

International Civil Aviation Organization

Eleventh Meeting of the Air Traffic Management Sub-Group (ATM/SG/11) of APANPIRG

Singapore, 2 – 6 October 2023

Agenda Item 6: ATM Coordination (Meetings, Route Development, Contingency Planning)

STANDARDIZING PRONUNCIATION FOR 5LNCs

(Presented by Japan)

SUMMARY

This paper presents the issues, considerations and solutions for the difference in pronunciation of the Five Letter Name Codes (5LNCs) in States/Countries.

1. INTRODUCTION

- 1.1 The Federal Aviation Administration (FAA) and the Japan Civil Aviation Bureau (JCAB) have been considering and discussing the project for redesign of the North Pacific (NOPAC) route, which is called "NOPAC Redesign." The NOAPC Redesign project has been conducted with a phased approach.
- 1.2 The current Phase of the project is Phase 1b. In Phase 2, M523 will be established between R220 and R580, and N507 will be established between R580 and A590 in Phase 3. "HARKI" on M523 and "RNDER" on N507 will be established in each phase as waypoints at the Flight Information Region (FIR) boundary between Anchorage Oceanic and Fukuoka FIRs.
- 1.3 The outline for "NOPAC Redesign" is described in another working paper, and **Figure 1** shows the route structure of NOPAC routes within Fukuoka FIR.

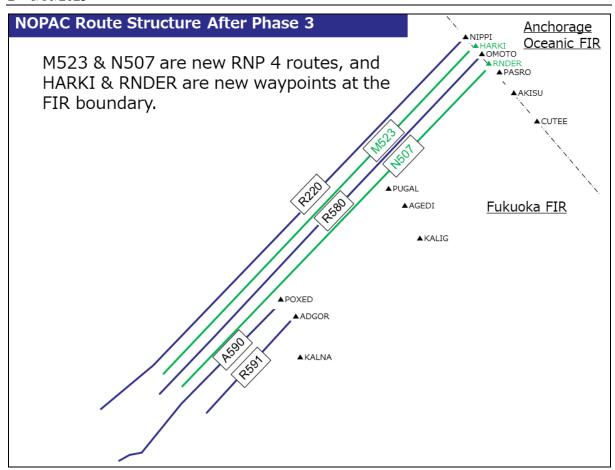


Figure 1: NOPAC route structure after Phase 3

2. DISCUSSION

- 2.1 In Japan, the pronunciation of waypoints is published in the Japanese version of the Aeronautical Information Publication (AIP).
- 2.2 Before determining the pronunciation of waypoints for "HARKI" and "RNDER," it was recognized that someone called HARKI "Harki," but the other one called it "Haruki" during the internal discussion in JCAB. A variety of pronunciations for RNDER, for example, "Render" and "Rander," was also confirmed.
- 2.3 Although the frequency of verbal communication between the Air Traffic Control Officers (ATCOs), and ATCOs and pilots has been decreasing since the Air Traffic Services (ATS) Interfacility Data Communication (AIDC) and Controller Pilot Data Link Communications (CPDLC) have been implemented and are used as primary communication procedure in the Pacific Ocean airspace including NOPAC, the standard pronunciation would support smooth verbal communication by ATCOs and pilots in case of urgent situation such as sudden AIDC trouble or Datalink outage.
- 2.4 The Automatic Dependent Surveillance Contract (ADS-C) also contributes to less verbal communication for position reports in the airspace where ATS surveillance is not covered. However, pilots need to conduct each position report verbally in case of a Datalink outage.
- 2.5 Therefore, JCAB started coordinating on this matter with the Anchorage Air Route Traffic Control Center (ARTCC) to define the standard pronunciation of waypoints at the FIR boundary between Anchorage Oceanic FIR and Fukuoka FIR.

- 2.6 Through several discussions, Anchorage ARTCC and JCAB agreed on the pronunciation for HARKI that "Har-Key" would be used in Anchorage Oceanic FIR and "Harky" would be used in Fukuoka FIR, although there was a minor pronunciation difference. Additionally, "Render" was agreed as a standard pronunciation for RNDER.
- 2.7 Since AIDC and Datalink (ADS-C and CPDLC) have been implemented in the APAC region, the opportunity for verbal communication between ATCOs in different FIRs/States and ATCOs/Pilots has decreased. However, the Five Letter Name Codes (5LNCs) at the FIR boundary would be spoken and pronounced by ATCOs and pilots in urgent situations such as sudden AIDC trouble or Datalink outages.
- 2.8 Therefore, JCAB highlights that matching and standardizing the pronunciation of 5LNCs, especially established at the FIR boundary, is essential and ideal for the Air Navigation Service providers (ANSPs) to prevent human errors and the occurrence of Large Height Deviation (LHD), even though some time and effort would be needed as the endeavor contributes to enhance and ensure airspace safety and smooth ATC operation in a particular situation like AIDC or Datalink outage.
- 2.9 To support the smooth coordination and agreement between States/ANSPs, an official scheme and measure to standardize the pronunciation of 5LNCs globally and publish them would be preferred. For example, one of the options might be an Enhancement of the International Codes and Routes Designators (ICARD) system to add the table for the standard pronunciation of 5LNCs.
- 2.10 Additionally, it would facilitate taking up waypoints from the ICARD system and resolve the issue of bias of 5LNCs stock, which some 5LNCs starting from the specific alphabet are popular and less stock, but 5LNCs starting from other alphabet are not widespread and have much stock.
- 2.11 In Fukuoka FIR, there is no 5LNC starting from "X," and only seven 5LNCs starting from "Q," and the trend of avoidance using those 5LNCs would be continued since the words and pronunciation of both 5LNCs are minor in Japan. If the standard pronunciation is clarified and defined by some method, both 5LNCs will be used more in Fukuoka FIR.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the information contained in this paper;
 - b) discuss paragraphs 2.7 and 2.8, and
 - c) discuss any relevant matters as appropriate.

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