



**THE FORTY-EIGHTH MEETING OF THE
INFORMAL PACIFIC ATC COORDINATING GROUP
(IPACG/48)**

FAA Northwest Mountain Regional Office - Des Moines, Washington
September 25 - 28, 2023

Agenda Item 5: Air Traffic Management Issues

Reduction of PACOTS

(Presented by United Airlines)

SUMMARY

This paper updates the previous IP on the subject presented at IPACG/47 in 2022. It continuously seeks to reduce the number of Organized Track Structures in the Pacific (PACOTS), thus increasing the airspace for flight trajectories modelled by user-preferred routes (UPRs)

1. Introduction

- 1.1. United Airlines continuously advocates for the ability to perform User Preferred Routes (UPR) across the Pacific. It has demonstrated on several occasions the operational and environmental benefits realized by UPR compared to the Pacific Organized Track System (PACOTS). Continuous review and discussions for the future state of PACOTS are requested to include all stakeholders.
- 1.2. The operational landscape over the Pacific has changed significantly over the last 20-30 years, but the fundamental OTS guidelines in the Pacific mainly stayed the same. However, in recent years, the reduced traffic volume caused by the COVID-19 pandemic opened discussions for greater operational efficiency. The high rates of performance-based communications and surveillance (PBCS) aircraft equipage in the North Pacific provide opportunities to explore additional UPR trial possibilities.
- 1.3. Through great efforts credited to the FAA, JCAB, and other parties involved, by July of 2023, 4 PACOTS M/8/I/K were eliminated. The Implementation of NOPAC Re-design Phase 1B afforded additional UPR airspace availability by deletion of airways G344 and R591. These accomplishments are a testament to great collaboration at a joint informal meeting such as IPACG and reflection of operators' feedback being implemented.

2. Discussion

- 2.1. Still, the continuous aim is to reduce the OTS footprint by fewer OTS publications and easing the UPR rules concerning PACOTS described in the fine print. The restrictions continue to be subject to limitations by the flight planning software automation. Training retention and harmonization into flight dispatchers' workflow and manual handling subject to errors are challenges operators face due to human factors. Some UPR rules have migrated to the PAC

Chart Supplement or AIP. While the UPR relief is welcoming, it can be a lengthy description of the complex requirements or an ambiguous NOTAM.

- 2.2. As a recurring position, the legacy processes to conform to OTS no longer meet today's airline business requirements. Airlines have invested millions in flight planning technology with its enhancements to generate more efficient routes. New generation aircraft with remarkable performance and equipment, in turn, opened various new city pair markets, shifting their business from hub-to-hub to point-to-point model. Much has changed over the years except how OTS is designed daily for a middle-of-the-road air traffic management scheme in the same manner.
- 2.3. The traffic volume over the Pacific has returned to near, at, or exceeding pre-COVID-19 pandemic levels. Traditional traffic flows may have shifted, and volume increases in certain sectors may also be attributed to increased dependency on NOPAC airspace. Throughout the UPR framework, it is highly encouraged to continuously evaluate if the expanded UPR provides the expected benefits and acceptable level of service delivery.
- 2.4. Through IPACG and other means, United Airlines supports a roadmap that would reduce the number of PACOTS publications in the following phased manner.
 - 2.2.1. Consider the elimination of Hawaii-Japan PACOTS A/B/11/12. According to Oakland publication there are longer any restrictions for the westbound UPR.
 - 2.2.2. Consider the phased elimination of North America-Asia PACOTS H/J/14/15. Oakland often does not issue Track H.
 - 2.2.3. Consider the phased elimination of North America-Japan PACOTS C/D/1/4.
- 2.5. The suggested reduction of the PACOTS at the current phase aims at the periphery of OTS with less traffic, not the core that serves the main flow between North America's West Coast and Japan. In recent events in the North Pacific airspace, the increase in airspace reservation or restricted areas due to various activities necessitated a temporary and partial flow scheme or file on PACOTS to address a large concentration of air traffic. In United's view, such measures can still be implemented on demand.

3. Conclusion

- 3.1 The meeting is invited to note the information provided.