International Civil Aviation Organization

Tenth Meeting of the FANS Interoperability Team – Asia (FIT-Asia/10)

Video Teleconference, 03 – 06 August 2020

Agenda Item 3: PBCS Developments and Implementation

REGIONAL SUPPLEMENTARY PROCEDURES UPDATE

(Presented by the Secretariat)

SUMMARY

This paper presents the status of Regional Supplementary Procedures supporting performance-based separations in Asia/Pacific airspace over the high seas.

1. INTRODUCTION

1.1 ICAO Doc. 7030 – *Regional Supplementary Procedures* provides the procedural means of implementing in airspace over the high seas the provisions of Doc 4444 – *Procedures for Air Navigation Services – Air Traffic Services* (PANS-ATM), and any regionally agreed procedures supplementing the provisions of Annexes to the Convention and PANS. Doc. 7030 is available through the ICAO Secure Portal at http://portallogin.icao.int/.

1.2 Regional Supplementary Procedures must not be in conflict with the provisions contained in the Annexes or PANS.

1.3 Implementation of the performance-based separation minima based on RNAV 10/RNP 10, RNP 4 and/or RNP 2 and the supporting Performance-Based Communications and Surveillance (PBCS) specified in PANS-ATM in airspace over the high seas requires supporting Regional Supplementary Procedures.

2. DISCUSSION

History of PBCS in Doc 7030 - APANPIRG/28 Outcomes

2.1 The 28th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/28, Bangkok, Thailand, 11 to 14 September 2017) was informed that no Asia/Pacific States had either individually or collectively submitted PBCS-related Proposals for Amendment (PfAs) to SUPPS, as was expected under the Asia/Pacific PBCS Transition Strategy endorsed by APANPIRG/27.

2.2 APANPIRG/28 was further reminded that in cases where States did not implement PBCS in accordance with the provisions of the Annexes and PANS:

1. In the case of States that had not implemented operational authorization policies and procedures enabling operators to conduct flights in airspace where separations are dependent on PBCS, aircraft from its registry that operated in airspace where PBCS was implemented may be disadvantaged through tactical interventions by ATC; and

2. In the case of States that currently applied or planned to apply performance-based separation minima in airspace over the high seas, failure to update Doc 7030 to include PBCS support for such separations in their FIR/s would result in ATC separation procedures that were not compliant with the Annexes and PANS.

2.3 APANPIRG/28 agreed to the following Conclusion:

Conclusion APANPIRG/28/15: PBCS-Related Proposals for Amendment to Regional Supplementary Procedures

That, ICAO Asia/Pacific Regional Office is requested to circulate to States and then submit for consideration by the Council of ICAO the Proposals for Amendment to Regional Supplementary Procedures MID/ASIA and PAC to support performance-based separation.

2.4 The APANPIRG/28 meeting noted that the process of circulating the PfAs to States provided the opportunity for States to register any objections. In the event of an objection being received, the FIRs of the State concerned would be removed from the list of FIRs in the PfA before submission for approval by the Council of ICAO. This would also result in the removal of current non-compliant Regional Supplementary Procedures for all affected FIRs.

2.5 FIRs affected were:

MID/ASIA: Auckland Oceanic, Brisbane, Fukuoka, Ho Chi Minh, Hong Kong, Honiara, Kuala Lumpur, Melbourne, Nauru, New Zealand, Port Moresby, Sanya and Singapore.

PAC: Anchorage Oceanic, Auckland Oceanic, Nadi, Oakland Oceanic and Tahiti.

2.6 In accordance with ***Conclusion APANPIRG/28/15***, PfAs to Regional Supplementary Procedures were circulated to all States and relevant International Organizations under State Letter T 3/2.1, T 3/3.9 – AP148/17 (ATM) on 7 December 2017.

2.7 Consequently, State Letter T 3/2.1, T 3.3/9: AP039/18 (ATM) was circulated to Asia/Pacific Administrations, International Organizations and all other ICAO Regions on 28 March 2018. The State Letter, including the approved PfAs, is provided in **Attachment A**.

2.8 The meeting is invited to note that the Regional Supplementary Procedures for PBCS implementation support the application of performance-based separations by Asia/Pacific Administrations in their FIRs detailed as in **Table 1**.

Administration FIR/s	50 NM Lateral RNAV 10 (RNP 10)	50 Longitudinal RNAV 10 (RNP 10) with PBCS	23 NM Lateral RNP 4 or RNP 2 with PBCS	30 NM Longitudinal RNP 4 or RNP 2 with PBCS
Australia Brisbane and Melbourne	✓	✓	✓	✓
China Sanya	✓	✓		
Hong Kong, China Hong Kong	✓	✓		
France (Polynésie Française) Tahiti	✓	✓	✓	✓
Fiji Nadi	✓	✓	✓	✓
Japan Fukuoka	✓	✓	✓	✓
Malaysia Kuala Lumpur	✓	✓		
Nauru Nauru	✓	✓	✓	✓
New Zealand Auckland Oceanic and New Zealand	✓	✓	✓	✓
Papua New Guinea Port Moresby	✓	✓	✓	✓
Singapore Singapore	✓	✓		
Solomon Islands Honiara	✓	✓	✓	✓
USA Anchorage and Oakland Oceanic	✓	✓	✓	✓
Viet Nam Ho Chi Minh	✓	✓		

Table 1: Doc 7030-supported Performance Based Separations per APAC State/FIR

2.9 States not listed in Table 1 may have currently implemented, or intend to implement, performance-based separations in the high seas airspace within their FIRs. Such States may include (but not be limited to):

India, Indonesia, Maldives, Myanmar, Philippines, Sri Lanka.

2.10 States that are planning to implement performance-bases separation minima in airspace over the high seas, or have already done so without the necessary Doc 7030 support, are invited to inform the meeting, and to notify the ICAO Asia/Pacific Regional Office so that a coordinated PfA may be prepared.

2.11 In that regard, ICAO is currently engaged in the initial processing of a PfA including the following proposed amendments to Doc 7030 MID/ASIA, following consultation between ICAO APAC Regional Sub-Office (RSO) and Indonesia, Philippines and Sri Lanka:

6.2.1.3 The minimum lateral separation shall be 93 km (50 NM) between aircraft meeting RNAV 10 (RNP 10) in accordance with 4.1.1.1 on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Colombo, Fukuoka, Ho Chi Minh, Hong Kong, Honiara, Jakarta, Kuala Lumpur, Manila, Melbourne, Nauru, New Zealand, Port Moresby, Sanya, ~~and~~ Singapore and Ujung Pandang FIRs.

Secretariat Note: This separation minimum does not require PBCS support.

Sri Lanka has confirmed the intention to include 50NM longitudinal separation (see below) for the Colombo FIR. Confirmation is sought on the matter of 50NM lateral separation.

Indonesia currently applies 50NM longitudinal separation based on RNAV 10 (RNP 10) in the Jakarta FIR (see below). Confirmation is sought on the matter of 50NM lateral separation.

6.2.1.4 The minimum lateral separation shall be 42.6 km (23 NM) between aircraft on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Honiara, Melbourne, Nauru, New Zealand~~, and~~ Port Moresby and Ujung Pandang FIRs. This minimum is applied in accordance with 5.4.1.2.1.6 b) of PANS-ATM and provided the following conditions are met:

a) communication – CPDLC RCP 240 per para 3.1.1.1;

b) navigation – RNP 4, or RNP 2 per para 4.1.2.1 and 4.1.2.2;

c) surveillance – ADS-C RSP 180 per para. 5.4.1.2

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New Para The minimum longitudinal separation shall be 93 km (50 NM) between aircraft on designated controlled oceanic routes or areas within the Jakarta FIR. This minimum is applied in accordance with 5.4.2.6 of PANS-ATM.

Secretariat Note: The specific separation minimum in PANS-ATM 5.4.2.6 is not dependent on RCP240/RSP180.

Clarification from ICAO HQ on whether this separation minimum requires Doc 7030 support will also be sought.

6.2.2.x The minimum longitudinal separation shall be 93 km (50 NM) between aircraft on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Colombo, Fukuoka, Ho Chi Minh, Hong Kong, Honiara, Kuala Lumpur, Manila, Melbourne, Nauru, New Zealand, Port Moresby, Sanya, ~~and~~ Singapore and Ujung Pandang FIRs. This minimum is applied in accordance with 5.4.2.9 of PANS-ATM and provided the following conditions are met:

a) communication – CPDLC RCP240 per para. 3.1.1.2;

b) navigation – RNAV 10 (RNP 10) RNP 4, or RNP 2 per para 4.1.1.1, 4.1.2.1 and 4.1.2.2;

c) surveillance – ADS-C RSP 180 per para. 5.4.1.2.

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6.2.2.x The minimum longitudinal separation shall be 55.5 km (30 NM) between aircraft on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Honiara, Melbourne, Nauru, New Zealand~~, and~~ Port Moresby and Ujung Pandang FIRs. This minimum is applied in accordance with 5.4.2.9 of PANS-ATM and provided the following conditions are met:

a) communication – CPDLC RCP240 per para. 3.1.1.2;

b) navigation – RNP 4, or RNP 2 per para 4.1.2.1 and 4.1.2.2;

c) surveillance – ADS-C RSP 180 per para. 5.4.1.2.

Secretariat Note: Indonesia has confirmed the intention to include 50NM longitudinal and 23NM lateral separation minimums supported by PBCS in the Ujung Pandang FIR. Noting that the 23NM lateral and 30NM longitudinal separation minimums share the same dependencies on PBCS, confirmation is sought on the matter of whether Indonesia may also intend to introduce 30NM longitudinal separation.

2.12 Further PfAs are currently in the initial coordination stage, to introduce separation based on ADS-B *In-Trail Procedure* (ITP) and *Climb and Descend Procedure* (CDP) in selected FIRs.

2.13 The meeting is invited to note that ICAO is commencing a two-phase project to:

a) restructure Doc 7030 (currently structured with MID/ASIA and PAC regions, and others) to align with the ICAO Regions (APAC, etc.); and

b) conduct a follow-up review of the document to remove redundant information and carry through consequential changes arising from amendments to ICAO Annexes and PANS.

2.14 On commencement of the project a moratorium, notified by State Letter, will be placed on the processing of PfAs.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper;

b) Note that Doc 7030 support is necessary for the implementation of performance-based separations in airspace over the high seas;

c) Commit to a course of action to submit the necessary Proposals for Amendment to Doc 7030 (India, Maldives, Myanmar, and others, where necessary);

d) Seek confirmation of details for the Doc 7030 PfA from Indonesia, Philippines and Sri Lanka.

e) notify the ICAO Asia and Pacific Regional Office of any requirements or proposals for amendment to Doc 7030; and

f) discuss any relevant matters as appropriate.

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Reference : T 3/2.1, T 3.3/9: AP039/18 (ATM) 28 March 2018

Subject : **Approval of a Proposal for Amendment to the Regional Supplementary Procedures (Doc 7030/5),** (Serial No. APAC-S 17/10-MID/ASIA 2,3,4,5,6,7) (Serial No. APAC-S 17/11-PAC 2,3,4,5,6,7)

Sir/Madam,

1. I wish to inform you that the attached amendment of the Proposal for Amendment to the Regional Supplementary Procedures (Doc 7030/5), (Serial No. APAC-S 17/10-MID/ASIA 2,3,4,5,6,7) (Serial No. APAC-S 17/11-PAC 2,3,4,5,6,7) has been processed according to the procedure approved by the Council on 13 March 2018 and so is now approved.

2. The material concerned will be implemented on 29 March 2018.

3. This change will be incorporated in the new Sixth Edition of Doc 7030/6 as part of the restructuring process of Doc 7030.

Yours sincerely.

Arun Mishra
ICAO Regional Director
Asia and Pacific

Enclosure:
Proposal for Amendment to the Regional
Supplementary Procedures (Doc 7030/5),
(Serial No. APAC-S 17/10-MID/ASIA 2,3,4,5,6,7)
(Serial No. APAC-S 17/11-PAC 2,3,4,5,6,7)

ATTACHMENT A

PROPOSAL FOR AMENDMENT OF THE REGIONAL SUPPLEMENTARY PROCEDURES MIDDLE EAST/ASIA (MID/ASIA) REGION (Doc. 7030/5)

(Serial No.: APAC-S 17/10-MID/ASIA 2,3,4,5,6,7)

a) **Regional Supplementary Procedures:**

MID/ASIA

b) **Proposed by:**

Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG)

c) **Proposed amendment:**

Editorial Note: Amendments are arranged to show deleted text using strikeout (~~text to be deleted~~), and added text with grey shading (text to be inserted).

Glossary

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RCP	required communication performance
RSP	required surveillance performance
PBC	performance-based communication
PBCS	performance-based communication and surveillance
PBN	performance-based navigation
PBS	performance-based surveillance

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Chapter 2. FLIGHT PLANS

2.1 CONTENT – GENERAL (A2 – Chapter 3; P-ATM – Chapter 4 and Appendix 2)

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2.1.5 Required communication performance (RCP) specifications

2.1.5.1 From 29 March 2018, all aircraft authorized for performance-based communication (PBC) and planning to operate in the MID/ASIA Region shall insert the appropriate descriptor(s) in Item 10a of the flight plan to indicate the compliance with the relevant required communication performance (RCP) specification(s).

2.1.6 Required surveillance performance (RSP) specifications

2.1.6.1 From 29 March 2018, all aircraft authorized for performance-based surveillance (PBS) and planning to operate in the MID/ASIA Region shall insert relevant required surveillance performance (RSP) specification(s) (e.g. RSP 180) in Item 18 of the flight plan following the SUR/ indicator.

2.1.~~5~~7 Reduced vertical separation minimum (RVSM) approved aircraft

2.1.~~5~~7.1 The aircraft registration shall be inserted in Item 18 of the ICAO flight plan form.

2.1.~~5~~7.2 Operators of formation flights of State aircraft shall not insert the letter W in Item 10 of the ICAO flight plan form, regardless of the RVSM approval status of the aircraft concerned. Operators of formation flights of State aircraft intending to operate within the RVSM airspace specified in 4.2.2 shall include STS/NONRVSM in Item 18 of the ICAO flight plan form.

2.1.~~6~~8 Non-RVSM-approved aircraft

2.1.~~6~~8.1 Civil operators of non-RVSM-approved aircraft shall flight plan to operate outside the RVSM airspace specified in 4.2.2.

2.1.~~7~~9 Non-RVSM-approved State aircraft

Nil.

2.1.~~8~~10 Indication of 8.33 kHz channel spacing capability

Nil.

2.1.~~9~~11 Route

Nil.

2.1.~~10~~12 Estimated times

Nil.

2.1.~~11~~13 Mach number

2.1.~~11~~13.1 For turbo-jet aircraft intending to operate within airspace and on air routes to which longitudinal separation minima utilizing Mach number technique will be applied, the planned true Mach number shall be specified in Item 15 of the flight plan.

2.1.~~12~~14 Alternative flight level

Nil.

2.1.~~13~~15 Special handling (STS)

Nil.

2.1.~~14~~16 Controller-pilot data link communications (CPDLC)

~~Nil~~

2.1.16.1 All aircraft planning to operate in the MID/ASIA Region and intending to use controller-pilot data link communications (CPDLC) shall insert the appropriate descriptor(s); (J2, J3, J4, J5, J6 and/or J7) in Item 10a of the flight plan.

2.1.17 Automatic dependent surveillance –contract (ADS-C)

2.1.17.1 All aircraft planning to operate in the MID/ASIA Region and intending to use automatic dependent surveillance — contract (ADS-C) services shall insert the D1 descriptor in Item 10b of the flight plan.

Editorial Note. — All remaining paragraphs in Chapter 2 are renumbered accordingly.

Chapter 3. COMMUNICATIONS

3.1 AIR-GROUND COMMUNICATIONS AND IN-FLIGHT REPORTING

~~3.1.1 Communications equipment~~

~~Nil~~

3.1.1 PERFORMANCE BASED COMMUNICATIONS (PBC)

(A6, Part I – Chapter 7; A6, Part II – Chapter 2.5; A6, Part III, Sections II and III – Chapter 5; A11 –

Chapters 2, 3 and 6; A15 – Chapter 7, P-ATM – Chapters 4 and 5, and Appendix 2)

Note.— Additional guidance can be found in the ICAO Performance-based Communication and Surveillance (PBCS) Manual (Doc 9869).

3.1.1.1 Required communication performance (RCP) Specifications

3.1.1.1.1 RCP 240

3.1.1.1.1.1 RCP 240 is applicable to communication systems used to support the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4.

Note. — Note. As of 29 March 2018, the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4 will be applied in portions of the MID/ASIA Region, as notified in State AIPs.

Means of compliance

3.1.1.1.1.2 The aircraft operator shall:

a) implement provisions for receiving reports of performance and taking corrective actions for aircraft identified as not complying with RCP specification(s); and

b) be authorized by the State of the Operator or the State of Registry, as appropriate, in order to qualify for the separation minima specified in 6.2.1. 4, 6.2.2.2 and 6.2.2.4.

3.1.1.1.1.3 The air navigation services providers (ANSPs) shall:

a) ensure that the communication system satisfies RCP 240 when applying the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4;

b) establish PBCS monitoring programmes; and

c) apply the appropriate flight plan designator to determine aircraft eligibility for the application of relevant separation minima.

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~~**3.3 CONTROLLER PILOT DATA LINK COMMUNICATIONS (CPDLC)**~~

~~Nil.~~

Editorial Note.— All remaining paragraphs in Chapter 3 are renumbered accordingly.

Editorial Note.— Chapter 4 is included for reference and consequential amendments resulting from PBCS Pfa.

Chapter 4. NAVIGATION

4.1 PERFORMANCE-BASED NAVIGATION (PBN)

Note.— As the Middle East and Asia (MID/ASIA) Regions transition to PBN as contained in the Performance-based Navigation (PBN) Manual (Doc 9613), the contents of 4.1 will be amended.

4.1.1 Area navigation (RNAV) specifications

4.1.1.1 RNAV 10 (RNP 10)

Note.— RNAV 10 retains the RNP 10 designation, as specified in the Performance-based Navigation (PBN) Manual (Doc 9613), 1.2.3.5.

Area of applicability

4.1.1.1.1 The RNAV 10 (RNP 10) specification or better is applicable to navigation systems used to support the separation minima specified in 6.2.1.3 and 6.2.2.2.

~~4.1.1.1.1 For flights on designated controlled oceanic routes or areas within the Auckland Oceanic, , Brisbane, Fukuoka, Ho Chi Minh, Hong Kong, Honiara, Kuala Lumpur, Melbourne, Nauru, New Zealand, Port Moresby, Sanya, and Singapore FIRs, a lateral separation minimum of 93 km (50 NM) may be applied.~~

~~4.1.1.1.2 For flights on designated controlled oceanic routes or areas within the Auckland Oceanic, , Brisbane, Fukuoka, Ho Chi Minh, Hong Kong, Honiara, Kuala Lumpur, Melbourne, Nauru, New Zealand, Port Moresby, Sanya, and Singapore FIRs, a longitudinal separation minimum of 93 km (50 NM) derived by RNAV may be applied between RNAV-equipped aircraft approved to RNP 10 or better, in accordance with the provisions of the PANS-ATM, 5.4.2.6.~~

Means of compliance

4.1.1.1.3~~2~~ For application of 4.1.1.1.1 ~~and 4.1.1.1.2~~, the aircraft and the operator must have been approved by the State of Registry or the State of the Operator, as appropriate, to meet the following requirements (or equivalent):

a) aircraft navigation performance shall be such that the standard deviation of lateral track errors shall be less than 8.7 km (4.7 NM) (or the aircraft approved to RNP 10); and

b) operator programmes shall be established to mitigate the occurrence of large navigational errors due to equipment malfunction or operational error:

1) operator in-flight operating drills shall include mandatory navigation cross-checking procedures to identify navigation errors in sufficient time to prevent aircraft from inadvertent deviation from ATC-cleared route; and

2) the operator shall establish programmes to provide for the continued airworthiness of aircraft navigation systems necessary to navigate to the degree of accuracy required.

…

4.1.2 Required navigation performance (RNP) specifications

4.1.2.1 RNP 4

Area of applicability

4.1.2.1.1 The RNP 4 specification shall be applicable to navigation systems used to support the separation minima specified in 6.2.1.3, 6.2.1.4, 6.2.2.2 and 6.2.2.4

~~4.1.2.1.1 For flights on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Honiara, Melbourne, Nauru, New Zealand and Port Moresby, FIRs, a lateral separation minimum of 55.5 km (30 NM) may be applied.~~

~~4.1.2.1.2 For flights on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Honiara, Melbourne, Nauru, New Zealand and Port Moresby FIRs, a longitudinal separation minimum of 55.5 km (30 NM) derived by RNAV may be applied between RNAV-equipped aircraft approved to RNP 4 or better, in accordance with the provisions of the PANS-ATM 5.4.2.6.~~

Means of compliance

4.1.2.1.2 Aircraft must be approved by the State of Registry or the State of the Operator to RNP 4.

4.1.2.2 RNP 2

4.1.2.2.1 The RNP 2 specification shall be applicable to navigation systems used to support the separation minima specified in in 6.2.1.3, 6.2.1.4, 6.2.2.2 and 6.2.2.4.

Means of compliance

4.1.2.2.2 Aircraft must be approved by the State of Registry or the State of the Operator to RNP 2.

Editorial Note.— All remaining paragraphs in Chapter 4 are renumbered accordingly.

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Chapter 5. SURVEILLANCE
(P-OPS, Vol. 1; P-ATM – Chapter 8)

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5.4 PERFORMANCE-BASED SURVEILLANCE (PBS)

~~5.4 AUTOMATIC DEPENDENT SURVEILLANCE – CONTRACT (ADS-C)~~

~~Nil.~~

(A6, Part I – Chapter 7; A6, Part II – Chapter 2.5; A6, Part III, Sections II and III – Chapter 5; A11 – Chapters 2, 3 and 6; A15 – Chapter 7, P-ATM – Chapters 4 and 5, and Appendix 2)

Note.— Additional guidance can be found in the ICAO Performance-based Communication and Surveillance (PBCS) Manual (Doc 9869).

5.4.1 Required surveillance performance (RSP) specifications

5.4.1.2 RSP 180

5.4.1.2.1 RSP 180 is applicable to surveillance systems used to support the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4.

Means of compliance

5.4.1.2.2 The aircraft operator shall:

a) implement provisions for receiving the reports of observed performance and taking corrective actions for aircraft identified as not complying with RSP specification(s); and

b) be authorized by the State of the Operator or the State of Registry, as appropriate, in order to qualify for the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4.

5.4.1. 2.3 The air navigation services providers (ANSPs) shall:

a) ensure that the communication system satisfies RSP 180 when applying the separation minima specified in 6.2.1 and 6.2.2;

b) establish PBCS monitoring programmes; and

c) apply the appropriate flight plan designator to determine aircraft eligibility for application of relevant separation minima.

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Editorial Note.— All remaining paragraphs in Chapter 5 are renumbered accordingly.

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Chapter 6. AIR TRAFFIC SERVICES

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6.2 SEPARATION

6.2.1 Lateral

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6.2.1.3 The minimum lateral separation shall be 98 km (50 NM) between aircraft meeting RNAV 10 (RNP 10) in accordance with 4.1.1.1 on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Ho Chi Minh, Hong Kong, Honiara, Kuala Lumpur, Melbourne, Nauru, New Zealand, Port Moresby, Sanya and Singapore FIRs:

~~6.2.1.3 The minimum lateral separation shall be 93 km (50 NM) between aircraft meeting the provisions in 4.1.1.1.~~

6.2.1.4 The minimum lateral separation shall be 42.6 km (23 NM) between aircraft on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Honiara, Melbourne, Nauru, New Zealand and Port Moresby FIRs. This minimum is applied in accordance with 5.4.1.2.1.6 b) of PANS-ATM and provided the following conditions are met:

a) communication – CPDLC RCP 240 per para, 3.1.1.1;

b) navigation – RNP 4, or RNP 2 per para.4.1.2.1 and 4.1.2.2;

c) surveillance – ADS-C RSP 180 per para. 5.4.1.2.

6.2.1.4 ~~The minimum lateral separation shall be 55.5 km (30 NM) between aircraft meeting the provisions in 4.1.2.1, provided:~~

a) ~~the aircraft are approved by the State of Registry or the State of the Operator to RNP 4;~~

b) ~~direct controller-pilot voice communications or controller-pilot data link communications (CPDLC) are maintained;~~

c) ~~surveillance is maintained using an automatic dependent surveillance (ADS) system; and~~

d) ~~an ADS lateral deviation change event contract is established, with a lateral deviation threshold of 9.3 km (5 NM)~~

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6.2.2 Longitudinal

(P-ATM – Chapters 5 and 13)

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6.2.2.2 The minimum longitudinal separation shall be 98 km (50 NM) between aircraft on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Ho Chi Minh, Hong Kong, Honiara, Kuala Lumpur, Melbourne, Nauru, New Zealand, Port Moresby, Sanya and Singapore FIRs. This minimum is applied in accordance with 5.4.2.9 of PANS-ATM and provided the following conditions are met:

a) communication – CPDLC RCP 240 per para. 3.1.1.2;

b) navigation – RNAV 10 (RNP 10), RNP 4, or RNP 2 per para. 4.1.1.1, 4.1.2.1 and 4.1.2.2;

c) surveillance – ADS-C RSP 180 per para. 5.4.1.2.

~~6.2.2.2 The minimum longitudinal separation shall be 93 km (50 NM) derived by RNAV between aircraft meeting the provisions in 4.1.1.1.~~

…

6.2.2.4 The minimum longitudinal separation shall be 55.5 km (30 NM) between aircraft on designated controlled oceanic routes or areas within the Auckland Oceanic, Brisbane, Fukuoka, Honiara, Melbourne, Nauru, New Zealand and Port Moresby FIRs. This minimum is applied in accordance with 5.4.2.9 of PANS-ATM and provided the following conditions are met:

a) communication – CPDLC RCP 240 per para. 3.1.1.2;

b) navigation – RNP 4, or RNP 2 per para. 4.1.2.1 and 4.1.2.2;

c) surveillance – ADS-C RSP 180 per para. 5.4.1.2.

~~6.2.2.4 The minimum longitudinal separation shall be 55.5 km (30NM) between aircraft meeting the provisions in 4.1.2.1~~

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Chapter 7. SAFETY MONITORING

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7.2 AIRSPACE MONITORING

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7.2.4 PBCS

7.2.4.1 Adequate monitoring shall be conducted to assess continuing compliance of the communication and surveillance systems with the prescribed RCP and/or RSP specifications.

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Editorial Note.— All remaining paragraphs in Chapter 7 are renumbered accordingly.

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-END-

d) **Date when proposal received:**

15 September2017

e) **Proposer's reason for amendment:**

1. This proposal for amendment was developed by ICAO Asia and Pacific Regional Office responding to the request by the 28th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/28, Bangkok, Thailand, 11 to 14 September 2017) that ICAO circulate to States and then submit for consideration by the Council of ICAO the Proposals for Amendment to ICAO Doc 7030 Regional

Supplementary Procedures MID/ASIA and PAC to support performance-based separation. *Conclusion APANPIRG/28/15* Refers. The new performance-based communication and surveillance (PBCS) provisions supporting performance-based separation became applicable in November 2016 under amendments to ICAO Annexes 6 and 11, and Doc 4444.

2. This amendment is necessary to ensure that Doc 7030 is updated to correctly support the current standards and procedures specified in Annexes 6 and 11 and Doc 4444.

3. Annex 11 sections 2.8.1 and 2.9.1 state that the RCP and RSP specifications shall be prescribed, when applicable, on the basis of regional air navigation agreements. This proposal for amendment will represent the agreement of the MID/ASIA Region on the implementation operator authorization and flight planning requirements and, in specified FIRs, separation minima based on PBC, PBN and PBS.

4. The following APANPIRG/27 (September 2016) and APANPIRG/28 Conclusions support this PfA:

    a. *Conclusion APANPIRG/27/7: PBCS Operator Requirements*, urging States to take appropriate measures to enable aircraft operators to file RCP and RSP indicators in flight plans;

    b. *Conclusion APANPIRG/27/8: State Implementation of ICAO Provisions for PBCS*, urging States that apply or plan to apply performance-based separation to implement ATM system capability by not later than 29 March 2018, and apply common implementation dates supported by joint submissions of PfAs to Doc 7030;

    c. *Conclusion APANPIRG/27/9: Asia/Pacific Region PBCS Transition Strategy*, endorsing a strategy for implementation of the new PBCS provisions in Annexes 6 and 11 and Doc 4444 by not later 29 March 2018;

    Note: The Asia/Pacific Region PBCS Transition Strategy was developed in coordination with the North Atlantic (NAT) Region Systems Planning Group (NAT SPG).

    d. Conclusion APANPIRG/28/11: PBCS Operational Authorizations, urging States to expedite action on the development and implementation of a PBCS authorization process, to share information on the availability of PBCS regulatory material and operator readiness, and to monitor and make available communications and surveillance performance against the RCP 240 and RSP 180 specifications;

    e. *Conclusion APANPIRG/28/15*: PBCS-Related Proposals for Amendment to Regional Supplementary Procedures, requesting the ICAO Asia/Pacific Regional Office to circulate to States and then submit to the Council of ICAO this PfA.

5. Taking similar action in support of the PBCS implementation the 52nd Meeting of the North Atlantic Systems Planning Group (NAT SPG/52, June 2016) approved Conclusions 52/19 and 52/20 urging: a) user States (States of the Operator or Registry) to take appropriate measures to develop, establish and implement necessary policies and procedures to ensure that their operators conducting flights in the NAT Region would be compliant with PBCS requirements, and b) the NAT provider States and their ANSPs that planned to apply 42.6 km (23 NM) lateral separation minimum and/or 55.5 km (30 NM), 93 km (50 NM) and/or 5-minute longitudinal separation minima implement the capability to process and apply ICAO PBCS flight plan designators to determine aircraft eligibility for performance-based horizontal separation by 29 March 2018.

f) **Proposed implementation date of the amendment:**

Upon approval by Council.

g) **Action by the Secretary General:**

The proposal has been circulated to the following States and international organizations:

Afghanistan
Albania
Algeria
Andorra
Angola
Argentina
Armenia
Australia
Austria
Azerbaijan
Bahamas
Bahrain
Bangladesh
Belarus
Belgium
Benin
Bhutan
Bolivia (Plurinational State of)
Bosnia and Herzegovina
Botswana
Brazil
Brunei Darussalam
Bulgaria
Burkina Faso
Cameroon
Canada
Cape Verde
Central African Republic
Chad
Chile
China
Colombia
Congo
Côte d'Ivoire
Croatia
Cuba
Cyprus
Czech Republic
Democratic People's Rep. of Korea
Democratic Republic of the Congo
Denmark
Djibouti
Dominican Republic
Ecuador
Egypt
El Salvador
Eritrea
Estonia
Ethiopia
Finland
France
Gabon
Gambia
Georgia
Germany
Ghana
Greece
Guinea-Bissau
Haiti
Hungary
Iceland
India
Indonesia
Iran (Islamic Republic of)
Iraq
Ireland
Israel
Italy
Jamaica
Japan
Jordan
Kazakhstan
Kenya
Kuwait
Kyrgyzstan
Latvia
Lebanon
Libya
Lithuania
Luxembourg
Madagascar
Malaysia
Maldives
Mali
Malta
Mauritania
Mauritius
Mexico
Monaco
Mongolia
Montenegro
Morocco
Mozambique
Namibia
Nepal
Netherlands
New Zealand
Niger
Nigeria
Norway
Oman
Pakistan
Paraguay
Peru
Philippines
Poland
Portugal
Qatar
Republic of Korea
Republic of Moldova
Romania
Russian Federation
San Marino
Saudi Arabia
Senegal
Serbia
Seychelles
Sierra Leone
Singapore
Slovakia
Slovenia
Somalia
South Africa
Spain
Sri Lanka
Sudan
Suriname
Swaziland
Sweden
Switzerland
Syrian Arab Republic
Tajikistan
Thailand
The Former Yugoslav Republic of Macedonia
Togo
Trinidad and Tobago
Tunisia
Turkey
Turkmenistan
Uganda
Ukraine
United Arab Emirates
United Kingdom
United Republic of Tanzania
United States
Uruguay

Uzbekistan		IBAC
Venezuela	EUROCONTROL	IFALPA
Viet Nam	CANSO	IFATCA
Yemen	IACA	
Zambia	IAOPA	
Zimbabwe	IATA	

h) **Secretariat's comments:**

This proposal for amendment was initially developed by the FANS Interoperability Team – Asia (FIT-Asia) as a template for submission by States or Groups of States and, following the request by APANPIRG/28 under Conclusion APANPIRG/28/15, further developed and modified in consultation between the ICAO Asia/Pacific Regional Office and ICAO Headquarters. This ensures conformance with the provisions of Annexes 6 and 11 and the PANS-ATM, and with the ICAO rules and practices for drafting amendments to Regional Supplementary Procedures, and provides for alignment with Regional Supplementary Procedures and NAT and PAC where necessary.

The provisions in this PfA related to implementation of PBCS by ANSPs to support the application of performance-based separation by ATC apply only to the FIRs previously specified in Doc 7030 to provide separation based on RNAV 10/RNP 10 and RNP 4.

The provisions in this PfA related to operator authorizations and flight planning of PBCS capability apply to all operators (and their States) that plan to operate flights in airspace where performance-based separation requiring PBCS may be applied to their flights.

— — — — — — — —

ATTACHMENT B

PROPOSAL FOR AMENDMENT OF THE REGIONAL SUPPLEMENTARY PROCEDURES PACIFIC (PAC) REGION (Doc. 7030/5)

(Serial No.: APAC-S 17/11-PAC 2, 3, 4, 5, 6, 7)

a) **Regional Supplementary Procedures:**

PAC.

b) **Proposed by:**

Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG)

c) **Proposed amendment:**

Editorial Note: Amendments are arranged to show deleted text using strikeout (~~text to be deleted~~), and added text with grey shading (text to be inserted).

Glossary

…

RCP	required communication performance
RSP	required surveillance performance
PBC	performance-based communication
PBCS	performance-based communication and surveillance
PBN	performance-based navigation
PBS	performance-based surveillance

…

Chapter 2. FLIGHT PLANS

2.1 CONTENT – GENERAL (A2 – Chapter 3; P-ATM – Chapter 4 and Appendix 2)

…

2.1.5 Required communication performance (RCP) specifications

2.1.5.1 From 29 March 2018, all aircraft authorized for performance-based communication (PBC) and planning to operate in the PAC Region shall insert the appropriate descriptor(s) in Item 10a of the flight plan to indicate the compliance with the relevant required communication performance (RCP) specification(s).

2.1.6 Required surveillance performance (RSP) specifications

2.1.6.1 From 29 March 2018, all aircraft authorized for performance-based surveillance (PBS) and planning to operate in the PAC Region shall insert relevant required surveillance performance (RSP) specification(s) (e.g. RSP 180) in Item 18 of the flight plan following the SUR/ indicator.

2.1.~~5~~7 Reduced vertical separation minimum (RVSM) approved aircraft

2.1.~~5~~7.1 The aircraft registration shall be inserted in Item 18 of the ICAO flight plan form.

2.1.~~6~~8 Non-RVSM-approved aircraft

Nil.

2.1.~~7~~9 Non-RVSM-approved State aircraft

Nil.

2.1.~~8~~10 Indication of 8.33 kHz channel spacing capability

Nil.

2.1.~~9~~11 Route

Nil.

2.1.~~10~~12 Estimated times

Nil.

2.1.~~11~~13 Mach number

2.1.~~11~~13.1 For turbo-jet aircraft intending to operate within the Anchorage Oceanic and Oakland Oceanic FIRs, the planned true Mach number shall be specified in Item 15 of the flight plan.

2.1.~~12~~14 Alternative flight level

Nil.

2.1.~~13~~15 Special handling (STS)

Nil.

2.1.~~14~~16 Controller-pilot data link communications (CPDLC)

~~Nil~~

2.1.16.1 All aircraft planning to operate in the PAC Region and intending to use controller-pilot data link communications (CPDLC) shall insert the appropriate descriptor(s); (J2, J3, J4, J5, J6 and/or J7) in Item 10a of the flight plan.

2.1.17 Automatic dependent surveillance –contract (ADS-C)

2.1.17.1 All aircraft planning to operate in the PAC Region and intending to use automatic dependent surveillance — contract (ADS-C) services shall insert the D1 descriptor in Item 10b of the flight plan.

Editorial Note. — All remaining paragraphs in Chapter 2 are renumbered accordingly.

Chapter 3. COMMUNICATIONS

3.1 AIR-GROUND COMMUNICATIONS AND IN-FLIGHT REPORTING

~~3.1.1 Communications equipment~~

~~Nil~~

3.1.1 PERFORMANCE BASED COMMUNICATIONS (PBC)

(A6, Part I – Chapter 7; A6, Part II – Chapter 2.5; A6, Part III, Sections II and III – Chapter 5; A11 – Chapters 2, 3 and 6; A15 – Chapter 7, P-ATM – Chapters 4 and 5, and Appendix 2)

Note.— Additional guidance can be found in the ICAO Performance-based Communication and Surveillance (PBCS) Manual (Doc 9869).

3.1.1.1 Required communication performance (RCP) Specifications

3.1.1.1.1 RCP 240

3.1.1.1.1.1 RCP 240 is applicable to communication systems used to support the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4.

Note. As of 29 March 2018, the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4 will be applied in portions of the PAC Region, as notified in State AIPs.

Means of compliance

3.1.1.1.1.2 The aircraft operator shall:

a) implement provisions for receiving reports of performance and taking corrective actions for aircraft identified as not complying with RCP specification(s); and

b) be authorized by the State of the Operator or the State of Registry, as appropriate, in order to qualify for the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4.

3.1.1.1.1.3 The air navigation services providers (ANSPs) shall:

a) ensure that the communication system satisfies RCP 240 when applying the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4;

b) establish PBCS monitoring programmes; and

c) apply the appropriate flight plan designator to determine aircraft eligibility for the application of relevant separation minima.

…

~~**3.3 CONTROLLER-PILOT DATA LINK COMMUNICATIONS (CPDLC)**~~

~~Nil.~~

Editorial Note.— All remaining paragraphs in Chapter 3 are renumbered accordingly.

Editorial Note.— Chapter 4 is included for reference and consequential amendments resulting from PBCS Pfa.

Chapter 4. NAVIGATION

4.1 PERFORMANCE-BASED NAVIGATION (PBN)

Note.— As the Pacific (PAC) Region transition to PBN as contained in the Performance-based Navigation (PBN) Manual (Doc 9613), the contents of 4.1 will be amended.

4.1.1 Area navigation (RNAV) specifications

4.1.1.1 RNAV 10 (RNP 10)

Note.— RNAV 10 retains the RNP 10 designation, as specified in the Performance-based Navigation (PBN) Manual (Doc 9613), 1.2.3.5.

Area of applicability

4.1.1.1.1 The RNAV 10 (RNP 10) specification or better is applicable to navigation systems used to support the separation minima specified in 6.2.1.3 and 6.2.2.2.

~~4.1.1.1.1 For flights on designated controlled oceanic routes or areas within the Anchorage Oceanic, Auckland Oceanic, Nadi, Oakland Oceanic and Tahiti FIRs, a lateral separation minimum of 93 km (50 NM) may be applied.~~

~~4.1.1.1.2 For flights on designated controlled oceanic routes or areas within the Anchorage Oceanic, Auckland Oceanic, Nadi, Oakland Oceanic and Tahiti FIRs, a longitudinal separation minimum of 93 km (50 NM) derived by RNAV may be applied between RNAV equipped aircraft approved to RNP 10 or better, in accordance with the provisions of the PANS-ATM, 5.4.2.6.~~

Means of compliance

4.1.1.1.3~~2~~ For application of 4.1.1.1.1 ~~and 4.1.1.1.2~~, the aircraft and the operator must have been approved by the State of Registry or the State of the Operator, as appropriate, to meet the following requirements (or equivalent):

a) aircraft navigation performance shall be such that the standard deviation of lateral track errors shall be less than 8.7 km (4.7 NM) (or the aircraft approved to RNP 10); and

b) operator programmes shall be established to mitigate the occurrence of large navigational errors due to equipment malfunction or operational error:

1) operator in-flight operating drills shall include mandatory navigation cross-checking procedures to identify navigation errors in sufficient time to prevent aircraft from inadvertent deviation from ATC-cleared route; and

2) the operator shall establish programmes to provide for the continued airworthiness of aircraft navigation systems necessary to navigate to the degree of accuracy required.

…

4.1.2 Required navigation performance (RNP) specifications

4.1.2.1 RNP 4

Area of applicability

4.1.2.1.1 The RNP 4 specification shall be applicable to navigation systems used to support the separation minima specified in 6.2.1.3, 6.2.1.4, 6.2.2.2 and 6.2.2.4.

~~4.1.2.1.1 For flights on designated controlled oceanic routes or areas within the Anchorage Oceanic, Auckland Oceanic, Nadi, Oakland Oceanic and Tahiti FIRs, a lateral separation minimum of~~

~~55.5 km (30 NM) may be applied.~~

~~4.1.2.1.2 For flights on designated controlled oceanic routes or areas within the Anchorage Oceanic, Auckland Oceanic, Nadi, Oakland Oceanic and Tahiti FIRs, a longitudinal separation minimum of 55.5 km (30 NM) derived by RNAV may be applied between RNAV equipped aircraft approved to RNP 4 or better, in accordance with the provisions of the PANS-ATM 5.4.2.6.~~

Means of compliance

4.1.2.1.2~~3~~ Aircraft must be approved by the State of Registry or the State of the Operator to RNP 4.

4.1.2.2 RNP 2

4.1.2.2.1 The RNP 2 specification shall be applicable to navigation systems used to support the separation minima specified in in 6.2.1.3, 6.2.1.4, 6.2.2.2 and 6.2.2.4.

Means of compliance

4.1.2.2.2 Aircraft must be approved by the State of Registry or the State of the Operator to RNP 2.

Editorial Note.— All remaining paragraphs in Chapter 4 are renumbered accordingly.

…

Chapter 5. SURVEILLANCE
(P-ATM – Chapter 8; P-OPS, Vol. I, Part III)

…

5.4 PERFORMANCE-BASED SURVEILLANCE (PBS)

~~**5.4 AUTOMATIC DEPENDENT SURVEILLANCE – CONTRACT (ADS-C)**~~

~~Nil.~~

(A6, Part I – Chapter 7; A6, Part II – Chapter 2.5; A6, Part III, Sections II and III – Chapter 5; A11 – Chapters 2, 3 and 6; A15 – Chapter 7, P-ATM – Chapters 4 and 5, and Appendix 2)

Note.— Additional guidance can be found in the ICAO Performance-based Communication and Surveillance (PBCS) Manual (Doc 9869).

5.4.1 Required surveillance performance (RSP) specifications

5.4.1.2 RSP 180

5.4.1.2.1 RSP 180 is applicable to surveillance systems used to support the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4.

Means of compliance

5.4.1.2.2 The aircraft operator shall:

a) implement provisions for receiving the reports of observed performance and taking corrective actions for aircraft identified as not complying with RSP specification(s); and

b) be authorized by the State of the Operator or the State of Registry, as appropriate, in order to qualify for the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4.

5.4.1.2.3 The air navigation services providers (ANSP) shall:

a) ensure that the communication system satisfies RSP 180 when applying the separation minima specified in 6.2.1.4, 6.2.2.2 and 6.2.2.4;

b) establish PBCS monitoring programmes; and

c) apply the appropriate flight plan designator to determine aircraft eligibility for application of relevant separation minima.

…

Editorial Note.— All remaining paragraphs in Chapter 5 are renumbered accordingly.

…

Chapter 6. AIR TRAFFIC SERVICES

(A11 – Attachment B; P-ATM – Chapters 5 and 15)

…

6.2 SEPARATION

6.2.1 Lateral

…

6.2.1.2 The minimum lateral separation shall be 98 km (50 NM) between aircraft meeting RNAV 10 (RNP 10) in accordance with 4.1.1.1 on designated controlled oceanic routes or areas within the Anchorage Oceanic, Auckland Oceanic, Nadi, Oakland Oceanic and Tahiti FIRs.

~~6.2.1.2 The minimum lateral separation shall be 93 km (50 NM) between aircraft meeting the provisions in 4.1.1.1.~~

6.2.1.3 The minimum lateral separation shall be 42.6 km (23 NM) between aircraft on designated controlled oceanic routes or areas within the Anchorage Oceanic, Auckland Oceanic, Nadi, Oakland Oceanic and Tahiti FIRs. This minimum is applied in accordance with 5.4.1.2.1.6 b) of PANS-ATM and the following:

a) communication – CPDLC RCP 240 per para. 3.1.1.1;

b) navigation – RNP 4, or RNP 2 per para. 4.1.2.1 and 4.1.2.2;

c) surveillance – ADS-C RSP 180 per para. 5.4.1.2.

6.2.1.3 ~~The minimum lateral separation shall be 55.5 km (30 NM) between aircraft meeting the provisions in 4.1.2.1, provided:~~

a) ~~the aircraft are approved by the State of Registry or the State of the Operator to RNP 4;~~

b) ~~direct controller-pilot voice communications or controller-pilot data link communications (CPDLC) are maintained;~~

c) ~~surveillance is maintained using an automatic dependent surveillance (ADS) system; and~~

d) ~~an ADS lateral deviation change event contract is established, with a lateral deviation threshold of 9.3 km (5 NM)~~

6.2.2 Longitudinal

(P-ATM – Chapters 5 and 13)

…

6.2.2.2 The minimum longitudinal separation shall be 98 km (50 NM) between aircraft on designated controlled oceanic routes or areas within the Anchorage Oceanic, Auckland Oceanic, Nadi, Oakland Oceanic and Tahiti FIRs. This minimum is applied in accordance with 5.4.2.9 of PANS-ATM and provided the following conditions are met:

d) communication – CPDLC RCP 240 per para. 3.1.1.2;

e) navigation – RNAV 10 (RNP 10), RNP 4, or RNP 2 per para. 4.1.2.1 and 4.1.2.2;

f) surveillance – ADS-C RSP 180 per para. 5.4.1.2.

~~6.2.2.3 The minimum longitudinal separation shall be 55.5 km (30 NM) between aircraft meeting the provisions in 4.1.2.1.~~

~~*Note.- ADS is required for the application of this minimum; therefore, the applicable provisions will be those of PANS-ATM, 5.4.2.6.1 to 5.4.2.6.3 and 5.4.2.6.4*~~.

6.2.2.3 The minimum longitudinal separation shall be 55.5 km (30 NM) between aircraft on designated controlled oceanic routes or areas within the Anchorage Oceanic Auckland Oceanic, Nadi, Oakland Oceanic and Tahiti FIRs. This minimum is applied in accordance with 5.4.2.9 of PANS-ATM and provided the following conditions are met:

d) communication – CPDLC RCP 240 per para. 3.1.1.2;

e) navigation – RNP 4, or RNP 2 per para. 4.1.2.1 and 4.1.2.2;

f) surveillance – ADS-C RSP 180 per para. 5.4.1.2.

….

Chapter 7. SAFETY MONITORING

…

7.2 AIRSPACE MONITORING

…

7.2.4 PBCS

7.2.4.1 Adequate monitoring shall be conducted to assess continuing compliance of the communication and surveillance systems with the prescribed RCP and/or RSP specifications.

…

Editorial Note.— All remaining paragraphs in Chapter 7 are renumbered accordingly.

…

-END-

d) **Date when proposal received:**

15 September 2017

e) **Proposer's reason for amendment:**

3. This proposal for amendment was developed by ICAO Asia and Pacific Regional Office responding to the request by the 28th Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/28, Bangkok, Thailand, 11 to 14 September 2017) that ICAO circulate to States and then submit for consideration by the Council of ICAO the Proposals for Amendment to ICAO Doc 7030 Regional Supplementary Procedures MID/ASIA and PAC to support performance-based separation. *Conclusion APANPIRG/28/15* Refers. The new performance-based communication and surveillance (PBCS) provisions supporting performance-based separation became applicable in November 2016 under amendments to ICAO Annexes 6 and 11 and Doc 4444.

4. This amendment is necessary to ensure that Doc 7030 is updated to correctly support the current standards and procedures specified in Annexes 6 and 11 and Doc 4444.

5. Annex 11 sections 2.8.1 and 2.9.1 state that the RCP and RSP specifications shall be prescribed, when applicable, on the basis of regional air navigation agreements. This proposal for amendment will represent the agreement of the PAC Region on the implementation operator authorization and flight planning requirements and, in specified FIRs, separation minima based on PBC, PBN and PBS.

6. The following APANPIRG/27 (September 2016) and APANPIRG/28 Conclusions support this PfA:

    a. *Conclusion APANPIRG/27/7: PBCS Operator Requirements*, urging States to take appropriate measures to enable aircraft operators to file RCP and RSP indicators in flight plans;

    b. *Conclusion APANPIRG/27/8: State Implementation of ICAO Provisions for PBCS*, urging States that apply or plan to apply performance-based separation to implement ATM system capability by not later than 29 March 2018, and apply common implementation dates supported by joint submissions of PfAs to Doc 7030;

    c. *Conclusion APANPIRG/27/9: Asia/Pacific Region PBCS Transition Strategy*, endorsing a strategy for implementation of the new PBCS provisions in Annexes 6 and 11 and Doc 4444 by not later 29 March 2018;

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    e. *Conclusion APANPIRG/28/15*: PBCS-Related Proposals for Amendment to Regional Supplementary Procedures, requesting the ICAO Asia/Pacific

Regional Office to circulate to States and then submit to the Council of ICAO this PfA.

7. Taking similar action in support of the PBCS implementation the 52nd Meeting of the North Atlantic Systems Planning Group (NAT SPG/52, June 2016) approved Conclusions 52/19 and 52/20 urging: a) user States (States of the Operator or Registry) to take appropriate measures to develop, establish and implement necessary policies and procedures to ensure that their operators conducting flights in the NAT Region would be compliant with PBCS requirements, and b) the NAT provider States and their ANSPs that planned to apply 42.6 km (23 NM) lateral separation minimum and/or 55.5 km (30 NM), 93 km (50 NM) and/or 5-minute longitudinal separation minima implement the capability to process and apply ICAO PBCS flight plan designators to determine aircraft eligibility for performance-based horizontal separation by 29 March 2018.

f) **Proposed implementation date of the amendment:**

Upon approval by Council.

g) **Action by the Secretary General:**

The proposal has been circulated to the following States and international organizations:

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Algeria
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Armenia
Australia
Austria
Azerbaijan
Bahamas
Bahrain
Bangladesh
Belarus
Belgium
Benin
Bhutan
Bolivia (Plurinational State of)
Bosnia and Herzegovina
Botswana
Brazil
Brunei Darussalam
Bulgaria
Burkina Faso
Cameroon
Canada
Cape Verde
Central African Republic
Chad
Chile
China
Colombia
Congo
Côte d'Ivoire
Croatia
Cuba
Cyprus
Czech Republic
Democratic People's Rep. of Korea
Democratic Republic of the Congo
Denmark
Djibouti
Dominican Republic
Ecuador
Egypt
El Salvador
Eritrea
Estonia
Ethiopia
Finland
France
Gabon
Gambia
Georgia
Germany
Ghana
Greece
Guinea-Bissau
Haiti
Hungary
Iceland
India
Indonesia
Iran (Islamic Republic of)
Iraq
Ireland
Israel
Italy
Jamaica
Japan
Jordan
Kazakhstan
Kenya
Kuwait
Kyrgyzstan
Latvia
Lebanon
Libya
Lithuania
Luxembourg
Madagascar
Malaysia
Maldives
Mali
Malta
Mauritania
Mauritius
Mexico
Monaco
Mongolia
Montenegro
Morocco
Mozambique
Namibia
Nepal
Netherlands
New Zealand
Niger
Nigeria
Norway
Oman
Pakistan

Paraguay	South Africa	United Republic of Tanzania
Peru	Spain	United States
Philippines	Sri Lanka	Uruguay
Poland	SudanSuriname	Uzbekistan
Portugal	Swaziland	Venezuela
Qatar	Sweden	Viet Nam
Republic of Korea	Switzerland	Yemen
Republic of Moldova	Syrian Arab Republic	Zambia
Romania	Tajikistan	Zimbabwe
Russian Federation	Thailand	
San Marino	The Former Yugoslav	EUROCONTROL
Saudi Arabia	Republic of Macedonia	CANSO
Senegal	TogoTrinidad and Tobago	IACA
Serbia	Tunisia	IAOPA
Seychelles	Turkey	IATA
Sierra Leone	Turkmenistan	IBAC
Singapore	Uganda	IFALPA
Slovakia	UkraineUnited Arab	IFATCA
Slovenia	Emirates	
Somalia	United Kingdom	

h) **Secretariat's comments:**

This proposal for amendment was initially developed by the FANS Interoperability Team – Asia (FIT-Asia) as a template for submission by States or Groups of States and, following the request by APANPIRG/28 under Conclusion APANPIRG/28/15, further developed and modified in consultation between the ICAO Asia/Pacific Regional Office and ICAO Headquarters. This ensures conformance with the provisions of Annexes 6 and 11 and the PANS-ATM, and with the ICAO rules and practices for drafting amendments to Regional Supplementary Procedures, and provides for alignment with Regional Supplementary Procedures MID/ASIA and NAT where necessary.

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The provisions in this PfA related to operator authorizations and flight planning of PBCS capability apply to all operators (and their States) that plan to operate flights in airspace where performance-based separation requiring PBCS may be applied to their flights.

— END —