AGENDA ITEM 4: DEFICIENCIES IN THE AIR NAVIGATION FIELDS

Agenda Item 4: Deficiencies in the Air Navigation Field

Report of the First Meeting of the Deficiency Review Task Force (DRTF)

4.1 The meeting was briefed on the first meeting of the Deficiency Review Task Force (DRTF/1) which was convened from 22 – 23 July 2003 and attended by ten (10) members from Australia, Hong Kong (China), Fiji, India, Malaysia, Singapore, IATA, IFALPA and IFATCA.

4.2 The meeting recalled that APANPIRG/13 considered the need to develop a supplement to the Uniform Methodology for Identification, Assessment and Reporting of Air Navigation Deficiencies in order to provide guidance in identifying and evaluating deficiency. It was noted that the existing Methodology does not clearly specify what subjects or requirements, including SARPs, should be considered when PIRGs develop a list of deficiencies and this has been left at the discretion of the PIRGs. Another problem was the lack of precise procedures for validation and assessment of the reported deficiencies as well as for monitoring of the corrective actions. In view of the above, APANPIRG/13 agreed to the setting up of a Task Force to assist APANPIRG and the Secretariat in progressing the work on management of deficiencies.

4.3 The meeting was apprised on the single definition of deficiency as approved by the Council on 30 November 2001 and its broad definition, which now included elements of regularity and efficiency. During the discussions that subsequently ensued, comments were raised as to what constitute regularity and efficiency as these were, in some instances, arbitrary and subjective. In this regard, the meeting noted that DRTF/1 was in the process of formulating guidelines to assist in its implementation.

4.4 In order to avoid differing interpretations, the meeting felt that the definition of deficiency could be further clarified and some guidelines were required with regard to the practical aspects of its implementation. On another issue, a question was raised as to which party was ultimately responsible for the conduct of a safety assessment and determining if there was negative impact from the deficiencies. The meeting felt that the safety assessment was the most important part in the process of identification of deficiencies and that guidelines were required in this aspect.

4.5 On the subject of collection of information, the meeting noted that in order to prevent duplication of deficiencies reported by IATA and IFALPA, some sort of collaborative effort be undertaken by both the users in producing a list of common deficiencies. It was further suggested that along with the list, a statement on the negative safety impact the deficiency might give rise to should be included in the user's reporting mechanism and this would go a long way in assisting the work of the Regional Office. In this regard, the member from IFATCA suggested the use of a pro-forma with standard tick-boxes in the reporting of deficiencies by users, as suggested during DRTF/1, was noted. IFATCA had, during the same meeting, volunteered to pursue the subject of providing information on deficiencies to the ICAO Regional Office and to seek possible collaboration with IFALPA to collate and disseminate the data.

4.6 The meeting advised the DRTF that, in carrying out the commendable work that had been progressed, it should not attempt to change the definition of deficiency nor the Uniform Methodology other than to provide further guidance in its interpretation and implementation. The DRTF was reminded that one of its prime objectives was also to review the long list of deficiencies that had remained outstanding for a long time.

4.7 Accordingly, the meeting formulated the following Conclusion:

Conclusion 14/50 - Asia Pacific Supplement to the Uniform Methodology

That, the concept for the "Asia Pacific Supplement" to the Uniform Methodology for the identification, assessment and reporting of air navigation deficiencies contained in the attachment to the Report of the 1st Meeting of the Task Force be circulated to States for comments and the Task Force finalize the development of the Supplement taking into account comments from States".

4.8 The meeting recognized the good work that was achieved by the DRTF and noted that whilst substantial progress had been achieved in drafting a supplement to the Uniform Methodology, the work of DRTF had not been completed and felt the need for another meeting to, inter alia, develop specific procedures and further guidelines as enumerated in the draft Supplement. The meeting formulated the following Decision:

Decision 14/51 - 2nd Meeting of the Asia Pacific Deficiency Review Task Force (DRTF/2)

That, a second meeting of the DRTF be convened during early 2004 to finalize the procedures and develop further guidelines to be included in the Asia Pacific Supplement to the Uniform Methodology, taking into account comments received from States and Organizations concerned.

4.9 The meeting recorded its appreciation on the continuing effort by IFALPA in providing the ICAO Asia/Pac Regional Office with an annual updated list of deficiencies as contained in IFALPA's Annex 19 Part 3 and urged other Iinternational Organizations, in their capacity as users of air navigation facilities, to provide if they have not already done so, a list of deficiencies on a regular basis to the Regional Office for validation and action in accordance with Assembly Resolution A33-14 Appendix M.

4.10 The meeting was reminded by IATA that from 1 January 2002, Annex 6 requires all aircraft to be equipped with a pressure-altitude reporting transponder. In the interest of safety, States must take action to ensure that aircraft not equipped with a pressure-altitude reporting transponder do not operate in airspace where aircraft were equipped with ACAS, in particular, in terminal airspace where international flights were operating. The meeting emphasized that this was a serious safety concern, and States were required to notify a Difference to Annex 6 if they do not comply. The meeting recalled that Annex 11 requires States to establish requirements for carriage and operation of pressure-altitude reporting transponders within defined airspace. IATA advised the meeting that many States have not re-classified their airspace to ensure compliance.

4.11 The meeting recalled that APANPIRG/12 had decided that States that had not complied with Annex 6, this would be listed as a 'Deficiency" in the list of air navigation deficiencies in the Asia/Pacific Region. Further, with the carriage of ACAS II being required by Annex 6, applicable on 1 January 2003 for all turbine-engined aeroplanes of a maximum certificated take-off mass of 15 000 kg or authorized to carry more than 30 passengers, non-compliance would also be listed as a 'Deficiency'

Lists Of Deficiencies in the Air Navigation Field

4.12 The meeting was advised by some of the States attending the meeting of the actions taken by them with regard to the items in the list of deficiencies. The updated information is attached in the Appendices to the Report on Agenda Item 4.

4.13 The meeting was advised that in the field of ATS/AIS/SAR, the following progress has been made since APANPIRG/13:

ATS Routes

4.14 There were thirty (30) ATS routes listed as priority 'B' and two (2) routes as priority 'A', and fourteen (14) routes had been requested to be deleted by States. The meeting noted that in order for a route to be deleted, it would have to undergo an amendment process to the ASIA/PAC ANP in accordance with established procedure.

4.15 The meeting noted that the ATS Route Network Review Task Force had been established by the ATS/AIS/SAR/SG/13 meeting to conduct a review of the ATS route requirements in the region and to amend the APAC ANP as appropriate. It was expected that this work would be completed by APANPIRG/15. It was thus recognized that a considerable number of the routes may be removed from the list. However, until such time as the above Task Force meets, the meeting was of the view that the deficiency status on the ATS routes be retained as currently reflected.

WGS-84

4.16 There were twelve (12) States listed as deficient under priority 'A'. The Regional Office had been notified that one State had completed the WGS-84 conversion but not yet published information. One (1) State had completed the conversion but was in the process of redoing it due to flaws in their conversion. Six (6) States had partially implemented, and work was ongoing to complete the conversion. Four (3) States had not implemented. One (1) State notified as having completed implementation. The WGS-84 matrix was updated as shown in **Appendix B** to the Report on Agenda Item 4.

Type of ATS

4.17 Two (2) States were listed as deficient under priority 'A" as not providing Area Control Service on international ATS routes. One State had implemented ATC service, and the other was upgrading HF communications and ATC service would be provided in early 2004, thereby removing the deficiencies.

Airspace classification

4.18 Fourteen (14) States were listed as deficient under priority 'A' as not having classified their airspace. One (1) State has notified a difference, seven (6) States have advised the Regional Office that classification has been carried out but not provided official confirmation. One (1) State has notified completion. Four (4) States have not classified their airspace.

AIP Format

4.19 Twelve (12) States were listed as deficient under priority 'A' as not having published their AIP in the ICAO format. Five (5) States have advised the Regional Office that they have completed the format but not provided official confirmation. Two (2) States would complete the

format in September 2003 and another in 2004. Four (4) States have not completed the format and no up-to-date information was available.

SAR capability

4.20 Three (3) States were listed as deficient under priority 'U'. One (1) State had provided written information that a SAR agreement was being developed. One (1) State advised the Regional Office that they provided SAR services and facilities and SAR agreements with their neighbouring States were under development, and official confirmation would be provided. One State had not up-dated the Regional Office.

4.21 The meeting noted that considerable progress was made to remove the deficiencies and further action was in hand and at APANPIRG/15 there should be a substantial improvement in the elimination of deficiencies. States continue to be reminded to up-date the Regional Office by 30 April each year and to provide official confirmation when deficiencies have been rectified.

4.22 In the AOP field, the meeting was informed on the good progress that had been achieved in the rectification of deficiencies. The meeting was apprised that sixty-two (62) deficiencies were identified and reflected in the list of deficiencies. Based on additional information provided at the meeting and corrective actions taken by States concerned, a total of forty-seven (47) deficiencies representing seventy-six percent (76%) of the deficiencies were identified as being completed.

4.23 During the discussions on deficiencies in the AOP field, IFALPA had requested that a mechanism be made available for the verification of remedial actions taken by States. In this regard, the 2nd Meeting of the DRTF would include such a procedure whereby the services of the offices of the IFLAPA Regional Vice-Presidents will be called upon in providing such assistance and updates to the Regional Office once the relevant providers/authorities had accomplished the necessary rectification works.

4.24 In the CNS field, States concerned had taken actions to improve the aeronautical communications services in two of the three deficiencies identified. Alternate arrangements had been made for the AFTN routing between Bangladesh and India in accordance with an action agreed by a COM coordination meeting. ATS direct speech circuits had also been established between concerned centres using IDD service. Actions were agreed by States concerned to further improve the qualify of service and eventually implement the direct dedicated circuits.

4.25 In the MET field, of the six deficiencies identified in the list two were partly resolved and one other State has reported that corrective action has been taken since the last APANPIRG meeting. The deficiencies related to the implementation of the IAVW were being addressed by means of an on-going Special Implementation Project (SIP) approved by the ICAO Council for implementation in 2003. As requested by IATA, the status of the deficiency on reporting of information on volcanic eruptions to civil aviation units has been changed from "A" to "U" since it was considered a serious safety issue. A new MET deficiency has been added to the list on the non-implementation of the tropical cyclone advisories by the TCAC New Delhi, India.

4.26 The meeting requested States and users sources to provide regular updates on the list of deficiencies including instances where actions have been taken by States for the resolution of deficiencies.

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE ATS/AIS/SAR FIELDS IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
Requirements								
A202	Hong Kong, China/Japan	Partially implemented	24/11/93	Hong Kong-Bangkok segment was implemented on 1 November 2001. ~~Japan has proposed the deletion of the requirement for Chitose-Hong Kong segment in consultation with Hong Kong, China~~. Japan considering implementation as a conditional route	Japan co-ordinate Hong Kong, China	Hong Kong, China/ Japan	HongKong-Bangkok segment 1/11/2001; Hong Kong-Chitose segment TBD	B
A203	China/Hong Kong, China	Not implemented	24/11/93	China advises no international flight requirements.	China - ~~consider implementation~~ requested deletion and amendment to ANP	China/Hong Kong, China	Subject to ANP amendment	B
A211	Indonesia	Partially implemented	24/11/93	ICAO has requested Malaysia to co-ordinate the early implementation of A211 with States concerned. Malaysia has advised at SEACG/10 of the implementation of the route within Malaysia on 29 November 2001.	Indonesia - implement the missing segement ICAO- coordinate the implementation with Indonesia	Indonesia ICAO	29/11/2001 (by Malaysia) TBD by Indoensia	B

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Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
A218	China/Russian Federation	Partially implemented	24/11/93	ICAO has taken action to co-ordinate with China/Russian Federation for implementation of Harbin-Ekimchan segment and to amend ANP. APAC 99/1-ATS was approved on 26/1/00. CAAC subsequently advises (14 Apr 03) that current route G212 meets the requirements and the proposed A218 is no longer required.	~~China/Russian Federation - consider implementation~~ China requested deletion and amendment to ANP	China/Russian Federation ICAO	Subject to ANP amendment	B
A223	Japan	Not implemented	24/11/93	Japan has advised that a domestic route network covers the route; ~~thus will propose the deletion of the requirement~~.	~~Japan- co-ordinate the deletion with IATA~~ Japan considering implementation as a conditional route	Japan	TBD	B
A335	China/Mongolia/Russian Federation	Not implemented	24/11/93	China and Mongolia advised that this segment is covered by other ATS routes properly; thus will ***has*** proposed its deletion from ANP.	China, Mongolia - propose ANP amendment	China/Mongolia	Deletion of A335 notified 9 Oct 01 Subject to ANP amendment	B
A341	Indonesia/Malaysia	Partially implemented	24/11/93	ICAO has requested Indonesia to co-ordinate implementation with Malaysia. Malaysia has advised that the existing route B584 fulfils sufficiently the requirement and would propose the deletion of the requirement for Syrabaya-Kota Kinabalu segment.	Indonesia/Malaysia - consider full implementation	Indonesia/Malaysia	12/2001	B

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Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
A450	Indonesia/United States	Partially implemented	24/6/94	ICAO has requested Indonesia to co-ordinate implementation with United States. United States has agreed to the implementation, and a response from Indonesia is being awaited.	Indonesia/United States - consider full implementation	Indonesia/United States	TBD	B
A469	Viet Nam	Implemented as W9 before. As of 1 Nov 2001 implemented as L643.	19/8/94	ICAO has requested Viet Nam to implement as A469. Viet Nam advised that W9 was replaced with L643 on 1 November 2001.	Viet Nam - propose deletion of the requirement as A469 ICAO process ANP amendment	Viet Nam ICAO	Subject to ANP amendment	B
A473	India/Nepal	Not implemented	16/3/99	India and Nepah have advised that realignment is being co-ordinated and the route is to be implemented.	India/Nepal- implement the route	India/Nepal	Sep 2003	B
A581	Thailand	Partially implemented	17/2/97	China, Lao PDR and Thailand proposed an amendment to ANP. ICAO processed APAC99/11 in co-ordination with China/Myanmar/Thailand. APAC99/1 was approved on 15 December 2000. Lao PDR implemented 11 Jul 02	Thailand - implement accordingly.	Thailand	11/2002	B
A584	United States	Partially implemented	24/6/94	ICAO has requested United States to implement the missing segment. United States has proposed deletion of the missing segment, and the proposal is under preparation.	ICAO - process an amendment in co-ordiantion with United States	United States ICAO	Subject to ANP amendment	B

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Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
B201	Fiji/New Zealand	Not implemented	24/11/93	Fiji/New Zealand have advised that they agreed to delete the requirement. ICAO will process ANP amendment as this was covered by routes B575, G457 and R327.	Fiji/New Zealand - propose an amendment to delete the requirement in ANP	Fiji/New Zealand ICAO	Subject to ANP amendment	B
B204	Maldives	The requirements for this route are not detailed in ANP	24/1/96		Maldives - propose an amendment to ANP to add the route	Maldives ICAO	Subject to ANP amendment	B
B212	Japan/Rep of Korea	Not implemented	24/11/93	Japan is considering implementation as a conditional route and will coordinate with Rep of Korea	Japan/Rep of Korea - consider implementation	Japan/Rep of Korea	12/2005	B
B213	China	Not implemented	24/11/93	CAAC advises no international flight requirements - route H12 is available.	~~China - consider implementation~~ China - propose deletion and amendment to ANP	China ICAO	Subject to ANP amendment	B
B456	Papua New Guinea	Partially implemented	24/11/93	Papua New Guinea has advised that they will formally propose ANP amendment for deletion of the missing segment.	Papua New Guinea - propose an amendment to ANP. ICAO-process ANP amendment.	Papua New Guinea ICAO	Subject to ANP amendment	B
B591	China	Partially implemented	22/7/97	Co-ordination is in progress among States and ICAO	ICAO - continue on-going implementation co-ordination related to the Revised South China Sea route structure with States	China	TBD	B

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Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
G211	Malaysia	Not implemented	24/11/93	ICAO has requested Malaysia to implement G221. Malaysia has advised that G211 would be replaced with EMARSSH routes; thus would propose the deletion of the requirement when an ANP amendment relating to EMARSSH is prepared.	Malaysia - propose deletion ICAO- process ANP amendment~~t~~	Malaysia ICAO	28/11/2002 Subject to ANP amendment	B
G461	Indonesia	Implemented with different route specification	24/11/93	ICAO co-ordinated with Indonesia to amend ANP requirement. APAC00/1-ATS was approved on 15 January 2001.	Indonesia-implement the requirement accordingly.	Indonesia	TBD	B
G473	Cambodia /Philippines Thailand/Viet Nam	Partially implemented	24/11/93	Co-ordination is in progress among States and ICAO	ICAO - continue ongoing implementation co-ordination related to the Revised South China Sea route structure with States	Cambodia /Philippines Thailand/Viet Nam	TBD	B
G589	DPR Korea/ Rep of Korea	Not implemented	24/11/93		B467 established instead of G589 April 1998	DPR Korea/ Rep of Korea	April 1998 Completed	B
R216	China/Kazakhstan	Not implemented	24/11/93	CAAC advises current routes B215, Kuqa, A460 REVKI to Alma Ata meets the requirements for traffic from Urumqi to Alma Ata and requests deletion of R216 from ANP (14 Apr 03)	~~ICAO - co-ordinate with States for implementation and report the outcome to EAAR~~ CAAC proposes deletion	China/Kazakhstan ICAO	Subject to ANP amendment	B

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Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
R221	Russian Federation	R221 was implemented on 19 April 2001 in Malaysia in accordance with the requirement in ASIA/PAC ANP. The same route designator in use in Russian Federation	24/11/93	ICAO has requested Russian Federation to delete R221 and promulgate the route as R466 in AIP. Input from Russia is being awaited.	ICAO - co-ordinate with Russian Federation to redesignate the route as R466 as already assigned as a matter of priority	Russian Federation	TBD	A
R333	China	Not implemented	24/11/93	China is considering future implementation	China co-ordinating with Hong Kong CAA	China	TBD	B
R335	China/Hong Kong, China	Not implemented	24/11/93	CAAC advises no international flight requirementsand requests deletion from ANP (14 Apr 03)	China - ~~consider implementation~~ propose deltetion and amendment to ANP	China/Hong Kong, China ICAO	Subject to ANP amendment	B
R345	Cambodia/Lao PDR/Thailand	Not implemented	24/11/93	Cambodia has advised that the requirement is no longer valid and will propose the deletion of requirement in consultation with Lao PDR and Thailand.	ICAO - continue ongoing implementation co-ordination related to the Revised South China Sea route structure with States Camodia- coordinate the deletion with IATA as well as Lao PDR and Thailand	Cambodia/Lao PDR/ Thailand	TBD	B
R455	Indonesia	Partially implemented	24/11/93	ICAO has requested Malaysia to co-ordinate the implementation of R455 with States concerned. Malaysia has advised that R455 was implemented within Malaysia on 29 November 2001.	Indoensia - implement the requirement	Indonesia	29/11/2001 (by Malaysia) TBD by Indoensia	B

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Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
R459	Indonesia	Implemented as W51 and W36	24/11/93	ICAO has requested Indonesia to implement as R459	Indonesia - consider promulgation of the route with designator R459 in AIP	Indonesia	TBD	B
R466	Russian Federation	Implemented as R221 in Russian Federation. Route requirement is listed in EUR/NAT ANP	24/11/93	ICAO has requested Russian Federation to delete R221 and promulgate the route as R466 in AIP, and awaits input from Russia.	ICAO - co-ordinate with Russian Federation to redesignate the route as R466 as already assigned as a matter of priority	Russian Federation ICAO	TBD	A
R579	Indonesia/Malaysia	Not implemented	24/11/93	ICAO has requested Malaysia to co-ordinate with Indonesia for implementation. Malaysia considered there was no longer requirement due to a low traffic movement; thus will propose the deletion.	Indonesia/Malaysia - consider implementation	Indonesia/Malaysia	12/2001	B
R593	India/Oman	Not implemented	24/11/93	~~India has advised that the implemetation of R593 is being considered in conjunction with the implementation of RVSM in November 2003.~~	India and Oman are of the view that the proposed route is not considered as a requirement in view of availability of new ATS routes under EMARSSH project which provide connectivity from Mumbai and Oman. India anjd Oman suggested deletion of this item.	India/Oman (SWACG) ICAO	Subject to ANP amendment	B
WGS-84								
WGS-84	Bhutan	Not implemented	2/7/1999	Data conversion completed, but not published		Bhutan	TBD	A

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Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
WGS-84	Cambodia		28/6/2001	Cambodia has previously informed ICAO that their WGS-84 conversion had been completed. Cambodia has now informed ICAO of flaws in their conversion and their intention to start all over again.		Cambodia	TBD	A
WGS-84	China	Not implemented * implemented in the Sanya AOR as of 1 Nov 2001	2/7/1999	Differences to Annex 15 - *Aeronautical Information Services* are notified		China		A
WGS-84	DPR Korea	Not implemented				DPR Korea	TBD	A
WGS-84	French Polynesia	Implemented at main airports		in progress		French Polynesia	2003	A
WGS-84	Kiribati	Not implemented				Kiribati	TBD	A
~~WGS-84~~	~~Lao PDR~~	~~Implemented~~		~~AIP SUP A 02/02 dated 11 Jul 02 Effective date 5 Sep 02~~		~~Lao PDR~~	~~Completed~~	A
WGS-84	Malaysia	Partially implemented		In progress. Updated information received. Confirmation of completion date required.		Malaysia	December 2002	A
WGS-84	Nauru	Not implemented		Conferring with consultant		Nauru	TBD	A
WGS-84	Philippines	Implemented at main airports		on-going		Philippines	2003	A
WGS-84	Solomon Islands	Not implemented				Solomon Islands	1999	A
WGS-84	Vanuatu	Implemented at main airports	2/7/1999			Vanuatu	1999	A

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Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
Type of ATS								
Area Control Services	India	Some ATS route segments in part of Mumbai FIR are subject to Advisory Services	24/11/93	Co-ordination in progress through BBACG.	India informed the meeting that the existing HF radion is being modernized and new HF radio wth data link coapability is being installed at the Air Traffic centres at Mumbai, Delhi, Kolkata, Chennai and Thiruvananthapuram. Work is expected to be completed by December 2003, but expected well ahead of schedule. ADS/CDLC wil be installed at Mumbai and Delhi FIC/ACC. Subsequently Area Control Service will be provided.	India	December 2004	A
~~Area Control Services~~	~~Sri Lanka~~	~~Several ATS route segments are subject to Advisory Services~~	~~24/11/93~~	~~Co-ordination in progress through BBACG~~	~~Sri Lanka - implement Area Control Services~~	~~Sri Lanka~~	~~Completed~~	A
Airspace Classification								
Airspace Classification	China	Not implemented	7/7/99		Difference to Annex 11 is published in AIP, China.	China		A
Airspace Classification	Cook Islands	Not implemented	7/7/99			Cook Islands	TBD	A
Airspace Classification	DPR Korea	Not implemented	7/7/99			DPR Korea	TBD	A
Airspace Classification	Japan	Not implemented	7/7/99		Implementation in progress	Japan	2003 Official confirmation pending	A

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Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
Airspace Classification	Kiribati	Not implemented	7/7/99			Kiribati	TBD	A
~~Airspace Classification~~	~~Lao PDR~~	~~Implemented~~	~~7/7/99~~	~~AIP SUP A01/02 dated 11 Jul 02 effective 5 Sep 02~~	~~Area, Approach and Tower control services est. 1 Nov~~	~~Lao PDR~~	~~Completed Official confirmation 6 Aug 03~~	A
Airspace Classification	Nauru	Not implemented	7/7/99			Nauru	TBD	A
Airspace Classification	Papua New Guinea	Not implemented	7/7/99			Papua New Guinea	mid 2001 Offical confirmation pending	A
~~Airspace Classification~~	~~Republic of Korea~~	~~Not implemented~~	~~7/7/99~~		~~Implemented since 1 July 2001~~	~~Republic of Korea~~	~~1 July 2001~~ ~~Completed~~	A
Airspace Classification	Samoa	Not implemented	7/7/99		CTR C and D Samoa Sector Class G	Samoa	Completed Official confirmation required	A
Airspace Classification	Solomon Islands	Not implemented	7/7/99			Solomon Islands	TBD	A
~~Airspace Classification~~	~~Sri Lanka~~	~~Not implemented~~	~~7/7/99~~			~~Sri Lanka~~	~~Completed 2003~~	~~A~~
Airspace Classification	Tonga	Not implemented	7/7/99			Tonga	Completed, Official confirmation required.	~~A~~
Airspace Classification	Viet Nam	Not implemented	7/7/99			Viet Nam	2003/2004	A
AIP Format								
~~AIP Format~~	~~China~~	~~Not implemented~~	~~7/7/99~~	~~Implementation in progress~~	~~New AIP published 1 Oct 2002 with effective date 23 Jan~~	~~China~~	~~Completed~~	A
AIP Format	Cook Islands	Not implemented	7/7/99			Cook Islands	TBD	A
AIP Format	Fiji	Not implemented	7/7/99			Fiji	Sep 2002 (to be confirmed)	A
AIP Format	Kiribati	Not implemented	7/7/99			Kiribati	TBD	A

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Identification		Deficiencies			Corrective action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
AIP Format	Lao PDR	Aeronautical information has been put in new AIP format. On final check before production	7/7/99	On-going	On-going	Lao PDR	3-Sep	A
AIP Format	Myanmar	Not implemented	7/7/99			Myanmar	Completed 2003 (To be published)	A
AIP Format	Nauru	Not implemented	7/7/99			Nauru	TBD	A
AIP Format	New Zealand	Not implemented	7/7/99	Differences to Annex 15 - Aeronautical Information Services are notified		New Zealand	Revised format being prepared in line with ICAO requirements effective 4-Sep-03	A
AIP Format	Papua New Guinea	Not implemented	7/7/99	under development		Papua New Guinea	TBA	A
AIP Format	Samoa	Not implemented	7/7/99			Samoa	5/15/2003 (to be confirmed)	A
~~AIP Format~~	~~Sri Lanka~~	~~Not implemented~~	~~7/7/99~~			~~Sri Lanka~~	~~Completed - to be published end of 2003~~	A
AIP Format	Tonga	Not implemented	7/7/99		Under preparation	Tonga	2004	A
SAR capability								
SARPs in Annex 12	Cambodia	Annex 12 requirements not implemented. No agreements with adjacent States.	20/2/97		Cambodia - implement Annex 12 requirements and co-ordinate LOA with adjacent States ICAO - assist to develop SAR capability and to co-ordinate with adjacent States	Cambodia	TBD	U

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE ATS/AIS/SAR FIELDS IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
SARPs in Annex 12	Cook Islands	Annex 12 requirements not implemented. No agreements with adjacent States.	31/1/95	SAR agreement with New Zealand under development	Cook Islands - implement Annex 12 requirements and co-ordinate LOA with adjacent States ICAO - assist to develop SAR capability and to co-ordinate with adjacent States	Cook Islands	2004	U
SARPs in Annex 12	Maldives	Annex 12 requirements not implemented. No agreements with adjacent States.	24/4/1997	SAR services and facilites provided (details to be confirmed). SAR agreements with neighbouring States under development	Maldives - implement Annex 12 requirements and co-ordinate LOA with adjacent States ICAO - assist to develop SAR capability and to co-ordinate with adjacent States	Maldives	2004	U

STATUS OF WGS-84 IMPLEMENTATION

EXPLANATION OF THE TABLE

Column

1 Name of the State, territory or aerodrome for which WGS-84 coordinates are required with the designation of the aerodrome use:

RS - international scheduled air transport, regular use
RNS - international non-scheduled air transport, regular use
RG - international general aviation, regular use
AS - international scheduled air transport, alternate use

2 Runway designation numbers

3 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.

4 Requirement for the WGS-84 coordinates for FIR, indicated by the expected date of implementation or an "X" if already implemented.

5 Requirement for the WGS-84 coordinates for Enroute points, indicated by the expected date of implementation or an "X" if already implemented.

6 Requirement for the WGS-84 coordinates for the Terminal Area, indicated by the expected date of implementation or an "X" if already implemented.

7 Requirement for the WGS-84 coordinates for the Approach points, indicated by the expected date of implementation or an "X" if already implemented.

8 Requirement for the WGS-84 coordinates for runways, indicated by the expected date of implementation or an "X" if already implemented.

9 Requirement for the WGS-84 coordinates for Aerodrome/Heliport points (e.g. aerodrome/heliport reference point, taxiway, parking position, etc.), indicated by the expected date of implementation or an "X" if already implemented.

10 Requirement for geoid undulation indicated by the expected date of implementation or an "X" if already implemented.

11 Requirement for the WGS-84 Quality System, indicated by the expected date of implementation or an "X" if already implemented.

12 Requirement for publication of WGS-84 coordinates in the AIP indicated by the expected date of publication or an "X" if already published.

13 Remarks

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STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
AUSTRALIA			X	X						X	X	
YPAD ADELAIDE/												
Adelaide	05	NPA			X	X	X	X				
RS	23	PA1				X	X	X				
	12	NPA				X	X	X				
	30	NPA				X	X	X				
YBBN BRISBANE/					X			X				
Brisbane	1	PA1				X	X					
RS	19	PA1				X	X					
	14	NPA				X	X					
	32	NPA				X	X					
YBCS CAIRNS/					X			X				
Cairns	12	NPA				X	X					
RS	30	NPA				X	X					
	15	PA1				X	X					
	33	NPA				X	X					
YPDN DARWIN/					X			X				
Darwin	11	NPA				X	X					
RS	29	PA1				X	X					
	18	NINST				X	X					
	36	NPA				X	X					
YMML MELBOURNE/					X			X				
Melbourne	09	NPA				X	X					
RS	27	PA1				X	X					
	16	PA1				X	X					
	34	NPA				X	X					
YPPH PERTH/					X			X				
Perth Intl	03	NPA				X	X					
RS	21	PA1				X	X					
	06	NPA				X	X					
	24	PA1				X	X					
	11	NPA				X	X					
	29	NPA				X	X					
YSSY SIDNEY/					X			X				
Kingsford Smith Intl	07	PA1				X	X					
RS	25	NPA				X	X					
	16L	PA1				X	X					
	34R	PA1				X	X					
	16R	PA1				X	X					
	34L	PA1				X	X					
YMAV AVALON/					X			X				
Avalon	18	PA1				X	X					
AS	36	NPA				X	X					
YBRM BROOME/					X			X				
Broome	10	NPA				X	X					
RS	28	NPA				X	X					

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
YSCB CANBERRA/					X			X				
Canberra	12	NPA				X	X					
AS	30	NPA				X	X					
	17	NPA				X	X					
	35	PA1				X	X					
YSCH COFFS HARBOUR/					X			X				
Coffs Harbour	03	NPA				X	X					
AS	21	NPA				X	X					
	10	NPA				X	X					
	28	NPA				X	X					
YBCG COOLANGATTA/					X			X				
Coolangatta	14	NPA				X	X					
AS	32	NPA				X	X					
	17	NPA				X	X					
	35	NPA				X	X					
YMHB HOBART/					X			X				
Hobart	12	PA1				X	X					
RS	30	NPA				X	X					
					X			X				
Learmonth	18	NPA				X	X					
AS	36	NPA				X	X					
YLHI LORD HOWE ISLAND/					X			X				
Lord Howe Island	10	NPA				X	X					
RS	28	NPA				X	X					
YPPD PORT HEDLAND					X			X				
Port Hedland	14	NPA				X	X					
AS	32	NPA				X	X					
	18	NPA				X	X					
	36	NPA				X	X					
YBTL TOWNSVILLE/					X			X				
Townsville	01	PA1				X	X					
AS	19	NPA				X	X					
	07	NPA				X	X					
	25	NPA				X	X					
YBAS ALICE SPRINGS/					X			X				
Alice Springs	06	NPA				X	X					
AS	24	NPA				X	X					
	12	PA1				X	X					
	30	NPA				X	X					
	17	NPA				X	X					
	35	NPA				X	X					
YSDU DUBBO/					X			X				
Dubbo	05	NPA				X	X					
AS	23	NPA				X	X					
	11	NPA				X	X					
	29	NPA				X	X					

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
YPKG KALGOOLIE/					X			X				
Kalgoorlie	11	NPA				X	X					
AS	29	NPA				X	X					
	18	NPA				X	X					
	36	NPA				X	X					
YMLT LAUNCETON/					X			X				
Launceston	14L	ninst				X	X					
AS	32R	ninst				X	X					
	14R	NPA				X	X					
	32L	PA1				X	X					
	18	ninst				X	X					
	36	ninst				X	X					
YBRK ROCKHAMPTON/					X			X				
Rockhampton	04	NPA				X	X					
AS	22	NPA				X	X					
	15	NPA				X	X					
	33	NPA				X	X					
YPTN TINDAL/					X			X				
Katherine	14	NPA				X	X					
AS	32	NPA				X	X					
YHID HORN ISLAND/					X			X				
Horn Island	08	NPA				X	X					
RGS	26	NPA				X	X					
	14	NPA				X	X					
	32	NPA				X	X					
YSNF NORFOLK ISLAND/					X			X				NZZO FIR
Norfolk Island	04	PA1				X	X					
RS	22	NPA				X	X					
	11	PA1				X	X					
	29	PA1				X	X					
YPXM CHRISTMAS ISLAND/					X			X				
Christmas Island	18	NPA				X	X					
RS	36	NPA				X	X					
YPCC KEELING/					X			X				
Cocos Island Intl	15	NPA				X	X					
RS	33	NPA				X	X					
BANGLADESH			X	X						X	X	
VGZR DHAKA/					X			X				
Zia Int'l	14	PAI				X	X		*			* Not yet decided
RS	32	NPA				X	X					
VGEG CHITTAGONG/					X			X				
M.A. Hannan Intl	05	NPA				X			*			* Not yet decided
RS	23	PA1				X	X					
VGSY SYLHET/					X			X				
Osmani Intl	11	PA1				X	X		*			* Not yet decided
RS	29	NPA				X	X					

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
BHUTAN												
BRUNEI DARUSSALAM												WBFC FIR
WBSB BRUNEI/					X			X			X	
Brunei Intl	03	PA1				X	X					
	21	PA1				X	X					
CAMBODIA												
CHINA			X	X								Sanya AOR only
HONG KONG, China			X	X						X	X	
VHHH HONG KONG/					X			X	X			
Hong Kong Intl	07L	PA2				X	X		X			
RS	07R	PA2				X	X		X			
	25L	PA2				X	X		X			
	25R	PA3				X	X		X			
MACAO, China												VHHK FIR
VMMC MACAU/					X			X			X	
Macau Intl	16	NPA				X	X		X			
	34	PA2				X	X		X			
COOK ISLANDS												NZZO FIR
DPR KOREA												
FIJI			X	X						X	X	
NFFN NADI/					X			X				
Nadi Intl	02	PA1				X	X		X			
RS	20	PA1				X	X		X			
	09	NINST				X	X		X			
	27	NINST				X	X		X			
NFSU SUVA/					X			X				
Nausori Intl	10	NPA				X	X		X			
RS	28	NPA				X	X		X			
FRENCH POLYNESIA (FRANCE)			2003	2003						2003	2003	
NTAA TAHITI/								X				

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
Faaa	04	PA1				2003	X		X			
RS	22	NPA				2003	X	X	X			
NTTB BORA BORA/												
Moto-Mute	11	NPA				2003	X	2003	X			
	29	NPA				2003	X	2003	X			
NTTR RAIATEA												
Utoroa	07	NPA				2003	X	2003				
	25	NPA				2003	X	2003				
NTTG RANGIGORA												
Rangigora	09	NPA				2003	X	2003				
AS	27	NPA				2003	X	2003				
NEW CALEDONIA (FRANCE)			X	X						2001	X	NFFF FIR
NWWW Noumea/					X			X				
La Tontouta	11	PA1				X	X		X			
RS	29	NINST				X	X		X			
WALLIS ISLANDS (FRANCE)												NFFF FIR
NLWW Wallis/												
Hihifo										2001	X	
RS	08	NPA				X	X					
	26	NPA				X	X					
INDIA			X	X							X	
VIDP DELHI/					X			X				
Indian Gandhi Intl	09	NPA				X	X					
RS	27	PA1				X	X					
	10	PA1				X	X					
	28	PA2				X	X					
VABB MUMBAI/					X			X				
ChhatrapatiShivaji Intl	09	PA1				X	X					
RS	27	PA1				X	X					
	14	PA1				X	X					
	32	NPA				X	X					
VOMM CHENNAI/					X			X				
Madras	07	PA1				X	X					
RS	25	NPA				X	X					
	12	NPA				X	X					
	30	NPA				X	X					
VECC KOLKATA/					X			X				
Netaji Subash	19L	PA1				X	X					
Chandra Bose Intl	01R	PA1				X	X					
RS	19R	NPA				X	X					
	01L	NPA				X	X					
VAAH AHMEDABAD/					X			X				
Sardar VallabhBhai	05	NPA				X	X					
Patel Intl	23	PA1				X	X					
RS												
VIAR AMRITSAR/					X			X				

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
Amritsar	16	NPA				X	X					
RS	34	PA1				X	X					
VOBG BANGALORE/					X			X				
Bangalore	09	NPA				X	X					
RS	27	PA1				X	X					
VOCI COCHIN/					X			X				
Cochin Intl	09	NPA				X	X					
RS	27	PA1				X	X					
VAGO GOA/					X							
Goa	08	NPA				X	X					
RS	26	NPA				X	X					
VEGT GUWAHATI/					X			X				
Lokapriya Gopinath	02	PA1				X	X					
Bardoloi Intl	20	NPA				X	X					
RS												
VOHY HYDERABAD/					X			X				
Rajiv Gandhi Intl	09	NPA				X	X					
RS	27	PA1				X	X					
VOTV TRIVANDRUM/					X			X				
Thiruvananthapuram	14	NPA				X	X					
Intl	32	PA1				X	X					
RS												
	Note: Transformation into WGS-84 has been done by mathematical means using MADRAN software developed by NIMA (National Imaginary and Mapping Agency), USA											
INDONESIA			2002	X					X	2001		
WAPP AMBON/					2002			X				
Pattimura	04	NPA				X	X					
RNS	22	PA1				X	X					
WRLL BALIKPAPAN/					2002			X				
Sepinggan	07	NPA				X	X					
RS	25	PA1				X	X					
WRBB BANJARMASIN/					2002			X				
Syamsudin Noor	10	PA1				X	X					
AS	28	NPA				X	X					
WIKB BATAM/					2002			X				
Hang Nadim	04	PA1				X	X					
RS	22	NPA				X	X					
WABB BIAK/					2002			X				
Frans Kaisiepo	11	PA1					X					
RS	29	NPA					X					
WRRR DENPASAR/					2002			X				
Ngurah Rai	09	NPA				X	X					
RS	27	PA1				X	X					
WIII JAKARTA/					2002			X				
HalimPerdanakusuma	06	NPA					X					
RNS	24	PA1					X					

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
WIIH JAKARTA/					2002			X				
Soekarno-Hatta	07L	PA1				X	X					
RS	25L	PA1				X	X					
	07R	PA1				X	X					
	25R	PA1				X	X					
WAJJ JAYAPURA/					2002			X				
Sentani	12	NPA				X	X					
RS	30	PA1				X	X					
WRKK KUPANG/					2002			X				
El Tari	07	NPA					X					
RS	25	PA1					X					
WAAA MAKASSAR/					2002			X				
Hasanuddin	13	PA1				X	X					
RNS	31	NPA				X	X					
WAMM MANADO/					2002			X				
Sam Ratulangi	18	PA1				X	X					
RS	36	NPA				X	X					
WIMM MEDAN/					2002			X				
Polonia	05	PA1				X	X					
RS	23	NPA				X	X					
WAKK MERAUKE/					2002			X				
Mopah	16	NPA				X	X					
RNS	34	NINST				X	X					
WIMG PADANG/					2002			X				
Tabing	16	NINST				X	X					
RS	34	NINST				X	X					
WIPP PALEMBANG/					2002			X				
SM Badaruddin II	11	NPA				X	X					
RNS	29	PA1				X	X					
WIBB PEKANBARU/					2002			X				
SultanSyarifKasim II	18	NPA				X	X					
RNS	34	PA1				X	X					
WIOO PONTIANAK/					2002			X				
Supadio	15	PA1				X	X					
RS	33	NPA				X	X					
WRSJ SURABAYA/					2002			X				
Juanda	10	PA1				X	X					
RS	28	NPA				X	X					
WIKN TANJUNG PINANG/					2002			X				
Kiang	04	NPA				X	X					
RNS	22	NINST				X	X					
WRLR TARAKAN/					2002			X				
Juwata	06	NPA				X	X					
RS	24	NINST				X	X					
WABP TIMIKA/					2002			X				
Tembaga Pura	12	NPA					X					

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
RS	30	NPA					X					
WIJJ YOGYAKARTA/					2002			X				
Adi Sucipto	09	NPA					X					
RNS	27						X					
	* The WGS-84 was implemented in almost all International Airport in Indonesia including the NPA with overlay ** The Ground Undulation (Diference between Mean Sea Leval and Elipsoit) will be started in the Year 2002											
JAPAN			X	X							X	
RJFF FUKUOKA/					X			X				
Fukuoka	16	PA1				X	X					
RS	34	NPA				X	X					
RJCH HAKODATE/					X			X				
Hakodate	12	PA1				X	X					
RS	30	NPA				X	X					
RJFK KAGOSHIMA/					X			X				
Kagoshima	16	NPA				X	X					
RS	34	PA1				X	X					
RJBB OSAKA/					X			X				
Kansai Intl	06	PA2				X	X					
RS	24	NPA				X	X					
RJFT KUMAMOTO/					X			X				
Kumamoto	07	PA3				X	X					
RS	25	NPA				X	X					
RJFU NAGASAKI/					X			X				
Nagasaki	14	NPA				X	X					
RS	32	PA1				X	X					
	18	NPA				X	X					
	36	NPA				X	X					
RJNN NAGOYA/					X			X				
Nagoya	16	NPA				X	X					
RS	34	PA1				X	X					
ROAH NAHA/					X			X				
Naha	18	NPA				X	X					
RS	36	PA1				X	X					
RJCC SAPPORO/					X			X				
New Chitose	01L	PA1				X	X					
RS	19R	NPA				X	X					
	01R	PA1				X	X					
	19L	NPA				X	X					
RJAA NARITA/					X			X				
New Tokyo Intl	16	PA3				X	X					
RS	34	NPA				X	X					
RJSN NIIGATA					X			X				
Niigata	04	NPA				X	X					
RS	22	NPA				X	X					
	10	NPA				X	X					
	28	PA1				X	X					

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
RJOO OSAKA/					X			X				
Osaka Intl	14R	NPA				X	X					
RS	32L	PA1				X	X					
	14L	NPA				X	X					
	32R	NPA				X	X					
RJSS SENDAI/					X			X				
Sendai	09	NPA				X	X					
RS	27	PA1				X	X					
	12	NPA				X	X					
	30	NPA				X	X					
RJTT TOKYO/					X			X				
Tokyo Intl	16L	NPA				X	X					
RS	34R	PA2				X	X					
	16R	NPA				X	X					
	34L	PA1				X	X					
	04	NPA				X	X					
	22	PA1				X	X					
KIRIBATI												NFFF FIR
LAO PDR												
VLVT Vientiane			X	X	X			X				
Vientiane												
RS	13	PA 1				X						
	31	NPA										
VLLB LUANG PHABANG					**X**							
Luang Phabang								**X**				
RS	**06**	**NPA**				**X**						
	24	**NPA**										
VLPS PAKSE					**X**							
Pakse								**X**				
RS	**15**	**NPA**										
	33	**NPA**										
MALAYSIA			X	X							X	
WMKA ALOR SETAR/					X	X		X	X			
Sultan Abdul Halim	04	NPA					X					
RS	22	NINST					X					
WMKB BUTTERWORTH/					X			X				
Butterworth	18	NPA					X					
RS	36	NPA					X					
WMKC KOTA BHARU/					X	X		X	X			
Sultan Ismail Petra	10	NPA					X					
RS	28	NPA					X					
WMKD KUANTAN/					X			X				

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
Kuantan	18	NPA					X					
RS	36	PA1					X					
WMKE KERTEH/					X	X		X	X			
Kerteh	16	NPA					X					
RS	34	NPA					X					
WMKF KUALA LUMPUR/					X			X				
Simpang	04	NINST					X					
RS	22	NINST					X					
WMKI IPOH/					X			X	X			
Sultan Azlan Shah	04	PA1					X					
RS	22	NINST					X					
WMKJ JOHOR BAHRU/					X	X		X	X			
Sultan Ismail	16	PA1					X					
RS	34	NPA					X					
WMKK SEPANG/					X	X		X	X			
K.L. Intl	14R	PA1					X					
RS	32L	PA1					X					
	14L	PA1					X					
	32R	PA1					X					
WMKL LANGKAWI/					X			X	X			
Langkawi Intl	03	PA1					X					
RS	21						X					
WMKM MALACCA/					X			X	X			
Malacca	03	NPA					X					
RS	21	NPA					X					
WMKN KUALA TERENGGANU/					X			X	X			
Sultan Mahmud Shah	04	NPA					X					
RS	22	NPA					X					
WMKP PENANG/					X			X	X			
Penang Intl	04	PA1					X					
RS	22	NPA					X					
WMSA SUBANG/					X			X	X			
SultanAbdulAzizShah	15	PA1					X					
RS	33	PA1					X					
WMBT PULAU TIOMAN/								X				
Pulau Tioman	02						X					
RS	20	NINST					X					
WMPA PULAU PANGKOR/								X				
Pulau Pangkor	04						X					
RS	22	NINST					X					
WMAP KLUANG/								X				
Kluang	05	NINST										
RS	23	NINST										
KOTA KINABALU			X	X				X			X	
WBGB BINTULU/					X	X		X	X			

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
Bintulu	12	NPA					X					
RS	30	NINST					X					
WBGG KUCHING/					X	X		X	X			
Kuching Intl	07	NPA					X					
RS	25	PA1					X					
WBGR MIRI/					X	X		X	X			
Miri	02	PA1					X					
RS	20	NPA					X					
WBGS SIBU/					X			X	X			
Sibu	13	PA1					X					
RS	31	NPA					X					
WBKD LAHAD DATU/					X			X	X			
Lahad Datu	11	NINST					X					
RS	29	NPA					X					
WBKK KOTA KINABALU/					X			X	X			
Kota Kinabalu Intl	02	PA1					X					
RS	20	NPA					X					
WBKL LABUAN/					X	X		X	X			
Labuan	14	NPA					X					
RS	32	NPA					X					
WBKS SANDAKAN/					X			X	X			
Sandakan	08	PA1					X					
RS	26	NPA					X					
WBKW TAWAU/					X	X		X	X			
Tawau	17	NINST					X					
RS	35	NPA					X					
MALDIVES			X	X						X		
VRMM MALE/					X			X				
Male Intl	18	PA1				X	X		X			
RS	36	NPA					X					
MARSHALL IS.												KZOK FIR
MICRONESIA, FS												KZOK FIR
MONGOLIA			X	X						2002	X	
ZMUB ULAN BATOR/					X			X				
Byant-Ukkaa	14	NPA				X	X					
	32	NPA				X	X					
RS												
MYANMAR												

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
NAURU												
NEPAL				X						X	X	
VNKT KATHMANDU					X			X				
Tribhuvan Intl	02	NPA				X	X					
RS	20	NINST					X					
NEW ZEALAND			X	X						X	X	
NZAA AUCKLAND/					X			X				
Auckland Intl	05	PA1				X	X		X			
RS	23	PA1			X	X	X		X			
NZWN WELLINGTON/					X			X				
Wellington	16	PA1				X	X		X			
RS	34	PA1				X	X		X			
NZCH CHRISTCHURCH/					X			X				
Christchurch	02	PA1				X	X		X			
RS	20	PA1				X	X		X			
NZNS NELSON/					X			X				
Nelson	02	NPA				X	X		X			
RNS	20	NPA				X	X		X			
NZDN DUNEDIN/					X			X				
Dunedin	03	PA1				X	X		X			
RS	21	PA1				X	X		X			
NZPM PALMERSTON/					X			X				
Palmerston North	07	NPA				X	X		X			
RS	25	NPA				X	X		X			
NZHN HAMILTON/					X			X				
Hamilton	18	NPA				X	X		X			
RS	36	NPA				X	X		X			
NZQN QUEENSTOWN/					X			X				
Queenstown	05	NPA				X	X		X			
RS	23	NPA				X	X		X			
NZWP WHENUAPAI/					X			X				
Whenuapai (Mil)	03	PA1				X	X		X			
RNS	21	PA1				X	X		X			
NZOH OHAKEA					X			X				
Ohakea (Mil)	09	PA1				X	X		X			
AS	27	PA1				X	X		X			
NIUE ISLAND (New Zealand)												NZZO FIR
NIUE ALOF/												

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
Niue Intl												
RS												
PAKISTAN			X	X						X	X	
OPFA FAISALABAD/					X			X				
Faisalabad	03	PA1				X	X		X			
RS	21	NPA										
OPGD GWADAR/					X			X				
Gwadar	06	NINST				X	X		X			
RS	24	NPA										
OPRN ISLAMABAD/					X			X				
Chaklala	12	NINST				X	X		X			
RS	30	PA1										
OPKC KARACHI/					X			X				
Quaid-e-Azam Intl	07	NINST				X	X		X			
RS	25	PA1										
OPLA LAHORE/					X			X				
Lahore	18	NPA				X	X		X			
RS	36	PA2										
OPMT MULTAN/					X			X				
Multan	18	NPA				X	X		X			
RS	36	PA1										
OPNH NAWABSHAH/					X			X				
Nawabshah	02	NPA				X	X		X			
AS	20	NPA										
OPPS PESHAWAR/					X			X				
Peshawar	17	NPA				X	X		X			
RS	35	NPA										
OPTU TURBAT/					X			X				
Turbat	08	NPA				X	X		X			
RS	26	NPA										
PALAU												KZOK FIR
PAPUA NEW GUINEA												
	Note: All Navaids coordinates using WGS-84 datum FLT SUP COM 2-1 to 2-7											
PHILIPPINES			X	X							X	Calculated
RPLL MANILA/					X	X					X	Calculated
Ninoy Aquino Intl	06	PA1					X	X	07/2002		X	ATO-NIMA survey
RS	24	PA1					X	X	07/2002		X	
	13	NINST					X	X	07/2002		X	
	31	NINST					X	X	07/2002		X	
RPLB SUBIC BAY/					X	X					X	Calculated
Subic Bay Intl	07R	NPA					X	X	07/2002		X	ATO-NIMA survey
RS	25L	(S Cat1)					X	X	07/2002		X	

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
	07L	NINST					X	X	07/2002		X	
	25R	NINST					X	X	07/2002		X	
RPMD DAVAO/					X	X					X	Calculated
Francisco Bangol Intl	05	NPA					X	X	07/2002		X	** Old co-ordinates converted
AS	23	NPA					X	X	07/2002		X	
RPLI LAOAG/					X	X					X	Calculated
Laoag Intl	01	NPA					X	X	07/2002		X	* Old co-ordinates converted
AS	19	NPA					X	X	07/2002		X	
RPVM LAPU-LAPU/					X	X					X	ATO-NIMA survey
Mactan Cebu Intl	04	PA1					X	X	07/2002		X	
RS	22	PA1					X	X	07/2002		X	
RPLC PAMPANGA/					X	X					X	Calculated
Clark Intl	02R	PA1					X	X	07/2002		X	ATO-NIMA survey
RS	20L	PA1					X	X	07/2002		X	
	02L	NINST					X	X	07/2002		X	
	20R	NINST					X	X	07/2002		X	
RPMZ ZAMBOANGA/					X	X					X	Calculated
Zamboanga Intl	09	PA1					X	X	07/2002		X	* Old co-ordinates converted
AS	27	PA1					X	X	07/2002		X	
Note: * ATO-NIMA survey final report to be incorporated in the AIP Amendment #2 dated 11 July 2002												
** ATO-NIMA survey final report to be incorporated in the AIP Amendment #3												
REP OF KOREA			X	X						X	X	
RKSI INCHEON/					X			X				
Incheon Intl	15R	PA3				X	X		X			
RS	15L	PA3				X	X		X			
	33R	PA3				X	X		X			
	33L	PA3				X	X		X			
RKSS GIMPO/					X			X				
Gimpo Intl	14R	PA2				X	X		X			
RS	32L	NPA				X	X		X			
	14L	PA1				X	X		X			
	32R	PA1				X	X		X			
RKPK BUSAN/					X			X				
Gimhae Intl	18L	NPA				X	X		X			
RS	36R	PA1				X	X		X			
	18R	NPA				X	X		X			
	36L	PA1				X	X		X			
RKPC JEJU/					X			X				
Jeju Intl	6	PA1				X	X		X			
RS	24	PA1				X	X		X			
	31	NINST				X	X		X			
	13	NINST				X	X		X			
RKTU CHEONG/					X			X				
Cheongju	06L	PA1				X	X		X			
RNS/AS	24R	PA1				X	X		X			

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
	06R	NINST				X	X		X			
	24L	NINST				X	X		X			
RKJJ GWANGJU/					X			X				
Gwangju	4	PA1				X	X		X			
RNS/AS	22	NPA				X	X		X			
RKTN DAEGU/					X			X				
Daegu	31	PA1				X	X		X			
RNS/AS	13	NPA				X	X		X			
RKNN GANGNEUNG/					X			X				
Gangneung	26	NPA				X	X		X			
RNS/AS	8	NINST				X	X		X			
RKTH POHANG/					X			X				
Pohang	10	NPA				X	X		X			
AS	28	NPA				X	X		X			
RKTY YECHEON/					X			X				
Yecheon	28	PA1				X	X		X			
AS	10	NPA				X	X		X			
SAMOA											X	NFFO FIR
NSFA FALEOLO/					X			X				
Faleolo Intl	08	PA1				X	X			X	X	
RS	26	NPA				X	X			X	X	
NSFI FAGALII/												
Fagalii	10											
RG	28	NINST										
NSMA MAOTA/												
Maota	08											
RG	26	NINST										
NSAU ASAU/												
Asau	08											
RG	26	NINST										
SINGAPORE			X	X						X	X	
WSSS SINGAPORE/					X			X				
Changi Intl	02L	PA2				X	X		X			
RS	20R	PA1				X	X		X			
	02R	PA1				X	X		X			
	20L	PA2				X	X		X			
WSSL SINGAPORE/					X			X			X	
Seletar	03	NINST					X		X			
RG	21	NINST					X		X			
WSAP SINGAPORE/					X			X			X	
Paya Lebar	02	NPA				X	X					
AS	20	NPA				X	X					
SOLOMON ISLANDS												

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
SRI LANKA			X	X							X	
COLOMBO/												
Bandaranaike Intl	22	PA1			X	X	X			X	X	AIP Supplement
RNS	04	PA1				X					X	
THAILAND			2001	2001							2002	
VTSE CHUMPHON/					2001			X				
Chumphon												
RG	06	NPA					X		X			
	24	NPA					X		X			
VTPH PRACHUAP KHIRI KHAN/								X				
Hua Hin												
RG	16	NPA					X		X			
	34	NINST					X		X			
VTUK KHON KAEN/								X				
Khon Kaen	03	NPA					X		X			
RNS	21	NPA					X		X			
VTSG KRABI/								X				
RNS	14	NPA					X		X			
	32	NPA					X		X			
VTUQ NAKHON RATCHASIMA/								X				
Nakhon Ratchasima												
RG	06	NPA					X		X			
	24	NPA					X		X			
VTCN NAN/								X				
Nan												
RNS	02	NPA					X		X			
	20	NPA					X		X			
VTSC NARATHIWAT/								X				
Narathiwat												
RG	02	PA1					X		X			
	20	NPA					X		X			
VTSK PATTANI/								X				
Pattani												
RG	08	NPA					X		X			
	26						X		X			
VTPP PHITSANULOK/								X				
Phitsanulok	14	NPA					X		X			
RS	32	PA1					X		X			
VTSR RANONG/								X				
Ranong												
RG	02	PA1					X		X			
	20						X		X			
VTSB SURAT THANI/								X				
Surat Thani	04	NPA					X		X			
RNS	22	PA1					X		X			

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
VTST TRANG/								X				
Trang												
RG	08	NPA					X		X			
	26						X		X			
VTUU UBON RATCHATHANI/								X				
Ubon Ratchathani	05	NPA					X		X			
RS	23	PA1					X		X			
VTUD UDONTHANI/								X				
Udon Thani												
RNS	12	NPA					X		X			
	30	PA1					X		X			
VTSM SURATHANI/					X			X				
Samui												
RS	17	NPA				X	X		X		X	
	35	NPA				X	X					
VTPO SUKHOTHAI/					X			X				
Sukhothai												
RS	18	NPA				X	X		X		X	
	36	NPA				X	X					
VTCC CHIANG MAI/												
Chiang Mai Intl	18	NPA			2001	X	X	X				
RS	36	PA1										
VTSS SONG KHLA/												
Hat Yai Intl	08	NPA			2001	X	X	X				
RS	26	PA1										
VTSP PHUKET/	09	NPA			2001	X	X	X				
Phuket												
RS	27	PA1										
VTCT CHIANG RAI/												
Chiangrai Intl	03	PA1			2001	X	X	X				
RS	21	NPA										
VTBU RAYONG/												
Ban U-Taphao	18	PA1			2001	X	X	X				
AS	36	NPA										
VTBD BANGKOK/					2001			X				
Bangkok Intl	03R	NPA				X	X					
RS	03L	PA1				X	X					
	21R	NPA					X		X			
	21L	PA1					X		X			
TONGA			X	X						X	X	NFFO FIR
NFTF FUA'AMOTU/					X			X				
Fua'amotu Intl	11	NPA				X	X		X			
RS	29	NPA				X	X		X			
	17	NINST				X	X		X			
	35	NINST				X	X		X			
TUVALU												NZZF FIR

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
UNITED STATES			X	X						X	X	
PANC ANCHORAGE/					X			X				
Anchorage Intl	14	PA1				X	X		X			
RS	32	NINST				X	X		X			
	6L	PA1				X	X		X			
	24R	NINST				X	X		X			
	6R	PA3				X	X		X			
	24L	NINST					X		X			
PAED ANCHORAGE/					X			X				
Elmendorf AFB	5	PA1				X	X		X	X	X	
AS	23	NINST										
	15	NINST										
	33	NINST										
PACD COLD BAY/					X			X				
Coldbay	14	PA1				X	X		X			
AS	32	NPA				X	X		X			
	26	NINST										
KPAE EVERETT/					X			X				
Paine Field	34L	NPA				X	X		X			
AS	16R	PA1				X	X		X			
	11	NINST										
	29	NINST										
	34R	NINST										
	16L	NINST										
PAEI FAIRBANKS/					X			X				
Eielson AFB	13	PA1				X	X		X			
AS	31	PA1				X	X		X			
PAFA FAIRBANKS/					X			X				
Fairbanks Intl	19R	PA1				X	X		X			
RS	01L	PA3				X	X		X			
	19L	NINST										
	01R	NINST										
KFAT FRESNO/					X			X				
Yosemite Intl	29R	PA3				X	X		X			
AS	11L	NPA										
	29L	NINST										
	11R	NINST										
PHTO HILO/					X			X				
General Lyman Field	03	NINST				X	X		X			
AS	21	NINST										
	26	PA1				X	X		X			
	08	NINST										
PHNA HONOLULU/												
Barbers Point	04R	NPA										No WGS-84
AS	22L	NINST										data available
PHNL HONOLULU/					X			X				

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
Honolulu Intl	8L	PA1				X	X		X			
INTL	26R	NINST					X					
RS	04L	NINST					X					
	22R	NINST					X					
	04R	PA1					X					
	22L	NINST					X					
	26L	PA1				X	X		X			
	8R	NINST					X					
PHOG KAHULUI/					X			X				
Kahului	32	NINST										
AS	02	PA1				X	X		X			
	05	NINST					X					
	20	NPA				X	X		X			
KLAX LOS ANGELES/					X			X				
Los Angeles Intl	06L	PA1				X	X		X			
RS	24R	PA3				X	X		X			
	6R	PA1				X	X		X			
	24L	PA1				X	X		X			
	07L	PA1				X	X		X			
	25R	PA1				X	X		X			
	07R	PA1				X	X		X			
	25L	PA3				X	X		X			
KOAK OAKLAND/					X			X				
Oakland Metropolitan	11	PA1				X	X		X			
AS	29	PA3				X	X		X			
	09R	NPA										
	27L	NPA										
	09L	NPA										
	27R	PA1				X	X		X			
KONT ONTARIO/					X			X				
Ontario Intl	26R	PA1				X	X		X			
AS	08L	PA1				X	X		X			
	26L	PA3				X	X		X			
	08R	NPA				X	X		X			
KPMD PALMDALE/					X			X				
Palmdale	22	NPA				X	X		X			
AS	25	PA1				X	X		X			
	07	NPA				X	X		X			
KPDX PORTLAND/					X			X				
Portland Intl	03	NINST				X	X		X			
AS	21	NPA				X	X		X			
	10R	PA3				X	X		X			
	28L	PA1				X	X		X			
	10L	PA1				X	X		X			
	28R	PA1				X	X		X			
KSMF SACRAMENTO/					X			X				

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
Metropolitan	16R	PA3				X	X		X			
AS	34L	PA1				X	X		X			
	16L	PA1				X	X		X			
	34R	NPA				X	X		X			
KSFO SANFRANCISCO/					X			X	X			
San Francisco Intl	10L	NINST										
RS	28R	PA3				X	X		X			
	10R	NINST					X					
	28L	PA1				X	X		X			
	01L	NINST					X					
	19R	NINST					X					
	01R	NINST					X					
	19L	PA1				X	X					
KSJC SAN JOSE/					X			X				
San Jose Intl	12R	PA1				X	X		X			
RS	30L	PA1				X	X		X			
	12L	NPA				X	X		X			
	30R	NPA				X	X		X			
	11	NINST					X					
	29	NINST					X					
KBFI SEATTLE/					X			X				
Tacoma Intl	13R	PA1				X	X		X			
RS	31L	PA1				X	X		X			
	13L	NINST				X	X		X			
	31R	NINST										
KGEG SPOKANE/					X			X			X	
Spokane Intl	25	NPA				X	X		X		X	
AS	07	NINST				X	X					
	21	PA2				X	X					
	03	PA3				X	X					
KSCK STOCKTON/					X			X				
Metropolitan	11L	PA1				X	X		X			
AS	29R	NINST				X	X		X			
AMERICAN SAMOA (United States)												NFFF FIR
NSTU PAGO PAGO/					X			X				
Pago Pago Intl	05	PA1				X	X					
RS	23	NINST				X	X					
GUAM ISLAND (United States)												KZOK FIR
PGUM GUAM/					X			X				
Agana	06L	PA1				X	X					
RS	24R	NPA				X	X					
	06R	NINST				X	X					
	24L	NINST				X	X					
PGUA GUAM ISLAND/					X			X				
Andersen	06L	NPA				X	X					
AS	24R	NPA				X	X					

STATUS OF WGS-84 IMPLEMENTATION

STATE, TERRITORY OR AERODROME FOR WHICH WGS-84 IS REQUIRED			WGS-84 IMPLEMENTATION									REMARKS
CITY/AERODROME	RWY No	RWY TYPE	FIR	ENR	TMA/ CTA/ CTZ	APP	RWY	AD/HEL	GUND	QUALITY SYSTEM	AIP	
1	2	3	4	5	6	7	8	9	10	11	12	13
	06R	PA1				X	X					
	24L	NPA				X	X					
JOHNSTON ISLAND (United States)												KZOK FIR
PJON JOHNSTON ISLAND/					X			X				
Johnston Atoll	05	NPA				X	X					
RS	23	NPA				X	X					
NORTHERN MARIANA ISLANDS (United States)												KZOK FIR
PGSN SAIPAN/					X			X				
Saipan Intl	07	PA1				X	X					
RS	25	NPA				X	X					
VANUATU												NFFF FIR
VIET NAM			X	X							X	
VVNB HANOI/					X							
Noi Bai Intl	11	PA1				X	X		X			
RS	29	NPA				X	X		X			
VVDN DANANG/					X							
Da Nang Intl	17L	NPA				X	X		X			
RS	35R	PA1				X	X		X			
	35L	NPA				X	X		X			
	17R	NPA				X	X		X			
VVTS HO CHI MINH/					X							
Tan Son Nhat Intl	07R	NPA				X	X		X			
RS	07L	NPA				X	X		X			
	25R	PA1				X	X		X			
	25L	NPA				X	X		X			

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REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
	Bangladesh							
~~RAN/3 Rec. 4/10~~	~~Dhaka~~	~~Runway, taxiway and apron markings and marker boards faded.~~	~~1999~~	~~All markings on paved areas should be inspected and a schedule of painting be established.~~	~~All marking are freshly painted now, Daily inspections are being carried out. Runway designators centerline, and parking bay markings are painted every two month. By the end of July/03 all the marker boards will be changed to fluorescent types.~~	~~Director, Zia International Airport, Dhaka.~~	~~July 2003~~	~~Completed~~
	PR China							
~~**Annex 14 § 3.1.22**~~	~~Beijing~~	~~RWY 18L/36R slippery when wet.~~	~~2001~~	~~RWY surface to provide good friction characteristics when wet.~~	~~Friction values taken in June 2003 using SAAB friction tester meet requirements in §3.1.22 Annex 14.~~	~~CAAC~~	~~June 2003~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
~~**Annex 14 § 9.2.3**~~		~~RFF inadequate.~~		~~Level of RFF protection shall be appropriate to the aerodrome category.~~	~~Inspection carried out in June 2003 confirm meeting requirements for Cat 9, Annex 14.~~	~~CAAC~~	~~June 2003~~	~~Completed~~
~~**Annex 14 § 5.3.5**~~	~~Guangzhou~~	~~No PAPIs RWY 03 or 21.~~	~~2001~~	~~PAPI/VASI to be provided to serve approach to RWY.~~	~~PAPI rwy 03 installed and operational since 1987. PAPI rwy 21 -ditto- 1999. Calibration certs. issued yearly.~~	~~CAAC~~	~~1999 & yearly certs. Issued~~	~~Completed~~
~~**Annex 14 § 5.3.15 & 16**~~		~~Taxi-way lighting inadequate.~~		~~Improve taxi-way lighting system.~~	~~)Reconstructed, checked)and accepted by CAAC)Visual lighting and)marking systems)rectified according to)ICAO Annex 14 stds.~~	~~CAAC~~	~~April 2003~~	~~Completed~~
~~**RAN/3 Rec. 4/10**~~		~~Directional markings inadequate.~~		~~All markings on paved surfaces should be inspected and a schedule of painting be established.~~	~~)Reconstructed, checked)and accepted by CAAC)Visual lighting and)marking systems)rectified according to)ICAO Annex 14 stds.~~	~~CAAC~~	~~April 2003~~	~~Completed~~
~~**§ 3.1.22**~~	~~Shanghai/ Hongqiao~~	~~RWY uneven and slippery when wet.~~	~~2001~~	~~RWY surface to provide good friction characteristics when wet.~~	~~Comply with straight edge test. Friction values taken in June 2003 using SAAB friction tester meet requirements in §3.1.22 Annex 14.~~	~~CAAC~~	~~June 2003~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
~~**RAN/3 Rec. 4/10**~~		~~Taxiways poorly signed and lit.~~	~~2001~~	~~To comply with Annex 14 § 5.4.~~	~~Lighting system renovated in April 2002 and conforms to §5.4 Annex 14. RMB 1.2 million spent on improving guidance signs that do not meet standards, to be completed by June 2003.~~	~~CAAC~~	~~June 2003~~	~~Completed~~
~~**Annex 14 § 9.2.3**~~		~~RFF inadequate.~~	~~2001~~	~~Level of RFF protection shall be appropriate to the aerodrome category.~~	~~Inspection carried out in June 2003 confirm meeting requirements for Cat 9, Annex 14.~~	~~CAAC~~	~~June 2003~~	~~Completed~~
	Fiji							
~~**Annex 14 § 3.1.9**~~	~~Suva Nausori~~	~~RWY width only 30m.~~	~~2001~~	~~Width of runway should not be less than 45 m.~~	~~RWY can only be extended after Control Tower and Terminal Buildings relocated. Risk assessment carried out, res-trictions apply e.g. aircraft type & when X-wind exceeds certain limits.~~	~~Airports Fiji Ltd.~~	~~July 2003~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
~~**Annex 14 § 5.3.4**~~	**India**	~~No approach lighting on either RWY.~~	~~2003~~	~~Where physically practicable, approach lighting system shall be provided.~~	~~Due to constraints on land access and availability, this will not be implemented in near future. GPS approaches planned.~~	~~Airports Fiji Ltd.~~		~~Completed~~
~~**RAN 3 Rec. 4/10**~~	Delhi	~~Taxiway and~~ Apron lighting inadequate.	~~2002~~	Improve ~~taxiway~~ and apron lighting system.	~~All the taxiways at Delhi Airport are provided with taxiway edge lights as per ICAO specifications. Taxiway centerline lights have also been provided on all taxiways which are taxi routes for ILS CAT III operations.~~ Action to improve the apron lighting is in progress by replacing existing lattice type tower with lowering type high mast.	~~AAI~~	30.06.2004	~~Completed~~ "B"
		~~High speed Taxiway "I" require stop signs.~~	~~2002~~	~~To comply with Annex 14 § 5.4.~~	~~High speed taxiway at Delhi Airport is 'L' which has been mistakenly mentioned as 'I'. 'L' being high speed exit taxi track only, the entry has been prevented by providing red centerline lights on the taziway upto 75m from taxiway 'P' and~~	~~AAI~~	~~31.07.2003~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
					~~'L-1' towards runway. NO ENTRY BOARD HAS BEEN PROVIDED. In addition, NO ENTRY sign is being provided by 31.07.2003.~~			
~~**Annex 14 § 5.3.4**~~	~~Madras/Chennai~~	~~No approach lighting for RWY 25 available.~~	~~2002~~	~~Where physically practicable, approach lighting system shall be provided.~~	~~Approach lighting is available for Runway 07/25 as follows: Runway 07 (ILS Runway): Runway 07 is provided with CAT-1 approach lighting system. The length of the approach lighting system is 900 mtrs. Total number of crossbars - 5 at a spacing of 150 mtrs. Each. Runway 25: Runway 25 is provided with CAT-1 truncated system since the land is not~~	~~AAI~~		~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
					~~available to provide full CAT-1 system. The length of approach lighting system is 510 mtrs. Total number of crossbars - 3 at a spacing of 150 mtrs each. Information already published in AIP India & Jeppesen Manual.~~			
Annex 14 § 5.3.5		Problem in distinguishing the colours for PAPIS on RWY 25.	2002	Flight check and ground inspections shall be performed regularly.	Airline operators such as Indian Airlines, Jet Airways & Air Sahara have not reported any such observations. Ground calibration of PAPI units is being carried out regularly. Flight check shall be carried out shortly.			"A"
~~**Annex 14 § 5.3.1.2**~~		~~Runway 25, potential hazard as runway lighting blends with existing road lights and is difficult to differentiate.~~	~~2001~~	~~Action to be taken to extinguish, screen or modify the lights to prevent confusion.~~	~~A number of lighted hoardings erected along the highway have been responsible for this observation. Action to extinguish those lights was initiated with local Govt. authorities. Electricity Board at Chennai is disconnecting electric supply to the hoardings.~~		~~31.07.2003~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
Annex 14 § 3.8.3		Taxiway Bravo is unusable for aircraft with a wing span exceeding 36 metres.	2001	TWY clearance should be provided to permit safe movement of aircraft.	Action to provide suitable clearance to aircraft with wing span exceeding 36m by widening the taxiway and shifting the centerline of Taxiway 'B' has been initiated. However, taxiway 'F' is available for Runway 07 for taxiing of aircraft of wing span exceeding 36m.	AAI	31.05.2004	"A"
				This information needs to be promulgated in the AIP AND Jeppesen Manuals.	Information promulgated in Jeppesen Manual. Action to include the information in the AIP INDIA as an AIP Amendment is in progress.			
	Indonesia							
Annex 14 § 5.3.5	Bali	PAPIS on RWY 09 not calibrated.	2001	Flight checks and ground inspections should be performed regularly.				"A"
§ 9.5		Excessive bird activity on the airport with no bird control programme available.	2001	Action to be taken to decrease number of birds constituting hazards to aircraft operations.				"A"

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
	Japan							
~~**RAN/3 Rec. 4/10**~~	~~Fukuoka~~	~~Taxi procedure to RWY 34 is inadequate for wide body a/c.~~	~~2002~~	~~Crossing active RWY is presently required. E11 should be available for wide body jets.~~	~~Taxiway E11 has been reconstructed to meet the international srandards. It has been notified by AIP on 23 January 2003.~~	~~JCAB~~	~~Jan 2003~~	~~Completed~~
~~Annex 14 § 5.3.7~~		~~RWY lead in light for RWY 16 difficult to identify.~~		~~The lights may be augmented by steady burning lights to assist in identifying the system.~~	~~A Precision approach category I lighting system is implemented for RWY 16 at Fukuoka Airport for straight in approach, and RWY lead in lights are not required for the RWY~~.	~~JCAB~~	~~July 2003~~	~~Completed~~
Annex 14 § 3.1.6	**Narita/New Tokyo**	B runway (16L/34R) is considered short for international operations (7,150 ft).	2002	Length of r/w should be adequate to meet operational requirements of aeroplanes for which the runway is intended.	Site acquisition for the remaining 2500m of the runway. In progress.	JCAB	On-going	"A"
Annex 14 § 4.2.19		Obstacles above the approach surface slope (2%) on finals for runway 34R.	2002	No obstacles are permitted above an approach surface.	Removal of the trees existence on final approach area in progress. Information about the removal of obstacle will be notified by AIP.	JCAB	On-going	"U"

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
~~**Annex 14 § 9.1.14 & 9.2.2**~~	~~Okinawa/Naha~~	~~No adequate RFF facilities for over water areas.~~	~~1999~~	~~AEP and specialist RFFS to be provided in difficult environment~~	~~Aerodrome emergency planning that includes the coordination with Japan Coast Guard and Japan Maritime Self-Defence Force exists at this airport. Therefore specialists RFFS for over-water areas have already provided at this airport.~~	~~JCAB~~	~~July 2003~~	~~Completed~~
~~**Annex 14 § 9.1.14 & 9.2.2**~~	~~Okinawa/app. Area~~	~~No adequate RFF facilities for over water areas.~~	~~1999~~	~~AEP and specialist RFFS to be provided in difficult environment.~~	~~In Okinawa/app. Area, the international airport is only Naha Airport. As stated above, specialists RFFS for over water areas have already provided at Naha Airport.~~	~~JCAB~~	~~July 2003~~	~~Completed~~
~~**Annex 14** § 9.1.14 & 9.2.2~~	~~Osaka/Kansai~~	~~No adequate RFF facilities for over water areas.~~	~~1999~~	~~AEP and specialist RFFS to be provided in difficult environment.~~	~~Aerodrome emergency planning that includes the coordination with Japan Coast Guard, Japan Maritime Self-Defence Force, Osaka Marine Fire Department and Osaka Onwater Police Station exists at this airport. Therefore specialists RFFS for over water areas have already provided at this airport.~~	~~JCAB~~	~~July 2003~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
~~**Annex 14** § 9.1.14 & 9.2.2~~	~~Tokyo/Haneda~~	~~No adequate RFF facilities for over water areas.~~	~~1999~~	~~AEP and specialist RFFS to be provided in difficult environment.~~	~~Aerodrome emergency planning that includes the coordination with Japan Coast Guard, Japan Maritime Self-Defence Force exists at this airport. Therefore specialists RFFS for over-water areas have already provided at this airport.~~	~~JCAB~~	~~July 2003~~	~~Completed~~
~~**Ran/3 Rec. 4/10**~~	~~Nagoya~~	~~Parking areas and bay numbers are not properly marked.~~	~~1999~~	~~All markings on paved areas should be inspected and a schedule of painting be.~~	~~All markings for parking areas and bay numbers are properly re-painted once a year.~~	~~JCAB~~	~~July 2003~~	~~Completed~~
	Maldives							
~~**RAN 3 Rec. 4/10**~~	~~Male~~	~~RWY often wet or sandy as result of sea spray/strong winds. Touchdown RWY 18 has subsidence filled with sand.~~	~~1996~~	~~Surface irregularities may adversely affect the take-off or landing of aircraft.~~	~~Sea wall reinforced with sheet piling and paved area around touchdown RWY 18 has ceased sea spray and sand being blown on to the area.~~	~~CAD~~	~~2003~~	~~Completed~~
~~**Annex 14 § 5.3.4**~~		~~No approach lighting RWY 18.~~	~~1999~~	~~Where physical practicable, approach lighting system should be established.~~	~~Runway 18 meets the standard for Non-precision approach runway stated under 5.3.4.1 of Annex 14. This runway is only used~~	~~CAD~~	~~2003~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
					~~in conditions of good visibility and a PAPI is installed for visual guidance.~~			
~~**§ 5.3.12.2**~~		~~No RWY centerline lights.~~	~~1999~~	~~Centerline lights should be provided on PA1 r/w when used by aircraft with high landing speeds or where width between edge lights >50 m.~~	~~Under the standard 5.3.12.1 runway centerline lights are a requirement for CAT II and CATIII precision approach runways. The runway at Male' is a CAT I runway. This requirement shall be complied with once the category is changed.~~	~~CAD~~	~~2003~~	~~Completed~~
~~**RAN 3 Rec. 4/10**~~		~~Apron markings hardly discernible.~~	~~1996~~	~~All markings on paved areas should be inspected and a schedule of painting be established.~~	~~Due to limited parking space available it is not feasible to have designated parking positions or aircraft stands and hence the safety lines required at aircraft stands. However, Apron edge lines and apron service roads are marked. Maneuvering of aircraft on the apron are precisely controlled by trained marshallers so that at all times they will be kept clear of the adjacent aircraft, buildings and service vehicles on the apron.~~	~~CAD~~	~~2003~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
	Myanmar							
~~**Annex 14 § 3.1.6**~~	~~Yangon~~	~~RWY length inadequate.~~	~~1999~~	~~RWY length to be adequate to meet operational requirements of aeroplanes for which the runway is intended.~~	~~Current length sufficient for B767 & A300. Rwy will be extended when funds are available.~~	~~DCA~~	~~July 2003~~	~~Completed~~
~~**Annex 14 § 3.1.22**~~		~~RWY slippery when wet.~~	~~2001~~	~~RWY surface to provide good friction characteristics when wet.~~	~~Present length 2400 m overlaid with 4 cm asphalt concrete.~~	~~DCA~~	~~4.8.2000~~	~~Completed~~
Annex 14 § 5.3.4		No approach lighting RWY 03.	1994	Where physically practical, a simple approach lighting system shall be provided.	PAPI installed in 2002. Approach lights to the installed when funds available.	DCA		"A"
Annex 14 § 9.1.12-13		Emergency plan to be updated.	1996	Emergency exercises to be carried out and AEP updated.	Updating/exercising AEP in progress.	DCA	Will inform in due course	"B"
~~**Annex 14 § 9.2.3**~~		~~RFF Category inadequate~~	~~1996~~	~~Level of RFF protection shall be appropriate to the aerodrome category.~~	~~RFF increased from VI to VII accordingly.~~	~~DCA~~	~~1.12.2002~~	~~Completed~~
	Nepal							
Annex 14 § 5.2.7.1	Kathmandu	No side stripe markings.	2002	Side stripe marking shall be provided between the thresholds of a paved RWY where there is a lack of contrast between RWY edge and the shoulders or surrounding terrain.				"A"

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
	New Zealand							
	~~Auckland~~							
~~**Annex 14 § 1.3.4**~~		~~Confusion due to proximity of normal runway 05R/23L with temporary runway 05L/23R especially in low visibility conditions.~~	~~2002~~	~~Perform safety assessment of aerodromes especially in low visibility condition.~~	~~3 modes of operations broadcast in AKL ATIS. Parallel rwy operations prohibited. Low vis take-off not permitted below 800m, restrictions apply. Active rwy identified by strobe lights and/or rwy end identifier lights. Twr monitors approach of IFR acft landing by use of Approach Monitoring Aid based on SSR info. Instrument Flight guide highlights caution, warning notes to alert/remind pilots of special circumstances, conditions and restriction.~~	~~CAANZ/AIA Ltd.~~	~~June 2003~~	~~Completed~~
~~**Annex 14 § 5.4**~~		~~Some aircraft movement signage is confusing due to the proximity of parallel taxiway Bravo to temporary runway 05L/23R.~~	~~2002~~	~~Review signage placing and content.~~	~~Signage specifically upgraded for introduction of temporary r/w. Same signs had been relocated.~~	~~CAANZ/AIA Ltd.~~	~~June 2003~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
Annex 14 § 3.4	Wellington	Runway-end safety areas RWY 16/34 inadequate.	2000	RESA shall be provided and shall extend from the end of a RWY strip to a distance of at least 90 m.	Amendments to Civil Aviation Rules required. Cost benefit analysis carried out, NPRM review in progress.	CAA	On-going	"A"
	Pakistan							
~~**RAN/3 Rec. 4/10**~~	~~Karachi~~	~~RWY and Taxiway markings inadequate and are not clearly visible at night.~~	~~2001~~	~~All markings on paved areas should be inspected and a schedule of painting be establish.~~	~~Runway and taxiway markings repainted and checked by aircraft, reported satisfactory.~~	~~Director JIAP Karachi~~	~~2003~~	~~Completed~~
	Papua New Guinea							
Annex 14 § 3.8.1	Port Moresby/ Jacksons	No parallel taxi-way servicing main runway.	2002	Taxiways should be provided to permit safe and expeditions aircraft movement.				"A"
§ 3.12.2	Vanimo	Limited parking.	2002	Total apron area should be adequate to permit expedition handling of aerodrome traffic at its max-anticipated density.				"B"
§ 9.2.3		No RFF facilities.	1999	Level of RFF protection shall be appropriate to the aerodrome category.				"A"

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
	Philippines							
~~**RAN 3 Rec. 4/1, 4/2**~~	~~Manila~~	~~Rwy 06/24 surface rough Heavy rubber deposits and very slippery when wet.~~	~~1998~~	~~RWY surface to provide good friction characteristics when wet. Rwy friction values to be taken regularly.~~	~~Overlay of RWY 06/24. Derubberizing works & testing w/friction tester equipment.~~	~~Engineering~~	~~Completed & Regularly done~~	~~Completed~~
~~**RAN 3 Rec. 3/1**~~		~~No approach lights on rwy 06.~~	~~1995~~	~~Where physically practicable, a PA1 approach lighting system to be provided.~~	~~Simple approach lights, 900 m.~~	~~Engineering~~	~~Installed November 2002~~	~~Completed~~
~~**Annex 14 § 8.4.1 & § 8.4.2**~~		~~Airport security lax, allowing livestock to stray on to active runways.~~	~~1999~~	~~Improved airport perimeter fencing and general security within the perimeter of the airport required.~~	~~Perimeter fences at JOCASP & terminal 2.~~	~~Engineering~~	~~Completed~~	~~Completed~~
					~~Rehab of Perimeter fence at Int'l Cargo Terminal.~~	~~Engineering~~	~~Installed October 2002~~	~~Completed~~
					~~Repair of Security Cameras NAIA security sectorized.~~	~~Security~~	~~Completed~~	~~Completed~~

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Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
	Republic of Korea							
~~**Annex 14 § 3.1.22**~~	~~Seoul/Gimpo~~	~~RWY slippery when wet.~~	~~2002~~	~~RWY surface to provide good friction characteristics when wet. Friction values to be taken regularly.~~	~~RWY 14 L/R grooved, rubbers removed 3 x a year since 2001 after calibration test.~~	~~KMOCT/ KAC~~	~~(3 x yearly)~~	~~Completed~~
~~**Annex 14 § 3.8.3**~~		~~Taxiway P5 Insufficient wingtip clearance.~~	~~1999~~	~~To comply with Annex requirements.~~	~~Separation distance between aircraft stand centerline and object extended to 42.5m by marking relocation.~~	~~KMOCT/ KAC~~	~~It will be completed by July 2003~~	~~Completed~~
	Thailand							
~~**Annex 14 § 3.1.21**~~	~~Bangkok~~	~~Parallel taxiway is very rough and almost unusable even at low taxi speeds (5 kts) .~~	~~1999~~	~~Despite the completion of the resurfacing the taxiway surface remains undulated.~~	~~Parallel taxiway C had already been repaired. Repair and improvement to surface of parallel taxiway A completed.~~	~~AOT~~	~~July 2003~~	~~Completed~~

Appendix C to the Report on Agenda Item 4

Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
	Viet Nam							
Annex 14 § 3.1.21	Hanoi/Noibai	RWY surface is rough.	2000	Surface of runway shall be constructed without irregularities that would result in friction loss or adversely affect take-off and landing.	The existing RWY (RWY 1A) is made of betonite. Currently it is being operated safely. However another RWY (RWY 1B) is under construction and expected to be completed in the fourth quarter of 2003. So the existing RWY is planned to be closed in 2004 for upgrading.	Northern Airport Authority	2004	"A"
~~**Annex 14 § 8.4.1 & § 8.4.2**~~		~~Apron congested. Poor security with no proper perimeter fencing.~~	~~2000~~	~~Improved airport perimeter fencing and general security within the perimeter of the airport required.~~	~~Currently the apron is able to hold 17-19 aircraft. New aprons are expected to be constructed in the West of the airport. The preparations for new constructions already began this year. The perimeter fencing is being improved and safeguarded 24/24 hours.~~	~~Northern Airport Authority~~	~~2004 for apron expansion and construction. Third quarter of 2003 for perimeter fencing.~~	~~Completed~~
~~**RAN/3 Rec. 4/10**~~		~~Faint taxiway and ramp markings.~~	~~2000~~	~~All markings on paved areas should be inspected and a schedule of painting be established.~~	~~All taxiways and markings have been repainted by schedule.~~	~~Northern Airport Authority~~		~~Completed~~

Appendix C to the Report on Agenda Item 4

Identification		Deficiencies			Corrective Action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Date of completion**	**Priority for action**
~~**Annex 14 § 3.1.22**~~	~~Hochiminh/ Tansonnhat~~	~~RWY 25L slippery when wet.~~	~~2000~~	~~Runway surface to provide good friction characteristics when wet.~~	~~Already extended and upgraded~~	~~Southern Airport Authority~~	~~June 2003~~	~~Completed~~
~~**§ 5.3.4 § 5.3.5**~~		~~RWY 07R No app lighting, PAPIs.~~		~~Where physically practicable, approach light system shall be provided. PAPI/VASI to be provided to serve the approach to RWY.~~	~~Already installed~~	~~Southern Airport Authority~~	~~July 2003~~	~~Completed~~
~~**§ 5.3.12.2 § 5.3.12.3 § 5.3.12.4**~~		~~No RWY centerline lighting.~~	~~2000~~	~~Centreline lights to be provided in certain circumstances.~~	~~Already installed~~	~~Southern Airport Authority~~	~~July 2003~~	~~Completed~~
~~**RAN/3 Rec. 4/10**~~		~~Taxiway markings not clear.~~	~~2000~~	~~All markings on paved areas should be inspected and a schedule of painting be established.~~	~~Already repainted~~	~~Southern Airport Authority~~	~~July 2003~~	~~Completed~~
~~**§ 8.4.1 & § 8.4.2**~~		~~Security is poor near the main taxiway where access to the whole airport poses a risk.~~		~~Improved airport perimeter fencing and general security within the perimeter of the airport required.~~	~~Already corrected~~	~~Southern Airport Authority~~	~~July 2003~~	~~Completed~~

AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE ASIA/PAC REGION

Identification		Deficiencies			Corrective action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
VHF coverage to be provided in the Southern Part of Dhaka FIR and withdrawal of HF	Bangladesh	No requirement for HF except for smaller portion of FIR.~~HF used for ground-to-ground COM due to lack of ER VHF and reliable ATS DSCs.~~	1992	Relevant sector of ATS routes has been delegated to adjacent ACC.	An action item was developed by a COM coordination meeting held in June 03 to expedite implementation of RCAGs included in a Project. An interim arrangement has been made for implementation of one RCAG site in the southern part of Dhaka FIR.	Civil Aviation Authority of Bangladesh	Target date is set by end of 2003.	A
Reliable AFS communications between Kolkata and Dhaka FIRs.	Bangladesh and India	HF RTT AFTN circuit had been operating far below the required reliability of 97%. ATS DSC not implemented. IDD service used for ATS coordination not meeting operational requirement. ~~Agartala/Dhaka and Dhaka/Guwahati. ATS DSCS not implemented.~~	ATS DSC 1993 AFTN 1995	HF RTT circuit was required to be to be upgraded to LTT. Corrective action required to improve performance of the IDD services initially. A dedicated circuit should be established between Kolkata and Dhaka. ~~IDD service to be provided for Agartala/Dhaka and Dhaka/Guwahati ATS DSC.~~	HF RTT circuit was withdrawn. Alternate routing was established via Bangkok/Mumbai/ Kolkata for AFTN traffic between Dhaka and Kolkata. In accordance with action agreed at a COM coordination meeting held in June 03 implementation of a 64 Kbps data circuit is planned to support both AFTN and DSC requirements. ~~Agartala/Dhaka, Dhaka/Guwahati and Dhaka/Kolkata ATS DSCs. implemented on IDD hotlines.~~	CAA Bangladesh and Airports Authority of India	November 2003 for upgrading AFTN circuit; and December 2003 for establishment of DSC between Dhaka/Kolkata	A

Identification		Deficiencies			Corrective action			
Requirements	**States/facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action****
Adequate and reliable VHF COM	Myanmar	Quality and reliability of RCAG VHF inadequate and unavailability of required coverage	1998	Improvements in the quality of link to RCAG stations and power supply system are required.	Action should be taken to provide reliable links between the RCAG stations and Yangon ACC. Power supply to the RCAG sites needs improvement.	DCA Myanmar	Revised target date is end of 2003	A

Appendix E to the Report on Agenda Item 4

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective action			
Requirements	**States/ facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action ***
Meteorological observations and reports. Provision of Annex 3, Chapter 4	Solomon I.	Weather information is inadequate and not provided on a regular basis	1996	Reported by airlines operating to Solomon I.	Equipment to be upgraded and arrangements to be made for regular observations	Ministry of Transport, Works and Aviation, Solomon I. *Note: OPMET/E TF to carry out survey on availability in 2003*	TBD	A
~~a) Requirements for forecasts to be provided. ASIA/PAC ANP, Part IV- Meteorology. Table MET 1A.~~ b) Meteorological observations and reports. Provision of Annex 3, Chapter 4.	Kiribati	~~a) TAFs for Kiribati not regularly provided by MET Centre of Fiji.~~ b) MET observations from Kiribati not available on regular basis.	1998	Reported by the National Weather Service concerned during introduction of the new flight operations.	~~a) Fiji reported that TAFs for Tarawa, Kiribati have been provided regularly.~~	Directorate of Civil Aviation, Kiribati. Civil Aviation Authority, Fiji *Note: OPMET/E TF to carry out survey on availability in 2003*	~~a) Completed~~ b) TBD	A

Appendix E

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective action			
Requirements	**States/ facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action ***
a) Reporting of information on volcanic eruptions to civil aviation units. Provision of Annex 3. b) International airways volcano watch (IAVW) operational procedures.	Indonesia Philippines	Information on volcano activities not always reaches civil aviation units due to lack of fixed communications with volcano observatories.	1995	a) Observed by States concerned. b) Reported at the WMO/ICAO Workshop on Volcanic Ash Hazards (Darwin, 1995)	a) MOU to be signed between Department of Transportation and Department of Mining and Energy, Indonesia b) Volcano observations and warnings to be made available on the Internet by Department of Mining and Energy. c) MOU between Air Transportation Office, the Philippines Institute of Volcanology and Seismology, and PAGASA to be signed.	Civil Aviation Administrations in co-ordination with Met. Authorities of the States concerned. *Note: CNS/MET SG to monitor developments on this subject.*	~~To be determined~~ 2003 *Note: The matter is addressed by an ICAO SIP to be conducted during 2003*	~~A~~ U
a) Service for operators and flight crew members Provision of Annex 3, Chapter 9. b) Requirements for WAFS products for flight documentation. ASIA/PAC ANP, Table MET 1A.	Cambodia Myanmar	VSATs for reception of the ISCS and SADIS satellite broadcasts not installed.	1999	Expected lack of products for flight documentation due to forthcoming implementation of the final phase of WAFS and cease of RAFCs operations.	States consider urgent action to be taken for installation of SADIS or ISCS VSATs.	Civil Aviation Administrations in co-ordination with Met. Authorities of the States concerned. *Note: CNS/MET SG to monitor*	To be determined	A

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REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective action			
Requirements	**States/ facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action ***
a) ~~Aerodrome meteorological office,~~ Meteorological watch office provisions of Annex 3, Chapter 3. ~~b) Requirement for aerodrome meteorological office to be established, ASIA/PAC ANP, Table MET 1A;~~ b) Requirements for MWO to be established, ASIA/PAC FASID, Table MET 1B.	Cambodia	Requirements for ~~Aerodrome meteorological office and~~ meteorological watch office (MWO) to be established at Phnom-Penh international airport have not been met.	1992 updated 2003 (MET mission from ICAO RO)	Requirements have not been met due to staffing and funding problems. MET briefing and flight documentation for return flights provided by the MET offices of other aerodromes.	The Authority concerned to take urgent actions to meet requirements of ANP. *Note: If MWO is not able to meet all its obligations, proposal to be considered for temporary transfer of its responsibilities to another MWO and a NOTAM to be issued to indicate such a transfer.*	State Secretariat of Civil Aviation, Cambodia. *Note: The matter was addressed by a MET mission to Cambodia in May 2003. Assistance provided in preparing an action plan*	To be determined	A
a) SIGMET information Provision of Annex 3, Chapter 7 b) Requirements for dissemination of SIGMETs, including SIGMETs for volcanic ash. ASIA/PAC ANP (FASID) Table MET 2A c) International airways volcano watch (IAVW) operational procedures	Bangladesh Cambodia India Indonesia Lao PDR Myanmar Nepal Papua New Guinea Philippines Sri Lanka	Requirements for issuance and proper dissemination of SIGMETs, including SIGMET for volcanic ash, have not been fully implemented.	2000	a) Reported by airlines b) Noted by Volcanic Ash Advisory Centres	~~a) ICAO to consider proposal for Special Implementation Project be established with the primary objective to improve implementation of SIGMET procedures.~~ a) ICAO SIP (on-going in 2003) b) States to take urgent actions to implement the procedures. *Note: Sri Lanka informed that the deficiency is dealt with immediate effect*	a) States' Meteorological Authorities b) ICAO to update the Regional SIGMET Guide *Note: CNS/MET SG to monitor.*	2003 by means of a SIP *and a new edition of the Regional SIGMET Guide*	A

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REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective action			
Requirements	**States/ facilities**	**Description**	**Date first reported**	**Remarks**	**Description**	**Executing body**	**Target date for completion**	**Priority for action ***
a) Annex 3 provisions for Tropical Cyclone Advisory Centres (TCAC) and for the format of tropical cyclone advisories for aviation b) ASIA/PAC Basic ANP (p.6.2) and FASID Table MET 3A	India	TCAC New Delhi does not issue tropical cyclone advisories for aviation	2003	Reported by airlines and identified during ICAO attendance to ESCAP/WMO Panel on Tropical Cyclones, 2002 and 2003	The Authority concerned to take urgent actions to meet requirements of Annex 3 and ASIA/PAC BANP and FASID for provision of tropical cyclone advisory for aviation.	India Directorate General of Civil Aviation; India Meteorological Department	2004	A