*INTERNATIONAL CIVIL AVIATION ORGANIZATION*

**THE THIRD MEETING OF THE AERODROMES OPERATIONS AND PLANNING – WORKING GROUP (AOP/WG/3)**

Malaysia, 2 – 4 June 2015

**Agenda Item 3: Regional Reporting**

# PROGRESS ON THE ALIGNMENT OF AIR NAVIGATION PLANS WITH THE *GLOBAL AIR NAVIGATION PLAN*

(Presented by the Secretariat)

**SUMMARY**

This paper reports follow-up to the 12th Air Navigation Conference Recommendation 6/1 [Regional Performance Framework – Planning Methodologies and Tools] regarding the alignment of regional air navigation plans with the Fourth Edition of the Global Air Navigation Plan (Doc 9750).
This paper relates to –

**Strategic Objectives:**

*A:* ***Safety*** *– Enhance global civil aviation safety*
*B:* ***Air Navigation Capacity and Efficiency –*** *Increase Capacity and improve efficiency of the global civil aviation system*
*E:* ***Environmental Protection*** *– Minimize the adverse environmental effects of civil aviation activities*

## 1. INTRODUCTION

1.1 The 12th Air Navigation Conference (AN-Conf/12) agreed to Recommendation 6/1 *[Regional Performance Framework – Planning Methodologies and Tools]* regarding the alignment of regional Air Navigation Plans (ANP) with the Fourth Edition of the *Global Air Navigation Plan* (GANP) (Doc 9750).

1.2 The Council in June 2014 approved the new structure, format, content of the Regional ANPs, and the ANP amendment process which were developed by eANPWG. APANPIRG/25 supported the action plan approved by the Council and adopted Decision 25/1 on the development of the new APAC eANP, the text of which is reproduced below:

> ***Decision APANPIRG 25/1 – Development of the new APAC eANP***
>
> *That in support to the ICAO efforts to align the regional Air Navigation Plans (ANP) with the Fourth Edition of the Global Air Navigation Plan (GANP) (Doc 9750) APANPIRG and its sub groups be invited to:*
>
> *a) include the development of the APAC eANP based on the Council approved ANP template and action plan, in the work programmes of the related APANPIRG contributory bodies; and*
>
> *b) present the relevant Parts of the APAC eANP to APANPIRG/26 for endorsement.*

## 2. DISCUSSION

2.1 Objectives of Regional Air Navigation Plan

*The ANPs provide for the planning and implementation of air navigation systems within a specified area, in accordance with the agreed global and regional planning framework. They are developed to meet those needs of specific areas not covered in the worldwide provisions. The development and maintenance of the ANPs is undertaken by ICAO PIRGs with the assistance of the ICAO Secretariat.*

*The ANPs are used as a repository Document for the assignment of responsibilities to States for the provision of air navigation facilities and services within a specified area in accordance with Article 28 of the Convention on International Civil Aviation (Doc 7300).*

*The ANPs contain requirements related to the facilities and services to be implemented by States in accordance with regional air navigation agreements. The procedural parts of ANPs are published in the ICAO Regional Supplementary Procedures (SUPPs) (Doc 7030).*

*The ANPs contain provisions that States can follow in programming the provision of their air navigation facilities and services, with the assurance that facilities and services furnished in accordance with the plan will form with those of other States an integrated system adequate for the foreseeable future.*

*The ANPs may serve as a legal basis for air navigation services charges which are levied for services provided or made available to users, in accordance with ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082) and ICAO Manual on Air Navigation Services Economics (Doc 9161).*

*It supports the performance-based approach to planning adopted by ICAO to measure the efforts made by States in implementing the agreed requirements.*

2.2 Action Plan for the development of the ANP/eANP

| ANP Volume | eANP | Responsible | Date |
|---|---|---|---|
| Vol I, II & III | Population of eANP with existing data | Regional Offices | September 2014 |
| Vol I, II & III | Agreement on the content of the eANP | PIRGs/States | Mid 2015 |
| Vol I | Approval of Volume I of eANPs by the Council | Regional Offices/ANB | End 2015 |
| Vol II | Approval of Volume II of eANPs by regional agreement | Regional Offices/PIRGs | End 2015 |
| Vol III | Approval of Part II by regional agreement. Inclusion of Volume III on web-based platform. | Regional Offices/PIRGs/ANB | End 2015 |
| Consequential amendments | Amendments to existing ICAO documentation related to ANPs to ensure harmonization including the Regional Office Manual, and review of the applicability of the Uniform methodology for the identification, assessment and reporting of air navigation deficiencies to the new ANP | ANB | Mid 2015 |

2.2.1 In accordance with the action plan the ICAO Regional Office has populated the eANP Volume I and II with existing data taken from Doc 9673 Volume I (Basic) and Volume II (FASID). The ICAO Regional Office circulated a letter ref: AP063/15 dated 10 April 2015 to Administrations requesting a review of the draft AOP Tables Volume I and II and inform ICAO Regional Office for any discrepancies if any. The Meeting is invited to review and agree with the contents of the eANP.

## 3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

a) agree on the content of the eANP Volume I and Volume II; and

b) discuss any relevant matters as appropriate.

…….

# APPENDIX A

# APAC AIR NAVIGATION PLAN

# VOLUME I

# APAC AIR NAVIGATION PLAN

## VOLUME I

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# APAC ANP, VOLUME I
# PART 0 – INTRODUCTION

## 1. GENERAL

1.1 On ***18 June 2014***, the ICAO Council decided that the regional air navigation plans (ANPs) should be published in three volumes.

1.2 ANP Volume I contains stable plan elements whose amendment necessitates approval by the Council such as the assignment of responsibilities to States for the provision of aerodrome and air navigation facilities and services in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300); and the current to medium term mandatory regional requirements related to aerodrome and air navigation facilities and services to be implemented by States in accordance with regional air navigation agreements and requirements specific to the region which are not covered in the ICAO Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS). The material to be included in Volume I should minimise the requirement for frequent amendment. The following is a non-exhaustive list of such elements:

- Flight Information Regions (FIR) boundaries (Table and Charts);
- Search and Rescue Regions (SRR) boundaries (Table and Charts);
- Volcanic Ash Advisory Centres (VAAC);
- Tropical Cyclone Advisory Centres (TCAC); and
- Volcano Observatories (VO).

1.3 ANP Volume II contains dynamic plan elements material related to the assignment of responsibilities to States for the provision of aerodrome and air navigation facilities and services and the current to medium term mandatory regional requirements related to aerodrome and air navigation facilities and services to be implemented by States in accordance with regional air navigation agreements involving the relevant PIRG. The amendment of these elements does not require approval by the Council. The following is a non-exhaustive list of such elements:

- Major traffic flows;
- ATS route network;
- Meteorological Watch Offices (MWO);
- Secondary Surveillance Radar (SSR) codes;
- Five-letter name-codes; and
- VOLMET Broadcasts.

1.4 ANP Volume III contains dynamic/flexible plan elements providing implementation planning guidance for air navigation systems and their modernization taking into consideration emerging programmes such as the ICAO Aviation System Block Upgrades (ASBUs) and associated technology roadmaps described in the *Global Air Navigation Plan* (GANP) (Doc 9750). The ANP Volume III would also include appropriate additional guidance, particularly with regard to implementation, to complement the material contained in the ANP Volumes I and II. The amendment of Volume III would not require approval by the Council (approval of Part II is under the responsibility of the relevant PIRG).

*Note 1: The ANP does not list all facilities in the region(s) but only those required for international civil aviation operations. Documents from the Integrated Aeronautical Information Package and other States publications should be consulted for information on additional facilities and for operational information in general.*

*Note 2: The general structure of the regional plans for the parts which concern an air navigation field in Volumes I and II consists of an "Introduction", "General Regional Requirements" and "Specific Regional Requirements". Only Tables shown under "General Regional Requirements" are harmonized for all Regions. Should a Region require a Table for a specific field, this should be reflected under "Specific Regional Requirements" of the subject concerned. The naming convention for such tables*

*consists of the technical field concerned (AOP, CNS, ATM, MET, SAR and AIM), the ANP Volume number (I or II), the Region (APAC, AFI, CAR/SAM, EUR, MID, NAM and NAT) and the consecutive number of the table. Examples are as follows: Table ATM I-EUR-1, Table CNS II-MID-1 or Table MET I-AFI-2.*

1.5 Guidance material on the detail of programmes or concepts should be contained in supplementary material referenced appropriately or adopted as (***NAME***) Documents.

## 2. RELATIONSHIP BETWEEN THE GLOBAL AND REGIONAL AIR NAVIGATION PLANS

2.1 The ANPs represent the bridge between, on one side, the global provisions in the ICAO SARPs and the GANP, and on the other side, the States' air navigation plans and implementation status.

2.2 The GANP represents a rolling, 15-year strategic methodology which leverages existing technologies and anticipates future developments based on State/industry-agreed operational objectives. The GANP is an overarching framework that includes key aviation policy principles to assist ICAO Regions, sub-regions and States with the preparation of their regional and State air navigation plans and to support the establishment of air navigation priorities.

## 3. OBJECTIVE AND PURPOSE OF REGIONAL AIR NAVIGATION PLANS

3.1 The ANPs provide for the planning and implementation of air navigation systems within a specified area, in accordance with the agreed global and regional planning framework. They are developed to meet those needs of specific areas not covered in the worldwide provisions. The development and maintenance of the ANPs is undertaken by ICAO PIRGs with the assistance of the ICAO Secretariat.

3.2 The ANPs are used as a repository Document for the assignment of responsibilities to States for the provision of air navigation facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300).

3.3 The ANPs contain requirements related to the facilities and services to be implemented by States in accordance with regional air navigation agreements. The procedural parts of ANPs are published in the *ICAO Regional Supplementary Procedures* (SUPPs) (Doc 7030).

3.4 The ANPs contain provisions that States can follow in the planning of aerodrome and air navigation facilities and services activities, with the assurance that facilities and services furnished in accordance with the plan will form with those of other States an integrated system adequate for the foreseeable future.

3.5 The ANPs may serve as a legal basis for air navigation services charges which are levied for services provided or made available to users, in accordance with ICAO's *Policies on Charges for Airports and Air Navigation Services* (Doc 9082) and *ICAO Manual on Air Navigation Services Economics* (Doc 9161).

3.6 The ANPs support the performance-based approach to planning adopted by ICAO to measure the efforts made by States in implementing the agreed requirements.

## 4. MANAGEMENT AND AMENDMENT OF REGIONAL AIR NAVIGATION PLANS

4.1 The elements of the existing planning system and the planning principles, operational requirements and planning criteria as developed for the APAC Region are kept under constant review by the APANPIRG in accordance with its schedule of meetings, in consultation with provider and user States and with the assistance of the ICAO Regional Office(s) concerned.

4.2 The detailed amendment procedure of the three ANP Volumes is described in paragraph 5 below.

## 5. PROCEDURE FOR THE AMENDMENT OF REGIONAL AIR NAVIGATION PLANS

5.1 The procedure for the amendment of regional air navigation plans in three Volumes as approved by the Council is shown in **Appendix A**.

## 6. ABBREVIATIONS

6.1 The abbreviations used in this document are contained in the *Procedures for Air Navigation Services — ICAO Abbreviations and Codes (PANS-ABC)* (Doc 8400), with the exception of those used in the explanations of any tables appearing herein, which also give their meaning.

## 7. ESTABLISHMENT AND PROVISION OF A MULTINATIONAL ICAO AIR NAVIGATION FACILITY/SERVICE (*If applicable*)

7.1 The operation of multinational air navigation services is well established within the (***NAME***) Region(s). The ICAO *Manual on Air Navigation Services Economics* (Doc 9161) details the ICAO policies on charges for air navigation services and provides additional information on the various models adopted globally. The introduction of multinational air navigation services does not dilute the principle that a State has the responsibility of overseeing the provision of air navigation services and that it shall maintain that responsibility within its sovereign airspace as well as within the airspace over the high seas for which it has accepted the responsibility for the provision of services. Where there is no intention to change or modify the FIR boundaries nor the facilities and services currently listed in the ANP there is not a requirement to amend the ANP. However, should changes to the FIR boundaries or to the facilities and services provided be required, such changes are likely to be subject to the ANP amendment procedure and should therefore be examined on a case-by-case basis. Advice on this issue can be obtained from the ICAO Regional Office(s). Any multinational arrangements for the provision of air navigation services should be registered with ICAO (Article 83 of the Convention (Doc 7300) and *Rules for Registration with ICAO of Aeronautical Agreements and Arrangements* (Doc 6685)).

## APPENDIX A - PROCEDURE FOR THE AMENDMENT OF REGIONAL AIR NAVIGATION PLANS

*(Approved by Council on **18 June 2014**)*

### 1. Introduction

1.1. The procedure outlined below has been evolved to provide a means of maintaining the regional air navigation plans using an ANP web based platform.

### 2. General criteria

2.1. The Assembly has resolved that regional plans should be revised when it becomes apparent that they are no longer consistent with current and foreseen requirements of international civil aviation and that, when the nature of a required change permits, the associated amendment of the regional plan should be undertaken by correspondence between the Organization and the States and international organizations concerned.

2.2. When a State cannot immediately implement a particular part or a specific detail of a regional plan although it intends to do so, when practicable, this in itself should not lead to the State proposing an amendment to the plan.

2.3. The general structure of the regional plans for the parts which concern an air navigation field in Volumes I and II consists of an "Introduction", "General Regional Requirements" and "Specific Regional Requirements". As the section "General Regional Requirements" is harmonized for all regions, an amendment of the provisions (text) in "General Regional Requirements" will lead to amendment of Volumes I and II of the regional plans of all regions.

2.4. The amendment process of Volume III is under the responsibility of the relevant Planning and Implementation Regional Group (PIRG). The Parts 0 (Introduction) and I (General Planning Aspects) of Volume III are harmonized for all regions and the amendment of these parts should be made following inter-regional coordination.

### 3. User rights

3.1. Access to the ANP web based platform to develop and submit amendment proposals to the regional plan and to comment on an officially issued amendment proposal should be provided through controlled access by the State's or international organization's designated Focal Points. The State or international organization should officially inform their respective Regional Office of the registration of their designated Focal Points.

### 4. States and international organizations to be consulted

4.1. The Secretary General, through the relevant Regional Office, will determine the States and international organizations to be consulted on the amendment proposal. These will generally only include the provider and user States and international organizations that have a direct and obvious interest in the amendment in question.

## PART A — AIR NAVIGATION PLANS, VOLUME I

### 5. Procedure for amendment of Volume I

5.1. If, in the light of the above general criteria, any State (or group of States) wishes to effect a change in the approved air navigation plan for that region, it should propose to the Secretary General, through the Regional Office accredited to that State, an appropriate amendment to the plan, adequately documented; the proposal should include the facts that lead the State (or group of States) to the conclusion that the amendment is necessary. Such amendments may include additions, modifications or deletions. (This procedure does not preclude a State having previous consultation with other States before submitting an amendment proposal to the Regional Office.) This proposed amendment should be submitted via the web based tool and/or by correspondence to the Regional Office.

5.2. Upon studying the proposal, if the Secretary General considers that the proposed amendment requires further coordination through the relevant Planning and Implementation Regional Group (PIRG), the proposal will be presented, adequately documented, to the PIRG. The views of the PIRG will be coordinated with the originating State and the proposed amendment will be uploaded via the ANP web based platform for processing proposals for amendment for approval by the Council.

5.3. If the proposal concerns an amendment of the provisions (text) in "General Regional Requirements", the Secretary General will coordinate and circulate, through all Regional Offices, an amendment of all the regional plans.

5.4. If the Secretary General considers that the proposed amendment conflicts with established ICAO policy, or that it raises questions which the Secretary General considers should be brought to the attention of the Air Navigation Commission, the proposal will be presented, adequately documented, to the Commission. In such cases, the Commission will decide the action to be taken on the proposal.

5.5. The Secretary General, through the Regional Office, will circulate the proposal, adequately documented, with a request for comments to all provider and user States of the region considered affected as well as to user States outside the region and international organizations which may be invited to attend suitable ICAO meetings and which may be concerned with the proposal. The States and international organizations concerned should either send their comments/agreement/objection via the ANP web based platform and/or by correspondence to the Regional Office. Any comment or objection should be adequately supported by reasons for the comment or objection.

5.6. If, in reply to the Secretary General's inquiry, no objection is raised to the proposal by a specified date, the proposal should be submitted to the President of the Council, who is authorized to approve the amendment on behalf of the Council. The approved amendment should be incorporated into Volume I of the regional plan.

5.7. If, in reply to the Secretary General's inquiry, any objection is raised, and if objection remains after further consultation, the matter will be documented for discussion by the respective planning and implementation regional group (PIRG) and, ultimately for formal consideration by the Air Navigation Commission, if it remains unresolved. If the Commission concludes that the amendment is acceptable in its original or other form, it will present appropriate recommendations to the Council.

5.8. Proposals for the amendment of Volume I of the regional plan submitted by international organizations directly concerned with the operation of aircraft, which may be invited to attend suitable ICAO meetings and which attended the meeting(s) where the relevant regional plan is managed, will be dealt with in the same manner as those received from States, except that, before circulating a proposal to States and selected international organizations, the Secretary General will ascertain whether it has adequate support from the State or States whose facilities will be affected. If such support is not forthcoming, the proposal will be presented to the Commission, and the Commission will decide on the action to be taken on the proposal.

5.9. Proposals for the amendment of Volume I of the regional plan may also be initiated by the Secretary General, through the Regional Office accredited to that State, provided that the State or States whose facilities will be affected have expressed their concurrence with the proposal.

5.10. Amendments to Volume I of the regional plan which have been approved in accordance with the above procedure will be published in the ANP web based platform at convenient intervals.

## PART B — AIR NAVIGATION PLANS, VOLUME II

### 6. Procedure for amendment of Volume II

6.1. Amendments of Volume II of the regional plan should be effected on the basis of an adequately documented proposal submitted by a State (or a group of States) or the relevant PIRG to the Secretary General, through the Regional Office accredited to that State. The proposal should include the facts that lead to the conclusion that the amendment is necessary. Such amendments may include additions, modifications or deletions to Volume II of the regional plan. (This procedure does not preclude a State having previous consultation with other States before submitting an amendment proposal to the Regional Office.) This proposed amendment should be submitted via the ANP web based platform and/or by correspondence to the Regional Office.

6.2. If the proposal concerns an amendment of the provisions (text) in "General Regional Requirements", the Secretary General will coordinate and circulate, through all Regional Offices, an amendment of all the regional plans.

6.3. The ICAO Regional Office will circulate the proposal, adequately documented, with a request for comments to all provider and user States of the region considered affected as well as to user States outside the region and international organizations which may be invited to attend suitable ICAO meetings and which may be concerned with the proposal. The States and international organizations concerned should either send their comments/agreement/objection via the ANP web based platform and/or by correspondence to the Regional Office. Any comment or objection should be adequately supported by reasons for the comment or objection.

6.4. If, in reply to the ICAO Regional Office's inquiry, no objection is raised to the proposal by a specified date, it will be deemed that a regional agreement (involving the relevant PIRG) on the subject has been reached and the proposed amendment should be incorporated into Volume II of the regional plan.

6.5. If, in reply to the ICAO Regional Office's inquiry, any objection is raised, and if objection remains after further consultation, the matter will be documented for discussion by the respective planning and implementation regional group (PIRG) and, ultimately for formal consideration by the Air Navigation Commission, if it remains unresolved. If the Commission concludes that the amendment is acceptable in its original or other form, it will present appropriate recommendations to the Council.

6.6. Proposals for the amendment of Volume II of the regional plan submitted by international organizations directly concerned with the operation of aircraft, which may be invited to attend suitable ICAO meetings, where the relevant regional plan is managed, will be dealt with in the same manner as those received from States, except that, before circulating a proposal to States and selected international organizations, the Secretary General will ascertain whether the proposal has adequate support from the State or States whose facilities or services will be affected. If such support is not forthcoming, the proposal will not be pursued.

6.7. Proposals for the amendment of Volume II of the regional plan may also be initiated by the Secretary General, through the Regional Office accredited to that State, provided that the State or States whose facilities or services will be affected have expressed their concurrence with the proposal.

6.8. Amendments to Volume II of the regional plan which have been approved in accordance with the above procedure will be published in the ANP web based platform at convenient intervals.

## PART C — AIR NAVIGATION PLANS, VOLUME III

### 7. Procedure for amendment of Volume III

7.1. Amendments of Volume III of the regional plan are under the responsibility of the relevant Planning and Implementation Regional Group (PIRG) and not subject to a formal application of the procedure for amendment of the ANP described in Parts A and B above. However, the amendment of the provisions of Part 0 - "Introduction" and Part I - "General Planning Aspects" needs special coordination, as specified in 7.4 below. Since these two Parts are harmonized for all regions, an amendment of the provisions contained there-in will lead to amendment of Parts 0 and I of Volume III of the regional plans of all regions.

7.2. Amendments of Volume III of the regional plan should be effected on the basis of an adequately documented proposal submitted to the ICAO Regional Office concerned by:

- a State (or a group of States); or
- the relevant Planning and Implementation Regional Group (PIRG) of the region(s); or
- the ICAO Secretariat; or
- international organisations directly concerned with the operation of aircraft, which may be invited to attend suitable ICAO meetings and/or which attended the meeting(s) where the relevant Volume III amendments were agreed.

7.3. This procedure does not preclude a State (or group of States) having previous consultation with other States before submitting an amendment proposal to the Regional Office. Such amendments may include additions, modifications or deletions to Volume III of the regional plan. In addition, the facts that led to the conclusion that the amendment should be included.

7.4. If the proposal concerns an amendment of the provisions in Part 0 - "Introduction" or Part I - "General Planning Aspects", the ICAO Regional Office concerned will submit the proposal to ICAO Headquarters (Air Navigation Bureau) for coordination with all ICAO Regional Offices. The views of the ICAO Regional Offices will be taken into consideration in the consolidation/approval of the amendment by the ANB. The approved amendment will be published in Volume III of all regional plans at convenient intervals.

7.5. The mechanism for the amendment of Part II of Volume III of the regional plan should be developed, agreed by the relevant PIRG and reflected in the corresponding PIRG Handbook.

**APAC ANP, VOLUME I**

**PART I – GENERAL PLANNING ASPECTS (GEN)**

## 1. GEOGRAPHICAL SCOPE

1.1 The APAC ANP is related to the ICAO Asia and Pacific air navigation region(s). The ANP may call for the provision of basic facilities and services beyond the charted boundaries of a region where such facilities and services are necessary to meet the requirements of international air navigation within that region.

1.2 A number of States within the ICAO Asia and Pacific Region(s) are members of one or more sub-regional groupings which have development plans to improve air navigation services; such plans contribute to the regional implementation of the ICAO *Global Air Navigation Plan* (GANP) (Doc 9750). Regional subgroups include the:

- ***(include appropriate regional subgroups names if applicable)***
- ***Note: Diagram or list of regional sub groupings to be inserted in the Volume II or database. (If applicable)***

## 2. FLIGHT INFORMATION REGIONS

2.1 **Table GEN I-1** shows the current Flight Information Regions (FIR)/Upper Information Regions (UIR) which are part of the ICAO (***NAME***) Region(s). More details of the FIRs and UIRs within the (***NAME***) air navigation region(s) are contained in **Table ATM I-1** and **Charts ATM I-1** and **ATM I-2**.

## 3. STATES' RESPONSIBILITIES

3.1 Each Contracting State is responsible for the provision of facilities and services in its territory under Article 28 of the Convention as well as within the airspace over the high seas for which it has accepted the responsibility for the provision of services. The Council has recommended that these facilities and services include those specified in the ANPs.

3.2 The inclusion of the basic facilities and services provided by non-Contracting States and territories in regional ANPs is simply recognition that they are needed by or likely to affect international civil aircraft operations of Contracting States or the facilities and services of these States.

*Note. — Non-Contracting States in the APAC region are: Tuvalu*

## 4. ASIA AND PACIFIC REGIONAL PLANNING

4.1 The regional planning and implementation process is the principal engine of ICAO's planning framework. It is here that the top-down approach comprising global guidance and regional harmonization measures converges with the bottom-up approach constituted by national planning by States.

## 4.2 PERFORMANCE BASED APPROACH

4.2.1 Global Approach

4.2.1.1 In an effort to assist planners in weighing outcomes and making appropriate decisions, the *Manual on Global Performance of the Air Navigation System* (Doc 9883) has been developed. In this respect ICAO has defined 11 Key Performance Areas (KPA), one for each of the *Global ATM Operational Concept* (Doc 9854) expectations outlined below.

4.2.1.2 These general expectations are relative to the effective operation of the ATM system. The ICAO planning objective is to achieve a performance based global air traffic management (ATM) system through the implementation of air navigation systems and procedures in a safe, progressive, cost-effective and cooperative manner.

## 5. RELATIONSHIP BETWEEN GLOBAL, REGIONAL AND NATIONAL PLANNING

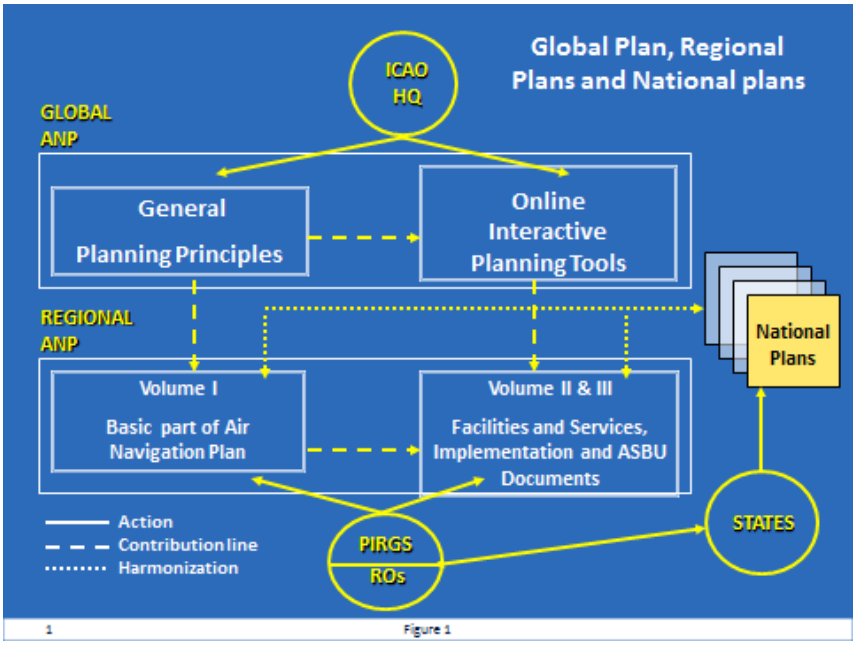


**Figure 1. Relationship between global, regional and national plans.**

5.1 Planning takes place at global, regional and national levels. Planning is accomplished with the help of planning tools and methodologies that are used primarily at the regional and national levels, conditioned by guidance from the global level. The basis for effective planning is the GANP (Doc 9750), which should guide the development of regional and national implementation plans that will support system architectures.

## 6. HUMAN RESOURCE PLANNING

6.1 Human resource planning can be considered "*the systematic and continuing process of analysing an organisation's human resource needs under changing conditions and developing personnel policies appropriate to the longer-term effectiveness of the organisation. It is an integral part of corporate planning and budgeting procedures since human resource costs and forecasts both affect and are affected by longer-term corporate plans.*"[1]

6.2 Estimating current and future requirements for civil aviation personnel and training capacity is essential for human resource planning, institutional capacity building, and related funding and policy measures. Such planning will need to take into account the interdependencies for supply and demand of qualified personnel at national, regional and global levels.

6.3 Human Performance

6.3.1 The high level of automation and interdependencies across aviation disciplines will only increase with evolving air navigation systems. To maximise potential safety and efficiency benefits that these offer, the development of human-driven, rather than engineering-driven interfaces is required, making it easier for the human operator to make sound decisions and take correct actions. Similarly, as part of a safety management systems approach, procedures need to be identified for the use of current and new

[1] Defined by the UK Institute of Personnel and Development

technologies that take into account human capabilities and manage the risk associated with human limitations.

6.3.2 States should:

a) Identify a certification process that requires at the design stage:

i) recognition of the potential human performance issues that the proposed new technology attempts to address; and

ii) consideration of the potential human performance issues, including changes in roles and the effects on individual and team behaviours, that may be introduced by the proposed new technology.

b) Identify processes for the implementation of new technologies, systems and procedures that describes the means by which human performance considerations can be addressed within operational contexts.

c) Consider the management of human performance-related risks as a necessary and essential aspect of the oversight of safety management systems.

d) Ensure that their technical personnel have exposure to training in human factors.

6.4 Training

6.4.1 A major goal of CNS/ATM systems is to create a seamless air navigation system. A seamless air navigation environment will require adequately qualified personnel prepared to perform their jobs in an evolving environment. At the same time, shortcomings in human resource planning and training are frequently mentioned as one of the reasons for the lack of implementation of regional ANPs. Human resource development challenges will be compounded during the transition period to CNS/ATM systems. As the existing and emerging air navigation technologies will co-exist in parallel for a period of time, civil aviation personnel will need to learn new skills, whilst retaining those needed to operate and maintain existing systems. To meet this challenge, a cooperative approach should be used in civil aviation training within the region. This approach should:

a) ensure that the training needs for the region are identified, documented and kept up to date;

b) facilitate the access to specialized types of training needed within the region or sub-regions that individual States cannot justify based on their national training needs alone;

c) ensure that a balanced market exists to support the development and on-going implementation of high-quality training in one or more training centres within the region or sub-regions;

d) endeavour to distribute equitably regional training activities among the training centres established within the region or sub-regions.

e) take advantage of readily available training materials including those available through the TRAINAIR Plus sharing system.

6.4.2 Appropriate bodies should be established to facilitate regional and sub-regional training planning. A quantitative approach should be used to determine the training capabilities needed within a region or sub-region. Decisions concerning required training capabilities should be based on an aggregate of training needs for existing air navigation technologies, as well as emerging technologies. A State consultation process should be used to formulate a plan for the establishment of specific regional training centres.

6.5 Training of technical personnel

6.5.1 States should develop and implement comprehensive training programmes and periodic training plans for all technical staff, including initial, on-the-job, recurrent and specialized training.

## 7. SAFETY CONSIDERATIONS

7.1 Safety fundamentally contributes to the sustainable growth of a sound and economically viable civil aviation system that continues to foster economic prosperity and social development. With air traffic projected to double in the next 15 years, safety risks must be addressed proactively to ensure that this significant capacity expansion is carefully managed and supported through strategic regulatory and infrastructure developments. It is imperative therefore that States and regions remain focused on their safety priorities as they continue to encourage expansion of their air transport sectors.

7.2 Acceptable safety levels are related to the establishment of State safety programmes (SSPs) that are able to anticipate and effectively respond to safety-related occurrences, resulting in continual improvements to an already low global accident rate. The *Global Aviation Safety Plan* (GASP) specifically establishes targeted safety objectives and initiatives that support SSP implementation while ensuring the efficient and effective coordination of complementary safety activities between all stakeholders.

7.3 PIRGs should harmonize activities undertaken to address aviation safety issues on a regional basis with the Regional Aviation Safety Groups (RASGs). In addition, PIRGs should coordinate relevant safety matters with RASGs to ensure consistency and avoid overlap.

7.4 PIRGs should ensure that air navigation services development programmes are consistent with the GASP safety objectives and initiatives. States are responsible for the prompt elimination of their air navigation deficiencies. Detailed information on the process of identifying and managing air navigation deficiencies is contained in the APANPIRG Handbook.

7.5 Adherence to the ICAO SARPs will significantly contribute to aviation safety. States should therefore ensure that they have the necessary regulatory framework in place to reinforce the adoption of the ICAO SARPs within their national regulations. States should also ensure that any differences to the ICAO SARPs have been assessed in respect of safety and are notified in accordance with ICAO requirements.

7.6 Unsatisfactory Conditions Reporting

7.6.1 States should act on any serious problems encountered due to the lack of implementation or prolonged unavailability of air navigation facilities or services required by the ANPs as reported by users of air navigation facilities and services.

## 8. ENVIRONMENT CONSIDERATIONS

8.1 It is an ICAO Strategic Objective to minimize the adverse effects of global civil aviation on the environment. PIRGs should ensure that environmental factors are taken into consideration when performance based systems implementation plans are developed and may wish to coordinate their plans with the State Action Plans on $CO_2$ Emissions Reduction. The results of environmental analysis can be useful in providing national decision-makers within the various sub-regions with information upon which to base airspace architecture decisions and in providing information on what the aviation industry is doing now to protect the environment in the future. Tools such as the ICAO Fuel Savings Estimation Tool (IFSET) are available from the ICAO public website to help quantify the environmental benefits from operational improvements. Environmental considerations should, however, not compromise acceptable levels of safety and be balanced against operational and economic considerations.

## 9.0 AIR TRAFFIC FORECASTS

9.1 Regional traffic forecasting supports the regional air navigation system planning. All States generally prepare individual forecasts, taking account of the regional information, for national planning purposes. A uniform strategy has been adopted by ICAO for the purpose of preparing traffic forecasts and other planning parameters in support of the regional planning process. This information should be shared through at least the sub-regional groupings to enable effective regional planning development.

## 10.0 CONTINGENCY PLANNING

10.1 Contingency plans may constitute a temporary deviation from the approved ANPs; such deviations are approved, as necessary, by the President of the ICAO Council on behalf of the Council.

10.2 The effects of disruption of services in particular portions of airspace are likely to affect significantly the services in adjacent airspace. States should co-ordinate with neighbouring States in the development and implementation of contingency plans, which in some cases may be developed on a sub-regional basis.

10.3 ICAO will initiate and coordinate appropriate contingency action in the event of disruption of air traffic services and related supporting services affecting international civil aviation operations provided by a State in the event that the authorities cannot adequately discharge their responsibility for the provision of such services to ensure the safety of international civil aviation operations. In such circumstances, ICAO will work in coordination with States responsible for airspace adjacent to that affected by the disruption and in close consultation with international organizations concerned.

10.4 Regional contingency plans will be developed, approved and maintained by APANPIRG with the support of ICAO and other organizations.

10.5 States should prepare their contingency plans in advance and ensure their availability or accessibility to the ICAO Regional Office. The plans should be reviewed at regular intervals and updated as required.

## TABLE GEN I-1 - FLIGHT INFORMATION REGIONS (FIR)/UPPER INFORMATION REGIONS (UIR) OF THE ICAO APAC REGION(S)

EXPLANATION OF TABLE

| Column | | |
|---|---|---|
| 1 | State | Name of State |
| 2 | FIR/UIR | Name of FIR/UIR |

| STATE | FIR/UIR |
|---|---|
| 1 | 2 |
| | |

# APAC ANP, VOLUME I

# PART II – AERODROMES / AERODROME OPERATIONS (AOP)

## 1. INTRODUCTION

1.1 This part of the APAC ANP constitutes the agreed regional requirements considered to be the minimum necessary for effective planning and implementation of aerodromes operations (AOP) facilities and services in the APAC Region(s) and complements the provisions of ICAO SARPs and PANS related to AOP. It contains stable plan elements related to the assignment of responsibilities to States for the provision of aerodrome facilities and services within the Region(s) in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300) and mandatory requirements related to the AOP facilities and services to be implemented by States in accordance with regional air navigation agreements.

1.2 The dynamic plan elements related to the assignment of responsibilities to States for the provision of the aerodrome facilities and services including the mandatory requirements based on regional air navigation agreements related to the AOP are contained in the APAC ANP Volume II Part II - AOP.

1.3 The APAC ANP Volume III contains dynamic/flexible plan elements related to the implementation of air navigation systems and their modernization in line with the ICAO Aviation System Block Upgrades (ASBUs) methodology and associated technology roadmaps described in the Global Air Navigation Plan. The ASBU modules are aimed at increasing capacity and improving efficiency of the aviation system whilst maintaining or enhancing safety level, and achieving the necessary harmonization and interoperability at regional and global level. This includes the regionally agreed ASBU modules applicable to the specified ICAO region/sub-region and associated elements/enablers necessary for the monitoring of the status of implementation of these ASBU modules.

***Standards and Recommended Practices and Procedures for Air Navigation Services***

1.4 The SARPs and PANS and associated guidance material applicable to the provision of AOP are contained in:

a) Annex 14 — *Aerodromes*, Volumes I and II;

b) *Procedures for Air Navigation Services – Aerodromes* (PANS-Aerodromes) (Doc 9981) *(pending final approval)*;

c) *Airport Planning Manual* (Doc 9184);

d) *Aerodrome Design Manual* (Doc 9157);

e) *Airport Services Manual* (Doc 9137);

f) *Manual on Certification of Aerodromes* (Doc 9774);

g) *Assessment, Measurement and Reporting of Runway Surface Conditions* (Cir 329);

h) *Operation of New Larger Aeroplanes at existing aerodromes* (Cir 305);

i) *Advanced Surface Movement Guidance and Control Systems (A-SMGCS) Manual* (Doc 9830);

j) *Manual of Surface Movement Guidance and Control Systems (SMGCS)* (Doc 9476);

k) *Heliport Manual* (Doc 9261);

l) *Manual on the prevention of runway incursions* (Doc 9870);

m) *Stolport Manual* (Doc 9150);

n) *ICAO Bird Strike Information System Manual* (Doc 9332); and

o) *Manual on Civil Aviation Jet Fuel Supply* (Doc 9977).

## 2. GENERAL REGIONAL REQUIREMENTS

2.1 Regular aerodromes and their alternates required for international commercial air transport operations should be determined through regional agreements, based on the list of international aerodromes designated by States and the needs of the international commercial flights. Consideration should also be given to the needs of international general aviation flights as identified by user requirements. The alternate aerodromes should be planned/selected, to the greatest practicable extent, from the list of existing regular aerodromes used for international aircraft operations. However, where in specific cases the designation of another aerodrome in close proximity to a regular aerodrome would result in appreciable fuel conservation or other operational advantages, this aerodrome may be designated for use as an alternate aerodrome only. Planning of alternate aerodromes should be made on the basis of the following objectives:

a) to ensure that at least one suitable alternate is available for each international aircraft operation; and

b) to ensure that the facilities at the designated alternate aerodrome(s) are appropriate for the alternate aircraft operations.

2.2 The list of regular and alternate aerodromes (including their designations) required in the Region(s) to serve international civil aviation operations (international scheduled air transport, non-scheduled air transport and general aviation operations) is given in **Table AOP I-1**. Each Contracting State should ensure the provision of aerodrome facilities and services at the international aerodromes under its jurisdiction.

## 3. SPECIFIC REGIONAL REQUIREMENTS

3.1 TBD (if necessary)

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# Table AOP I-1
## INTERNATIONAL AERODROMES REQUIRED IN THE APAC REGIONS

EXPLANATION OF THE TABLE

| | |
|---|---|
| City/Aerodrome: | Name of the city and aerodrome, preceded by the location indicator. |
| Designation: | Designation of the aerodrome as:<br>RS — international scheduled air transport, regular use;<br>RNS — international non-scheduled air transport, regular use;<br>AS — international scheduled air transport, alternate use;<br>ANS — international non-scheduled air transport, alternate use. |

*Note 1 — when an aerodrome is needed for more than one type of use, normally only the use highest on the above list is shown.*

[Example — an aerodrome required for both RS and AS use would only be shown as RS in the list.]

*Note 2 — when the aerodrome is located on an island and no particular city or town is served by the aerodrome, the name of the island is included instead of the name of a city.*

# Table AOP I-1
## INTERNATIONAL AERODROMES REQUIRED IN THE APAC REGION



| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| **AFGHANISTAN** | | |
| OAKB | KABUL/Kabul Intl | RS |
| OAKN | KANDAHAR/Kandahar Intl | AS |
| | | |
| **AMERICAN SAMOA (United States)** | | |
| NSTU | PAGO PAGO/Pago Pago Intl | RS |
| | | |
| **AUSTRALIA** | | |
| YPAD | ADELAIDE/Adelaide | RS |
| YBAS | ALICE SPRINGS/Alice Springs | AS |
| YBBN | BRISBANE/Brisbane | RS |
| YBCS | CAIRNS/Cairns | RS |
| YPXM | CHRISTMAS I./Christmas I. | RS |
| YPCC | COCOS I./Cocos I. | RS |
| YPDN | DARWIN/Darwin | RS |
| YMHB | HOBART/Hobart | RNS |
| YMML | MELBOURNE/Melbourne Intl | RS |
| YSNF | NORFOLK I./Norfolk I. | RS |
| YPPH | PERTH/Perth Intl | RS |
| YPPD | PORT HEDLAND/Port Hedland | RNS |
| YBRK | ROCKHAMPTON/Rockhampton | AS |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| YSSY | SYDNEY/Kingsford Smith Intl | RS |
| YPTN | TINDAL/Tindal | AS |
| YBTL | TOWNSVILLE/Townsville | RNS |
| | | |
| **BANGLADESH** | | |
| VGEG | CHITTAGONG/Shah Amanat Intl | RS |
| VGHS | DHAKA/Hazrat Shahjalal Intl | RS |
| | | |
| **BHUTAN** | | |
| VQPR | PARO/Paro Intl | RS |
| | | |
| **BRUNEI DARUSSALAM** | | |
| WBSB | BRUNEI/Brunei Intl | RS |
| | | |
| **CAMBODIA** | | |
| VDPP | PHNOM PENH/Phnom Penh | RS |
| VDSR | SIEM REAP/Siem Reap | AS |
| | | |
| **CANADA**[1] | | |
| CYXX | ABBOTSFORD/Abbotsford | AS |
| CYYC | CALGARY/Calgary Intl | RS |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| CYQQ | COMOX/Comox | AS |
| CYEG | EDMONTON/Edmonton Intl | RS |
| CYVR | VANCOUVER/Vancouver Intl | RS |
| CYYJ | VICTORIA/Victoria Intl | RNS |
| | | |
| **CHINA** | | |
| ZBAA | BEIJING/Capital | RS |
| ZGHA | CHANGSHA/Huanghua | RS |
| ZUUU | CHENGDU/Shuangliu | AS |
| ZUCK | CHONGQING/Jiangbei | RS |
| ZYTL | DALIAN/Zhoushuizi | RS |
| ZSFZ | FUZHOU/Changle | RS |
| RCKH | GAOXIONG/Gaoxiong | RS |
| ZGGG | GUANGZHOU/Baiyun | RS |
| ZGKL | GUILIN/Liangjiang | RS |
| ZSHC | HANGZHOU/Xiaoshan | RS |
| ZYHB | HARBIN/Taiping | RS |
| ZSOF | HEFEI/Luogang | AS |
| ZBHH | HOHHOT/Baita | RS |
| ZSJN | JINAN/Yaoqiang | RS |
| ZWSH | KASHI/Kashi | AS |
| ZPPP | KUNMING/Wujiaba | RS |
| ZLLL | LANZHOU/Zhongchuan | AS |
| ZSNJ | NANJING/Lukou | RS |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| ZGNN | NANNING/Wuxu | AS |
| ZSQD | QINGDAO/Liuting | RS |
| ZJSY | SANYA/Phoenix | RS |
| ZSSS | SHANGHAI/Hongqiao | RS |
| ZSPD | SHANGHAI/Pudong | RS |
| ZYTX | SHENYANG/Taoxian | RS |
| ZGSZ | SHENZHEN/Bao'an | RS |
| RCSS | TAIBEI/Songshan | AS |
| RCTP | TAIBEI CITY/Taibei Intl | RS |
| ZBYN | TAIYUAN/Wusu | AS |
| ZBTJ | TIANJIN/Binhai | RS |
| ZWWW | URUMQI/Diwopu | RS |
| ZHHH | WUHAN/Tianhe | RNS |
| ZSAM | XIAMEN/Gaoqi | RS |
| ZLXY | XI'AN/Xianyang | RS |
| ZUXC | XICHANG/Qingshan | RNS |
| | | |
| **COOK IS.** | | |
| NCRG | RAROTONGA/Rarotonga Intl | RS |
| | | |
| **DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA** | | |
| ZKPY | SUNAN/Sunan | RS |
| | | |
| | | |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| **FIJI** | | |
| NFFN | NADI/Nadi Intl | RS |
| NFSU | SUVA/Nausori | RS |
| | | |
| **FRENCH POLYNESIA (France)** | | |
| NTAA | TAHITI/Faaa | RS |
| | | |
| **GUAM (United States)** | | |
| PGUA | GUAM I./Andersen AFB | AS |
| PGUM | GUAM I./Guam Intl | RS |
| | | |
| **HONG KONG, China** | | |
| VHHH | HONG KONG/Hong Kong Intl | RS |
| | | |
| **INDIA** | | |
| VAAH | AHMEDABAD/Sardar Vallabhai Patel International Airport | RS |
| VIAR | AMRITSAR/Rajasansi Airport | RS |
| VOBL | BANGALORE/Bangalore International Airport | RS |
| VOCL | CALICUT/Calicut International Airport | RS |
| VOMM | CHENNAI/Chennai International Airport | RS |
| VOCI | COCHIN/Cochin International Airport | RS |
| VOCB | COIMBATORE/Coimbatore Airport | RS |
| VEGY | GAYA/Gaya Airport | RS |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| VEGT | GUWAHATI/Lokpriya Gopinath Bordoloi Airport | RS |
| VOHS | HYDERABAD/Rajiv Gandhi International Airport | RS |
| VIJP | JAIPUR/Jaipur Airport | RS |
| VECC | KOLKATA/Netaji Subhash Chandra Bose International Airport | RS |
| VILK | LUCKNOW/Choudhry Charan Singh Airport | RS |
| VOML | MANGALORE/Mangalore Airport | RS |
| VABB | MUMBAI/Chatrapati Shivaji International Airport | RS |
| VANP | NAGPUR/DR Ambedkar Airport | RS |
| VIDP | NEW DELHI/Indira Gandhi International Airport | RS |
| VEPT | PATNA/Jai Prakash Narayan International Airport | RS |
| VOTR | THIRUCIRAPALLI/Thiruchirapalli Airport | RS |
| VOTV | TRIVANDRUM/Trivandrum International Airport | RS |
| VIBN | VARANASI/Lal Bahadur Shastri Airport | RS |
| | | |
| **INDONESIA** | | |
| WAPP | AMBON/Pattimura | RNS |
| WADD | BALI/Ngurah Rai | RS |
| WALL | BALIKPAPAN/Sepinggan | RS |
| WAOO | BANJARMASIN/Syamsudin Noor | AS |
| WIDD | BATAM/Hang Nadim | RS |
| WABB | BIAK/Frans Kaisiepo | RS |
| WIHH | JAKARTA/Halimperdana Kusuma | RNS |
| WIII | JAKARTA/Soekarno Hatta | RS |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| WAJJ | JAYAPURA/Sentani | RS |
| WATT | KUPANG/El Tari | RS |
| WAAA | MAKASSAR/Sultan Hasanuddin | RS |
| WAMM | MANADO/Sam Ratulangi | RS |
| WIMM | MEDAN/Kualanamu | RS |
| WAKK | MERAUKE/Mopah | RNS |
| WIPT | PADANG/Minangkabau | RS |
| WIPP | PALEMBANG/Sultan Mahmud Badaruddin II | RS |
| WIBB | PEKANBARU/Sultan Syarif Kasim II | RS |
| WIOO | PONTIANAK/Supadio | RS |
| WARR | SURABAYA/Juanda | RS |
| WIDN | TANJUNG PINANG/Raja Haji Fisabilillah Int'l | RNS |
| WALR | TARAKAN/Juwata | RNS |
| | | |
| **JAPAN** | | |
| RJFF | FUKUOKA/Fukuoka | RS |
| RJCH | HAKODATE/Hakodate | AS |
| RJOA | HIROSHIMA/Hiroshima | RS |
| RJFK | KAGOSHIMA/Kagoshima | RS |
| RJBB | KANSAI/Kansai Intl | RS |
| RJFT | KUMAMOTO/Kumamoto | RS |
| RJFU | NAGASAKI/Nagasaki | RS |
| RJGG | NAGOYA/Chubu Centrair Intl | RS |
| ROAH | NAHA/Naha | RS |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| RJSN | NIIGATA/Niigata | RS |
| RJFO | OITA/Oita | RS |
| RJOB | OKAYAMA/Okayama | RS |
| RJOO | OSAKA/Osaka Intl | AS |
| RJCC | SAPPORO/New Chitose | RS |
| RJSS | SENDAI/Sendai | RNS |
| RJOT | TAKAMATSU/Takamatsu | RS |
| RJAA | TOKYO/Narita Intl | RS |
| RJTT | TOKYO/Tokyo Intl | AS |
| | | |
| **JOHNSTON I. (United States)** | | |
| PJON | JOHNSTON ATOLL/Johnston I. | RS |
| | | |
| **KIRIBATI** | | |
| PLCH | KIRITIMATI I./Christmas I. | RS |
| NGTA | TARAWA/Bonriki Intl | RS |
| | | |
| **LAO PEOPLE'S DEMOCRATIC REPUBLIC** | | |
| VLVT | VIENTIANE/Wattay | RS |
| | | |
| **MACAO, China** | | |
| VMMC | MACAO/Macao Intl | RS |
| | | |
| | | |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| **MALAYSIA** | | |
| WMKJ | JOHOR BAHRU/Sultan Ismail | RS |
| WBKK | KOTA KINABALU/Kota Kinabalu Intl | RS |
| WBGG | KUCHING/Kuching | RS |
| WMKP | PENANG/Penang Intl | RS |
| WMKL | PULAU LANGKAWI/Pulau Langkawi | RS |
| WMKK | SEPANG/KL Intl | RS |
| | | |
| **MALDIVES** | | |
| VRMG | GAN/Gan International | AS |
| VRMH | HANIMAADHOO/Hanimaadhoo Intl | RS |
| VRMV | MAAMIGILI/Villa Intl | RS |
| VRMM | MALE/Ibrahim Nasir Intl | RS |
| | | |
| **MARSHALL IS.** | | |
| PKMJ | MAJURO ATOLL/Marshall Is. Intl | RS |
| | | |
| **MICRONESIA (FEDERATED STATES OF)** | | |
| PTPN | POHNPEI I./Pohnpei Intl | RS |
| PTKK | WENO I./FM Chuuk Intl | RS |
| PTYA | YAP I./Yap Intl | RS |
| | | |
| | | |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| **MONGOLIA** | | |
| ZMUB | ULAANBAATAR/Ulaanbaatar | RS |
| | | |
| **MYANMAR** | | |
| VYYY | YANGON/Yangon Intl | RS |
| | | |
| **NAURU** | | |
| AUUU | NAURU I./Nauru I. | RS |
| | | |
| **NEPAL** | | |
| VNKT | KATHMANDU/Kathmandu | RS |
| | | |
| **NEW CALEDONIA (France)** | | |
| NWWW | NOUMEA/La Tontouta | RS |
| | | |
| **NEW ZEALAND** | | |
| NZAA | AUCKLAND/Auckland Intl | RS |
| NZCH | CHRISTCHURCH/Christchurch Intl | RS |
| NZWN | WELLINGTON/Wellington Intl | RS |
| | | |
| **NIUE (New Zealand)** | | |
| NIUE | NIUE/Hanan Intl | RS |
| | | |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| **NORTHERN MARIANA IS. (United States)** | | |
| PGSN | OBYAN/Saipan Intl | RS |
| PGRO | ROTA I./Rota Intl | RS |
| | | |
| **PAKISTAN** | | |
| OPGD | GWADAR/Gwadar | RS |
| OPRN | ISLAMABAD/Benazir Bhutto Intl | RS |
| OPKC | KARACHI/Jinnah Intl | RS |
| OPLA | LAHORE/Allama Iqbal Intl | RS |
| OPNH | NAWABSHAH/Nawabshah | AS |
| OPPS | PESHAWAR/Peshawar | RS |
| | | |
| **PALAU** | | |
| PTRO | BABELTHAUP I./Koror | RS |
| | | |
| **PAPUA NEW GUINEA** | | |
| AYPY | PORT MORESBY/Port Moresby | RS |
| AYVN | VANIMO/Vanimo | RS |
| | | |
| **PHILIPPINES** | | |
| RPMD | DAVAO/Francisco Bangoy Intl | RNS |
| RPLI | LAOAG/Laoag Intl | AS |
| RPVM | LAPU-LAPU/Mactan Cebu | RS |
| RPLL | MANILA/Ninoy Aquino Intl | RS |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| RPLC | PAMPANGA/Clark Intl | RNS |
| RPLB | SUBIC BAY/Subic Bay Intl | RNS |
| RPMZ | ZAMBOANGA/Zamboanga Intl | RNS |
| | | |
| **REPUBLIC OF KOREA** | | |
| RKTU | CHEONGJU/Cheongju Intl | RS |
| RKTN | DAEGU/Daegu Intl | RS |
| RKPK | GIMHAE/Gimhae Intl | RS |
| RKSS | GIMPO/Gimpo Intl | RNS |
| RKSI | INCHEON/Incheon Intl | RS |
| RKPC | JEJU/Jeju Intl | RS |
| RKNY | YANGYANG/Yangyang Intl | RS |
| RKJB | MUAN/Muan Intl | RS |
| | | |
| **SAMOA** | | |
| NSFA | FALEOLO/Faleolo Intl | RS |
| | | |
| **SINGAPORE** | | |
| WSAP | PAYA LEBAR/Paya Lebar (RSAF) | AS |
| WSSL | SELETAR/Seletar | RS |
| WSSS | SINGAPORE/Changi | RS |
| | | |
| **SOLOMON IS.** | | |
| AGGH | HONIARA/Henderson | RS |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| **SRI LANKA** | | |
| VCBI | COLOMBO/Bandaranaike Intl | RS |
| VCRI | MATTALA/Mattala Rajapaksa Intl | RS |
| | RS | |
| **THAILAND** | | |
| VTBD | BANGKOK/Bangkok Intl | RS |
| VTBS | BANGKOK/Suvarnabhumi Intl | RS |
| VTCC | CHIANG MAI/Chiang Mai Intl | RS |
| VTCT | CHIANG RAI/ Mae Fah Luang-Chiang Rai Intl | RS |
| VTUK | KHON KAEN/Khon Kaen | RS |
| VTSG | KRABI/ Krabi | RS |
| VTPP | PHITSANULOK/Phitsanulok | RS |
| VTSP | PHUKET/Phuket Intl | RS |
| VTBU | RAYONG/U-Taphao Pattaya Intl | RS |
| VTSS | SONGKHLA/Hat Yai Intl | RS |
| VTSB | SURAT THANI/Surat Thani | RS |
| VTUU | UBON RATCHATHANI/Ubon Ratchathani | RS |
| | | |
| **TONGA** | | |
| NFTF | FUA'AMOTU/Fua'amotu Intl | RS |
| NFTV | VAVA'U/Vava'u | RS |
| | | |
| | | |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| **TUVALU** | | |
| NGFU | FUNAFUTI/Funafuti Intl | RS |
| | | |
| **UNITED STATES**[1] | | |
| PANC | ANCHORAGE/Anchorage Intl | RS |
| PAED | ANCHORAGE/Elemendorf AFB | AS |
| PACD | COLD BAY/Cold Bay | AS |
| KPAE | EVERETT/Snohomish County-Paine Field | AS |
| PAEI | FAIRBANKS/Eielson AFB | AS |
| PAFA | FAIRBANKS/Fairbanks Intl | RS |
| KFAT | FRESNO/Fresno Air Terminal | AS |
| PHTO | HILO/Hilo Intl | AS |
| PHNL | HONOLULU/Oahu Intl | RS |
| PHOG | KAHULUI/Kahului | AS |
| PAKN | KING SALMON/King Salmon | AS |
| KLAX | LOS ANGELES/Los Angeles Intl | RS |
| KOAK | OAKLAND/Metropolitan Oakland | AS |
| KONT | ONTARIO/Ontario Intl | AS |
| KPMD | PALMDALE/Palmdale P.F.T.I. | AS |
| KPDX | PORTLAND/Portland Intl | AS |
| KSMF | SACRAMENTO/Metropolitan | AS |
| KSAN | SAN DIEGO/San Diego (AFSS) | AS |
| KSFO | SAN FRANCISCO/San Francisco Intl | RS |

| Location Indicator | City/Aerodrome | Designation |
|---|---|---|
| KSJC | SAN JOSE/San Jose Intl | RS |
| KBFI | SEATTLE BOEING FIELD/King County Intl | AS |
| KSEA | SEATTLE/Seattle-Tacoma Intl | RS |
| KGEG | SPOKANE/Spokane Intl | AS |
| KSCK | STOCKTON/Metropolitan | AS |
| KIAD | WASHINGTON/Dulles Intl | RS |
| | | |
| **VANUATU** | | |
| NVVV | PORT VILA/Bauerfield | RS |
| NVSS | SANTO/Pekoa | RS |
| | | |
| **VIET NAM** | | |
| VVCT | CAN THO/Can Tho | RS |
| VVDN | DA NANG/Da Nang | RS |
| VVNB | HA NOI/Noi Bai | RS |
| VVTS | HO CHI MINH/Tan Son Nhat | RS |
| VVPB | HUE/Phu Bai | RS |
| VVCR | KHANH HOA/Cam Ranh | RS |
| VVPQ | KIEN GIANG/Phu Quoc | RS |
| | | |
| **WALLIS AND FUTUNA IS. (France)** | | |
| NLWW | WALLIS/Hihifo | RS |
| | | |

*Note 1— Outside ASIA/PAC. Indicated for coordination*

Location Indicator City/Aerodrome Designation

# APPENDIX B

# APAC AIR NAVIGATION PLAN

# VOLUME II

# APAC AIR NAVIGATION PLAN

## VOLUME II

**TABLE OF CONTENTS**

# APAC ANP, VOLUME II
# PART 0 – INTRODUCTION

## 1. GENERAL

1.1 The background to the publication of ANPs in three volumes is explained in the Introduction in Volume I. The procedure for amendment of Volume II is also described in Volume I.

1.2 Volume II contains dynamic plan elements related to:

the assignment of responsibilities to States for the provision of aerodrome and air navigation facilities and services; and

the mandatory requirements related to aerodrome and air navigation facilities and services to be implemented by States in accordance with regional air navigation agreements.

1.3 Volume II does not list all facilities in the region(s) but only those required for international civil aviation operations in accordance with regional air navigation agreements. A regional air navigation agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified. Documents from the Integrated Aeronautical Information Package and other publications should be consulted for information on additional facilities and for operational information in general. Detailed guidance material or concepts, complementary to the material in Volumes I, II and III are contained in documents that are referenced as **(*NAME*)** Documents.

## 2. MANAGEMENT OF REGIONAL AIR NAVIGATION PLANS

2.1 The elements in Volume II are reviewed by the APANPIRG in accordance with its schedule of meetings, in consultation with provider and user States, and with the assistance of the ICAO APAC Regional Office.

2.2 The information on States' facilities and services included in Volume II, should be updated following the process of regional air navigation agreements.

2.3 The development and maintenance of region-specific documents that provide detailed guidance material or concepts that are complementary to the material in Volumes I, II and III is the responsibility of the APANPIRG.

# APAC ANP, VOLUME II

## PART I – GENERAL PLANNING ASPECTS (GEN)

### INTRODUCTION

The material in this part of Volume II of ANP is applicable to one or more parts of the ANP. It should be taken into consideration in the overall planning process for the APAC Region.

### GENERAL REGIONAL REQUIREMENTS

To facilitate air navigation systems planning and implementation, homogenous ATM areas and/or major traffic flows/routing areas have been defined for the Region(s). While these areas of routing do not encompass all movements in the Region(s), they include the major routes. This includes the domestic flights in that particular area of routing.

*Homogeneous ATM area*

A homogeneous ATM area is an airspace with a common ATM interest, based on similar characteristics of traffic density, complexity, air navigation system infrastructure requirements or other specified considerations. In such an ATM area a common detailed plan will foster the implementation of interoperable ATM systems. Homogeneous ATM areas may extend over States, specific portions of States, or groupings of States. They may also extend over large oceanic and continental areas. They are considered areas of shared interest and requirements.

The method of identifying homogeneous ATM areas involves consideration of the varying degrees of complexity and diversity of the worldwide air navigation infrastructure. Based on these considerations, planning could best be achieved at the global level if it was organized based on ATM areas of common requirements and interest, taking into account traffic density and the level of sophistication required.

*Major traffic flows/routing areas*

A major traffic flow refers to a concentration of significant volumes of air traffic on the same or proximate flight trajectories. Major traffic flows may cross several homogeneous ATM areas with different characteristics.

A routing area encompasses one or more major traffic flows, defined for the purpose of developing a detailed plan for the implementation of ATM systems and procedures. A routing area may cross several homogeneous ATM areas with different characteristics. A routing area specifies common interests and requirements of underlying homogeneous areas, for which a detailed plan for the implementation of ATM systems and procedures either for airspace or aircraft will be specified.

The homogeneous ATM areas and major traffic flows/routing areas identified are given in **Table GEN II-1**.

**TABLE GEN II-1 - HOMOGENEOUS ATM AREAS AND/OR MAJOR TRAFFIC FLOWS IDENTIFIED IN THE APAC REGION**

EXPLANATION OF TABLE

| Column | | |
|---|---|---|
| 1 | Area of routing (AR) | Sequential number of area of routing |
| 2 | Homogeneous Areas and/or Traffic flows | Brief description and/or name |
| 3 | FIRs involved | List of FIRs concerned |
| 4 | Type of area covered | Brief description of type of area, examples:<br>Oceanic or Continental<br>High or low density<br>Oceanic en-route or Continental en-route |
| 5 | Remarks | Homogeneous ATM Area and/or Major Traffic Flow and Region(s) concerned |

| **Area of routing (AR)** | **Homogeneous Areas and/or Traffic flows** | **FIRs involved** | **Type of area covered** | **Remarks** |
|---|---|---|---|---|
| **1** | **2** | **3** | **4** | **5** |
| | | | | |

# APAC ANP, VOLUME II

# PART II – AERODROMES / AERODROME OPERATIONS (AOP)

## 1. INTRODUCTION

1.1 This part of the APAC ANP, Volume II, complements the provisions in ICAO SARPs and PANS related to aerodrome design and operations (AOP). It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of AOP facilities and services within a specified area in accordance with Article 28 of the *Convention on International Civil Aviation* (Doc 7300); and mandatory requirements related to AOP facilities and services to be implemented by States in accordance with regional air navigation agreements. Such agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified.

## 2. GENERAL REGIONAL REQUIREMENTS

2.1 **Table AOP II-1** contains the list of facilities and services to be provided by the State concerned at each aerodrome that is listed in **Table AOP I-1** in Volume I. Table AOP II-1 shows the operational requirements at each aerodrome to be considered in planning the facilities and services for safe and efficient aircraft operations.

*Visual aids for low visibility aerodrome operations*

2.2 At aerodromes where there is a requirement to conduct low visibility operations, the appropriate visual and non-visual aids should be provided.

*Non-precision approach aids*

2.3 Where required by the topographic and/or environmental situation of an aerodrome, improved track guidance during departure and/or approach by specific non-visual and/or visual aids should be provided even if such aids would not normally be required in accordance with the SARPs.

*Reduced runway declared distances for take-off*

*Note. — In the following operational requirements the term "intersection" is used to cover both intersection and junction concepts.*

2.4 The reduced runway declared distances for take-off, as for those used for full runway declared distances, should consist of take-off run available (TORA), take-off distance available (TODA) and accelerate-stop distance available (ASDA).

2.5 The datum-line from which the reduced runway declared distances for take-off should be determined is defined by the intersection of the downwind edge of the specific taxiway with the runway edge. The loss, if any, of runway length due to alignment of the aircraft prior to take-off should be taken into account by the operators for the calculation of the aircraft's take-off weight.

2.6 Intersections used as intermediate take-off positions should be identified by the "taxiway designator" to which the datum-line of the associated reduced runway declared distance for take-off refers.

2.7 At each international aerodrome, specific minima visibility for take-off should be established, regulating the use of intersection take-off positions. These minima should permit the appropriate ATC unit to maintain a permanent surveillance of the ground movement operations, and the flight crews to constantly secure their position on the manoeuvring area, so as to exclude any potential risk of confusion as

to the identification of the aircraft and intersections used for take-off. The minima should be consistent with the surface movement guidance and control system (SMGCS) provided at the aerodrome concerned.

2.8 The provision of marking and lighting aids together with signs should ensure the safe control and guidance of aircraft towards and at take-off intersections appropriate to the minima visibility criteria retained. At the runway holding position of the associated intersection take-off position, such signs should indicate the runway heading and the remaining TORA in metres.

2.9 At aerodromes regularly used by international commercial air transport, take-offs from runway/taxiway intersections may be justified for the following reasons:

runway capacity improvement;
taxi routes distances reduction;
noise alleviation; and
air pollution reduction.

2.10 The appropriate authorities should, upon prior consultation with aircraft operators, agree on the selection of suitable intermediate intersection take-off positions along the runway(s). Accordingly, authorities should determine the reduced runway declared distances for take-off associated with each selected intersection take-off position and establish the specific ATC rules and operational procedures/limitations. Such provisions should be published in the State aeronautical information publications (AIP).

*Aerodrome capacity management*

2.11 As an integral part of the air navigation system, the aerodrome should provide the needed ground infrastructure including, *inter alia*, lighting; taxiways; runway, including exits; aprons and precise surface guidance to improve safety and to maximize aerodrome capacity in all weather conditions. An efficient aerodrome capacity planning and management should include:

reduction of runway occupancy time;
the capability to safely manoeuvre in all weather conditions whilst maintaining capacity;
precise surface guidance to and from a runway required in all conditions; and
availability of information on the position (to an appropriate level of accuracy) and intent of all vehicles and aircraft operating on the movement area for the appropriate ATM community members.

2.12 States should ensure that adequate consultation and, where appropriate, cooperation between airport authorities and users/other involved parties are implemented at all international aerodromes to satisfy the provisions of aerodrome capacity assessment and requirement.

2.13 When international aerodromes are reaching designed operational capacity, a better and more efficient utilization of existing runways, taxiways and aprons is required. Runway selection procedures and standard taxi routes at aerodromes should ensure an optimum flow of air traffic with a minimum of delay and a maximum use of available capacity. They should also, if possible, take account of the need to keep taxiing times for arriving and departing aircraft as well as apron occupancy time to a minimum. The airport collaborative decision making (A-CDM) concept should be implemented to improve airport capacity as early as possible.

*Aerodrome capacity assessment and requirement*

2.14 The declared capacity/demand condition at aerodromes should be periodically reviewed in terms of a qualitative analysis for each system component and, when applicable, the result of the qualitative assessment upon mutual agreement be used for information.

2.15 The future capacity/demand, based on a forecast for the next five years, should be agreed upon after close cooperation between aerodrome authorities and affected users.

2.16 Operators should consult with aerodrome authorities when future plans indicate a significant increased requirement for capacity resulting in one of the elements reaching a limiting condition.

2.17 Aerodrome capacity should be assessed by aerodrome authorities in consultation with the parties involved for each component (terminal/apron/aircraft operations) using agreed methods and criteria for level of delays.

2.18 Where restrictions in aerodrome capacity are identified, a full range of options for their reduction or removal should be evaluated by the aerodrome authority, in close cooperation with the operators and other involved parties. Such options should include technical/operational/procedural and environmental improvements and facility expansion.

2.19 At many aerodromes, airspace capacity has influence on the aerodrome capacity. If the declared capacity of a specified airspace has influence on aerodrome operations, this should be indicated and action undertaken to reach a capacity in this airspace corresponding to the aerodrome capacity.

2.20 The possibility of overcoming capacity limitations should also take the use of other aerodromes in the vicinity into consideration.

*Closure of regular aerodromes*

2.21 When a regular aerodrome is to be closed, States should ensure that sufficient alternate aerodromes remain open to provide for the safety and efficiency of aircraft approaching the regular aerodrome that may be required to divert to an alternate.

*Scheduling aerodrome maintenance*

2.22 States, when planning major aerodrome maintenance work that would affect the regularity of international aircraft operations, should consider the need to notify aircraft operators sufficiently in advance prior to undertaking the scheduled work.

## Table AOP II-1 – REQUIREMENTS AND CAPACITY ASSESSMENT

## EXPLANATION OF THE TABLE

*Note: Columns 3 to 5 for physical characteristics relate to runways and taxiways. The physical characteristics of taxiways and aprons should be compatible with the aerodrome reference code (Column 3) and appropriate for the runways with which they are related.*

*Column*

1 Name of the city and aerodrome, preceded by the location indicator.

*Note 1— When the aerodrome is located on an island and no particular city or town is served by the aerodrome, the name of the island is included instead of a city.*

Designation of the aerodrome as:
RS — international scheduled air transport, regular use;
RNS — international non-scheduled air transport, regular use;
AS — international scheduled air transport, alternate use; and
ANS — international non-scheduled air transport, alternate use.

2 Required rescue and firefighting service (RFF). The required level of protection expressed by means of an aerodrome RFF category number, in accordance with Annex 14, Volume I, 9.2.

3 Aerodrome reference code (RC). The aerodrome reference code for aerodrome characteristics expressed in accordance with Annex 14, Volume I, chapter 1. The code letter or number within an element selected for design purposes is related to the critical aeroplane characteristics for which the facilities are provided.

4 Runway Designation numbers

5 Type of each of the runways to be provided. The types of runways, as defined in Annex 14, Volume I, Chapter 1, are:
NINST — non-instrument runway;
NPA — non-precision approach runway;
PA1 — precision approach runway, Category I;
PA2 — precision approach runway, Category II;
PA3 — precision approach runway, Category III.

6 Remarks. Additional information including critical design aircraft selected for determining RC, critical aircraft selected for determining the RFF category and critical aircraft for pavement strength. Only one critical aircraft type is shown if it is used to determine all the above three elements: otherwise different critical aircraft types need to be shown for different elements.

---

# Table AOP II-1 – REQUIREMENTS AND CAPACITY ASSESSMENT

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| **AFGHANISTAN** | | | | | | |
| OAKB | KABUL/Kabul intl | 8 | 4D | 11 | NPA | DC 10-30 |
| | RS | | | 29 | PAI | |
| | | | | | | |
| OAKN | KANDAHAR/Kandahar Intl | 8 | 4D | 05 | NPA | DC10-30 |
| | AS | | | 23 | NPA | |
| | | | | | | |
| **AMERICAN SAMOA (United States)** | | | | | | |
| NSTU | PAGO PAGO/Pago Pago Intl | 7 | 4D | 05 | PA1 | DC8 |
| | RS | | | 23 | NINST | |
| | | | | | | |
| **AUSTRALIA** | | | | | | |
| YPAD | ADELAIDE/Adelaide | 8 | 4E | 05 | NPA | B747 |
| | RS | | | 23 | PA1 | |
| | | | | | | |
| YBAS | ALICE SPRINGS/Alice Springs | 7 | 4E | 12 | PA1 | B747 |
| | AS | | | 30 | NPA | |
| | | | | | | |
| YBBN | BRISBANE/Brisbane | 9 | 4E | 01 | PA1 | B747 |
| | RS | | | 19 | PA1 | |
| | | | | | | |
| YBCS | CAIRNS/Cairns | 9 | 4E | 15 | PA1 | B747 |
| | RS | | | 33 | NPA | |
| | | | | | | |
| YPXM | CHRISTMAS I./Christmas I. | 4 | 4C | 18 | NPA | B727 |
| | RS | | | 36 | NPA | |
| | | | | | | |
| YPCC | COCOS I./Cocos I. | 4 | 4C | 15 | NPA | B727 |
| | RS | | | 33 | NPA | |
| | | | | | | |
| YPDN | DARWIN/Darwin | 8 | 4E | 11 | NPA | B747 |
| | RS | | | 29 | PA1 | |
| | | | | | | |
| YMHB | HOBART/Hobart | 7 | 4C | 12 | PA1 | B727-200 |
| | RNS | | | 30 | NPA | |
| | | | | | | |
| YMML | MELBOURNE/Melbourne Intl | 9 | 4E | 16 | PA1 | B 747 |
| | RS | | | 34 | NPA | |
| | | | | 09 | NPA | B747 |
| | | | | 27 | PA1 | |
| | | | | | | |
| YSNF | NORFOLK I./Norfolk I. | 4 | 4C | 11 | NPA | B737 |
| | RS | | | 29 | NPA | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| YPPH | PERTH/Perth Intl | 9 | 4E | 06 | NPA | B747 |
| | RS | | | 24 | PA1 | |
| | | | 4E | 03 | PA1 | B747 |
| | | | | 21 | PA1 | |
| | | | | | | |
| YPPD | PORT HEDLAND/Port Hedland | 5 | 4C | 14 | NPA | B737 |
| | RNS | | | 32 | NPA | |
| | | | | | | |
| YBRK | ROCKHAMPTON/Rockhampton | 6 | 4C | 15 | NPA | B737 |
| | AS | | | 33 | NPA | |
| | | | | | | |
| YSSY | SYDNEY/Kingsford Smith Intl | 9 | 4E | 16 | PA1 | B747 |
| | RS | | | 34 | PA1 | |
| | | | 4E | 07 | PA1 | B747 |
| | | | | 25 | PA1 | |
| | | | | | | |
| YPTN | TINDAL/Tindal | 7 | 4E | 14 | PA1 | B747 |
| | AS | | | 32 | NPA | |
| | | | | | | |
| YBTL | TOWNSVILLE/Townsville | 7 | 4E | 01 | PA1 | B747-SP |
| | RNS | | | 19 | NPA | |
| | | | | | | |
| **BANGLADESH** | | | | | | |
| VGEG | CHITTAGONG/Shah Amanat Intl | 6 | 4C | 05 | NPA | B737-200 |
| | RS | | | 23 | NPA | |
| | | | | | | |
| VGHS | DHAKA/Hazrat Shahjalal Intl | 8 | 4E | 14 | PA1 | B747 |
| | RS | | | 32 | NPA | |
| | | | | | | |
| **BHUTAN** | | | | | | |
| VQPR | PARO/Paro Intl | | 3C | 15 | NPA | A319-115 |
| | RS | 6 | | 33 | NPA | |
| | | | | | | |
| **BRUNEI DARUSSALAM** | | | | | | |
| WBSB | BRUNEI/Brunei Intl | 9 | 4E | 03 | NPA | B747 |
| | RS | | | 21 | PA1 | |
| | | | | | | |
| **CAMBODIA** | | | | | | |
| VDPP | PHNOM PENH/Phnom Penh | 8 | 4D | 05 | NPA | DC-10 |
| | RS | | | 23 | PA1 | |
| | | | | | | |
| VDSR | SIEM REAP/Siem Reap | 8 | 4D | 05 | NPA | IL 62 |
| | AS | | | 23 | NPA | |
| | | | | | | |
| | | | | | | |

| City/Aerodrome/Designation | | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | | |
| **CANADA**[1] | | | | | | | |
| CYXX | ABBOTSFORD/Abbotsford | | 7 | 4E | 07 | PA1 | B747 |
| | | AS | | | 25 | NINSX | |
| | | | | | | | |
| CYYC | CALGARY/Calgary Intl | RS | 8 | 4E | 16 | PA 1 | B747 |
| | | | | | 34 | PA 1 | |
| | | | | 4E | 10 | NPA | B747 |
| | | | | | 28 | PA! | |
| | | | | | | | |
| CYQQ | COMOX/Comox | | 8 | 4E | 11 | NPA | B747 |
| | | AS | | | 29 | NINSX | |
| | | | | | | | |
| CYEG | EDMONTON/Edmonton Intl | | 8 | 4E | 02 | PA1 | B747 |
| | | RS | | | 20 | NPA | |
| | | | | 4E | 12 | PA1 | B747 |
| | | | | | 30 | PA1 | |
| | | | | | | | |
| CYVR | VANCOUVER/Vancouver Intl | | 9 | 4E | 08R | PA2 | B747 |
| | | RS | | | 26L | PA1 | |
| | | | | 4E | 08L | PA3 | B747 |
| | | | | | 26R | PA3 | |
| | | | | | | | |
| CYYJ | VICTORIA/Victoria Intl | | 6 | 4D | 09 | PA1 | DC-68 |
| | | RNS | | | 27 | PA1 | |
| | | | | | | | |
| **CHINA** | | | | | | | |
| ZBAA | BEIJING/Capital | | 9 | 4E | 18R | PA1 | B747 |
| | | RS | | | 36L | PA1 | |
| | | | | 4E | 18L | PA1 | B747 |
| | | | | | 36R | PA2 | |
| | | | | | | | |
| ZGHA | CHANGSHA/Huanghua | | 7 | 4D | 18 | NPA | MD82 |
| | | RS | | | 36 | PA1 | |
| | | | | | | | |
| ZUUU | CHENGDU/Shuangliu | | 7 | 4E | 02 | PA1 | B747 |
| | | AS | | | 20 | PA1 | |
| | | | | | | | |
| ZUCK | CHONGQING/Jiangbei | | 7 | 4E | 02 | PA1 | DC10 |
| | | RS | | | 20 | PA1 | |
| | | | | | | | |
| ZYTL | DALIAN/Zhoushuizi | | 8 | 4E | 10 | PA1 | B747 |
| | | RS | | | 28 | PA1 | |
| | | | | | | | |
| ZSFZ | FUZHOU/Changle | | 8 | 4E | 03 | PA1 | B747 |
| | | RS | | | 21 | PA1 | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| RCKH | GAOXIONG/Gaoxiong | 9 | 4E | 09L | PA1 | B747 |
| | RS | | | 27R | PA1 | |
| | | | | | | |
| ZGGG | GUANGZHOU/Baiyun | 9 | 4E | 02R | PA1 | B747-400 |
| | RS | | | 20L | PA1 | |
| | | | | 02L | PA1 | B747-400 |
| | | | | 20R | PA1 | |
| | | | | | | |
| ZGKL | GUILIN/Liangjiang | 8 | 4D | 01 | PA1 | B747 |
| | RS | | | 19 | PA1 | |
| | | | | | | |
| ZSHC | HANGZHOU/Xiaoshen | 7 | 4D | 07 | PA1 | A300 |
| | RS | | | 25 | NPA | |
| | | | | | | |
| ZYHB | HARBIN/Taiping | 6 | 4D | 05 | PA1 | A300 |
| | RS | | | 23 | PA1 | |
| | | | | | | |
| ZSOF | HEFEI/Luogang | 5 | 4D | 14 | PA1 | B767 |
| | AS | | | 32 | NPA | |
| | | | | | | |
| ZBHH | HOHHOT/Baita | 5 | 4D | 08 | PA1 | B737 |
| | RS | | | 26 | NPA | |
| | | | | | | |
| ZSJN | JINAN/Yaoqiang | 6 | 4D | 01 | PA1 | A300 |
| | RS | | | 19 | NPA | |
| | | | | | | |
| ZWSH | KASHI/Kashi | 6 | 4D | 08 | NPA | A300 |
| | AS | | | 26 | PA1 | |
| | | | | | | |
| ZPPP | KUNMING/Wujiaba | 7 | 4E | 03 | PA1 | B747 |
| | RS | | | 21 | PA1 | |
| | | | | | | |
| ZLLL | LANZHOU/Zhongchuan | 7 | 4D | 18 | NPA | B747 |
| | AS | | | 36 | PA1 | |
| | | | | | | |
| ZSNJ | NANJING/Lukou | 8 | 4E | 06 | PA1 | B747 |
| | RS | | | 24 | PA1 | |
| | | | | | | |
| ZGNN | NANNING/Wuxu | 5 | 4D | 05 | PA1 | A300 |
| | AS | | | 23 | NPA | |
| | | | | | | |
| ZSQD | QINGDAO/Liuting | 5 | 4D | 17 | PA1 | A300 |
| | RS | | | 35 | PA1 | |
| | | | | | | |
| | | | | | | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| ZJSY | SANYA/Phoenix | 8 | 4E | 08 | PA1 | B747 |
| | RS | | | 26 | NPA | |
| | | | | | | |
| ZSSS | SHANGHAI/Hongqiao | 9 | 4E | 18 | PA1 | B747 |
| | RS | | | 36 | PA1 | |
| | | | | | | |
| ZSPD | SHANGHAI/Pudong | 9 | 4E | 17 | PA1 | B747 |
| | RS | | | 35 | PA1 | |
| | | | | | | |
| ZYTX | SHENYANG/Taoxian | 7 | 4E | 06 | PA1 | B747 |
| | RS | | | 24 | PA1 | |
| | | | | | | |
| ZGSZ | SHENZHEN/Bao'an | 7 | 4E | 15 | PA1 | B747 |
| | RS | | | 33 | PA1 | |
| | | | | | | |
| RCSS | TAIBEI/Songshan | 9 | 4E | 10 | PA1 | B747 |
| | AS | | | 28 | PA1 | |
| | | | | | | |
| RCTP | TAIBEI CITY/Taibei Intl | 9 | 4E | 05L | PA2 | B747 |
| | RS | | | 23R | PA2 | |
| | | | | 05R | PA1 | B747 |
| | | | | 23L | PA1 | |
| | | | | 06 | PA1 | B747 |
| | | | | 24 | PA1 | |
| | | | | | | |
| ZBYN | TAIYUAN/Wusu | 7 | 4D | 13 | PA1 | A300 |
| | AS | | | 31 | PA1 | |
| | | | | | | |
| ZBTJ | TIANJIN/Binhai | 7 | 4D | 16 | PA1 | A300 |
| | RS | | | 34 | PA1 | |
| | | | | | | |
| ZWWW | URUMQI/Diwopu | 7 | 4D | 07 | PA1 | A300 |
| | RS | | | 25 | PA1 | |
| | | | | | | |
| ZHHH | WUHAN/Tianhe | 7 | 4E | 04 | PA1 | B747 |
| | RNS | | | 22 | PA1 | |
| | | | | | | |
| ZSAM | XIAMEN/Gaoqi | 7 | 4E | 05 | PA1 | B767 |
| | RS | | | 23 | NPA | |
| | | | | | | |
| ZLXY | XI'AN/Xianyang | 6 | 4E | 05 | PA1 | A300 |
| | RS | | | 23 | PA1 | |
| | | | | | | |
| ZUXC | XICHANG/Qingshan | 6 | 4D | 18 | NPA | B767 |
| | RNS | | | 36 | PA1 | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| **COOK IS.** | | | | | | |
| NCRG | RAROTONGA/Rarotonga Intl | 7 | 4D | 08 | NPA | DC 10-30 |
| | RS | | | 26 | NPA | |
| | | | | | | |
| **DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA** | | | | | | |
| ZKPY | SUNAN/Sunan | 9 | 4D | 17 | NPA | IL 62 |
| | RS | | | 35 | PA1 | |
| | | | 4E | 01 | PA1 | B747-400 |
| | | | | 19 | PA1 | |
| | | | | | | |
| **FIJI** | | | | | | |
| NFFN | NADI/Nadi Intl | 8 | 4E | 03 | PA1 | B747 |
| | RS | | | 21 | NINST | |
| | | | | 09 | NINST | B737-200 |
| | | | | 27 | NINST | |
| | | | | | | |
| NFSU | SUVA/Nausori | 5 | 4C | 10 | NPA | B737-200 |
| | RS | | | 28 | NPA | |
| | | | | | | |
| **FRENCH POLYNESIA (France)** | | | | | | |
| NTAA | TAHITI/Faaa | 9 | 4E | 04 | PA1 | B747 |
| | RS | | | 22 | NPA | |
| | | | | | | |
| **GUAM (United States)** | | | | | | |
| PGUA | GUAM I./Andersen AFB | 8 | 4E | 06R | PA1 | B747 |
| | AS | | | 24L | NPA | |
| | | | | | | |
| PGUM | GUAM I./Guam Intl | 8 | 4E | 06L | PA1 | B747 |
| | RS | | | 24R | NPA | |
| | | | | | | |
| **HONG KONG, China** | | | | | | |
| VHHH | HONG KONG/Hong Kong Intl | 10 | 4F | 07R | PA2 | A380 |
| | RS | | | 25L | PA2 | |
| | | | | 07L | PA2 | A380 |
| | | | | 25R | PA3 | |
| | | | | | | |
| **INDIA** | | | | | | |
| VAAH | AHMEDABAD/Sardar VallabhBhai Patel International Airport | 9 | 4E | 05 | NPA | B747-400 |
| | RS | | | 23 | PA1 | |
| | | | | | | |
| VIAR | AMRITSAR/Amritsar Airport | 9 | 4E | 16 | NPA | B747-400 |
| | RS | | | 34 | PA1 | |
| | | | | | | |
| | | | | | | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| VOBL | BANGALORE/Bangalore International Airport | 9 | 4E | 09 | PAI | B747-400 |
| | RS | | | 27 | PAI | |
| | | | | | | |
| VOCL | CALICUT/Calicut Airport | | 4D | 10 | NPA | A300-600 |
| | RS | 8 | | 28 | PAI | |
| | | | | | | |
| VOMM | CHENNAI/Chennai Airport | | 4E | 07 | PA1 | B747-400 |
| | RS | 9 | | 25 | PAI | |
| | | | 4C | 12 | NPA | A320-200 |
| | | | | 30 | NPA | |
| | | | | | | |
| VOCB | COIMBATORE/Coimbatore Airport | 7 | 4C | 05 | NPA | A321 |
| | RS | | | 23 | PAI | |
| | | | | | | |
| VOCI | COCHIN/Cochin Airport | 9 | 4E | 09 | NPA | B747-400 |
| | RS | | | 27 | PAI | |
| | | | | | | |
| VIDP | DELHI/Indira Gandhi Intl Airport | 9 | 4E | 10 | PAI | B747-400 |
| | RS | | | 28 | PA3 | |
| | | | 4E | 09 | NPA | B747-400 |
| | | | | 27 | PAI | |
| | | | 4E | 11 | PA3 | B747-400 |
| | | | | 29 | PA3 | |
| | | | | | | |
| VEGY | GAYA/ Gaya Airport | 6 | 4C | 10 | NPA | A320-200 |
| | RS | | | 28 | PAI | |
| | | | | | | |
| VEGT | GUWAHATI/Lokpriya Gopinath Bordolai International Airport | 7 | | 02 | PAI | A300-600 |
| | RS | | 4D | 20 | NPA | |
| | | | | | | |
| VOHS | HYDERABAD/Rajiv Gandhi International Airport | 9 | 4F | 09 | PAI | B747-400 |
| | RS | | | 27 | PAI | |
| | | | | | | |
| VIJP | JAIPUR/Jaipur Airport | 7 | 4D | 09 | NPA | A300-600 |
| | RS | | | 27 | PAI | |
| | | | | | | |
| VECC | KOLKATA/Netaji Subhash Chandra Bose International Airport | 9 | 4E | 01R | PAI | B747-400 |
| | RS | | | 19L | PA2 | |
| | | | 4E | 01L | NPA | B747-400 |
| | | | | 19R | NPA | |
| | | | | | | |
| VILK | LUCKNOW/ Chaudhry Charan singh Airport | 7 | 4D | 09 | NPA | B767-400 |
| | RS | | | 27 | PAI | |
| | | | | | | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| VOML | MANGALORE/ Mangalore Airport | 7 | 4D | 06 | NPA | A310-300 |
| | RS | | | 24 | PAI | |
| VABB | MUMBAI/Chatrapati Shivaji International Airport | 9 | 4E | 09 | PAI | B747-400 |
| | RS | | | 27 | PA1 | |
| | | | 4E | 14 | PAI | B747-400 |
| | | | | 32 | NPA | |
| VANP | NAGPUR/Dr Ambedkar Airport | 8 | 4E | 14 | NPA | B747-400 |
| | RS | | | 32 | PA1 | |
| VEPT | PATNA/Patna Airport | 7 | 4C | 07 | NPA | A320-200 |
| | RS | | | 25 | PAI | |
| VOTR | TIRUCHCHIRAPPALLI/Tiruchchirappalli Airport | 7 | 4C | 09 | NPA | A320-200 |
| | RS | | | 27 | PAI | |
| VOTV | THIRUVANANTHAPURAM/ Thiruvananthapuram Airport | 9 | 4E | 14 | NPA | B747-400 |
| | RS | | | 32 | PA1 | |
| VIBN | VARANASI/Lal Bahadur Shastri Airport | 6 | 4C | 09 | NPA | A320-200 |
| | RS | | | 27 | PAI | |
| **INDONESIA** | | | | | | |
| WAPP | AMBON/Pattimura | 7 | 4C | 04 | PA1 | B737 |
| | RNS | | | 22 | NINST | |
| WADD | BALI/Ngurah Rai | 9 | 4E | 09 | NPA | B747 |
| | RS | | | 27 | PA1 | |
| WALL | BALIKPAPAN/Sepinggan | 7 | 4D | 07 | NPA | B767 |
| | RS | | | 25 | PA1 | |
| WAOO | BANJARMASIN/Syamsudin Noor | 7 | 4C | 10 | PA1 | B737 |
| | AS | | | 28 | NINST | |
| WIDD | BATAM/Hang Nadim | 9 | 4E | 04 | PA1 | B747 |
| | RS | | | 22 | NPA | |
| WABB | BIAK/Frans Kaisiepo | 7 | 4E | 11 | PA1 | B747 |
| | RS | | | 29 | NINST | |
| WIHH | JAKARTA/HalimPerdana Kusuma | 9 | 4E | 06 | NPA | B747 |
| | RNS | | | 24 | PA1 | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| WIII | JAKARTA/Soekarno Hatta | 9 | 4E | 07L | PA1 | B747 |
| | RS | | | 25R | PA1 | |
| | | | 4E | 07R | PA1 | B747 |
| | | | | 25L | PA1 | |
| WAJJ | JAYAPURA/Sentani | 7 | 4C | 12 | NINST | B737 |
| | RS | | | 30 | PA1 | |
| WATT | KUPANG/El Tari | 6 | 4D | 07 | NPA | B767 |
| | RS | | | 25 | NPA | |
| WAMM | MANADO/Sam Ratulangi | 7 | 4E | 18 | PA1 | A330 |
| | RS | | | 36 | PA1 | |
| WIMM | MEDAN/Kualanamu | 9 | 4F | 05 | PA1 | A380 |
| | RS | | | 23 | PA1 | |
| WAKK | MERAUKE/Mopah | 6 | 4C | 16 | NPA | B737 |
| | RNS | | | 34 | NINST | |
| WIPT | PADANG/Minangkabau | 9 | 4E | 15 | NPA | A330 |
| | RS | | | 33 | PA1 | |
| WIPP | PALEMBANG/Sultan Mahmud Badaruddin II | 7 | 4D | 11 | NPA | B767 |
| | RS | | | 29 | PA1 | |
| WIBB | PEKANBARU/Sultan Syarif Kasim II | 7 | 4C | 18 | NPA | B737 |
| | RS | | | 36 | PA1 | |
| WIOO | PONTIANAK/Supadio | 7 | 4C | 15 | PA1 | B737 |
| | RS | | | 33 | NPA | |
| WARR | SURABAYA/Juanda | 8 | 4E | 10 | PA1 | B747 |
| | RS | | | 28 | NPA | |
| WIDN | TANJUNG PINANG/Raja Haji Fisabilillah | 6 | 4C | 04 | NPA | B737 |
| | RNS | | | 22 | NINST | |
| WALR | TARAKAN/Juwata | 7 | 4C | 06 | PA1 | B737 |
| | RNS | | | 24 | NINST | |
| WAAA | MAKASSAR/Sultan Hasanuddin | 8 | 4E | 13 | PA1 | B777 |
| | RS | | | 31 | NPA | |
| | | | | 03 | PA1 | B777 |
| | | | | 21 | PA1 | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| **JAPAN** | | | | | | |
| RJFF | FUKUOKA/Fukuoka | 9 | 4E | 16 | PA1 | B747-200 |
| | RS | | | 34 | PA1 | |
| | | | | | | |
| RJCH | HAKODATE/Hakodate | 9 | 4E | 12 | PA1 | B747-400 |
| | AS | | | 30 | NPA | |
| | | | | | | |
| RJOA | HIROSHIMA/Hiroshima | 9 | 4E | 10 | PA3 | B747-400 |
| | RS | | | 28 | NPA | |
| | | | | | | |
| RJFK | KAGOSHIMA/Kagoshima | 9 | 4E | 16 | NPA | B747-400 |
| | RS | | | 34 | PA1 | |
| | | | | | | |
| RJBB | KANSAI/Kansai Intl | 9 | 4E | 06R | PA2 | B747-400 |
| | RS | | | 24L | PA2 | |
| | | | 4F | 06L | PA1 | A380 |
| | | | | 24R | PA1 | |
| | | | | | | |
| RJFT | KUMAMOTO/Kumamoto | 9 | 4E | 07 | PA3 | B747-200 |
| | RS | | | 25 | NPA | |
| | | | | | | |
| RJFU | NAGASAKI/Nagasaki | 9 | 4E | 14 | NPA | B747-400 |
| | RS | | | 32 | PA1 | |
| | | | | | | |
| RJGG | NAGOYA/Chubu Centrair Intl. | 9 | 4F | 18 | PA2 | A380 |
| | RS | | | 36 | PA2 | |
| | | | | | | |
| ROAH | NAHA/Naha | 9 | 4E | 18 | NPA | B747-400 |
| | RS | | | 36 | PA1 | |
| | | | | | | |
| RJSN | NIIGATA/Niigata | 9 | 4E | 10 | NPA | B747-200 |
| | RS | | | 28 | PA1 | |
| | | | | | | |
| RJFO | OITA/Oita | 8 | 4E | 01 | PA1 | B747-400 |
| | RS | | | 19 | NPA | |
| | | | | | | |
| RJOB | OKAYAMA/Okayama | 9 | 4E | 07 | PA1 | B747-400 |
| | RS | | | 25 | NPA | |
| | | | | | | |
| RJOO | OSAKA/Osaka Intl | 9 | 4E | 14R | NPA | B747-400 |
| | AS | | | 32L | PA1 | |
| | | | | | | |
| RJCC | SAPPORO/New Chitose | 9 | 4E | 01L | PA1 | B747-400 |
| | RS | | | 19R | PA1 | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| | | | | 01R | PA1 | B747-400 |
| | | | | 19L | NPA | |
| | | | | | | |
| RJSS | SENDAI/Sendai | 9 | 4E | 09 | NPA | B747-400 |
| | RNS | | | 27 | PA1 | |
| | | | | | | |
| RJOT | TAKAMATSU/Takamatsu | 9 | 4E | 08 | NPA | B747-400 |
| | RS | | | 26 | PA1 | |
| | | | | | | |
| RJAA | TOKYO/Narita Intl | 9 | 4E | 16R | PA3 | A380 |
| | RS | | 4F | 34L | PA1 | |
| | | | 4E | 16L | PA1 | B777-300 |
| | | | | 34R | PA1 | |
| | | | | | | |
| RJTT | TOKYO/Tokyo Intl | 9 | 4E | 16L | NPA | B747-400 |
| | AS | | | 34R | PA2 | |
| | | | 4E | 04 | NPA | B747-400 |
| | | | | 22 | PA1 | |
| | | | 4E | 16R | NPA | B747-400 |
| | | | | 34L | PA1 | |
| | | | | | | |
| **JOHNSTON I. (United States)** | | | | | | |
| PJON | JOHNSTON ATOLL/Johnston I | 7 | 4C | 05 | NPA | B727 |
| | RS | | | 23 | NPA | |
| | | | | | | |
| **KIRIBATI** | | | | | | |
| PLCH | KIRITIMATI I./Christmas I. | 6 | 4C | 08 | NPA | B727 |
| | RS | | | 26 | NPA | |
| | | | | | | |
| NGTA | TARAWA/Bonriki Intl | 6 | 4C | 09 | NPA | B727-100 |
| | RS | | | 27 | NPA | |
| | | | | | | |
| **LAO PEOPLE'S DEMOCRATIC REPUBLIC** | | | | | | |
| VLVT | VIENTIANE/Wattay | 8 | 4D | 14 | PA1 | EA 30 |
| | RS | | | 32 | NPA | |
| | | | | | | |
| **MACAO, China** | | | | | | |
| VMMC | MACAO/Macao Intl | 9 | 4E | 16 | NPA | B747-400 |
| | RS | | | 34 | PA2 | |
| | | | | | | |
| **MALAYSIA** | | | | | | |
| WMKJ | JOHOR BAHRU/Sultan Ismail International | 9 | 4E | 16 | PA1 | B747 |
| | RS | | | 34 | NPA | |
| | | | | | | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| WBKK | KOTA KINABALU/Kota Kinabalu Intl | 9 | 4E | 02 | PA1 | B747 |
| | RS | | | 20 | PA1 | |
| | | | | | | |
| WBGG | KUCHING/Kuching International | 9 | 4E | 07 | NPA | B747 |
| | RS | | | 25 | PA1 | |
| | | | | | | |
| WMKP | PENANG/Penang Intl | 9 | 4E | 04 | PA1 | B747 |
| | RS | | | 22 | NPA | |
| | | | | | | |
| WMKL | PULAU LANGKAWI/Pulau Langkawi | 8 | 4E | 03 | PA1 | B747 |
| | RS | | | 21 | | |
| | | | | | | |
| WMKK | SEPANG/KL Intl | 10 | 4F | 14L | PA1 | A380 |
| | RS | | | 32R | PA1 | |
| | | | | 14R | PA1 | A380 |
| | | | | 32L | PA1 | |
| | | | | | | |
| **MALDIVES** | | | | | | |
| VRMG | GAN/Gan International | 8 | 4D | 10 | NPA | B767 |
| | AS | | | 28 | NPA | |
| | | | | | | |
| VRMM | MALE/Ibrahim Nasir Intl Airport | 9 | 4E | 18 | NPA | B747 |
| | RS | | | 36 | PA1 | |
| | | | | | | |
| VRMH | HANIMAADHOO/Hanimaadhoo Intl | 4 | 2C | 03 | NPA | DHC8 |
| | RS | | | 21 | NPA | |
| | | | | | | |
| VRMV | MAAMIGILI/Villa Intl | 5 | 3C | 09 | NPA | ATR72 |
| | RS | | | 27 | NPA | |
| | | | | | | |
| **MARSHALL IS.** | | | | | | |
| PKMJ | MAJURO ATOLL/Marshall I. Intl | 6 | 4C | 07 | NPA | B727-100 |
| | RS | | | 25 | NPA | |
| | | | | | | |
| **MICRONESIA (FEDERATED STATES OF)** | | | | | | |
| PTPN | POHNPEI I./Pohnpei Intl | 6 | 4C | 09 | NPA | B727-100 |
| | RS | | | 27 | NPA | |
| | | | | | | |
| PTKK | WENO I./FM Chuuk Intl | 6 | 4C | 04 | NINST | B727-100 |
| | RS | | | 22 | NINST | |
| | | | | | | |
| PTYA | YAP I./Yap Intl | 6 | 4C | 07 | NPA | B727-100 |
| | RS | | | 25 | NPA | |
| | | | | | | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| **MONGOLIA** | | | | | | |
| ZMUB | ULAANBAATAR/Ulaanbaatar | 7 | 4D | 14 | PA1 | B767-300 |
| | RS | | | 32 | NPA | |
| | | | | | | |
| **MYANMAR** | | | | | | |
| VYYY | YANGON/Yangon Intl | 8 | E | 03 | NPA | B747 |
| | RS | | | 21 | PA1 | |
| | | | | | | |
| **NAURU** | | | | | | |
| AUUU | NAURU I./Nauru I. | 6 | 4C | 12 | NPA | B727-100 |
| | RS | | | 30 | NPA | |
| | | | | | | |
| **NEPAL** | | | | | | |
| VNKT | KATHMANDU/Kathmandu | 7 | 4D | 02 | NPA | EA30 |
| | RS | | | 20 | NINST | |
| | | | | | | |
| **NEW CALEDONIA (France)** | | | | | | |
| NWWW | NOUMEA/La Tontouta | 7 | 4E | 11 | PA1 | B747 |
| | RS | | | 29 | NINST | |
| | | | | | | |
| **NEW ZEALAND** | | | | | | |
| NZAA | AUCKLAND/Auckland Intl | 9 | 4E | 05 | PA1 | B747 |
| | RS | | | 23 | PA1 | |
| | | | | | | |
| NZCH | CHRISTCHURCH/Christchurch Intl | 9 | 4E | 02 | PA1 | B747 |
| | RS | | | 20 | PA1 | |
| | | | | | | |
| NZWN | WELLINGTON/Wellington Intl | 9 | 4E | 16 | NPA | B747 SP |
| | RS | | | 34 | NPA | |
| | | | | | | |
| **NIUE (New Zealand)** | | | | | | |
| NIUE | NIUE/ Hanan Intl | 6 | 4C | 10 | NPA | B737-200 |
| | RS | | | 28 | NINST | |
| | | | | | | |
| **NORTHERN MARIANA IS. (United States)** | | | | | | |
| PGRO | ROTA I/Rota Intl | 5 | 4C | 09 | NPA | B737 |
| | RS | | | 27 | NPA | |
| | | | | | | |
| PGSN | OBYAN/Saipan Intl | 8 | 4E | 07 | PA1 | B747 |
| | RS | | | 25 | NPA | |
| | | | | | | |
| **PAKISTAN** | | | | | | |
| OPGD | GWADAR/Gwadar | 5 | 3C | 06 | NINST | FK27 |
| | RS | | | 24 | NINST | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| OPRN | ISLAMABAD/Benazir Bhutto intl | 9 | 4E | 12 | NPA | B747 |
| | RS | | | 30 | PA2 | |
| | | | 4C | 09 | NINST | B737 |
| | | | | 27 | NINST | |
| | | | | | | |
| OPKC | KARACHI/Jinnah Intl | 9 | 4E | 07L | NPA | B747 |
| | RS | | | 25R | PA2 | |
| | | | 3C | 07R | NPA | FK27 |
| | | | | 25L | NPA | |
| | | | | | | |
| OPLA | LAHORE/Allama Iqbal Intl | 9 | 4E | 18L | NPA | B747 |
| | RS | | | 36R | PA2 | |
| | | | 4E | 18R | NPA | EA 30 |
| | | | | 36L | NPA | |
| | | | | | | |
| OPNH | NAWABSHAH/Nawabshah | 8 | 4E | 02 | PA1 | B747 |
| | AS | | | 20 | PA1 | |
| | | | | | | |
| OPPS | PESHAWAR/Peshawar | 7 | 4D | 17 | NPA | EA30 |
| | RS | | | 35 | NPA | |
| | | | | | | |
| **PALAU** | | | | | | |
| PTRO | BABELTHAUP I./Koror | 6 | 4C | | NPA | B727 |
| | RS | | | | NINST | |
| | | | | | | |
| **PAPUA NEW GUINEA** | | | | | | |
| AYPY | PORT MORESBY/Port Moresby | 7 | 4E | 14L | PA1 | B747 |
| | RS | | | 32R | PA1 | |
| | | | | | | |
| AYVN | VANIMO/Vanimo | 5 | 3C | 13 | NINST | FK27 |
| | RS | | | 31 | NINST | |
| | | | | | | |
| **PHILIPPINES** | | | | | | |
| RPMD | DAVAO/Francisco Bangoy Intl | 9 | 4E | 05 | PA1 | B747-400 |
| | RNS | | | 23 | PA1 | |
| | | | | | | |
| RPLI | LAOAG/Laoag Intl | 7 | 4D | 01 | NPA | A300 |
| | AS | | | 19 | NPA | |
| | | | | | | |
| RPVM | LAPU-LAPU/Mactan Cebu | 9 | 4E | 04 | PA1 | B747-400 |
| | RS | | | 22 | PA1 | |
| | | | | | | |
| RPLL | MANILA/Ninoy Aquino Intl | 9 | 4F | 06 | PA1 | B747-400 |
| | RS | | | 24 | PA1 | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| RPLB | SUBIC BAY/Subic Bay Intl | 10 | 4E | 07 | PA1 | MD11 |
| | RNS | | | 25 | PA1 | |
| | | | | | | |
| RPMZ | ZAMBOANGA/Zamboanga Intl | 6 | 4D | 09 | PAI | A300 |
| | RNS | | | 27 | NPA | |
| | | | | | | |
| RPLC | PAMPANGA/Diosdada Macapagal Intl | 9 | 4E | 02R | PA1 | A747 |
| | RNS | | | 20L | PA1 | |
| | | | 4D | 02L | PA1 | A300 |
| | | | | 20R | PA1 | |
| | | | | | | |
| **REPUBLIC OF KOREA** | | | | | | |
| RKTU | CHEONGJU/Cheongju intl | 8 | 4E | 06L | NPA | B747-400 |
| | RS | | | 24R | PA1 | |
| | | | | | | |
| RKTN | DAEGU/Daegu Intl | 7 | 4D | 31L | PA1 | A 300 |
| | RS | | | 13R | NPA | |
| | | | | | | |
| RKPK | GIMHAE/Gimhae Intl | 9 | 4E | 18L | NPA | B747-400 |
| | RS | | | 36R | PA1 | |
| | | | 4E | 18R | NPA | |
| | | | | 36L | PA1 | |
| | | | | | | |
| RKSS | GIMPO/Gimpo Intl | 9 | 4E | 14L | PA1 | B747-400 |
| | RNS | | | 32R | PA1 | |
| | | | 4E | 14R | PA3 | B747-400 |
| | | | | 32L | PA1 | |
| | | | | | | |
| RKSI | INCHEON/Incheon Intl | 10 | 4F | 15R | PA3 | A380 |
| | RS | | | 33L | PA3 | |
| | | | 4F | 15L | PA3 | A380 |
| | | | | 33R | PA3 | |
| | | | 4F | 16 | PA3 | A380 |
| | | | | 34 | PA3 | |
| | | | | | | |
| RKPC | JEJU/Jeju Intl | 9 | 4E | 06 | PA1 | B747-400 |
| | RS | | | 24 | PA1 | |
| | | | | 13 | NPA | B747-400 |
| | | | 4C | 31 | NPA | |
| | | | | | | |
| RKNY | YANGYANG/Yangyang Intl | 7 | 4D | 33 | PA1 | A300-600 |
| | RS | | | 15 | NPA | |
| | | | | | | |
| RKJB | MUAN/Muan Intl | 7 | 4E | 01 | PA1 | B747-400 |
| | RS | | | 19 | PA1 | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| **SAMOA** | | | | | | |
| NSFA | Faleolo/Faleolo Intl | 8 | 4D | 08 | NPA | B767 |
| | RS | | | 26 | NINST | |
| | | | | | | |
| **SINGAPORE** | | | | | | |
| WSAP | PAYA LEBAR/Paya Lebar (RSAF) | 9 | 4E | 02 | PA1 | B747 |
| | AS | | | 20 | PA1 | |
| | | | | | | |
| WSSL | SELETAR/Seletar | 6 | 3C | 03 | NINST | B737 |
| | RS | | | 21 | NINST | |
| | | | | | | |
| WSSS | SINGAPORE/Changi | 10 | 4F | 02L | PA2 | A380 |
| | RS | | | 20R | PA1 | B777-300ER |
| | | | 4F | 02C | PA1 | A380 |
| | | | | 20C | PA2 | B777-300ER |
| | | | | | | |
| **SOLOMON IS.** | | | | | | |
| AGGH | HONIARA/Henderson | 6 | 4C | 06 | NINST | B737-200 |
| | RS | | | 24 | NPA | |
| | | | | | | |
| **SRI LANKA** | | | | | | |
| VCBI | COLOMBO/Bandaranaike Intl | 9 | 4E | 04 | PA1 | B747 |
| | RS | | | 22 | PA1 | |
| | | | | | | |
| VCRI | MATTALA/ Mattala Rajapaksa Intl | 10 | 4F | 05 | NPA | A380 |
| | RS | | | 23 | PAI | |
| | | | | | | |
| **THAILAND** | | | | | | |
| VTBD | BANGKOK/Don Mueang Intl | 9 | 4E | 03L | NPA | B747 |
| | RS | | | 21R | PA2 | |
| | | | 4E | 03R | NPA | B747 |
| | | | | 21L | PA1 | |
| | | | | | | |
| VTBS | BANGKOK/ Suvarnabhumi Intl | 10 | 4F | 01L | PA2 | A380 |
| | RS | | | 19R | PA2 | |
| | | | 4F | 01R | PA2 | A380 |
| | | | | 19L | PA2 | |
| | | | | | | |
| VTCC | CHIANG MAI/Chiang Mai Intl | 9 | 4E | 18 | NPA | B747 |
| | RS | | | 36 | PA1 | |
| | | | | | | |
| VTCT | CHIANG RAI/Chiang Rai Intl | 8 | 4E | 03 | PA1 | B747 |
| | RS | | | 21 | NPA | |
| | | | | | | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| VTUK | KHON KAEN/Khon Kaen | 6 | 4C | 03 | NPA | A300 |
| | RS | | | 21 | NPA | |
| | | | | | | |
| VTSG | KRABI/ Krabi | 7 | 4E | 32 | PA1 | B747 |
| | RS | | | 14 | NPA | |
| | | | | | | |
| VTPP | PHITSANULOK/Phitsanulok | 6 | 4C | 14 | NPA | A 300 |
| | RS | | | 32 | PA1 | |
| | | | | | | |
| VTSP | PHUKET/Phuket Intl | 9 | 4E | 09 | NPA | B747 |
| | RS | | | 27 | PA1 | |
| | | | | | | |
| VTBU | RAYONG/U-Taphao Intl | 8 | 4E | 18 | PA1 | B747 |
| | RS | | | 36 | NPA | |
| | | | | | | |
| VTSS | SONGKHLA/Hat Yai Intl | 7 | 4E | 08 | NPA | B747 |
| | RS | | | 26 | PA1 | |
| | | | | | | |
| VTSB | SURAT THANI/Surat Thani | 7 | 4D | 04 | NPA | A300 |
| | RS | | | 22 | PA1 | |
| | | | | | | |
| VTUU | UBONRATCHATHANI/Ubon Ratchathani | 7 | 4D | 05 | NPA | EA 30 |
| | RS | | | 23 | PA1 | |
| | | | | | | |
| **TONGA** | | | | | | |
| NFTF | FUA'AMOTU/Fua'amotu Intl | 6 | 4C | 11 | NPA | B737-200 |
| | RS | | | 29 | NPA | |
| | | | | | | |
| NFTV | VAVA'U/Vava'u | 4 | 2B | 08 | NINST | CS12 |
| | RS | | | 26 | NINST | |
| | | | | | | |
| **TUVALU** | | | | | | |
| NGFU | FUNAFUTI/Funafuti Intl | 4 | 3C | 03 | NINST | HS74 |
| | RS | | | 21 | NINST | |
| | | | | | | |
| **UNITED STATES**[1] | | | | | | |
| PANC | ANCHORAGE/Anchorage Intl | 9 | 4E | 06R | PA3 | B747 |
| | RS | | | 24L | NPA | |
| | | | 4E | 14 | NINST | B747 |
| | | | | 32 | NINST | |
| | | | | | | |
| PAED | ANCHORAGE/Elemendorf AFB | 9 | 4E | 05 | PA1 | B747 |
| | AS | | | 23 | NINST | |
| | | | | | | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| PACD | COLD BAY/Cold Bay | 7 | 4D | 14 | PA1 | B757 |
| | AS | | | 32 | NPA | |
| | | | | | | |
| KPAE | EVERETT/Snohomish County-Paine Field | 8 | 4E | 16R | PA1 | B747 |
| | AS | | | 34L | NINST | |
| | | | | | | |
| PAEI | FAIRBANKS/Eielson AFB | 9 | 4E | 13 | PA1 | B747 |
| | AS | | | 31 | PA1 | |
| | | | | | | |
| PAFA | FAIRBANKS/Fairbanks Intl | 8 | 4E | 01L | PA3 | B747 |
| | RS | | | 19R | PA1 | |
| | | | | | | |
| KFAT | FRESNO/Fresno Air Terminal | 7 | 4D | 11L | NPA | B757 |
| | AS | | | 29R | PA1 | |
| | | | | | | |
| PHTO | HILO/Hilo Intl | 8 | 4E | 08 | NPA | B747 |
| | AS | | | 26 | PA1 | |
| | | | | | | |
| PHNL | HONOLULU/Oahu Intl | 9 | 4E | 08L | PA1 | B747 |
| | RS | | | 26R | NINST | |
| | | | 4E | 04R | PA1 | B747 |
| | | | | 22L | NINST | |
| | | | 4E | 08R | NINST | B747 |
| | | | | 26L | NPA | |
| | | | | | | |
| PHOG | KAHULUI/Kahului | 8 | 4D | 02 | PA1 | DC10 |
| | AS | | | 20 | NPA | |
| | | | | | | |
| PAKN | KING SALMON/King Salmon | 8 | 4E | 11 | PA1 | B747 |
| | AS | | | 29 | NPA | |
| | | | | | | |
| KLAX | LOS ANGELES/Los Angeles Intl | 9 | 4E | 07R | PA1 | B747 |
| | RS | | | 25L | PA2 | |
| | | | 4E | 07L | PA1 | B747 |
| | | | | 25R | PA2 | |
| | | | 4E | 06L | PA1 | B747 |
| | | | | 24R | PA3 | |
| | | | | 06R | PA1 | B747 |
| | | | | 24L | PA1 | |
| | | | | | | |
| KOAK | OAKLAND/Metropolitan Oakland | 9 | 4E | 11 | PA1 | B747 |
| | AS | | | 29 | PA2 | |
| | | | | | | |
| KONT | ONTARIO/Ontario Intl | 8 | 4E | 08L | PA1 | B747 |
| | AS | | | 26R | PA1 | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| KPMD | PALMDALE/Palmdale P.F.T.I. | 8 | 4E | 07 | NINST | B747 |
| | AS | | | 25 | PA1 | |
| | | | | | | |
| KPDX | PORTLAND/Portland Intl | 9 | 4E | 10R | PA3 | B747 |
| | AS | | | 28L | NPA | |
| | | | 4E | 10L | NPA | B747 |
| | | | | 28R | PA1 | |
| | | | | | | |
| KSMF | SACRAMENTO/Metropolitan | 7 | 4D | 16R | PA2 | DC10 |
| | AS | | | 34L | NPA | |
| | | | | | | |
| KSAN | SAN DIEGO/San Diego (AFSS) | 8 | 4E | 09 | PA1 | B747 |
| | AS | | | 27 | NPA | |
| | | | | | | |
| KSFO | SAN FRANCISCO/San Francisco Intl | 9 | 4E | 10R | NINST | B747 |
| | RS | | | 28L | PA1 | |
| | | | 4D | 01R | NINST | B747 |
| | | | | 19L | PA1 | |
| | | | 4E | 10L | NINST | B747 |
| | | | | 28R | PA3 | |
| | | | 4E | 01L | NINST | B747 |
| | | | | 19R | NINST | |
| | | | | | | |
| KSJC | SAN JOSE/San Jose Intl | 7 | 4D | 12R | PA1 | DC10 |
| | RS | | | 30L | PA1 | |
| | | | | | | |
| KBFI | SEATTLE BOEING FIELD/King County Intl | 8 | 4E | 13R | PA1 | B747 |
| | AS | | | 31L | NPA | |
| | | | | | | |
| KSEA | SEATTLE/Seattle-Tacoma Intl | 9 | 4E | 16R | PA3 | B747 |
| | RS | | | 34L | PA1 | |
| | | | 4E | 16L | NPA | B747 |
| | | | | 34R | PA1 | |
| | | | | | | |
| KGEG | SPOKANE/Spokane Intl | 7 | 4E | 03 | PA1 | B747 |
| | AS | | | 21 | PA2 | |
| | | | | | | |
| KSCK | STOCKTON/Metropolitan | 8 | 4E | 11L | NINST | B747 |
| | AS | | | 29R | PA1 | |
| | | | | | | |
| KIAD | WASHINGTON/Dulles Intl | 9 | 4E | 01L | NPA | B747 |
| | RS | | | 19R | PA1 | |
| | | | 4D | 01R | PA2 | B707-300B |
| | | | | 19L | NPA | |

| City/Aerodrome/Designation | | RFF category | Physical characteristics | | | Remarks |
|---|---|---|---|---|---|---|
| | | | RC | RWY No. | RWY type | Design aircraft |
| 1 | | 2 | 3 | 4 | 5 | 6 |
| | | | | | | |
| **VANUATU** | | | | | | |
| NVVV | PORT-VILA/Bauerfield | 6 | 4C | 11 | NPA | B737-200 |
| | RS | | | 29 | NINST | |
| | | | | | | |
| NVSS | SANTO/Pekoa | 3 | 2B | 12 | NPA | SW4 |
| | RS | | | 30 | NINST | |
| | | | | | | |
| **VIET NAM** | | | | | | |
| VVCR | KHANH HOA/Cam Ranh | 8 | 4E | 02 | NINST | B777-200 |
| | RS | | | 20 | NPA | |
| | | | | | | |
| VVCT | CAN THO/Can Tho | 6 | 4E | 06 | PA1 | B777-200 |
| | RS | | | 24 | NPA | |
| | | | | | | |
| VVDN | DA NANG/Da Nang | 9 | 4E | 17L | NINST | B777-200 |
| | RS | | | 35R | PA1 | |
| | | | | 17R | NINST | B747-400 |
| | | | | 35L | NPA | |
| | | | | | | |
| VVNB | HA NOI/Noi Bai | 9 | 4E | 11L | PA1 | B747-400 |
| | RS | | | 29 R | NPA | |
| | | | | | | |
| | | | 4E | 11R | PA2 | B747-400 |
| | | | | 29L | NPA | |
| | | | | | | |
| VVTS | HO CHI MINH/Tan Son Nhat | 9 | 4E | 07R | NPA | B747-400 |
| | RS | | | 25L | PA1 | |
| | | | 4E | 07L | NPA | B747-400 |
| | | | | 25R | PA1 | |
| | | | | | | |
| VVPB | HUE/Phu Bai | 6 | 4C | 09 | NINST | B737-300 |
| | RS | | | 27 | PA1 | |
| | | | | | | |
| VVPQ | KIEN GIANG/Phu Quoc | 7 | 4E | 10 | PA1 | B747-400 |
| | RS | | | 28 | PA1 | |
| | | | | | | |
| **WALLIS and FUTUNA IS. (France)** | | | | | | |
| NLWW | WALLIS/Hihifo | 5 | 4C | 08 | NPA | B737 |
| | RS | | | 26 | NPA | |
| | | | | | | |

*Note 1 — Outside ASIA/PAC. Indicated for coordination*

## 3. SPECIFIC REGIONAL REQUIREMENTS

### SPECIAL REGIONAL REQUIREMENTS — ALTERNATE AERODROMES

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| **AFGHANISTAN** | | | |
| OAKB | KABUL/Kabul intl | VIAR | Amritsar |
| | RS | VIDP | Delhi |
| | | OPRN | Islamabad |
| | | OAKN | Kandahar |
| | | OPKC | Karachi |
| | | OPPS | Peshawar |
| | | UTTT | Tashkent |
| | | | |
| OAKN | KANDAHAR/Kandahar Intl | OAKB | Kabul |
| | AS | | |
| | | | |
| **AMERICAN SAMOA (United States)** | | | |
| NSTU | PAGO PAGO/Pago Pago Intl | NIUE | Niue |
| | RS | NSAP | Faleolo |
| | | NFFN | Nadi |
| | | NLWW | Wallis |
| | | | |
| **AUSTRALIA** | | | |
| YPAD | ADELAIDE/Adelaide | YBBN | Brisbane |
| | RS | YMML | Melbourne |
| | | YPPH | Perth |
| | | YSSY | Sydney |
| | | | |
| YBAS | ALICE SPRINGS/Alice Springs | YBBN | Brisbane |
| | AS | YPDN | Darwin |
| | | YSSY | Sydney |
| YBBN | BRISBANE/Brisbane | YPAD | Adelaide |
| | RS | YBAS | Alice Springs |
| | | YMML | Melbourne |
| | | NWWW | Noumea |
| | | YSSY | Sydney |
| | | YBTL | Townsville |
| | | | |
| YBCS | CAIRNS/Cairns | YBTL | Townsville |
| | RS | | |
| | | | |
| YPXM | CHRISTMAS I./Christmas I. | YPCC | Cocos I. |
| | RS | | |
| | | | |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| YPCC | COCOS I./Cocos I. | YPXM | Christmas I. |
| | RS | | |
| YPDN | DARWIN/Darwin | YBAS | Alice Springs |
| | RS | WATT | Kupang |
| | | AYPY | Port Morseby |
| | | YPTN | Tindal |
| | | YBTL | Townsville |
| | | | |
| YMHB | HOBART/Hobart | YPAD | Adelaide |
| | RNS | YMML | Melbourne |
| | | | |
| YMML | MELBOURNE/Melbourne Intl | YPAD | Adelaide |
| | RS | YBBN | Brisbane |
| | | YSSY | Sydney |
| | | | |
| YSNF | NORFOLK I./Norfolk I. | NZAA | Auckland |
| | RS | NWWW | Noumea |
| | | | |
| YPPH | PERTH/Perth Intl | YPAD | Adelaide |
| | RS | YPDN | Darwin |
| | | YPLM | Learmonth |
| | | YPPD | Port Hedland |
| | | | |
| YPPD | PORT HEDLAND/Port Hedland | YBRM | Broome |
| | RNS | YPLM | Learmonth |
| | | YPPH | Perth |
| | | | |
| YBRK | ROCKHAMPTON/Rockhampton | YBCS | Carins |
| | AS | YBTL | Townsville |
| | | | |
| YSSY | SYDNEY/Kingsford Smith Intl | YPAD | Adelaide |
| | RS | YBAS | Alice Springs |
| | | YBBN | Brisbane |
| | | YSDU | Dubbo |
| | | YMML | Melbourne |
| | | NWWW | Noumea |
| | | | |
| YPTN | TINDAL/Tindal | YPDN | Darwin |
| | AS | YBTL | Townsville |
| | | | |
| YBTL | TOWNSVILLE/Townsville | YBBN | Brisbane |
| | RNS | YBCS | Cairns |
| | | YPDN | Darwin |
| | | AYPY | Port Moresby |
| | | YPTN | Tindal |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| **BANGLADESH** | | | |
| VGEG | CHITTAGONG/Shah Amanat Intl | VGHS | Dhaka |
| | RS | | |
| | | | |
| VGHS | DHAKA/Hazrat Shahjalal Intl | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | VECC | Kolkata |
| | | VGEG | Chittagong |
| | | VIDP | Delhi |
| | | VNKT | Kathmandu |
| | | VYYY | Yangon |
| | | | |
| **BHUTAN** | | | |
| VQPR | PARO/Paro Intl | VECC | Kolkata |
| | RS | VGHS | Dhaka |
| | | | |
| **BRUNEI DARUSSALAM** | | | |
| WBSB | BRUNEI/Brunei Intl | WBKK | Kota Kinabalu |
| | RS | WMKK | Sepang |
| | | WBGG | Kuching |
| | | RPLL | Manila |
| | | WSSS | Singapore |
| | | | |
| **CAMBODIA** | | | |
| VDPP | PHNOM PENH/Phnom Penh | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | VVTS | Ho Chi Minh |
| | | VDSR | Siem Reap |
| | | | |
| VDSR | SIEM REAP/Siem Reap | VDPP | Phnom Penh |
| | AS | | |
| | | | |
| **CANADA**[1] | | | |
| CYXX | ABBOTSFORD/Abbotsford | CYYC | Calgary |
| | AS | CYYQ | Comox |
| | | CYEG | Edmonton |
| | | KSEA | Seattle |
| | | CYVR | Vancouver |
| | | CYYJ | Victoria |
| | | | |
| CYYC | CALGARY/Calgary Intl | CYXX | Abbotsford |
| | RS | CYQQ | Comox |
| | | CYEG | Edmonton |
| | | KSEA | Seattle |
| | | CYVR | Vancouver |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | CYYJ | Victoria |
| | | | |
| CYQQ | COMOX/Comox | CYXX | Abbotsford |
| | AS | CYYC | Calgary |
| | | CYEG | Edmonton |
| | | KSEA | Seattle |
| | | CYVR | Vancouver |
| | | CYYJ | Victoria |
| | | | |
| CYEG | EDMONTON/Edmonton Intl | CYXX | Abbotsford |
| | RS | CYYC | Calgary |
| | | CYQQ | Comox |
| | | KSEA | Seattle |
| | | CYVR | Vancouver |
| | | CYYJ | Victoria |
| | | | |
| CYVR | VANCOUVER/Vancouver Intl | CYXX | Abbotsford |
| | RS | CYYC | Calgary |
| | | CYQQ | Comox |
| | | CYEG | Edmonton |
| | | KSEA | Seattle |
| | | CYYJ | Victoria |
| | | | |
| CYYJ | VICTORIA/Victoria Intl | CYXX | Abbotsford |
| | RNS | CYYC | Calgary |
| | | CYQQ | Comox |
| | | CYEG | Edmonton |
| | | KSEA | Seattle |
| | | CYVR | Vancouver |
| | | | |
| **CHINA** | | | |
| ZBAA | BEIJING/Capital | ZYTL | Dalian |
| | RS | ZSSS | Shanghai |
| | | ZSPD | Shanghai |
| | | ZYTX | Shenyang |
| | | ZBYN | Taiyuan |
| | | ZBTJ | Tianjin |
| | | | |
| ZGHA | CHANGSHA/Huanghua | ZUUU | Chengdu |
| | RS | ZGGG | Guangzhou |
| | | ZGKL | Guilin |
| | | ZHHH | Wuhan |
| | | | |
| ZUUU | CHENGDU/Shuangliu | ZUCK | Chongqing |
| | AS | ZPPP | Kunming |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | ZUXC | Xichang |
| | | | |
| ZUCK | CHONGQING/Jiangbei | ZUUU | Chengdu |
| | RS | ZPPP | Kunming |
| | | ZUXC | Xichang |
| | | | |
| ZYTL | DALIAN/Zhoushuizi | ZBAA | Beijing |
| | RS | ZSQD | Qingdao |
| | | ZYTX | Shenyang |
| | | ZBTJ | Tianjin |
| | | | |
| ZSFZ | FUZHOU/Changle | ZGGG | Guangzhou |
| | RS | ZSHC | Hangzhou |
| | | ZSSS | Shanghai |
| | | ZSPD | Shanghai |
| | | ZSAM | Xiamen |
| | | | |
| RCKH | GAOXIONG/Gaoxiong | VHHH | Hong Kong |
| | RS | RPLL | Manila |
| | | VMMC | Macao |
| | | RCSS | Taibei |
| | | RCTP | Taibei City |
| | | | |
| ZGGG | GUANGZHOU/Baiyun | ZSHC | Hangzhou |
| | RS | VHHH | Hong Kong |
| | | VMMC | Macao |
| | | ZGNN | Nanning |
| | | ZSSS | Shanghai |
| | | ZSPD | Shanghai |
| | | | |
| ZGKL | GUILIN/Liangjiang | ZGHA | Changsha |
| | RS | ZGGG | Guangzhou |
| | | ZGNN | Nanning |
| | | ZHHH | Wuhan |
| | | | |
| ZSHC | HANGZHOU/Xiaoshen | ZSFZ | Fuzhou |
| | RS | ZSOF | Hefei |
| | | ZSNJ | Nanjing |
| | | ZSSS | Shanghai |
| | | ZSPD | Shanghai |
| | | ZSAM | Xiamen |
| | | | |
| ZYHB | HARBIN/Taiping | ZBAA | Beijing |
| | RS | ZYTL | Dalian |
| | | ZYTX | Shenyang |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | ZBTJ | Tianjin |
| | | | |
| ZSOF | HEFEI/Luogang | ZSHC | Hangzhou |
| | AS | ZSNJ | Nanjing |
| | | ZSSS | Shanghai |
| | | ZSPD | Shanghai |
| | | ZHHH | Wuhan |
| | | | |
| ZBHH | HOHHOT/Baita | ZBAA | Beijing |
| | RS | ZBYN | Taiyun |
| | | ZBTJ | Tianjin |
| | | | |
| ZSJN | JINAN/Yaoqiang | ZBAA | Beijing |
| | RS | ZSOF | Hefei |
| | | ZSQD | Qingdao |
| | | ZBTJ | Tianjin |
| | | | |
| ZWSH | KASHI/Kashi | ZWWW | Urumqi |
| | AS | | |
| | | | |
| ZPPP | KUNMING/Wujiaba | ZUUU | Chengdu |
| | RS | ZUCK | Chongqing |
| | | ZGNN | Nanning |
| | | | |
| ZLLL | LANZHOU/Zhongchuan | ZBYN | Taiyun |
| | AS | ZWWW | Urumqi |
| | | ZLXY | Xi'an |
| | | | |
| ZSNJ | NANJING/Lukou | ZSHC | Hangzhou |
| | RS | ZSOF | Heifei |
| | | ZSJN | Jinan |
| | | ZSSS | Shanghai |
| | | ZSPD | Shanghai |
| | | | |
| ZGNN | NANNING/Wuxu | ZUCK | Chongqing |
| | AS | ZGGG | Guangzhou |
| | | ZPPP | Kunming |
| | | | |
| ZSQD | QINGDAO/Liuting | ZYTL | Dalian |
| | RS | ZSJN | Jinan |
| | | ZSSS | Shanghai |
| | | ZSPD | Shanghai |
| | | | |
| ZJSY | SANYA/Phoenix | ZGGG | Guangzhou |
| | RS | VHHH | Hongkong |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | VMMC | Macao |
| | | ZGNN | Nanning |
| | | | |
| ZSSS | SHANGHAI/Hongqiao | ZBAA | Beijing |
| | RS | ZSHC | Hangzhou |
| | | ZSOF | Hefei |
| | | ZSNJ | Nanjing |
| | | ZSPD | Shanghai |
| | | | |
| ZSPD | SHANGHAI/Pudong | ZBAA | Beijing |
| | RS | ZSHC | Hangzhou |
| | | ZSOF | Hefei |
| | | ZSNJ | Nanjing |
| | | ZSPD | Shanghai |
| | | | |
| ZYTX | SHENYANG/Taoxian | ZBAA | Beijing |
| | RS | ZYTL | Dalian |
| | | ZYHB | Harbin |
| | | ZBTJ | Tianjin |
| | | | |
| ZGSZ | SHENZHEN/Bao'an | ZGGG | Guangzhou |
| | RS | VHHH | Hong Kong |
| | | VMMC | Macao |
| | | | |
| RCSS | TAIBEI/Songshan | RCKH | Gaoxiong |
| | AS | RCTP | Taibei City |
| | | | |
| RCTP | TAIBEI CITY/Taibei Intl | RCKH | Gaoxiong |
| | RS | VHHH | Hong Kong |
| | | RPLL | Manila |
| | | VMMC | Macao |
| | | RJBB | Kansai |
| | | RJOO | Osaka |
| | | RCSS | Taibei |
| | | | |
| ZBYN | TAIYUAN/Wusu | ZBAA | Beijing |
| | AS | ZBHH | Hohhot |
| | | ZBTJ | Tianjin |
| | | ZLXY | Xi'an |
| | | | |
| ZBTJ | TIANJIN/Binhai | ZBAA | Beijing |
| | RS | ZYTL | Dalian |
| | | ZSJN | Jinan |
| | | ZSQD | Qingdao |
| | | ZBYN | Taiyun |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| ZWWW | URUMQI/Diwopu | ZLLL | Lanzhou |
| | RS | ZWAK | Kashi |
| | | | |
| ZHHH | WUHAN/Tianhe | ZBAA | Beijing |
| | RNS | ZGHA | Changsha |
| | | ZGGG | Guangzhou |
| | | ZGKL | Guilin |
| | | ZSJN | Jinan |
| | | | |
| ZSAM | XIAMEN/Gaoqi | ZSFZ | Fuzhou |
| | RS | ZGGG | Guangzhou |
| | | ZSSS | Shanghai |
| | | ZSPD | Shanghai |
| | | | |
| ZLXY | XI'AN/Xianyang | ZBAA | Beijing |
| | RS | ZUUU | Chengdu |
| | | ZBYN | Taiyuan |
| | | ZLLL | Lanzhou |
| | | ZHHH | Wuhan |
| | | | |
| ZUXC | XICHANG/Qingshan | ZUUU | Chengdu |
| | RNS | ZUCK | Chongqing |
| | | ZPPP | Kunming |
| | | | |
| **COOK IS.** | | | |
| NCRG | RAROTONGA/Rarotonga Intl | NIUE | Niue |
| | RS | NSTU | Pago Pago |
| | | NTAA | Tahiti |
| | | | |
| **DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA** | | | |
| ZKPY | SUNAN/Sunan | ZBAA | Beijing |
| | RS | ZYYY | Shenyang |
| | | | |
| **FIJI** | | | |
| NFFN | NADI/Nadi Intl | NZAA | Auckland |
| | RS | NWWW | Noumea |
| | | NSTU | Pago Pago |
| | | NFSU | Suva |
| | | | |
| NFSU | SUVA/Nausori | NFFN | Nadi |
| | RS | | |
| | | | |
| **FRENCH POLYNESIA (France)** | | | |
| NTAA | TAHITI/Faaa | NCRG | Rarotonga |
| | RS | | |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| **GUAM (United States)** | | | |
| PGUA | GUAM I./Andersen AFB | PGUM | Guam I. |
| | AS | PGSN | Saipan I. (Obyan) |
| | | | |
| PGUM | GUAM I./Guam Intl | PGUA | Guam I. |
| | RS | PGSN | Saipan I. (Obyan) |
| | | | |
| **HONG KONG, China** | | | |
| VHHH | HONG KONG/Hong Kong Intl | RCKH | Gaoxiong |
| | RS | ZGGG | Guangzhou |
| | | RPVM | Lapu-Lapu |
| | | VMMC | Macau |
| | | RPLL | Manila |
| | | ROAH | Naha |
| | | ZSSS | Shanghai |
| | | ZGSZ | Shenzhen |
| | | RCTP | Taibei City |
| | | | |
| **INDIA** | | | |
| VAAH | AHMEDABAD/Sardar Vallabhbhai Patel International Airport | VABB | Mumbai |
| | RS | VIDP | Delhi |
| | | | |
| VIAR | AMRITSAR/Amritsar Airport | VIDP | Delhi |
| | RS | OPLA | Lahore |
| | | | |
| VOBL | BANGALORE/Bangalore International Airport | VOMM | Chennai |
| | RS | VOHS | Hyderabad |
| | | | |
| VOCL | CALICUT/Calicut Airport | VOCI | Cochin |
| | RS | VOTV | Thiruvanthapuram |
| | | | |
| VOMM | CHENNAI/Chennai Airport | VABB | Mumbai |
| | RS | VECC | Kolkata |
| | | VCBI | Colombo |
| | | VOTR | Tiruchchirappalli |
| | | VOTV | Thiruvanthapuram |
| | | VOBL | Bangalore |
| | | VOHS | Hyderabad |
| | | | |
| VOCB | COIMBATORE/Coimbatore Airport | VOMM | Chennai |
| | RS | | |
| | | | |
| VOCI | COCHIN/Cochin Airport | VOTV | Thiruvananthapuram |
| | RS | VOMM | Chennai |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| VIDP | DELHI/Indira Gandhi Intl Airport | VAAH | Ahmadabad |
| | RS | VIAR | Amritsar |
| | | VABB | Mumbai |
| | | VECC | Kolkata |
| | | OPKC | Karachi |
| | | OPLA | Lahore |
| | | | |
| VEGY | GAYA/ Gaya Airport | VECC | Kolkata |
| | RS | | |
| | | | |
| VEGT | GUWAHATI/Lokpriya Gopinath Bordolai International Airport | VECC | Kolkotta |
| | RS | | |
| | | | |
| VOHS | HYDERABAD/Rajiv Gandhi International Airport | VOMM | Chennai |
| | RS | VOBL | Bangalore |
| | | VABB | Mumbai |
| | | VAHH | Ahmedabad |
| | | | |
| VIJP | JAIPUR/Jaipur Airport | VIDP | Delhi |
| | RS | VAAH | Ahmedabad |
| | | | |
| VECC | KOLKATA/Netaji Subhash Chandra Bose International Airport | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | VGHS | Dhaka |
| | | VIDP | Delhi |
| | | VNKT | Kathmandu |
| | | VOMM | Chennai |
| | | VANP | Nagpur |
| | | VEPT | Patna |
| | | | |
| VILK | LUCKNOW/Chaudhry Charan Singh Airport | VIDP | Delhi |
| | RS | | |
| | | | |
| VOML | MANGALORE/ Mangalore Airport | VOTV | Thiruvananthapuram |
| | RS | VOMM | Chennai |
| | | | |
| VABB | MUMBAI/Chatrapati Shivaji International Airport | VAAH | Ahmadabad |
| | RS | VIDP | Delhi |
| | | OPKC | Karachi |
| | | VANP | Nagpur |
| | | VOHS | Hyderabad |
| | | | |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| VANP | NAGPUR/Dr Ambedkar Airport | VABB | Mumbai |
| | RS | VECC | Kolkata |
| | | | |
| VEPT | PATNA/Patna Airport | VECC | Kolkata |
| | RS | VIDP | Delhi |
| | | | |
| VOTR | TIRUCHCHIRAPPALLI/ Tiruchchirappalli Airport | VCBI | Colombo |
| | RS | VOMM | Chennai |
| | | VOBL | Bangalore |
| | | | |
| VOTV | THIRUVANANTHAPURAM/ Thiruvananthapuram Airport | VABB | Mumbai |
| | RS | VCBI | Colombo |
| | | VOMM | Chennai |
| | | VOTR | Tiruchchirappalli |
| | | | |
| VIBN | VARANASI/Lal Bahadur Shastri Airport | VIDP | Delhi |
| | RS | VILK | Lucknow |
| | | | |
| **INDONESIA** | | | |
| WAPP | AMBON/Pattimura | WAAA | Makassar |
| | RNS | | |
| | | | |
| WADD | BALI/Ngurah Rai | WIHH | Jakarta |
| | RS | WIII | Jakarta |
| | | WSSS | Singapore |
| | | WARR | Surabaya |
| | | | |
| WALL | BALIKPAPAN/Sepinggan | WAAA | Makassar |
| | RS | WARR | Surabaya |
| | | WAOO | Banjarmasin |
| | | | |
| WAOO | BANJARMASIN/Syamsudin Noor | WALL | Balikpapan |
| | AS | | |
| | | | |
| WIDD | BATAM/Hang Nadim | WIMM | Medan |
| | RS | WIBB | Pekanbaru |
| | | WSSS | Singapore |
| | | | |
| WABB | BIAK/Frans Kaisiepo | WAJJ | Jayapura |
| | RS | WAAA | Makassar |
| | | | |
| WIHH | JAKARTA/HalimPerdana Kusuma | WADD | Bali |
| | RNS | WIII | Jakarta |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | WSSS | Singapore |
| | | WARR | Surabaya |
| | | | |
| WIII | JAKARTA/Soekarno Hatta | WADD | Bali |
| | RS | WIHH | Jakarta |
| | | WSSS | Singapore |
| | | WARR | Surabaya |
| | | | |
| WAJJ | JAYAPURA/Sentani | WABB | Biak |
| | RS | WABP | Timika |
| | | | |
| WATT | KUPANG/El Tari | WADD | Bali |
| | RS | | |
| | | | |
| WAMM | MANADO/Sam Ratulangi | WAAA | Makassar |
| | RS | | |
| | | | |
| WIMM | MEDAN/Kualanamu | WMKK | Sepang |
| | RS | WMKP | Penang |
| | | WSSS | Singapore |
| | | | |
| WAKK | MERAUKE/Mopah | WAJJ | Jayapura |
| | RNS | | |
| | | | |
| WIPT | PADANG/Minangkabau | WIBB | Pekanbaru |
| | RS | WIMM | Medan |
| | | WIDD | Batam |
| | | | |
| WIPP | PALEMBANG/Sultan Mahmud Badaruddin II | WIHH | Jakarta |
| | RS | WIII | Jakarta |
| | | | |
| WIBB | PEKANBARU/Sultan Syarif Kasim II | WIMM | Medan |
| | RS | WSSS | Singapore |
| | | | |
| WIOO | PONTIANAK/Supadio | WBGG | Kuching |
| | RS | WSSS | Singapore |
| | | | |
| WARR | SURABAYA/Juanda | WADD | Bali |
| | RS | WIHH | Jakarta |
| | | WIII | Jakarta |
| | | | |
| WIDN | TANJUNG PINANG/Raja Haji Fisabilillah | WIDD | Batam |
| | RNS | WSSS | Singapore |
| | | | |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| WALR | TARAKAN/Juwata | WBSB | Brunei |
| | RNS | WBKK | Kota Kinabalu |
| | | WALL | Balikpapan |
| WAAA | MAKASSAR/Sultan Hasanuddin | WADD | Bali |
| | RS | | |
| | | | |
| **JAPAN** | | | |
| RJFF | FUKUOKA/Fukuoka | RJFK | Kagoshima |
| | RS | RKPK | Gimhae |
| | | RJFT | Kumamoto |
| | | RJFU | Nagasaki |
| | | RJGG | Nagoya |
| | | RJBB | Kansai |
| | | RJOO | Osaka |
| | | RKSS | Gimpo |
| | | RJAA | Narita |
| | | RJTT | Tokyo |
| | | | |
| RJCH | HAKODATE/Hakodate | RJBB | Kansai |
| | AS | RJOO | Osaka |
| | | RJCC | Sapporo |
| | | RJAA | Narita |
| | | | |
| RJOA | HIROSHIMA/Hiroshima | RJFU | Nagasaki |
| | RS | RJBB | Kansai |
| | | RJOO | Osaka |
| | | | |
| RJFK | KAGOSHIMA/Kagoshima | RJFF | Fukuoka |
| | RS | RKPK | Gimhae |
| | | RJFT | Kumamoto |
| | | RJFU | Nagasaki |
| | | RJBB | Kansai |
| | | RJOO | Osaka |
| | | | |
| RJBB | KANSAI/Kansai Intl | RJCC | New Chitose |
| | RS | ROAH | Naha |
| | | RJOO | Osaka |
| | | RJAA | Narita |
| | | RJTT | Tokyo |
| | | | |
| RJFT | KUMAMOTO/Kumamoto | RJFF | Fukuoka |
| | RS | RJFK | Kagoshima |
| | | RJFU | Nagasaki |
| | | RJBB | Kansai |
| | | RJOO | Osaka |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| RJFU | NAGASAKI/Nagasaki | RJFF | Fukuoka |
| | RS | RJFK | Kagoshima |
| | | RJFT | Kumamoto |
| | | RJBB | Kansai |
| | | RJOO | Osaka |
| | | | |
| RJGG | NAGOYA/Chubu Centrair Intl. | RJSN | Niigata |
| | RS | RJBB | Kansai |
| | | RJOO | Osaka |
| | | RJAA | Narita |
| | | | |
| ROAH | NAHA/Naha | RJFF | Fukuoka |
| | RS | RCKH | Gaoxiong |
| | | VHHH | Hong Kong |
| | | RJBB | Kansai |
| | | RJOO | Osaka |
| | | RCTP | Taibei City |
| | | RJAA | Narita |
| | | | |
| RJSN | NIIGATA/Niigata | RJGG | Nagoya |
| | RS | RJBB | Kansai |
| | | RJOO | Osaka |
| | | RJAA | Narita |
| | | RJTT | Tokyo |
| | | | |
| RJFO | OITA/Oita | RJFF | Fukuoka |
| | RS | | |
| | | | |
| RJOB | OKAYAMA/Okayama | RJFF | Fukuoka |
| | RS | RJFO | Oita |
| | | | |
| RJOO | OSAKA/Osaka Intl | RJFF | Fukuoka |
| | AS | RJCH | Hakodate |
| | | RJFK | Kagoshima |
| | | RKPK | Gimhae |
| | | RJGG | Nagoya |
| | | ROAH | Naha |
| | | RJBB | Kansai |
| | | RKSS | Gimpo |
| | | RJAA | Narita |
| | | RJTT | Tokyo |
| | | | |
| RJCC | SAPPORO/New Chitose | RJAA | Narita |
| | RS | RJCH | Hakodate |
| | | RJSN | Niigata |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| RJSS | SENDAI/Sendai | RJSN | Niigata |
| | RNS | RJTT | Tokyo |
| | | | |
| RJOT | TAKAMATSU/Takamatsu | RJBB | Kansai |
| | RS | RJOO | Osaka |
| | | RJOA | Hiroshima |
| | | | |
| RJAA | TOKYO/Narita Intl | RJFF | Fukuoka |
| | RS | RJCH | Hakodate |
| | | RJGG | Nagoya |
| | | ROAH | Naha |
| | | RJSN | Niigata |
| | | RJBB | Kansai |
| | | RJOO | Osaka |
| | | RJCC | Sapporo |
| | | RCTP | Taibei City |
| | | RJTT | Tokyo |
| | | | |
| RJTT | TOKYO/Tokyo Intl | RJSN | Niigata |
| | AS | RJBB | Kansai |
| | | RJOO | Osaka |
| | | RJAA | Narita |
| | | | |
| **JOHNSTON I. (United States)** | | | |
| PJON | JOHNSTON ATOLL/Johnston I | PHNL | Honolulu |
| | RS | PKMJ | Majuro Atoll |
| | | | |
| **KIRIBATI** | | | |
| PLCH | KIRITIMATI I./Christmas I. | NGTA | Tarawa |
| | RS | | |
| | | | |
| NGTA | TARAWA/Bonriki Intl | PKMJ | Nauru I. |
| | RS | PKMJ | Majuro Atoll |
| | | | |
| **LAO PEOPLE'S DEMOCRATIC REPUBLIC** | | | |
| VLVT | VIENTIANE/Wattay | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | VTCC | Chiang Mai |
| | | VVNB | Ha Noi |
| | | VYYY | Yangon |
| | | | |
| **MACAO, China** | | | |
| VMMC | MACAO/Macao Intl | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | ZGGG | Guanzhou |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | RPLL | Manila |
| | | | |
| **MALAYSIA** | | | |
| WMKJ | JOHOR BAHRU/Sultan Ismail International | WMKK | Sepang |
| | RS | WSSS | Singapore |
| | | | |
| WBKK | KOTA KINABALU/Kota Kinabalu Intl | WBSB | Brunei |
| | RS | WBGG | Kuching |
| | | RPLL | Manila |
| | | | |
| WBGG | KUCHING/Kuching International | WBKK | Kota Kinabalu |
| | RS | WSSS | Singapore |
| | | | |
| WMKP | PENANG/Penang Intl | VTBS | Bangkok |
| | RS | WMKK | Sepang |
| | | WSSS | Singapore |
| | | | |
| WMKL | PULAU LANGKAWI/Pulau Langkawi | WMKP | Penang |
| | RS | WMKK | Sepang |
| | | | |
| WMKK | SEPANG/KL Intl | VTBS | Bangkok |
| | RS | WIII | Jakarta |
| | | WMKP | Penang |
| | | WSSS | Singapore |
| | | | |
| **MALDIVES** | | | |
| VRMG | GAN/Gan International | VRMM | Male |
| | AS | | |
| | | | |
| VRMM | MALE/Ibrahim Nasir Intl Airport | VCBI | Colombo |
| | RS | VOTV | Trivandrum |
| | | | |
| VRMH | HANIMAADHOO/Hanimaadhoo Intl | VOTV | Trivandrum |
| | RS | | |
| | | | |
| VRMV | MAAMIGILI/Villa Intl | VRMM | Malé |
| | RS | | |
| | | | |
| **MARSHALL IS.** | | | |
| PKMJ | MAJURO ATOLL/Marshall I. Intl | PTPN | Pohnpei I. |
| | RS | | |
| | | | |
| **MICRONESIA (FEDERATED STATES OF)** | | | |
| PTPN | POHNPEI I./Pohnpei Intl | PTKK | Weno I. |
| | RS | AUUU | Nauru I. |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| PTKK | WENO I./FM Chuuk Intl | PTPN | Pohnpei I. |
| | RS | | |
| | | | |
| PTYA | YAP I./Yap Intl | | |
| | RS | | |
| | | | |
| **MONGOLIA** | | | |
| ZMUB | ULAANBAATAR/Ulaanbaatar | UIII | Irkutsk |
| | RS | ZBAA | Beijing |
| | | | |
| **MYANMAR** | | | |
| VYYY | YANGON/Yangon Intl | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | VECC | Kolkata |
| | | VTCC | Chiang Mai |
| | | VGEG | Chittagong |
| | | VLVT | Vientiane |
| | | VYMD | Mandalay |
| | | | |
| **NAURU** | | | |
| AUUU | NAURU I./Nauru I. | PKMJ | Majuro Atoll |
| | RS | PTPN | Pohnpei I. |
| | | NGTA | Tarawa |
| | | | |
| **NEPAL** | | | |
| VNKT | KATHMANDU/Kathmandu | VECC | Kolkata |
| | RS | VIDP | Delhi |
| | | VGHS | Dhaka |
| | | VEPT | Patna |
| | | VIBN | Varanasi |
| | | | |
| **NEW CALEDONIA (France)** | | | |
| NWWW | NOUMEA/La Tontouta | YBBN | Brisbane |
| | RS | NFFN | Nadi |
| | | NSTU | Pago Pago |
| | | NVVV | Port-Vila |
| | | YSSY | Sydney |
| **NEW ZEALAND** | | | |
| NZAA | AUCKLAND/Auckland Intl | NZCH | Christchurch |
| | RS | NFFN | Nadi |
| | | YSNF | Norfolk I. |
| | | NWWW | Noumea |
| | | YSSY | Sydney |
| | | NZWN | Wellington |
| | | | |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| NZCH | CHRISTCHURCH/Christchurch Intl | NZAA | Auckland |
| | RS | NZWN | Wellington |
| | | | |
| NZWN | WELLINGTON/Wellington Intl | NZAA | Auckland |
| | RS | NZCH | Christchurch |
| | | | |
| **NIUE (New Zealand)** | | | |
| NIUE | NIUE/ Hanan Intl | NSFA | Faleolo |
| | RS | NSTU | Pago Pago |
| | | | |
| **NORTHERN MARIANA IS. (United States)** | | | |
| PGRO | ROTA I/Rota Intl | PGUM | Guam I. |
| | RS | PGSN | Obyan |
| | | | |
| PGSN | OBYAN/Saipan Intl | PGUA | Guam I. |
| | RS | PGUM | Guam I. |
| | | | |
| **PAKISTAN** | | | |
| OPGD | GWADAR/Gwadar | OPKC | Karachi |
| | RS | | |
| | | | |
| OPRN | ISLAMABAD/Benazir Bhutto intl | VIDP | Delhi |
| | RS | OPKC | Karachi |
| | | OPLA | Lahore |
| | | OPPS | Peshawar |
| | | ZWWW | Urumqi |
| | | | |
| OPKC | KARACHI/Jinnah Intl | VAAH | Ahmedabad |
| | RS | VABB | Bombay |
| | | VIDP | Delhi |
| | | OPRN | Islamadab |
| | | OPLA | Lahore |
| | | OOMS | Muscat |
| | | OPNH | Nawabshah |
| | | ZWWW | Urumqi |
| | | | |
| OPLA | LAHORE/Allama Iqbal Intl | VIAR | Amritsar |
| | RS | VIDP | Delhi |
| | | OPRN | Islamabad |
| | | OPKC | Karachi |
| | | OPPS | Peshawar |
| | | | |
| OPNH | NAWABSHAH/Nawabshah | OPKC | Karachi |
| | AS | OPLA | Lahore |
| | | | |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| OPPS | PESHAWAR/Peshawar | OPRN | Islamabad |
| | RS | OAKB | Kabul |
| | | OPLA | Lahore |
| | | | |
| **PALAU** | | | |
| PTRO | BABELTHAUP I./Koror | PGUM | Guam I. |
| | RS | | |
| | | | |
| **PAPUA NEW GUINEA** | | | |
| AYPY | PORT MORESBY/Port Moresby | YBCS | Cairns |
| | RS | YPDN | Darwin |
| | | | |
| AYVN | VANIMO/Vanimo | WAJJ | Jayapura |
| | RS | | |
| | | | |
| **PHILIPPINES** | | | |
| RPMD | DAVAO/Francisco Bangoy Intl | RPMZ | Zamboanga |
| | RNS | | |
| | | | |
| RPLI | LAOAG/Laoag Intl | RPLL | Manila |
| | AS | | |
| | | | |
| RPVM | LAPU-LAPU/Mactan Cebu | VHHH | Hong Kong |
| | RS | RPLL | Manila |
| | | | |
| RPLL | MANILA/Ninoy Aquino Intl | RPMD | Davao |
| | RS | RCKH | Gaoxiong |
| | | VHHH | Hong Kong |
| | | RPLI | Laoag |
| | | RPVM | Lapu-Lapu |
| | | VMMC | Macau |
| | | ROAH | Naha |
| | | RPLB | Subic Bay |
| | | RCTP | Taibei City |
| | | RPMZ | Zamboanga |
| | | | |
| RPLB | SUBIC BAY/Subic Bay Intl | RPLL | Manila |
| | RNS | RPMI | Laoag |
| | | | |
| RPMZ | ZAMBOANGA/Zamboanga Intl | RPMD | Davao |
| | RNS | | |
| | | | |
| RPLC | PAMPANGA/Diosdada Macapagal Intl | RPLL | Manila |
| | RNS | RPLI | Laoag |
| | | RPLB | Subic Bay |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| **REPUBLIC OF KOREA** | | | |
| RKTU | CHEONGJU/Cheongju intl | RKTN | Daegu |
| | RS | RJFF | Fukuoka |
| | | RKPK | Gimhae |
| | | RKSS | Gimpo |
| | | RKSI | Incheon |
| | | RKPC | Jeju |
| | | RKJB | Muan |
| | | RJOO | Osaka |
| | | RKNY | Yangyang |
| | | | |
| RKTN | DAEGU/Daegu Intl | RKTU | Cheongju |
| | RS | RKPK | Gimhae |
| | | RKSS | Gimpo |
| | | RKSI | Incheon |
| | | RKPC | Jeju |
| | | RKJB | Muan |
| | | RKNY | Yangyang |
| | | | |
| RKPK | GIMHAE/Gimhae Intl | RKTU | Cheongju |
| | RS | RKSI | Incheon |
| | | RKPC | Jeju |
| | | RJFF | Fukuoka |
| | | RKSS | Gimpo |
| | | RKTN | Daegu |
| | | RKNY | Yangyang |
| | | RKJB | Muan |
| | | | |
| RKSS | GIMPO/Gimpo Intl | RKTU | Cheongju |
| | RNS | RKSI | Incheon |
| | | RKTN | Daegu |
| | | RKPK | Gimhae |
| | | RKPC | Jeju |
| | | RKNY | Yangyang |
| | | RKJB | Muan |
| | | | |
| RKSI | INCHEON/Incheon Intl | RKPC | Jeju |
| | RS | RKPK | Gimhae |
| | | RKSS | Gimpo |
| | | RKTU | Cheongju |
| | | RJAA | Tokyo |
| | | RKTN | Daegu |
| | | RJGG | Nagoya |
| | | RJFF | Fukuoka |
| | | RJOO | Osaka |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | RKNY | Yangyang |
| | | RKJB | Muan |
| | | | |
| RKPC | JEJU/Jeju Intl | RKTU | Cheongju |
| | RS | RKSI | Incheon |
| | | RJFF | Fukuoka |
| | | RKPK | Gimhae |
| | | RKSS | Gimpo |
| | | RKTN | Daegu |
| | | RKNY | Yangyang |
| | | RKJB | Muan |
| | | | |
| RKNY | YANGYANG/Yangyang Intl | RKSI | Incheon |
| | RS | RKSS | Gimpo |
| | | RKPC | Jeju |
| | | RKPK | Gimhae |
| | | RKTN | Daegu |
| | | RKJB | Muan |
| | | RKTU | Cheongju |
| | | | |
| RKJB | MUAN/Muan Intl | RKTU | Cheonglu |
| | RS | RKTN | Daegu |
| | | RKPK | Gimhae |
| | | RKSS | Gimpo |
| | | RKSI | Incheon |
| | | RKPC | Jeju |
| | | RKNY | Yangyang |
| | | | |
| **SAMOA** | | | |
| NSFA | Faleolo/Faleolo Intl | NSTU | Pago Pago |
| | RS | NLWW | Wallis |
| | | | |
| **SINGAPORE** | | | |
| WSAP | PAYA LEBAR/Paya Lebar (RSAF) | WSSS | Singapore |
| | AS | | |
| | | | |
| WSSL | SELETAR/Seletar | WMKJ | Johor Bahru |
| | RS | WSSS | Singapore |
| | | | |
| WSSS | SINGAPORE/Changi | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | WBSB | Brunei |
| | | WIHH | Jakarta |
| | | WIII | Jakarta |
| | | WMKJ | Johor Bahru |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | WMKK | Sepang |
| | | WIMM | Medan |
| | | WMKP | Penang |
| | | WSAP | Paya Lebar |
| | | | |
| **SOLOMON IS.** | | | |
| AGGH | HONIARA/Henderson | AYKT | Kieta |
| | RS | NVVV | Port-Vila |
| | | | |
| **SRI LANKA** | | | |
| VCBI | COLOMBO/Bandaranaike Intl | VOMM | Chennai |
| | RS | VRMM | Male |
| | | VOTV | Trivandrum |
| | | VCRI | Mattala |
| | | | |
| VCRI | MATTALA/ Mattala Rajapaksa Intl | VCBI | Colombo |
| | RS | VOMM | Chennai |
| | | VRMM | Male |
| | | VOTV | Trivandrum |
| | | | |
| **THAILAND** | | | |
| VTBD | BANGKOK/Don Mueang Intl | VTBS | Bangkok |
| | RS | VTCC | Chiang Mai |
| | | VHHH | Hong Kong |
| | | WMKK | Sepang |
| | | VMMC | Macao |
| | | WMKP | Penang |
| | | VTSP | Phuket |
| | | VTBU | U-Taphao |
| | | WSSS | Singapore |
| | | VTSS | Hat Yai |
| | | VYYY | Yangon |
| | | VECC | Kolkata |
| | | | |
| VTBS | BANGKOK/ Suvarnabhumi Intl | VTBD | Bangkok |
| | RS | VTCC | Chiang Mai |
| | | VHHH | Hong Kong |
| | | WMKK | Sepang |
| | | VMMC | Macao |
| | | WMKP | Penang |
| | | VTSP | Phuket |
| | | VTBU | U-Taphao |
| | | WSSS | Singapore |
| | | VTSS | Hat Yai |
| | | VYYY | Yangon |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | VECC | Kolkata |
| | | | |
| VTCC | CHIANG MAI/Chiang Mai Intl | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | VLVT | Vientiane |
| | | VYYY | Yangon |
| | | | |
| VTCT | CHIANG RAI/Chiang Rai Intl | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | VTCC | Chiang Mai |
| | | | |
| VTUK | KHON KAEN/Khon Kaen | VTPP | Phitsanulok |
| | RS | VTUD | Udon Thani |
| | | | |
| VTSG | KRABI/ Krabi | VTSP | Phuket |
| | RS | VTSS | Hat Yai |
| | | | |
| VTPP | PHITSANULOK/Phitsanulok | VTUK | Khon Kaen |
| | RS | VTCC | Chiang Mai |
| | | | |
| VTSP | PHUKET/Phuket Intl | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | WMKP | Penang |
| | | VTSS | Hat Yai |
| | | | |
| VTBU | RAYONG/U-Taphao Intl | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | | |
| VTSS | SONGKHLA/Hat Yai Intl | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | WMKK | Sepang |
| | | WMKP | Penang |
| | | VTSP | Phuket |
| | | VTBU | U-Taphao |
| | | | |
| VTSB | SURAT THANI/Surat Thani | VTSP | Phuket |
| | RS | VTSS | Hat Yai |
| | | | |
| VTUU | UBONRATCHATHANI/Ubon | | |
| | Ratchathani | | |
| | RS | | |
| | | | |
| **TONGA** | | | |
| NFTF | FUA'AMOTU/Fua'amotu Intl | NIUE | Niue |
| | RS | NFSU | Suva |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| NFTV | VAVA'U/Vava'u | NFTF | Fua'amotu |
| | RS | | |
| | | | |
| **TUVALU** | | | |
| NGFU | FUNAFUTI/Funafuti Intl | NLWW | Wallis |
| | RS | | |
| | | | |
| **UNITED STATES**[1] | | | |
| PANC | ANCHORAGE/Anchorage Intl | PAED | Anchorage |
| | RS | PACD | Cold Bay |
| | | CYEG | Edmonton |
| | | PAFA | Fairbanks |
| | | PAKN | King Salmon |
| | | | |
| PAED | ANCHORAGE/Elemendorf AFB | PANC | Anchorage |
| | AS | PAFA | Fairbanks |
| | | | |
| PACD | COLD BAY/Cold Bay | PANC | Anchorage |
| | AS | PAFA | Fairbanks |
| | | | |
| KPAE | EVERETT/Snohomish County-Paine Field | KSEA | Seattle |
| | AS | | |
| | | | |
| PAEI | FAIRBANKS/Eielson AFB | PAFA | Fairbanks |
| | AS | | |
| | | | |
| PAFA | FAIRBANKS/Fairbanks Intl | PAED | Anchorage |
| | RS | PANC | Anchorage |
| | | PACD | Cold Bay |
| | | PAEI | Fairbanks |
| | | PAKN | King Salmon |
| | | | |
| KFAT | FRESNO/Fresno Air Terminal | KLAX | Los Angeles |
| | AS | KSFO | San Francisco |
| | | | |
| PHTO | HILO/Hilo Intl | PHNL | Honolulu |
| | AS | | |
| | | | |
| PHNL | HONOLULU/Oahu Intl | PHTO | Hilo |
| | RS | PHOG | Kahului |
| | | | |
| PHOG | KAHULUI/Kahului | PHNL | Honolulu |
| | AS | | |
| | | | |
| | | | |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| PAKN | KING SALMON/King Salmon | PANC | Anchorage |
| | AS | PAFA | Fairbanks |
| | | | |
| KLAX | LOS ANGELES/Los Angeles Intl | KFAT | Fresno |
| | RS | KLAS | Las Vegas |
| | | KOAK | Oakland |
| | | KONT | Ontario |
| | | KPMD | Palmdale |
| | | KSAN | San Diego |
| | | KSFO | San Francisco |
| | | KSCK | Stockton |
| | | | |
| KOAK | OAKLAND/Metropolitan Oakland | KLAX | Los Angeles |
| | AS | KSFO | San Francisco |
| | | | |
| KONT | ONTARIO/Ontario Intl | KLAX | Los Angeles |
| | AS | KSFO | San Francisco |
| | | | |
| KPMD | PALMDALE/Palmdale P.F.T.I. | KLAX | Los Angeles |
| | AS | KSFO | San Francisco |
| | | | |
| KPDX | PORTLAND/Portland Intl | KSEA | Seattle |
| | AS | | |
| | | | |
| KSMF | SACRAMENTO/Metropolitan | KSFO | San Francisco |
| | AS | | |
| | | | |
| KSAN | SAN DIEGO/San Diego (AFSS) | KLAX | Los Angeles |
| | AS | | |
| | | | |
| KSFO | SAN FRANCISCO/San Francisco Intl | KFAT | Fresno |
| | RS | KLAS | Las Vegas |
| | | KLAX | Los Angeles |
| | | KOAK | Oakland |
| | | KONT | Ontario |
| | | KPMD | Palmdale |
| | | KSMF | Sacramento |
| | | KSCK | Stockton |
| | | | |
| KSJC | SAN JOSE/San Jose Intl | KOAK | Oakland |
| | RS | | |
| | | | |
| KBFI | SEATTLE BOEING FIELD/King County Intl | KSEA | Seattle |
| | AS | | |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| KSEA | SEATTLE/Seattle-Tacoma Intl | KLAX | Los Angeles |
| | RS | KPDX | Portland |
| | | KSFO | San Francisco |
| | | KBFI | Seattle Boeing Field |
| | | KGEG | Spokane |
| | | CYVR | Vancouver |
| | | | |
| KGEG | SPOKANE/Spokane Intl | KSEA | Seattle |
| | AS | | |
| | | | |
| KSCK | STOCKTON/Metropolitan | KLAX | Los Angeles |
| | AS | KSFO | San Francisco |
| | | | |
| KIAD | WASHINGTON/Dulles Intl | KBWI | Baltimore |
| | RS | KBOS | Boston |
| | | CYUL | Montreal |
| | | CYMX | Montreal |
| | | KJFK | New York |
| | | KPHL | Philadelphia |
| | | KPIT | Pittsburgh |
| | | KBDL | Windsor Locks |
| | | | |
| **VANUATU** | | | |
| NVVV | PORT-VILA/Bauerfield | NWWW | Noumea |
| | RS | NVSS | Santo |
| | | | |
| NVSS | SANTO/Pekoa | NVVV | Port-Vila |
| | RS | | |
| | | | |
| **VIET NAM** | | | |
| VVCR | KHANH HOA/Cam Ranh | VVTS | Tan Son Nhat |
| | RS | VVDN | Da Nang |
| VVCT | CAN THO/Can Tho | VVTS | Tan Son Nhat |
| | RS | VVPQ | Phu Quoc |
| | | | |
| VVDN | DA NANG/Da Nang | VVNB | Ha Noi |
| | RS | VVTS | Ho Chi Minh |
| | | VVPB | Phu Bai |
| | | VDPP | Phnom Penh |
| | | | |
| VVNB | HA NOI/Noi Bai | VTBS | Bangkok |
| | RS | VTBD | Bangkok |
| | | VVDN | Da Nang |
| | | VVTS | Ho Chi Minh |
| | | VHHH | Hong Kong |

| City/Aerodrome/Designation | | Alternate aerodromes | |
|---|---|---|---|
| 1 | | 2 | |
| | | | |
| | | VLVT | Vientiane |
| | | | |
| VVTS | HO CHI MINH/Tan Son Nhat | VVNB | Noi Bai |
| | RS | VTBS | Bangkok |
| | | VTBD | Bangkok |
| | | VVDN | Da Nang |
| | | VHHH | Hong Kong |
| | | RPLL | Manila |
| | | VDPP | Phnom Penh |
| | | | |
| VVPB | HUE/Phu Bai | VVDN | Da Nang |
| | RS | VVNB | Noi Bai |
| | | VVTS | Tan Son Nhat |
| | | | |
| VVPQ | KIEN GIANG/Phu Quoc | VVTS | Tan Son Nhat |
| | RS | VVCT | Can Tho |
| | | | |
| **WALLIS and FUTUNA IS. (France)** | | | |
| NLWW | WALLIS/Hihifo | NSAP | Apia |
| | RS | NGFU | Funafuti |
| | | NSTU | Pago Pago |
| | | | |

*Note 1 — Outside ASIA/PAC. Indicated for coordination*

# APPENDIX C

## APAC AIR NAVIGATION PLAN

## VOLUME III

# APAC AIR NAVIGATION PLAN

# VOLUME III

**TABLE OF CONTENTS**

# APAC ANP, VOLUME III

## PART 0 – INTRODUCTION

## 1. INTRODUCTION

1.1 The background to the publication of ANPs in three volumes is explained in the Introduction in Volume I. The procedure for amendment of Volume III is also described in Volume I. Volume III contains dynamic/flexible plan elements related to the implementation of the air navigation system and its modernization in line with the ICAO Aviation System Block Upgrades (ASBUs) and associated technology roadmaps described in the Global Air Navigation Plan (GANP).

1.2 The information contained in Volume III is related mainly to:

- Planning: objectives set, priorities and targets planned at regional or sub-regional levels;
- Implementation monitoring and reporting: monitoring of the progress of implementation towards targets planned. This information should be used as the basis for reporting purposes (i.e.: global and regional air navigation reports and performance dashboards); and/or
- Guidance: providing regional guidance material for the implementation of specific system/procedures in a harmonized manner.

1.3 The management of Volume III is the responsibility of the APANPIRG.

1.4 Volume III should be used as a tool for monitoring and reporting the status of implementation of the elements planned here above, through the use of tables/databases and/or references to online monitoring tools, as endorsed by APANPIRG. The status of implementation is updated on a regular basis as endorsed by APANPIRG.

## 2. AVIATION SYSTEM BLOCK UPGRADES (ASBUs), MODULES AND ROADMAPS

2.1. The ASBU Modules and Roadmaps form a key component to the GANP, noting that they will continue to evolve as more work is done on refining and updating their content and in subsequent development of related provisions, support material and training.

2.2. Although the GANP has a worldwide perspective, it is not intended that all Block Upgrade Modules are required to be applied in every State, sub-region and/or region. Many of the Block Upgrade Modules contained in the GANP are specialized packages that should be applied only where the specific operational requirement exists or corresponding benefits can be realistically projected. Accordingly, the Block Upgrade methodology establishes an important flexibility in the implementation of its various Modules depending on a region, sub-region and/or State's specific operational requirements. Guided by the GANP, ICAO APAC regional, sub-regional and State planning should identify Modules which best provide the needed operational improvements.

# APAC ANP, VOLUME III

## PART I - GENERAL PLANNING ASPECTS (GEN)

## 1. PLANNING METHODOLOGY

1.1 Guided by the GANP, the regional planning process starts by identifying the homogeneous ATM areas, major traffic flows and international aerodromes. An analysis of this data leads to the identification of opportunities for performance improvement. Modules from the Aviation System Block Upgrades (ASBUs) are evaluated to identify which of those modules best provide the needed operational improvements. Depending on the complexity of the module, additional planning steps may need to be undertaken including financing and training needs. Finally, regional plans would be developed for the deployment of modules by drawing on supporting technology requirements. This is an iterative planning process which may require repeating several steps until a final plan with specific regional targets is in place. This planning methodology requires full involvement of States, service providers, airspace users and other stakeholders, thus ensuring commitment by all for implementation.

1.2 Block 0 features Modules characterized by technologies and capabilities which have already been developed and implemented in many parts of the world today. It therefore features a near-term availability milestone, or Initial Operating Capability (IOC), of 2013 for high density based on regional, sub-regional and State operational need. Blocks 1 through 3 are characterized by both existing and projected performance area solutions, with availability milestones beginning in 2018, 2023 and 2028 respectively.

## 2. REVIEW AND EVALUATION OF AIR NAVIGATION PLANNING

2.1. The progress and effectiveness against the priorities set out in the regional air navigation plans should be annually reported, using a consistent reporting format, to ICAO.

2.2. Performance monitoring requires a measurement strategy. Data collection, processing, storage and reporting activities supporting the identified global/regional performance metrics are fundamental to the success of performance-based approaches.

2.3. The air navigation planning and implementation performance framework prescribes reporting, monitoring, analysis and review activities being conducted on a cyclical, annual basis. An Air Navigation Reporting Form (ANRF) reflecting selected key performance areas as defined in the Manual on Global Performance of the Air Navigation System (ICAO Doc 9883) has been developed for each ASBU Module. The ANRF is a customized tool which is recommended for the application of setting planning targets, monitoring implementation, and identifying challenges, measuring implementation/performance and reporting. If necessary, other reporting formats that provide more details may be used but should contain as a minimum the elements described in the ANRF template. A sample of the ANRF is provided in **Appendix A**. A sample Template of a planning table which may be used to show the elements planned in an ICAO region is provided in **Appendix B**.

## 3. REPORTING AND MONITORING RESULTS

3.1 Reporting and monitoring results will be analyzed by the PIRGs, States and ICAO Secretariat to steer the air navigation improvements, take corrective actions and review the allocated objectives, priorities and targets if needed. The results will also be used by ICAO and aviation partner stakeholders to develop the annual Global Air Navigation Report. The report results will provide an opportunity for the international civil aviation community to compare progress across different ICAO regions in the establishment of air navigation infrastructure and performance-based procedures.

3.2 The reports will also provide the ICAO Council with detailed annual results on the basis of which tactical adjustments will be made to the performance framework work programme, as well as triennial policy adjustments to the GANP and the Block Upgrade Modules.

3.3 **Table GEN III-1** contains a minimum set of Implementation Indicator(s) for each of the eighteen ASBU Block 0 Modules necessary for the monitoring of these Modules (if identified as a priority for implementation at regional or sub-regional level). These indicators are intended to enable comparison between ICAO Regions with respect to ASBU Block 0 Modules and will apply only to commonly selected ASBU Modules. All regions/PIRGs reserve the right to select the ASBU Modules relevant to their needs and to endorse additional indicators, as deemed necessary. No reporting is required for ASBU Block 0 Modules that have not been selected.

*Note: The priority for implementation as well as the applicability area of each selected ASBU Block 0 Module is to be defined by the APANPIRG. This should be reflected in Part II – Air Navigation System Implementation.*

———————

## TABLE GEN III-1 – IMPLEMENTATION INDICATOR(S) FOR EACH ASBU BLOCK 0 MODULE

**Explanation of the Table**

1 Block 0 Module Code
2 Block 0 Module Title
3 High level Implementation Indicator
4 Remarks *Additional information as deemed necessary.*

| Module Code | Module Title | Implementation Indicator | Remarks |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| B0-APTA | Optimization of Approach Procedures including vertical guidance | % of international aerodromes having at least one runway end provided with APV Baro-VNAV or LPV procedures | |
| B0-WAKE | Increased Runway Throughput through Optimized Wake Turbulence Separation | % of applicable international aerodromes having implemented increased runway throughput through optimized wake turbulence separation | 1. Not to be considered for the first reporting cycles due to lack of maturity.<br>2. List of ADs to be established through regional air navigation agreement. |
| B0-RSEQ | Improve Traffic flow through Runway Sequencing (AMAN/DMAN) | % of applicable international aerodromes having implemented AMAN / DMAN | 1. Not to be considered for the first reporting cycles due to lack of maturity.<br>2. List of ADs to be established through regional air navigation agreement. |
| B0-SURF | Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2) | % of applicable international aerodromes having implemented A-SMGCS Level 2 | List of ADs to be established through regional air navigation agreement. |
| B0-ACDM | Improved Airport Operations through Airport-CDM | % of applicable international aerodromes having implemented improved airport operations through airport-CDM | List of ADs to be established through regional air navigation agreement. |
| B0-FICE | Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration | % of FIRs within which all applicable ACCs have implemented at least one interface to use AIDC / OLDI with neighbouring ACCs | |
| B0-DATM | Service Improvement through Digital Aeronautical Information Management | - % of States having implemented an AIXM based AIS database<br>- % of States having implemented QMS | |
| B0-AMET | Meteorological information supporting enhanced operational efficiency and safety | - % of States having implemented SADIS / WIFS<br>- % of States having implemented QMS | |

| Module Code | Module Title | Implementation Indicator | Remarks |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| B0-FRTO | Improved Operations through Enhanced En-Route Trajectories | % of FIRs in which FUA is implemented | |
| B0-NOPS | Improved Flow Performance through Planning based on a Network-Wide view | % of FIRs within which all ACCs utilize ATFM systems | |
| B0-ASUR | Initial capability for ground surveillance | % of FIRs where ADS-B OUT and/or MLAT are implemented for the provision of surveillance services in identified areas. | 1. Not to be considered for the first reporting cycles due to lack of maturity. |
| B0-ASEP | Air Traffic Situational Awareness (ATSA) | % of States having implemented air traffic situational awareness | 1. Not to be considered for the first reporting cycles due to lack of maturity. |
| B0-OPFL | Improved access to optimum flight levels through climb/descent procedures using ADS-B | % of FIRs having implemented in-trail procedures | 1. Not to be considered for the first reporting cycles due to lack of maturity. |
| B0-ACAS | ACAS Improvements | % of States requiring carriage of ACAS (with TCAS 7.1 evolution) | |
| B0-SNET | Increased Effectiveness of Ground-Based Safety Nets | % of States having implemented ground-based safety-nets (STCA, APW, MSAW, etc.) | |
| B0-CDO | Improved Flexibility and Efficiency in Descent Profiles (CDO) | - % of international aerodromes / TMAs with PBN STAR implemented<br>- % of international aerodromes/TMA where CDO is implemented | |
| B0-TBO | Improved Safety and Efficiency through the initial application of Data Link En-Route | % of FIRs utilising data link en-route in applicable airspace | |
| B0-CCO | Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO) | - % of international aerodromes / TMAs with PBN SID implemented<br>- % of international aerodromes/TMA where CCO is implemented | |

# Appendix A

## SAMPLE TEMPLATE

### 1. AIR NAVIGATION REPORT FORM (ANRF)

(This template demonstrates how ANRF to be used.
The data inserted here refers to ASBU B0-05/CDO as an example only)

**Regional and National planning for ASBU Modules**

**2. REGIONAL/NATIONAL PERFORMANCE OBJECTIVE – B0-05/CDO:**
**Improved Flexibility and Efficiency in Descent Profiles**

**Performance Improvement Area 4:**
**Efficient Flight Path – Through Trajectory-based Operations**

**3. ASBU B0-05/CDO: Impact on Main Key Performance Areas (KPA)**

| | Access & Equity | Capacity | Efficiency | Environment | Safety |
|---|---|---|---|---|---|
| **Applicable** | N | N | Y | Y | Y |

**4. ASBU B0-05/CDO: Planning Targets and Implementation Progress**

| 5. Elements | 6. Targets and implementation progress (Ground and Air) |
|---|---|
| 1. CDO | |
| 2. PBN STARs | |

**7. ASBU B0-05/CDO: Implementation Challenges**

| Elements | Implementation Area | | | |
|---|---|---|---|---|
| | Ground system Implementation | Avionics Implementation | Procedures Availability | Operational Approvals |
| 1. CDO | | | | |
| 2. PBN STARs | | | | |

**8. Performance Monitoring and Measurement**
**8A. ASBU B0-05/CDO: Implementation Monitoring**

| Elements | Performance Indicators/Supporting Metrics |
|---|---|
| 1. CDO | Indicator: Percentage of international aerodromes/TMAs with CDO implemented<br>Supporting metric: Number of international aerodromes/TMAs with CDO implemented |
| 2. PBN STARs | Indicator: Percentage of international aerodromes/TMAs with PBN STARs implemented<br>Supporting metric: Number of international aerodromes/TMAs with PBN STARs implemented |

| **8. Performance Monitoring and Measurement**<br>**8 B. ASBU B0-05/CDO: Performance Monitoring** | |
|---|---|
| **Key Performance Areas**<br>(Out of eleven KPAs, for the present until experienced gained, only five have been selected for reporting through ANRF) | **Where applicable, indicate qualitative Benefits,** |
| Access & Equity | Not applicable |
| Capacity | Not applicable |
| Efficiency | Cost savings through reduced fuel burn. Reduction in the number of required radio transmissions. |
| Environment | Reduced emissions as a result of reduced fuel burn |
| Safety | More consistent flight paths and stabilized approach paths. Reduction in the incidence of controlled flight into terrain (CFIT). |
| **9. Identification of performance metrics:** It is not necessary that every module contributes to all of the five KPAs. Consequently, a limited number of metrics per type of KPA, serving as an example to measure the module(s)' implementation benefits, without trying to apportion these benefits between module, have been identified on page 5. For the family of ASBU modules selected for air navigation implementation, States/Region to choose the applicable performance (benefit) metrics from the list available on page 5. This approach would facilitate States in collecting data for the chosen performance metrics. States/Region, however, could add new metrics for different KPAs based on maturity of the system and ability to collect relevant data. | |

## AIR NAVIGATION REPORT FORM
## HOW TO USE - EXPLANATORY NOTES

1. **Air Navigation Report Form (ANRF):** This form is nothing but the revised version of Performance Framework Form that was being used by Planning and Implementation Regional Groups (PIRGs)/States until now. The ANRF is a customized tool for Aviation System Block Upgrades (ASBU) Modules which is recommended for application for setting planning targets, monitoring implementation, identifying challenges, measuring implementation/performance and reporting. Also, the PIRGs and States could use this report format for any other air navigation improvement programmes such as Search and Rescue. If necessary, other reporting formats that provide more details may be used but should contain as a minimum the elements described in this ANRF template. The results will be analysed by ICAO and aviation partners and utilized in the Regional Performance Dashboards and the Annual Air Navigation Report. The conclusions from the Air Navigation Report will serve as the basis for future policy adjustments, aiding safety practicality, affordability and global harmonization, amongst other concerns.

2. **Regional/National Performance objective:** In the ASBU methodology, the performance objective will be the title of the ASBU module itself. Furthermore, indicate alongside corresponding Performance Improvement area (PIA).

3. **Impact on Main Key Performance Areas:** Key to the achievement of a globally interoperable ATM system is a clear statement of the expectations/benefits to the ATM community. The expectations/benefits are referred to eleven Key Performance Areas (KPAs) and are interrelated and cannot be considered in isolation since all are necessary for the achievement of the objectives established for the system as a whole. It should be noted that while safety is the highest priority, the eleven KPAs shown below are in alphabetical order as they would appear in English. They are access/equity; capacity; cost effectiveness; efficiency; environment; flexibility; global interoperability; participation of ATM community; predictability; safety; and security. However, out of these eleven KPAs, for the present, only five have been selected for reporting through ANRF, which are Access & Equity, Capacity, Efficiency, Environment and Safety. The KPAs applicable to respective ASBU module are to be identified by marking Y (Yes) or N (No). The impact assessment could be extended to more than five KPAs mentioned above if maturity of the national system allows and the process is available within the State to collect the data.

4. **Planning Targets and Implementation Progress:** This section indicates planning targets and status of progress in the implementation of different elements of the ASBU Module for both air and ground segments.

5. **Elements related to ASBU module:** Under this section list elements that are needed to implement the respective ASBU Module. Furthermore, should there be elements that are not reflected in the ASBU Module (example: In ASBU B0-80/ACDM, Aerodrome certification and data link applications D-VOLMET, D-ATIS, D-FIS are not included; Similarly in ASBU B0-30/DAIM, note that WGS-84 and eTOD are not included) but at the same time if they are closely linked to the module, ANRF should specify those elements. As a part of guidance to PIRGs/States, every Regional ANP will have the complete list of all 18 Modules of ASBU Block 0 along with corresponding elements, equipage required on the ground and in the air as well as metrics specific to both implementation and performance (benefits).

6. **Targets and implementation progress (Ground and Air):** Planned implementation date (month/year) and the current status/responsibility for each element are to be reported in this section. Please provide as much details as possible and should cover both avionics and ground systems. This ANRF being high level document, develop necessary detailed action plan separately for each element/equipage.

7. **Implementation challenges**: Any challenges/problems that are foreseen for the implementation of elements of the Module are to be reported in this section. The purpose of the section is to identify in advance any issues that will delay the implementation and if so, corrective action is to be initiated by the concerned person/entity. The four areas, under which implementation issues, if any, for the ASBU Module to be identified, are as follows:

- Ground System Implementation:
- Avionics Implementation:
- Procedures Availability:
- Operational Approvals:

Should be there no challenges to be resolved for the implementation of ASBU Module, indicate as "NIL".

8. **Performance Monitoring and Measurement:** Performance monitoring and measurement is done through the collection of data for the supporting metrics. In other words, metrics are quantitative measure of system performance – how well the system is functioning. The metrics fulfil three functions. They form a basis for assessing and monitoring the provision of ATM services, they define what ATM services user value and they can provide common criteria for cost benefit analysis for air navigation systems development. The Metrics are of two types:

A. **Implementation Monitoring**: Under this section, the indicator supported by the data collected for the metric reflects the status of implementation of elements of the Module. For example- Percentage of international aerodromes with CDO implemented. This indicator requires data for the metric "number of international aerodromes with CDO".

B. **Performance Monitoring**: The metric in this section allows to asses benefits accrued as a result of implementation of the module. The benefits or expectations, also known as Key Performance Areas (KPAs), are interrelated and cannot be considered in isolation since all are necessary for the achievement of the objectives established for the system as a whole. It should be noted that while safety is the highest priority, the eleven KPAs shown below are in alphabetical order as they would appear in English. They are access/equity; capacity; cost effectiveness; efficiency; environment; flexibility; global interoperability; participation of ATM community; predictability; safety; and security. However, out of these eleven KPAs, for the present until experienced gained, only five have been selected for reporting through ANRF, which are Access & Equity, Capacity, Efficiency, Environment and Safety. Where applicable, mention qualitative benefits under this section.

9. **Identification of performance metrics:** It is not necessary that every module contributes to all of the five KPAs. Consequently, a limited number of metrics per type of KPA, serving as an example to measure the module(s)' implementation benefits, without trying to apportion these benefits between module, have been identified on page 6. For the family of ASBU modules selected for air navigation implementation, States/Region to choose the applicable performance (benefit) metrics from the list available on page 6. This approach would facilitate States in collecting data for the chosen performance metrics. States/Region, however, could add new metrics for different KPAs based on maturity of the system and ability to collect relevant data.

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# Appendix B - Main Planning Table Template

| | Objectives | | | | | Priorities and targets | | | Reference |
|---|---|---|---|---|---|---|---|---|---|
| **Block** | **ASBU modules and elements Enablers** | **Performance Improvement Area** | **Applicable or not in [Region] (Yes/No)** | **Regional planning elements** | **Enablers** | **Priority allocated in [Region]** | **Target(s) in [Region]** | **Indicator(s) / Metric(s)** | **Supporting Planning Document (ANRF, other)** |
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# APAC ANP, VOLUME III

## PART II – AIR NAVIGATION SYSTEM IMPLEMENTATION

## 1. INTRODUCTION

1.1 The planning and implementation of the ICAO Aviation System Block Upgrades (ASBUs) should be undertaken within the framework of the APANPIRG with the participation and support of all stakeholders, including regulatory personnel.

1.2 The ASBU Blocks and Modules adopted by the APAC region should be followed in accordance with the specific ASBU requirements to ensure global interoperability and harmonization of air traffic management. The APANPIRG should determine the ASBU Block Upgrade Modules, which best provide the needed operational improvements in the ICAO APAC region.

## 2. ICAO APAC AIR NAVIGATION OBJECTIVES, PRIORITIES AND TARGETS

2.1 In accordance with Recommendation 6/1 of the Twelfth Air Navigation Conference (AN-Conf/12), PIRGs are requested to establish priorities and targets for air navigation, in line with the ASBU methodology.

2.2 The achievement of the intended benefits along each routing or within each area of affinity is entirely dependent on the coordinated implementation of the required elements by all provider and user stakeholders concerned.

2.3 Considering that some of the block upgrade modules contained in the GANP are specialized packages that may be applied where specific operational requirements or corresponding benefits exist, States and PIRGs should clarify how each Block Upgrade module would fit into the national and regional plans.

2.4 As Block 0 modules in many cases provide the foundation for future development, all Block 0 modules should be assessed, as appropriate, for early implementation by States in accordance with their operational needs.

2.5 In establishing and updating the APAC air navigation plan, the APANPIRG and States should give due consideration to the safety priorities set out in the Global Aviation Safety Plan (GASP) and APAC safety strategy.

2.6 States in the APAC through the APANPIRG should establish their own air navigation objectives, priorities and targets to meet their individual needs and circumstances in line with the global and regional air navigation objectives, priorities and targets.

## 3. MONITORING OF ASBU MODULES IMPLEMENTATION

3.1 The monitoring of air navigation performance and its enhancement should be carried out through identification of relevant air navigation Metrics and Indicators as well as the adoption and attainment of air navigation system Targets.

3.2 The monitoring of the regional implementation progress and performance metrics/indicators should be done for all elements planned by APANPIRG. The monitoring should allow global correlation of status and expectations, appreciation of benefits achieved for the airspace users, as well as corrective actions to be taken by the PIRG on implementation plans.

3.3 The APANPIRG should determine appropriate mechanisms and tools for the monitoring and the collection of necessary data at national and regional levels.

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## APPENDIX – ASBU BLOCK 0 MODULES APPLICABLE IN THE APAC REGION(S)

### AIR NAVIGATION REPORT FORM (ANRF)
### APAC Regional Planning for ASBU Modules

**REGIONAL/NATIONAL PERFORMANCE OBJECTIVE – B0-ACDM:**
**Improved Airport Operations through Airport-CDM**

**Performance Improvement Area 1:**
**Airport Operations**

**ASBU B0-ACDM: Impact on Main Key Performance Areas (KPA)**

| | Access & Equity | Capacity | Efficiency | Environment | Safety |
|---|---|---|---|---|---|
| **Applicable** | Y | Y | Y | Y | |

**ASBU B0-ACDM: Implementation Progress**

| Elements | Target and Implementation Status (Ground and Air) |
|---|---|
| Airport CDM at all high density aerodromes | November 2015 (Seamless ATM Phase I): - Airport CDM at all high density aerodromes. |
| Apron Management | November 2015- (Seamless ATM Phase I)<br>All high density international aerodromes (100,000 scheduled movements per annum or more) should provide an appropriate apron management service in order to regulate entry of aircraft into and coordinate exit of aircraft from the apron; |
| ATM- Aerodrome coordination | November 2015- (Seamless ATM Phase I)<br>All high density international aerodromes (100,000 scheduled movements per annum or more) should have appropriate ATM coordination on airport development and maintenance planning;<br><br>coordination with local authorities regarding environmental, noise abatement, and obstacles;<br><br>and ATM/PBN procedures for the aerodrome |
| Aerodrome Capacity - assessment of passenger, airport gate, apron, taxiway and runway capacity; | November 2015- (Seamless ATM Phase I)<br>All high density international aerodromes (100,000 scheduled movements per annum or more) should have a declared airport terminal and runway capacity<br><br>November 2018- (Seamless ATM Phase II)<br>All high density aerodromes should have a declared airport terminal and runway capacity |
| | |

| ASBU B0-ACDM: Implementation Challenges | | | | |
|---|---|---|---|---|
| **Elements** | **Implementation Area** | | | |
| | **Ground system Implementation** | **Avionics Implementation** | **Procedures Availability** | **Operational Approvals** |
| Airport CDM at all high density aerodromes | Inter connection of ground systems of all stakeholders | Nil | Lack of guidance material and Coordination procedures | Lack of Agreements (MOU) among stake holders, and procedures |
| Apron Management | communication facilities | Nil | Lack of Coordination procedures between a provider of ATS Services and the aerodrome operator. | Lac k of Agreements, (MOU) and procedures |
| ATM coordination | Nil | Nil | Lack of Coordination procedures | Lack of Agreements (MOU),and procedures |
| Aerodrome Capacity | Availability of space | Nil | Lack of guidance material to assess airport capacity | Nil |
| | | | | |

| ASBU B0-ACDM: Performance Monitoring and Measurement (Implementation) | |
|---|---|
| **Elements** | **Performance Indicators/Supporting Metrics** |
| Airport CDM at all high density aerodromes. | % of applicable international aerodromes having implemented improved airport operations through airport-CDM (applicable=high density) |
| Apron Management | % of high density international aerodromes (100,000 scheduled movements per annum or more) providing an appropriate apron management service |
| ATM – Aerodrome coordination | % of high density international aerodromes having appropriate ATM coordination in accordance with the Seamless ATM Plan |
| Aerodrome Capacity –Phase 1 | % of high density international aerodromes having declared capacity in accordance with the Seamless ATM Plan Phase 1 |
| Aerodrome Capacity- Phase 2 | % of high density aerodromes having declared capacity in accordance with the Seamless ATM Plan Phase 2 |
| | |

| | |
|---|---|
| | |

| ASBU B0-ACDM: Performance Monitoring and Measurement (Benefits) | |
|---|---|
| **Key Performance Areas** | **Performance Metrics** |
| Access & Equity | Enhanced equity on the use of aerodrome facilities. |
| Capacity | Enhanced use of existing of gate and stands (unlock latent capacity).<br>Reduced workload, better organization of the activities to manage flights.<br>Enhanced aerodrome capacity |
| Efficiency | Improved operational efficiency (fleet management); and reduced delay. Reduced fuel burn due to reduced taxi time and lower aircraft engine run time.<br>Improved aerodrome expansion in accordance with Master Plan |
| Environment | Reduced emissions due to reduced fuel burn |
| Safety | Not applicable |