International Civil Aviation Organization

Twenty-Seventh Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/27)

Video Teleconference, 22 – 25 August 2022

Agenda Item 5: Airspace Safety Monitoring Activities/Requirements in the Asia/Pacific Region

JASMA ASSESSMENT OF NON-PBCS APPROVED AIRCRAFT

(Presented by JASMA)

SUMMARY

This paper presents the trend of the numbers and percentages for the Performance-Based Communications and Surveillance (PBCS)-filed flights and PBCS-approved flights which were flying in the Pacific Ocean airspace of Fukuoka Flight Information Region (FIR) as of June 2022. The list of operator-aircraft combinations identified as a non-PBCS-approved flight in June 2022 is also provided.

1. INTRODUCTION

1.1 The Japan Airspace Safety Monitoring Agency (JASMA) provides the Regional Monitoring Agency (RMA) and the En-route Monitoring Agency (EMA) responsibilities for the Pacific Ocean airspace of Fukuoka Flight Information Region (FIR).

1.2 JASMA obtains authorizations regarding Required Communication Performance (RCP) 240 and Required Surveillance Performance (RSP) 180 of Japanese aircraft operators from the State Authority. Besides, JASMA has included information on the authorizations of RCP240 and RSP180 in the global RMA's latest approval databases uploaded to the Knowledge Services Network (KSN) website every month since September 2019.

2. DISCUSSION

2.1 JASMA compared flight plans of Pacific Ocean flights of Fukuoka FIR with the global RMA's latest approval databases which include Reduced Vertical Separation Minimum (RVSM) and Performance-Based Communications and Surveillance (PBCS) approval status uploaded to the KSN website every month.

2.2 The flight plan information utilized for the monthly examination is the actual record of flight plans for the months extracted from the Flight Object Administration Center System (FACE) of the Japan Civil Aviation Bureau (JCAB).

2.3 **Figure 1** represents the number of all flights in the Pacific Ocean airspace of Fukuoka FIR, the percentage of flights with "P2" and "RSP180" in their flight plans (hereinafter called "PBCS-filed flights"), and the percentage of the flights which were confirmed as PBCS approved aircraft in the approval databases (hereinafter called "PBCS-approved flights") for the period from January 2021 to June 2022.

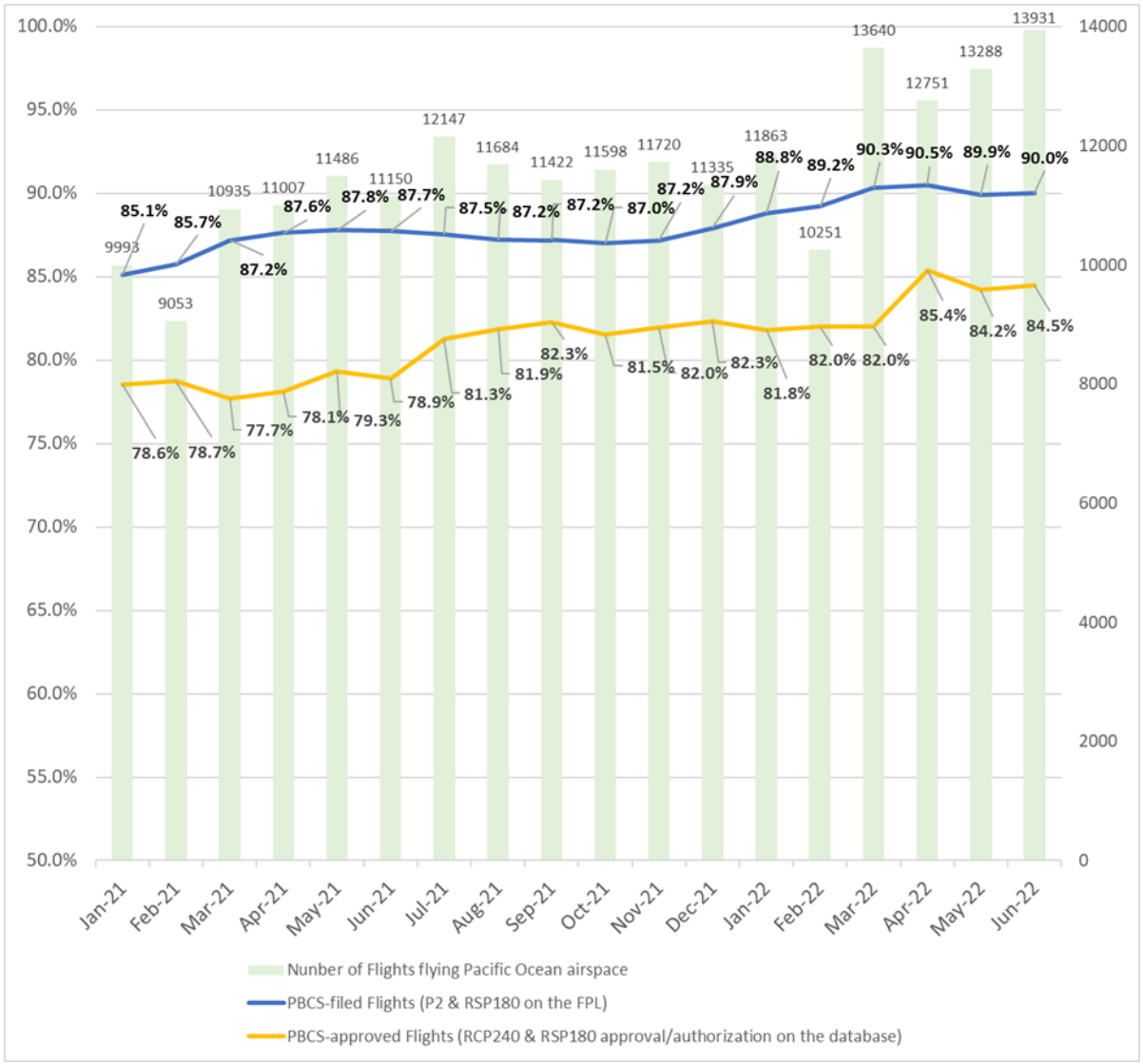

Figure 1: Percentage of PBCS-filed flights versus PBCS-approved flights in 2021 - 2022

2.4 The percentage of PBCS-filed flights increased gradually from 85 to 88 percent in 2021, then reached 90 percent in the first half of 2022. On the other hand, the percentage of PBCS-approved flights had maintained by 5 to 9 percent lower than the percentage of PBCS-filed flights.

2.5 It means that there were approximately 30 flights per day and 900 flights per month were flying in the Pacific Ocean airspace of Fukuoka FIR in June 2022 that filled "P2" and "RSP180" in their flight plans but were not confirmed their PBCS approval/authorization in the approval database.

2.6 **Table 1** represents the list of aircraft operators and their aircraft identified as a non-PBCS flight. Those aircraft were flying in the Pacific Ocean airspace of Fukuoka FIR with filed “P2” and “RSP180” in their flight plans in June 2022, but their PBCS approval/authorization were not found in the approval database as of 11 July 2022.

Operator	Registration										Total
ABL	HL8366										1
ACA	CFGDT	CFGDX	CFGDZ	CFGEI	CFGEO	CFGFZ	CFGHZ	GFITU	GFIUL	CFIUV	49
	CFIUW	CFIVM	CFIVQ	CFIVR	CFIVS	CFJZS	CFKSV	CFNNW	CFNOE	CFNOG	
	CFNOH	CFNOI	CFPQB	CFRAM	CFRSA	CFRSE	CFRSI	CFRSO	CFRSR	CFRTG	
	CFRTU	CFRTW	CFSBV	CFVLQ	CFVLU	CFVLX	CFVLZ	CFVNB	CFVND	CFVNF	
	CGHLM	CGHPQ	CGHPT	CGHPU	CGHPV	CGHPX	CGHPY	CGHQQ	CGHQY		
AXY	9HBIG	9HELF									2
CES	B1111	B2001	B2002	B2003	B2005	B2020	B2021	B2022	B2023	B2025	45
	B208X	B20AJ	B304D	B307Y	B308E	B321J	B323H	B324W	B324X	B5902	
	B5921	B5926	B5930	B5931	B5936	B5937	B5941	B5943	B5961	B5973	
	B6537	B6538	B6543	B6545	B6546	B7343	B7347	B7365	B7367	B7368	
	B7868	B7881	B7882	B7883	B8226						
CHH	B1020	B1132	B1133	B1138	B1499						5
CKK	B2076	B2077	B2079	B2082	B2083	B220E	B220F	B221S	B221W		9
CSN	B1128	B1167	B1168	B1169	B1242	B1243	B1293	B1297	B209D	B209E	19
	B209X	B20AA	B20C6	B20D7	B20E8	B20EH	B6138	B6139	B6140		
ETH	ETASK										1
HVN	VNA890	VNA891	VNA895	VNA896	VNA897	VNA899					6
KAL	HL7701	HL8508									2
KYE	N903AR	N904AR									2
MLM	9HUEC										1
PAL	RPC9933										1
QTR	A7BFB	A7BFK	A7BFL	A7BFM	A7BFN	A7BFO	A7BFQ	A7BFR	A7BFV	A7BFW	11
	A7BFX										
UAL	N34282	N36280	N37018	N37281	N37298	N69020	N73278	N73299	N77012	N77014	18
	N77019	N77022	N77295	N78002	N78013	N78017	N79011	N79279			
UPS	N365UP	N366UP	N369UP	N370UP	N371UP						5

Table 1: Operators and aircraft identified as non-PBCS-approved flight in June 2022

2.7 Incidentally, the Federal Aviation Administration (FAA) and the Japan Civil Aviation Bureau (JCAB) have a plan to implement 23NM lateral separation minima and new ATS routes, which are required RNP4 and PBCS for aircraft flying in the North Pacific Ocean airspace.

2.8 Besides, FAA and JCAB have been discussing that the altitude stratum between FL340 and FL400 of existing RNAV10 routes, R220 and R580 would be the exclusive use of RNP4 and PBCS approved aircraft. **Figure 2** and **Figure 3** show the future ATS routes based on 23NM lateral separation minima in the North Pacific Ocean airspace that is called the "North Pacific (NOPAC) Redesign Project."

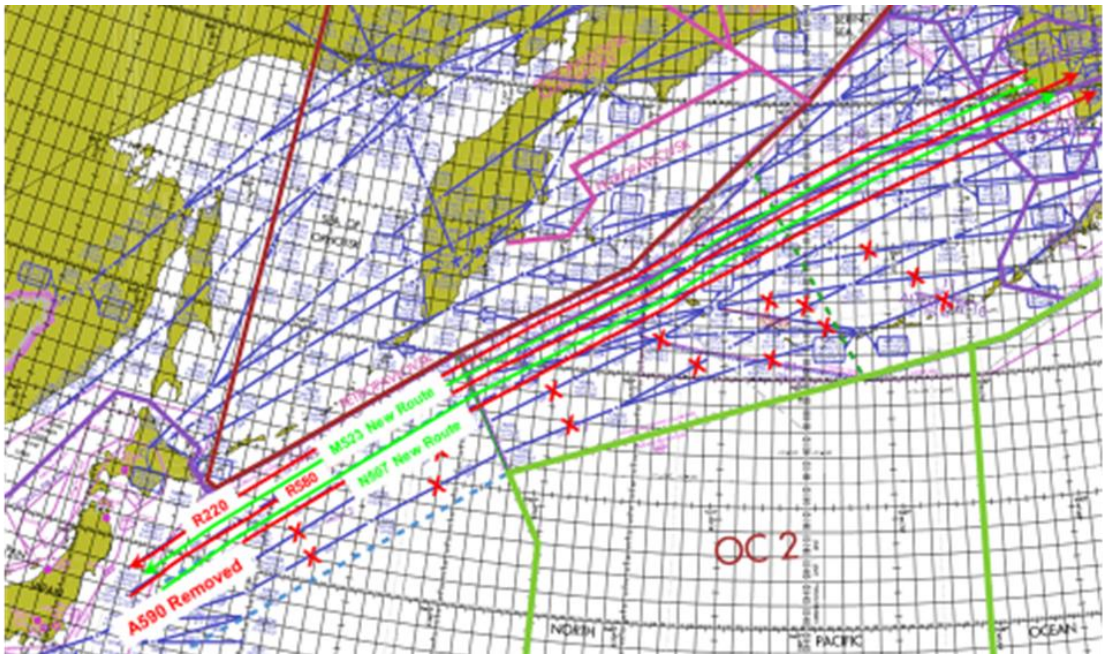

Figure 2: Future ATS routes on the completion phase of NOPAC redesign

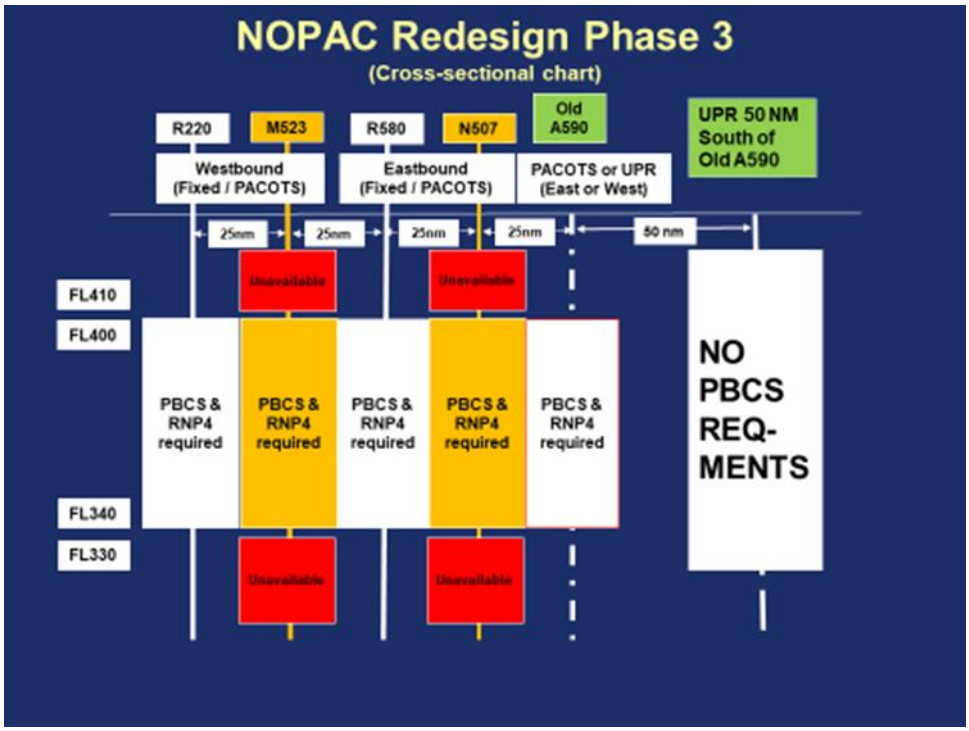

Figure 3: Cross-sectional chart of future ATS routes in NOPAC

2.9 If aircraft were identified as a non-PBCS-approved flight by JASMA, JASMA would provide the information on non-PBCS-approved aircraft to the Air Traffic Control Division of JCAB headquarters.

2.10 Thus, even if the aircraft operators filled "P2" and "RSP180" in their flight plan, the aircraft identified as non-PBCS-approved aircraft by JASMA might not be approved to fly on the new ATS routes or in the altitude stratum of R220 and R580, which would be approved and assigned only for RNP4 and PBCS approved aircraft after implementing the new ATS routes and the exclusive use of altitude stratum. However, the implementation date is not determined as of July 2022.

2.11 FAA and JCAB would provide the updated information for NOPAC Redesign Project at the relevant meetings hosted by the ICAO APAC Regional Office (e.g. ATM/SG meeting). Please kindly note that JCAB and JASMA encourage aircraft operators flying in the Pacific Ocean airspace to obtain PBCS approval/authorization and share the approval/authorization status with the designated RMAs.

2.12 JASMA would like to express our appreciation for States providing the authorizations of RCP240 and RSP180 to RMAs, and for RMAs updating the latest PBCS approval/authorization status on the KSN database.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper; and

b) discuss any relevant matters as appropriate.

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