



International Civil Aviation Organization
**ICAO Twenty-Eighth Meeting of the Regional Airspace Safety
Monitoring Advisory Group (RASMAG/28)**

Bangkok, Thailand, 21 – 24 August 2023

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 2023. The list of operator-aircraft combinations identified as non-PBCS-approved flight in June 2023 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 on the RMAs' approval databases every month since September 2019.

2. DISCUSSION

2.1 JASMA compared flight plans flying in the Pacific Ocean airspace of Fukuoka FIR with the latest RMAs' 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 2022 to June 2023.

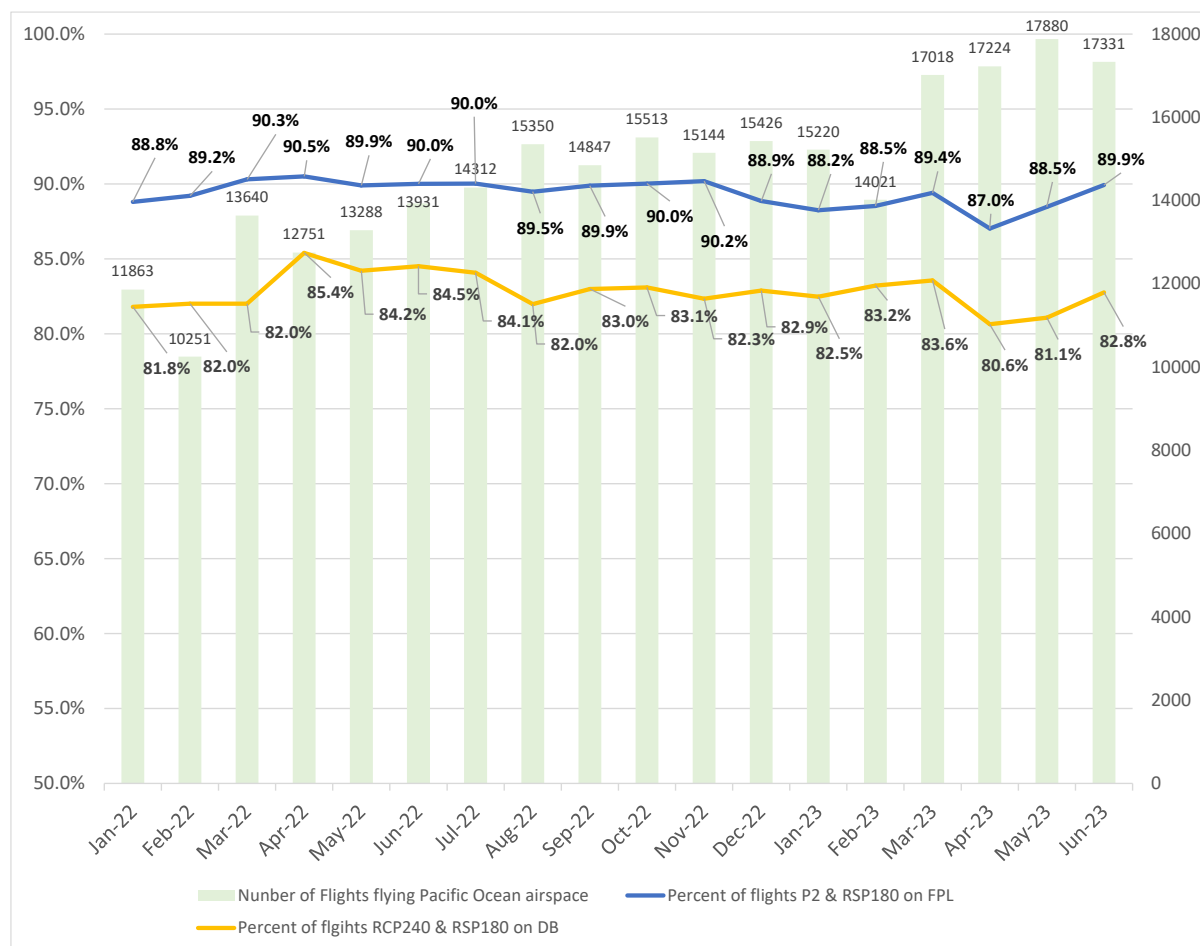


Figure 1: Percentage of PBCS-filed flights and PBCS-approved flights

2.4 The percentage of PBCS-filed flights was steady and approximately 90% in 2022, but it was slightly variable between 87% and 90% for the period of the first half of 2023. On the other hand, the percentage of PBCS-approved flights had maintained by approximately six to seven percent lower than the percentage of PBCS-filed flights.

2.5 It means that there were approximately 40 flights per day and 1,200 flights per month flying in the Pacific Ocean airspace of Fukuoka FIR in June 2023 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 non-PBCS flights. Those aircraft were flying in the airspace with filing "P2" and "RSP180" in their flight plans in June 2023, but their PBCS approval/authorization was not found in the approval database as of 11 July 2023.

Operator	Registration										Total	
AAL	N883BM	N886BR										2
AAR	HL7626	HL8356	HL8364	HL8371	HL8398	HL8399	HL8510	HL8511				8
ACA	CFGDT	CFGEI	CFNOE	CFNOG	CFNOH	CFNOI	CFRSA	CFRSE	CFRSI	CFRSR		48
	CFRTW	CFSBV	CFVLU	CFVNF	CFGDX	CFGDZ	CFGEO	CFGHZ	CFPQB	CFRSO		
	CFVLX	CFVLZ	CFVNB	CFGFZ	CFKSV	CFRTU	CFVND	CFRTG	CGHPQ	CGHPT		
	CGHPU	CGHPV	CGHPX	CGHPY	CGHQQ	CGHQY	CFNND	CFIUW	CGHKX	CGEGC		
	CFITW	CFIUL	CFIUR	CFIUW	CFIVM	CFIVS	CFRAM	CFVLQ				
AFR	FHTYL	FHTYM	FHTYN	FHTYO	FHTYP	FHTYR	FHTYS	FHTYT				8
APZ	HL8387	HL8389	HL8516									3
BOE	N8290V											1
CAO	B222S											1
CMB	N706CK	N919CA	N936CA									3
CPJ	VPCSY	VPCTT										2
DAL	N422DZ											1
HVN	VNA892	VNA893	VNA894	VNA895	VNA896	VNA898	VNA899					7
ICV	LXVCH	LXVCG	LXVCK	LXVCN								4
JST	VHVKB	VHVKG	VHVKH	VHVKJ	VHVKK	VHVKA	VHVKF	VHVKL	VHVKE			9
KAL	HL7602	HL8222	HL8068									3
KYE	N903AR	N904AR										2
QFA	VHZND											1
QQE	A7CGG	A7CGE	A7CGJ	A7CGB	A7CGC	A7CEE						6
QTR	A7BFC	A7BFS	A7BFU	A7BFE	A7BFI	A7BFZ						6
SIA	9VDHB	9VSCT										2
TWB	HL8500	HL8501	HL8502									3
TZP	JA827J	JA850J										2
UAL	N218UA	N27015	N37018	N57016	N74007	N76010	N76021	N77006	N77012	N77019		52
	N77022	N78001	N78002	N78008	N78009	N78017	N783UA	N787UA	N795UA	N206UA		
	N224UA	N227UA	N69020	N78004	N78005	N784UA	N79011	N33294	N34282	N36280		
	N37281	N37298	N73278	N73299	N79279	N77295	N222UA	N78013	N216UA	N223UA		
	N228UA	N229UA	N786UA	N788UA	N791UA	N792UA	N796UA	N799UA	N225UA	N226UA		
	N78003	N785UA										
UPS	N365UP	N366UP										2
VJT	9HVIE	9HVISTA	9HVIG	9HVIL	9HVIQ	9HVIB	9HVIN					7
WJA	CGKKN	CGMKS	CGUDH	CGUDO	CGURP	CGYRS						6
XAX	9MXXU	9MXXK										2

Table 1: Operators and aircraft identified as non-PBCS approved flight in June 2023

2.7 To enhance airspace capacity in the Pacific Ocean airspace, 23 NM lateral separation minima based on PBCS and RNP4 has already been implemented in the airspace of Fukuoka FIR entirely since 15 June 2023 as an operational trial.

2.8 Current RNAV10 (RNP10) routes and the Pacific Organized Track System (PACOTS) in the airspace are still established by using 50 NM lateral distance. However, new RNP4 routes, which aircraft are required PBCS and RNP4, are planning to be established in the North Pacific Ocean airspace in 2024, and the RNP4 routes would be separated at least 23 NM from other ATS routes.

2.9 Since lateral separation minima for PBCS/RNP4 aircraft has been reduced from 30 NM to 23 NM in Fukuoka FIR, the aircraft which do not have PBCS authorization/approval or meet the requirement of PBCS performance should be identified to ensure airspace safety.

2.10 Therefore, JASMA is planning to conduct to confirm the PBCS approval status of identified and listed aircraft as non-PBCS flights flying in the airspace implementing 23 NM lateral separation minima based on PBCS to the designated RMAs, as well as the RVSM flight plan checks, as a trial in 2023.

2.11 JASMA would like to express our appreciation for States/Administrations providing the authorizations of RCP240 and RSP180 to RMAs, and for RMAs updating the PBCS approval/authorization status on the RMAs' 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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