



THE THIRTY-FIRST MEETING OF THE INFORMAL PACIFIC ATC CO-ORDINATING GROUP MEETING (IPACG / 49)

Agenda Item 5b: ATM Issues

Start of the UPR trial between East Asia and Oceania

(Presented by JCAB)

SUMMARY

This paper provides information on the start of the UPR trial between East Asia and Oceania for Carbon emission reductions and effective use of airspace.

1. Introduction

1.1. Recent years, demand for UPR has been increasing to reduce CO₂ emissions from overall aircraft operations toward the realization of a de-carbonized society. In addition, there are requests from operators for UPR between East Asia and Oceania. Currently, there is no UPR in this area.

1.2. If the target aircraft are those flying between China/Korea/Japan and Oceania, the number of aircraft is approximately in September 2024. At oceanic in the Fukuoka FIR, more than 90% of the aircraft fly ATS routes G339 or A339 because the UPR in this area is not set. In the Oakland FIR, most are flying routes connecting the coordinates.

1.3. In this area, there are several restricted airspace that limit the operation of the UPR, but we have been seeking ways to set up the UPR as much as possible.

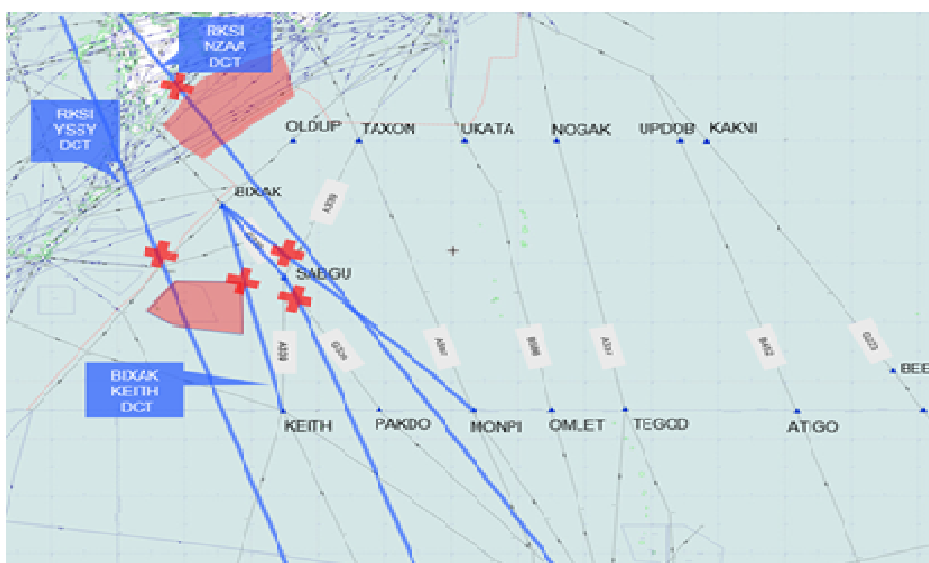


Figure 1: Expect route that the target aircraft may desire

1.4. Although there are some restrictions, Oakland ARTCC and Fukuoka ACC coordinated with each other, believing that by effectively utilizing part of airspace as the UPR and shortening the flight distance, we can contribute to reduction of CO₂ emissions, even if only slightly.

1.5. And the existing UPR between Japan and Oceania route could be expanded to operate as the UPR between East Asia and Oceania.

1.6. Oakland ARTCC and Fukuoka ACC decided to operate the UPR between East Asia and Oceania as follows.

Target aircraft

East Asia-Oceania (YSSY, YBBN, YBCS, YBCG, YPPH, NZAA and NWWW)

● Rules of operation in each FIRs

- In the Fukuoka FIR
 - The UPR must be flight planned via BIXAK, TAXON, UKATA, NOGAK, UPDOB, and KAKNI and existing ATS routes at or north of these waypoints
 - The UPRs must be flight planned at or east of BIXAK G339 SABGU A339 KEITH.
- In the Guam CTA
 - Within the Guam CTA, aircraft may flight plan UPRs at or above FL310, aircraft at or below FL300 shall flight plan via existing ATS routes.



Figure 2:
Rules of the
UPR Asia-
Oceania

1.7. This UPR began trial operation in November 28 2024.

2. Discussion

2.1. Although there are some restrictions, we believe that enabling UPR to be set in this area makes effective use of airspace and reduce CO₂ emissions. Expanding the UPR airspace and allowing flexible route planning in case of bad weather (e.g., typhoons) on the route will contribute to flight safety.

2.2. During the trial operation, we will investigate whether the aircraft planned for the UPR are instructed to change their route or altitude to keep the control separation. We plan to identify issues, etc., based on these results, and consider transitioning to formal operations.

Action by the meeting

3.1 The meeting is invited to note the information provided.