 4 navigation and Automatic Dependent Surveillance – Contract (ADS-C).
- 4. Role of the OSRWG Scrutiny Group. The FAA Oceanic Separation Reduction Working Group (OSRWG) Scrutiny Group was established to evaluate 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 Scrutiny Group was responsible for recommending to FAA managers the readiness to start 30/30 operational trials and the policies to be applied. The Scrutiny Group meets at regular intervals to assess the status of operations.

### 5. Scrutiny Group Findings

- 5.1 The 14-15 August meeting found:
- 5.1.1 The Oakland Oceanic CTA averages 638 flights per day. 35% of those flights use ADS and 12% of total flights are eligible for application of 30/30.
- 5.1.2 On major individual traffic flows, the following percentage of flights are 30/30 eligible:
  - Approximately 58% of flights between North America and South Pacific destinations.
  - Approximately 26% of flights between North America and Northern Asia destinations.
  - Approximately 12% of flights between Japan and Hawaii.
  - Approximately 10% of flights between Japan and South Pacific destinations.
  - Approximately 3% of flights between the U.S. mainland and Hawaii.

- 5.1.3 Data link service availability was 99.83% with outages experienced at rate of 15 hours per year. (Availability is defined as the ability of the network data link service to perform a required function, under given conditions, at a given time).
- 5.1.4 Data link service reliability was 99.72% with a mean time between service outages of 352.2 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).
- 5.1.5 For May July, the target of 1% missing basic (BAS) periodic reports was met.
- 5.1.6 Scrutiny Group Conclusions. The Scrutiny Group concluded that 30/30 operations should continue on an operational trial basis and that the group should continue to monitor satellite data link performance. The next Scrutiny Group meeting was scheduled for 30-31 October.

#### 6. Action by the meeting

6.1 The meeting is invited to note and discuss the status of 30/30 operational trials as presented in this paper.