



**THE FORTY-THIRD MEETING OF THE  
INFORMAL PACIFIC ATC CO-ORDINATING GROUP  
(IPACG/43)**

(Tokyo, Japan 27 – 28 September 2017)

Agenda Item 5: Communications/Navigation/Surveillance (CNS) Issues

**Status of PBCS Implementation in the United States**

(Presented by the United States of America)

**SUMMARY**

The FAA is progressing the implementation of PBCS in accordance with the guidance provided in ICAO Doc 9869, Performance-based Communication and Surveillance (PBCS) Manual, Edition 2, Appendix A, PBCS Implementation Plan – Checklist. This paper provides details on the implementation status of each of the activities.

**1. Introduction**

1.1 ICAO Doc 9869, *Performance-based Communication and Surveillance (PBCS) Manual, Edition 2*, provides guidance for States implementing PBCS. The FAA has used Doc 9869 *Appendix A, PBCS Implementation Plan – Checklist*, as a template for a web-based implementation project management tool and information sharing mechanism for FAA stakeholder organizations.

1.2 This paper informs the IPACG/43 meeting of the status of each of the implementation plan task list items, which collectively serve to advance the implementation of PBCS in U.S. delegated airspace.

**2. Discussion**

*Group A tasks – State/region preparation*

2.1 A-1 Aeronautical Information Publication (AIP) – Prescription of RCP/RSP specification

a) Status: In progress. The U.S. AIP amendment is on schedule for publication. Prior to publication, the information will be made available within the U.S. Notice to Airmen Publication (NTAP) that is planned to be updated by November 2017.

b) Target Date: March 29, 2018

2.2 A-2 ANSP – PBCS policies, objectives supporting safety oversight

a) Status: In progress.

- i. FAA JO 7110.10, *Flight Services*, will be amended with updated flight plan filing information. The U.S. *Aeronautical Information Manual (AIM)* will also be updated.

- (a) Target Date: March 29, 2018

- ii. To satisfy the requirement for oversight and enforcement of network allocations, the FAA is considering two potential mechanisms. The FAA participates in efforts within the ICAO Operational Data Link Working Group (OPDLWG) PBCS Project Team to develop a “PBCS Charter” (see further information in IP titled *Status of PBCS Charter Development*), as one possible mechanism. In parallel the FAA is investigating potential modifications to their contract with ARINC.

- (a) Target Date: October 15, 2017

2.3 A-3 Operator and aircraft system – PBCS policies, objectives supporting safety oversight

- a) Status: In progress. FAA AC 90-117, *Data Link Communications*, is on schedule for publication in September 2017.

- i. Target Date: September 30, 2017

- b) Additionally, FAA Flight Standards Service will issue FAA inspector guidance, authorization templates (A056), and a compliance matrix.

- i. Target Date: October 30, 2017

2.4 A-4 Regional Supplementary Procedures (Doc 7030) for PBCS operations, if applicable

- i. Status: In progress. The amended NAT Doc 7030 is scheduled for publication. The FAA formally submitted the PfA for Asia and Pacific regions to the ICAO Bangkok office on 27 August 2017.

*Group B tasks – ANSP general project development and management*

2.5 B-1 PBCS Implementation Plan

- a) Status: Complete. The FAA has developed an online PBCS Implementation Plan, and assembled a coordination team with participants from FAA stakeholder organizations, which allows for real-time updates to communicate the status of PBCS implementation activities.

2.6 B-2 Target dates for PBCS and relevant ATM operations

- a) Status: Complete. The FAA has reached agreement with its NAT and PAC international partners regarding a target date for PBCS and relevant ATM operations. The date is 29 March 2018, in accordance with the following conclusions of the relevant ICAO bodies:

- i. NAT SPG Conclusion 52/19 – PBCS Operator Requirements in the NAT Region
- ii. NAT SPG Conclusion 52/20 – RCP/RSP Flight Plan Designators
- iii. Conclusion APANPIRG/27-7: PBCS Operator Requirements
- iv. Conclusion APANPIRG/27-8: State Implementation of ICAO Provisions for PBCS
- v. Conclusion APANPIRG/27-9: Asia/Pacific Region PBCS Transition Strategy

2.7 B-3 RCP/RSP specifications

- a) Status: Complete. The specifications are RSP180 and RCP240 for relevant separation standards, as noted in ICAO Doc 4444, PANS-ATM.

2.8 B-4 PBCS Awareness

- a) Status: In progress. In order to ensure widespread awareness of forthcoming PBCS implementation, the information scheduled for publication within the U.S. AIP will be provided within the Notice to Airmen Publication (NTAP) prior to March 29, 2018. Additionally, PBCS workshops for the North Atlantic Region (NAT) are being planned for November 2017 and January 2018. FAA Flight Standards and the Air Traffic Organization (ATO) will also ensure that PBCS awareness is promoted in the appropriate inspector and controller workplace forums.
- b) Target Date: January 31, 2018

*Group C tasks – ANSP implementation activities – ATS service provision*

2.9 C-1 Operational Concepts and procedures for PBCS operations

- a) Status: Draft complete. The ATO is developing a PBCS Concept of Operations (CONOPS) to address the impact of PBCS on existing use of performance-based separation minima. Attachment B contains a draft of the FAA CONOPS.
- b) Target Date for Final: September 30, 2017

2.10 C-2 ATC automation changes to use flight plan RCP/RSP indicators

- a) Status: In progress. The ATOP automation changes are scheduled to take place in September 2017.
- b) Target Date: September 30, 2017

2.11 C-3 ATC automation changes for PBCS monitoring

- a) Status: Complete. The current FAA automation includes data archiving functionality that enables access to the data required for PBCS monitoring. However, modifications are in progress to enhance the efficiency of the analysis and reporting process and augment data sharing capabilities., f

2.12 C-4 Confirm initial ANSP compliance with RCP/RSP specifications

- a) Status: In progress. While the FAA had participated in efforts within the Pacific and NAT regional groups to assess compliance of the ground data link systems with DO-306 safety requirements, and made system changes to ATOP to ensure compliance (see references below), the FAA is working to specifically document the FAA ATOP compliance using the template in Attachment B.
  - i. IPACG/29, FIT/16, WP/5, ATS Ground System SPR Compliance. The United States. Fukuoka, Japan, October 27-31, 2008.
  - ii. NAT CSNG/1, IP/2, DO-306/ED-122 Compliance Assessment Summary. The United States. Paris, 28 September to 2 October 2009.
  - iii. NAT CNSG/10, WP/9, United States DO-306/ED-122 Compliance Assessment Summary. The United States. Paris, France, 24-28 March 2014.
- b) Target Date: October 31, 2017

*Group D tasks – Aircraft operator, Aircraft type/system (airworthiness) eligibility*

2.13 D-1 Aircraft operator readiness

- a) Status: In progress. This task is assigned to aircraft operators. Aircraft operators should be working to assess and ensure compliance with RCP240/RSP180 requirements listed in ICAO Doc 9869, Tables B.2.1.4, B.2.1.5, C.2.1.4, C.2.1.5 in preparation to apply for operational approval per FAA AC 90-117 (task ID A-3).

2.14 D-2 Confirm initial operator and/or aircraft type/system compliance with RCP/RSP specifications

- a) Status: In progress. This task is assigned to aircraft operators. Once readiness is ensured per task ID D-1, they should provide confirmation to FAA inspectors, per FAA AC 90-117.

*Group E tasks – All stakeholders – post-implementation monitoring*

2.15 E-1 PBCS monitoring – post-implementation

- a) Status: In progress. The monitoring mechanisms are already in place.
- b) Target Date: N/A Ongoing

**3. Action by the meeting**

- 3.1 The meeting is requested to note the information.

**ATTACHMENT A in a separate document:** FAA ANSP Compliance Template

**ATTACHMENT B in a separate document:** FAA PBCS CONOPS