



International Civil Aviation Organization

**THIRD MEETING OF ASIA/PAC OPMET MANAGEMENT TASK FORCE
OF CNS/MET SUB-GROUP OF APANPIRG (OPMET/M TF/3)**

Bangkok, Thailand, 2-4 March 2005

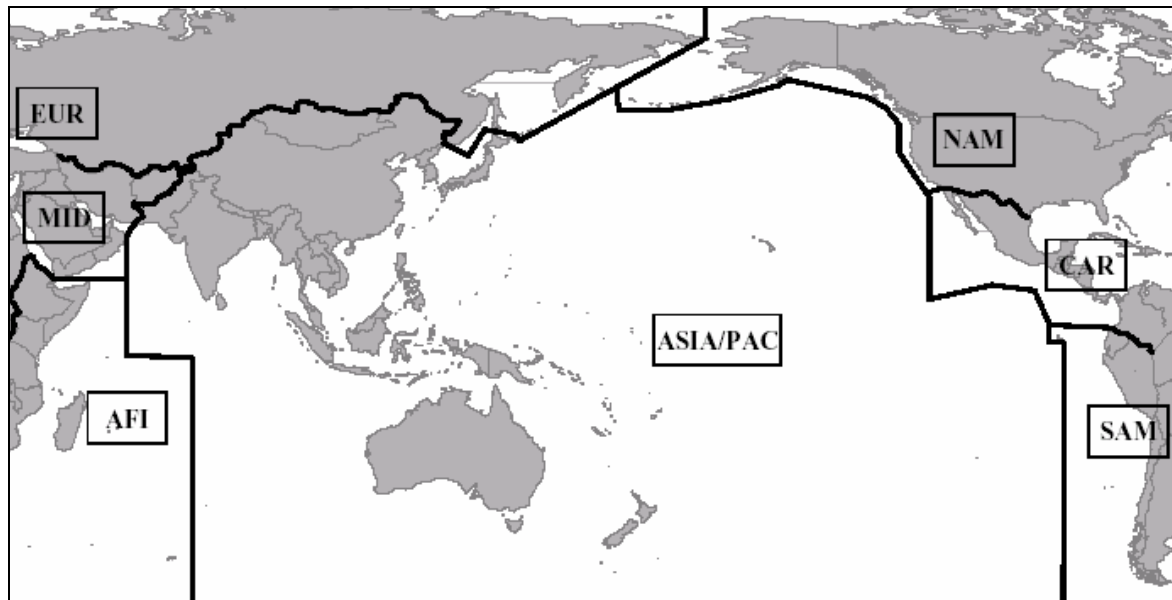
Agenda Item 2 a): Review: Current status of OPMET exchange in the Region

RESULTS OF ASIA/PAC AIREP SURVEY

(Presented by Australia)

SUMMARY

This paper presents the report of the AIREP Team of the OPMET/M TF regarding the regional survey on availability and procedures for exchange of AIREP data. The results of the survey would assist the TF to amend the ROBEX Handbook Chapter 9, AIREP exchange.



Asia Pacific OPMET Management Task Force
ICAO AIREP Survey
1st to 10th November

Report and Results



Survey conducted by Brisbane and Singapore RODB

1 Table of Contents

1	Table of Contents	2
2	Table of Figures.....	3
3	Introduction.....	4
4	Objective and expected goals.....	4
5	List of Participating Centres	5
6	Survey Questionnaire	5
7	Survey Information.....	9
8	Reporting Procedures.....	9
8.1	Bulletin Headers.....	9
9	Bulletin Delivery Information	13
10	Centre Summary.....	22
11	ARS Information contained in bulletins.....	27
12	Incorrect bulletin format.....	27
13	Results and Observations.....	29
13.1	Data Deficiencies	29
13.2	Data Discrepancies	29
13.3	Recommendations	30

2 Table of Figures

Figure 1 – UAAA01 NZCM	13
Figure 2 – UAAE01 WSSS	14
Figure 3 – UAAS11 RJTD	14
Figure 4 – UAAU31 YBBN.....	15
Figure 5– UAFE31 RJTD.....	15
Figure 6 – UAFE32 RJTD.....	16
Figure 7 – UAFE41 RJTD.....	16
Figure 8 – UAFJ01 NFFN	17
Figure 9 – UAHK31 VHHH	17
Figure 10 – UAIN31 VABB	18
Figure 11– UAIN32 VABB	18
Figure 12 – UAPF01 NTAA	19
Figure 13– UAPS01 NZKL	19
Figure 14– UASB31 VCCC	20
Figure 15 – UAXE01 VHHH	20
Figure 16– UAAU01 AMMC	21
Figure 17 – Bangkok Bulletins.....	22
Figure 18 – Brisbane Bulletins.....	22
Figure 19– Hong Kong Bulletins.....	23
Figure 20 – Incheon Bulletins.....	23
Figure 21 – Indonesia Bulletins	24
Figure 22 – Karachi Bulletins.....	24
Figure 23 – Singapore Bulletins	25
Figure 24 – Tokyo Bulletins.....	25
Figure 25– Wellington Bulletins.....	26
Figure 26 – Nadi Bulletins	26

3 Introduction

During the Second Meeting of ASIA/PAC OPMET Management Task Force it was agreed that a small sub-group, named AIREP Team, should carry out a survey on the current status of AIREP exchange in the ASIA/PAC and MID regions. The survey would be used to verify the current procedures, as well as the availability and the usage of the AIREP bulletins.

The AIREP Team developed a survey and questionnaire which was circulated to all ROBEX centres involved in collection and dissemination of AIREP messages/bulletins. The survey was conducted over a 10-day sampling period (November 1st to 10th). During this period all ROBEX centres were invited to capture AIREP bulletins received/transmitted by their centre and forward this information to the AIREP team for processing.

4 Objective and expected goals

The main objective of the survey was to provide information for the current exchange procedures and the availability of AIREP information in the ASIA/PAC and MID regions under the requirements specified in the regional guidance material (ROBEX Handbook), in order to develop updated procedures for the AIREP exchange compliant with the Annex 3 requirements.

It is hoped that based on the results of the survey, the procedures for AIREP exchange will be updated and brought in line with the current ICAO requirements set in Annex 3 and related documents.

The main goals to be achieved by the survey were:

- 1) To assess if the procedures in use ensure the transmission of all required AIREP information to the WAFCS;
- 2) To highlight any shortfalls of AIRMET information to be brought to the attention of airlines (IATA);
- 3) To check the correctness of the format of the AIREP messages;
- 4) To show the availability of special air-reports;
- 5) To allow the OPMET/TF to assess the adequacy of the AIREP exchange under the ROBEX scheme and make any proposal thereupon.

5 List of Participating Centres

The following centres responded to the AIREP survey

Centre	Location	Type of Response
BANGKOK	VTBB	Appendix B - Completed Tables
BEIJING	ZBAA	Letter Faxed to ICAO
BRISBANE	YBBN	Appendix B - Completed Tables + Survey Data
HONG KONG	VHHH	Appendix B - Spreadsheets
INCHEON	RKSI	Appendix B - Faxed to ICAO
JAKARTA	WIII	Appendix B - Completed Tables
KARACHI	OPKR	Appendix B - Completed Tables
NADI	NFFN	Appendix B - Completed Tables
SINGAPORE	WSSS	Appendix B - Completed Tables + Graphs
TOKYO	RJAA	Appendix B - Faxed to ICAO
WELLINGTON	NZWN	Data files
MALAYSIA	WMKK	Appendix B - Faxed to ICAO
MANILA	RPLL	Appendix B - Completed Tables
MALE	VRMM	Appendix A - Faxed to ICAO
PORT VILA	NVTV	Appendix A - Faxed to ICAO

6 Survey Questionnaire

An AIREP questionnaire was included as part of the AIREP survey.

Fifteen responses to the questionnaire were received.

A summary of the responses includes:

AIREP Questionnaire - Summary
Question 2: <i>Is/are the Meteorological Watch Office/s (MWO) in your State tasked to collect air-reports received by voice communication as per Annex3, Chapter5</i>
No.of feedback received = 15 5 MWOs (33%) do not collect ARP as per Annex 3, Chapter 5 9 MWOs (60%) collect ARP as per Aneex 3, Chapter 5 Beijing ZBAA MWO - receives ARP via ACARS data link
Question 3: <i>Describe in brief the procedures in place for relaying air-reports by the ATS unit(s) to the associated MWO(s):</i>
No of feedback received = 15 5 MWOs (33%): no procedure in place

AIREP Questionnaire - Summary
10 MWOs (67%): have procedures in place for relaying ARP Via AFTN - 3 MWOs (YBBN/WSSS/NZWN) Via AFTN/Telephone - 2 MWOs (VHHH/NVVV) Via Fax - 3 MWOs (RKSI/VRMM/RPLL) Via GTS - 1 MWO (NFFN) Via internal telecommunication system - 1 MWO (RJAA)
<i>Question 4:</i> Describe in brief the procedures used by MWO(s) for handling air-reports, in particular: <i>A)-Coding Procedures</i> <i>B)-ARP Bulletin Presentation</i> <i>C)-Transmission of ARP to WAFC's</i> <i>D)-Transmission of bulletin to responsible ROBEX centre</i> <i>E)-Procedures for handling ARS</i>
A) Coding Procedures 6 MWOs (40%) - filed NIL for coding procedures 8 MWOs (53%) - comply to Annex 3 coding procedures 1 MWOs - NIL reply B) ARP Bulletin Presentation 6 MWOs (40%) - filed NIL 8 MWOs (53%) - compile and disseminate hourly AIREP bulletins 1 MWOs - NIL reply C) Transmission of ARP to WAFC's 4 MWOs transmit ARP to WAFCs via AFTN (VHHH/RKSI/RPLL/WSSS) 2 MWOs transmit ARP to WAFCs via GTS (YBBN/NFFN) 2 MWO transmits ARP to WAFCs via AFTN/GTS (RJAA/NZWN) 6 MWOs filed NIL 1 MWO - NIL reply D) Transmission of bulletin to responsible ROBEX centre Only 8 MWOs (53%) transmit AIREP bulletins to their responsible ROBEX centre via AFTN (except one via GTS). E) Procedures for handling ARS 9 MWOs (60%) have procedures in place to handle ARS 6 MWOs filed NIL
<i>Question 5:</i> Are AIREP bulletins received on a regular basis by the responsible ROBEX centre by any other source
9 MWOs (60%) receive AIREP bulletins regularly from their responsible ROBEX Centres 6 MWOs - filed NO/NIL
<i>Question 6:</i> Are there procedures in place for the issuance of SIGMET by the MWOs on the basis of the received special air-reports?

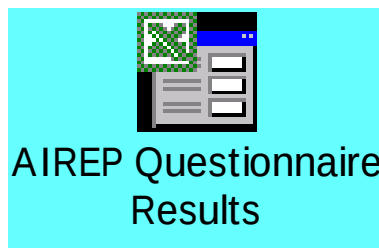
OPMET Taskforce

AIREP Questionnaire - Summary	
<i>Is there a procedure for dissemination of special air-reports in the same way as SIGMET messages in case the SIGMET is not issued</i>	
6 MWOs (40%) do not issue SIGMET upon receiving special air-reports. 6 MWOs (33%) do issue SIGMET if ARS are received. 3 MWOs filed NIL Manila, Hong Kong and Singapore do have procedures in place to disseminate special air-reports in the same way as SIGMET messages.	
Question 7: <i>Comments and/or requirements on future development of the regional procedures for AIREP exchange</i>	
Brisbane YBBN	Currently we do not generate our UAAU31 bulletin in accordance with ICAO Annex 3. Brisbane uses waypoint names in our reports. These names should be substituted with a Latitude and Longitude. This will be rectified in 2005. We regularly received ARP messages from adjacent FIR (AYPM, AGGH, and NFFF). Should these reports be included in our UAAU31 ROBEX bulletins also? All ATS units should be encouraged to send ARP messages to the nearest collection centre even if their FIR or region does not compile bulletins. This type of information should be exchanged if it is available. AMDAR ARP bulletins are sent from adjoining areas using area codes in the bulletin to define the location of the bulletin.
Hong Kong VHHH	Would appreciate more guidance on the definition of 'en-route' phase. SIGMETs are for warning of en-route weather. If an aircraft encounter the specified weather phenomenon, say severe turbulence, during climb-out phase, it is not clear whether SIGMET should be issued and disseminated even though the phenomenon is expected to persist. If not, considering that these events occurred at low level, the current requirement in Annex 3 (para.3.1.4 of Appendix 4) to disseminate such ARS in the same way as SIGMET appears to be superfluous.
Karachi OPKR	AIREP Exchange should be frequent & on regular basis
Malaysia WMKK	In some cases the Air Traffic Control and Navigation Centre (ATCN) is rather far from the WMO and is not easy to relay the reports by voice communication. The air-report may best be communicated in proper format and via automatic means such as AMDAR or ADS.
Male VRMM	Cost effective and convenient procedures to be developed
Manila RPLL	In consideration of Section 5.10.2, Chapter 5, Annex 3 (14th edition),

AIREP Questionnaire - Summary	
	completed AIREP taken less than an hour and not transmitted to concerned ATS units should be provided in addition to the completed report of volcanic activity
Singapore WSSS	As proposed by the OPMET/M TF/2, ARS shall be exchanged using different data type designators (T₁T₂) in the WMO abbreviated headers AIREP bulletins shall be exchanged in the standardized code forms, such as convert aircraft position to latitude/longitude (not using ATS reporting points) use F to indicate Flight Level, e.g. F350 (some centres use FL) Wind direction – the direction in degrees round off to the nearest 5 or 10 degrees, e,g 123/10KT ---> 125/10KT ; 158/20KT ----> 160/20KT The AIREP bulletins are exchanged in accordance with the ROBEX Scheme, in addition to the exchange over the GTS (The NMC transmits aircraft reports to the appropriate regional collection centre RTH on a regular basis). The content of these messages are similar and the WMO abbreviated headers are different for example, UAAU31 YBBN for ROBEX exchange and UAAU01 AMMC for GTS exchange.Can we review these procedures together with WMO? In order to have an efficient scheme to exchange AIREP received from air-ground data link (ADS or CPDLC), it will be beneficial to develop specific procedures (with regards to message format, code form and quality checks etc) for such AIREP exchange in the region.
Bangkok VTBB	NIL
Beijing ZBAA	NIL
Incheon RKSI	NIL
Jakarta WIII	NIL
Nadi NFFN	NIL
Port Vila NNVV	NIL
Tokyo RJAA	NIL
Wellington NZWN	NIL

A detailed report on the responses to the questionnaire has been included as an Excel Spreadsheet file.

To open the questionnaire document double click or select and enter the attached icon.



7 Survey Information

The total number of products exchanged (generated and received) by the different centres during the sample period were:

Date	Bulletins	ARP
1/11	650	3641
2/11	665	4562
3/11	585	4252
4/11	546	3990
5/11	799	5058
6/11	550	4034
7/11	636	4535
8/11	494	3052
9/11	590	3566
10/11	1147	6562
Total	6,662	43,252

8 Reporting Procedures

Data received from each centre was entered into Excel spreadsheets and an Access database. This data was then used for the compilation and generation of reports and charts. Bulletins that were received by more than one centre were used and reported against. No data analysis was carried out on bulletins that were received by a single centre.

Each Bulletin generated during the survey period was tracked to determine:

- which centre received a copy of the bulletin
- how many copies of the bulletin was received by each centre during the sample period.

8.1 Bulletin Headers

The following bulletins were exchanged by participating centres. (GTS bulletins have been included if reported).

Bulletins **highlighted in red** were received by more than one centre and were used in this survey.

Header	Receiving Centre
UAAA01 NZCM	Indonesia
UAAA01 NZCM	Nadi
UAAA01 NZCM	Wellington
UAAA01 NZCM	Brisbane
UAAE01 WSSS	Tokyo
UAAE01 WSSS	Bangkok
UAAE01 WSSS	Hong Kong
UAAE01 WSSS	Indonesia
UAAE01 WSSS	Karachi

OPMET Taskforce

Header	Receiving Centre
UAAE01 WSSS	Singapore
UAAS11 RJTD	Nadi
UAAS11 RJTD	Karachi
UAAS11 RJTD	Indonesia
UAAS11 RJTD	Bangkok
UAAS11 RJTD	Hong Kong
UAAS31 RJTD	Hong Kong
UAAU01 AMMC	Hong Kong
UAAU01 AMMC	Wellington
UAAU01 AMMC	Tokyo
UAAU01 AMMC	Nadi
UAAU01 AMMC	Bangkok
UAAU01 AMMC	Karachi
UAAU01 AMMC	Indonesia
UAAU31 VABB	Hong Kong
UAAU31 YBBN	Nadi
UAAU31 YBBN	Wellington
UAAU31 YBBN	Singapore
UAAU31 YBBN	Indonesia
UAAU31 YBBN	Hong Kong
UAAU31 YBBN	Brisbane
UAAU31 YBBN	Tokyo
UABZ22 SBBS	Nadi
UABZ24 SBCW	Nadi
UACH01 SCEL	Nadi
UACH01 SCTE	Nadi
UACI31 RCTP	Nadi
UACN10 CYYD	Nadi
UACN10 CYYF	Nadi
UADL31 EDZO	Singapore
UADL40 EDZO	Nadi
UAEW01 LPMG	Nadi
UAEW02 LPMG	Nadi
UAFE31 RJTD	Hong Kong
UAFE31 RJTD	Tokyo
UAFE31 RJTD	Incheon
UAFE31 RJTD	Brisbane
UAFE31 RJTD	Bangkok
UAFE31 RJTD	Indonesia
UAFE31 VABB	Hong Kong
UAFE32 RJTD	Tokyo
UAFE32 RJTD	Bangkok
UAFE32 RJTD	Brisbane
UAFE32 RJTD	Hong Kong
UAFE32 RJTD	Indonesia
UAFE331 RJTD	Hong Kong
UAFE41 RJTD	Bangkok
UAFE41 RJTD	Brisbane

OPMET Taskforce

Header	Receiving Centre
UAFE41 RJTD	Hong Kong
UAFE41 RJTD	Incheon
UAFE41 RJTD	Indonesia
UAFE41 RJTD	Tokyo
UAFJ01 NFFN	Wellington
UAFJ01 NFFN	Indonesia
UAFJ01 NFTN	Indonesia
UAHK31 VHHH	Brisbane
UAHK31 VHHH	Hong Kong
UAHK31 VHHH	Incheon
UAHK31 VHHH	Indonesia
UAHK31 VHHH	Nadi
UAHK31 VHHH	Singapore
UAHK31 VHHH	Tokyo
UAHK31 VHHH	Bangkok
UAIN 31 VABB	Karachi
UAIN31 VABB	Bangkok
UAIN31 VABB	Hong Kong
UAIN31 VABB	Indonesia
UAIN31 VABB	Karachi
UAIN31 VABB	Tokyo
UAIN31 VIDP	Bangkok
UAIN32 VABB	Hong Kong
UAIN32 VABB	Tokyo
UAIN32 VABB	Indonesia
UAIN32 VABB	Bangkok
UAIN32 VABB	Karachi
UAJP71 RJFF	Indonesia
UAJP71 RJFF	Nadi
UAJP71 RJFK	Nadi
UAMX27 MMMZ	Nadi
UANC01 CYQB	Nadi
UANC01 CYVR	Nadi
UANC10 CYCD	Nadi
UANC10 CYEG	Nadi
UANC10 CYFB	Nadi
UANC10 CYGL	Nadi
UANC10 CYGW	Nadi
UANC10 CYIV	Nadi
UANC10 CYKA	Nadi
UANC10 CYND	Nadi
UANC10 CYOW	Nadi
UANC10 CYQB	Nadi
UANC10 CYTH	Nadi
UANC10 CYTS	Nadi
UANC10 CYUY	Nadi
UANC10 CYWG	Nadi
UANC10 CYXC	Nadi

OPMET Taskforce

Header	Receiving Centre
UANC10 CYXH	Nadi
UANC10 CYXS	Nadi
UANC10 CYXU	Nadi
UANC10 CYYC	Nadi
UANC10 CYYZ	Nadi
UANC10 CYZF	Nadi
UANC10 CYZT	Nadi
UANC21 CYEG	Nadi
UANT01 BIRK	Nadi
UANT01 EGGR	Indonesia
UANT01 EGRR	Nadi
UANT01 KWBC	Indonesia
UANT01 KWBC	Nadi
UANT20 CWEG	Nadi
UAOS31 LOWM	Nadi
UAPA01 KWBC	Indonesia
UAPA01 KWBC	Nadi
UAPF01 NTAA	Indonesia
UAPF01 NTAA	Nadi
UAPF01 NTAA	Wellington
UAPH01 RPMM	Indonesia
UAPS01 NZKL	Nadi
UAPS01 NZKL	Bangkok
UAPS01 NZKL	Hong Kong
UAPS01 NZKL	Indonesia
UAPS01 NZKL	Karachi
UAPS01 NZKL	Nadi
UASA01 SABM	Nadi
UASB31 VCCC	Hong Kong
UASB31 VCCC	Indonesia
UASB31 VCCC	Bangkok
UASB31 VCCC	Singapore
UAUK90 EGGR	Indonesia
UAUS11 RJTD	Karachi
UAUS31 KWBC	Indonesia
UAUS31 KWBC	Nadi
UAVX99 TBPB	Nadi
UAXE01 VHHH	Indonesia
UAXE01 VHHH	Bangkok
UAXE01 VHHH	Hong Kong

8.2 Bulletin Headers

The following bulletins were used in the survey

Bulletin Header	Bulletin Header
1.UAAA01 NZCM (GTS)	2.UAAE01 WSSS (GTS)
3.UAAS11 RJTD (GTS)	4.UAAU31 YBBN
5.UAFE31 RJTD	6.UAFE32 RJTD
7.UAFE41 RJTD	8.UAFJ01 NFFN (GTS)
9.UAHK31 VHHH	10.UAIN31 VABB
11.UAIN32 VABB	12.UAPF01 NTAA (GTS)
13.UAPS01 NZKL (GTS)	14.UASB31 VCCC
15.UAXE01 VHHH (GTS)	16.UAAU01 AMMC (GTS)

9 Bulletin Delivery Information

Bulletins were checked to determine what centres receive which bulletins and how many copies.

Note: Centre highlighted in red indicates that centre responsible for generating the reported bulletin:

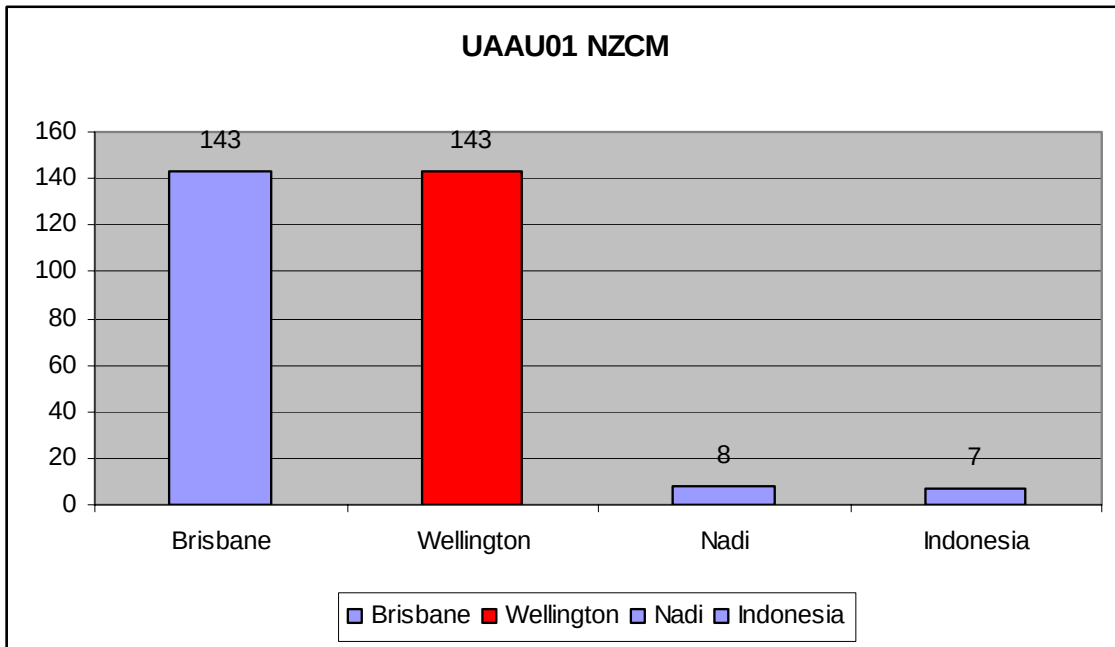


Figure 1 – UAAA01 NZCM

The distribution addresses for this bulletin as advised by New Zealand were: No AFTN distribution - Sent on the WMO GTS to Melbourne.

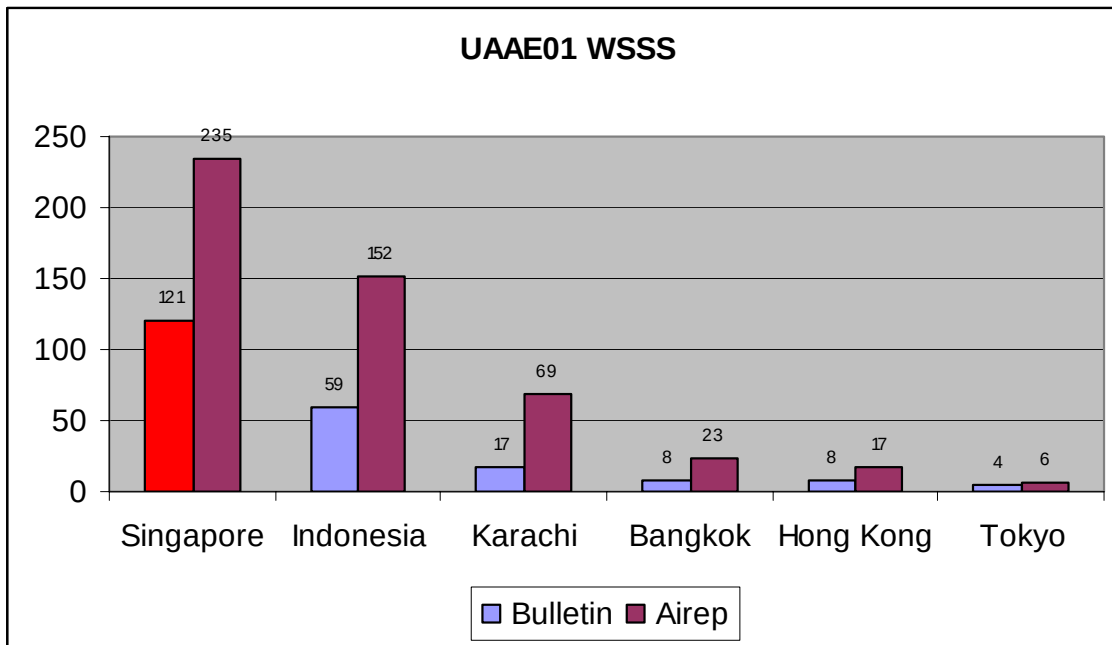


Figure 2 – UAAE01 WSSS

The distribution addresses for this bulletin as advised by Singapore were: WMKKYMYX WAFC: EGZZMASI

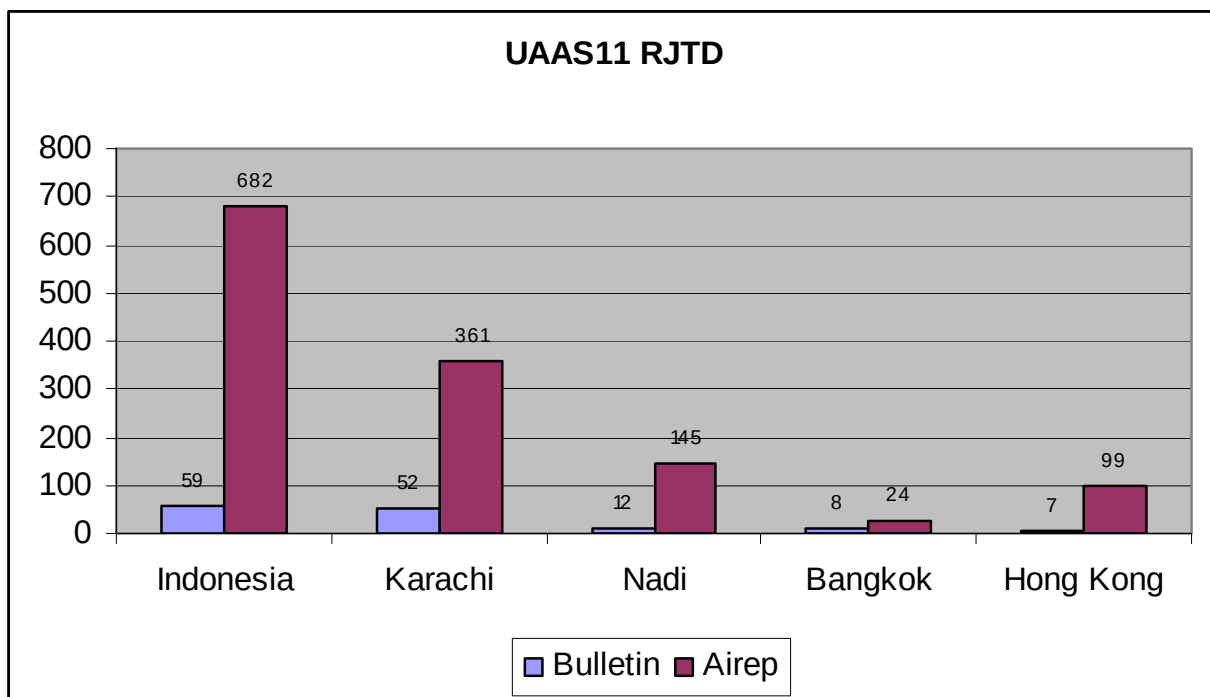


Figure 3 – UAAS11 RJTD

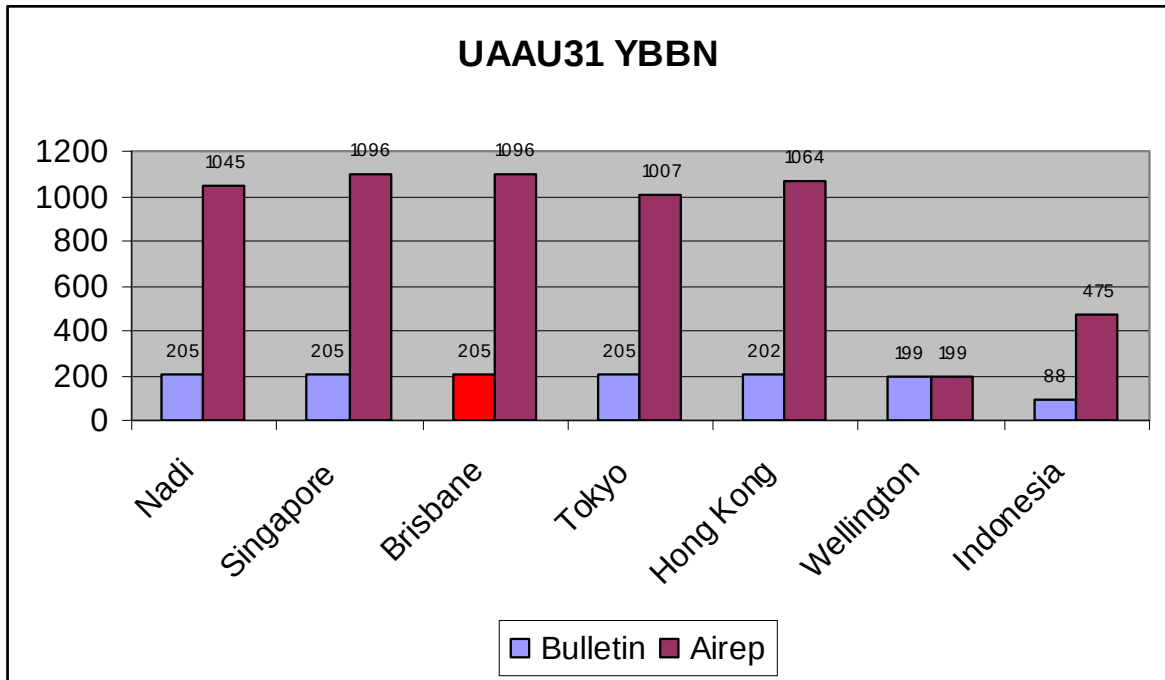


Figure 4 – UAAU31 YBBN

The distribution addresses for this bulletin as advised by Brisbane were: AYPMYX NFFNYX NZKLYX RJAAPYX VHZZPYX WIZZMGMG WMZZNBXX WSSYMYX YMMCXYX

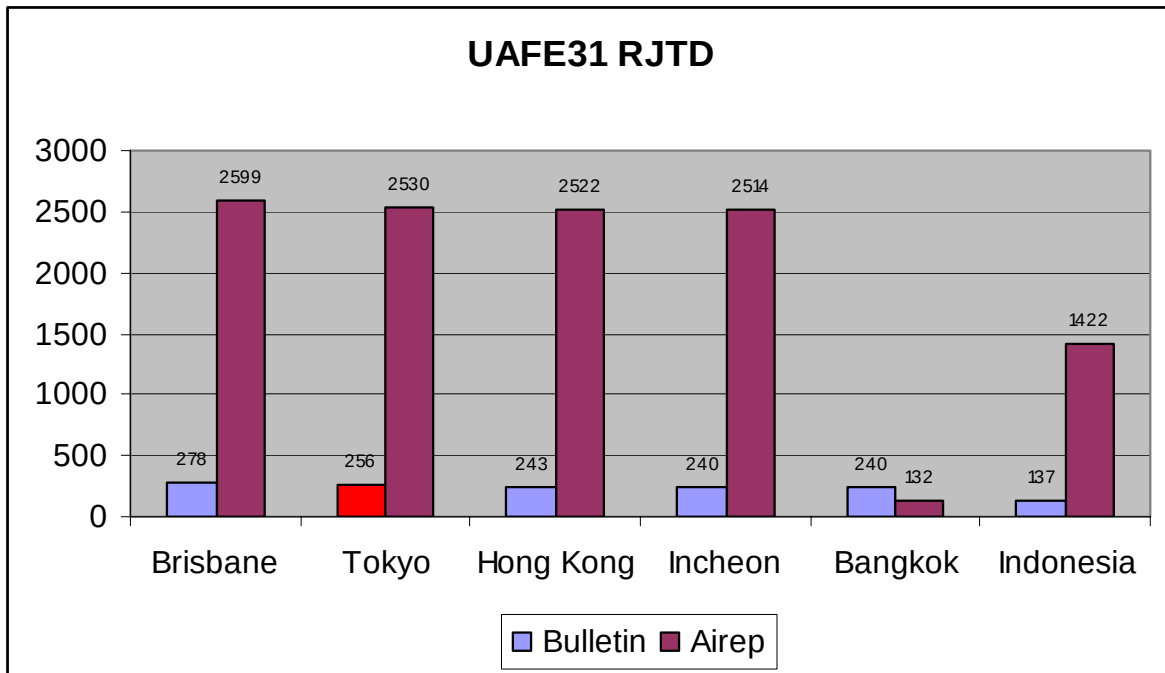


Figure 5– UAFE31 RJTD

The distribution addresses for this bulletin as advised by Tokyo were: PANCYX ZBBYPYX PGUMCOAX VTBBYPYX WMZZPYR WIZZMGMG AYPMYX VHZZPYX YBZZSPRX RKSIYPYX

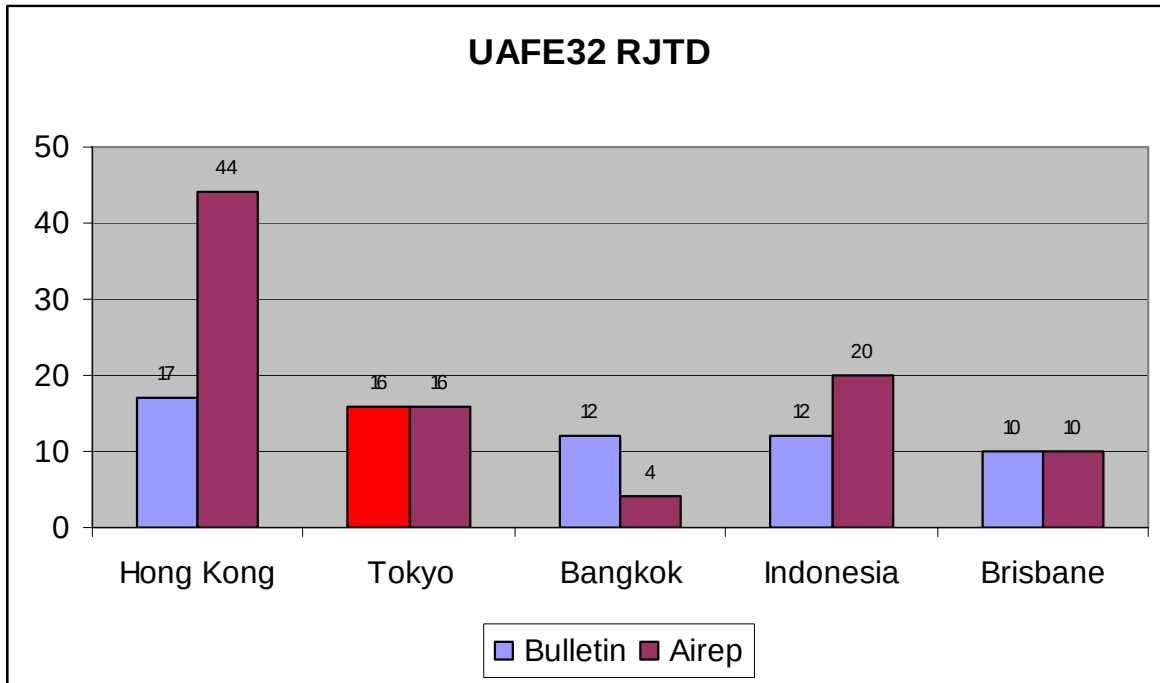


Figure 6 – UAFE32 RJTD

The distribution addresses for this bulletin as advised by Tokyo were: PANCYMYX RKSSYPYX ZBBBYPYX PGUMCOAX VTBBYPYX WMZZYPYR WIZZMGMG AYPMYMYX VHZZYPYX YBZZSPRX

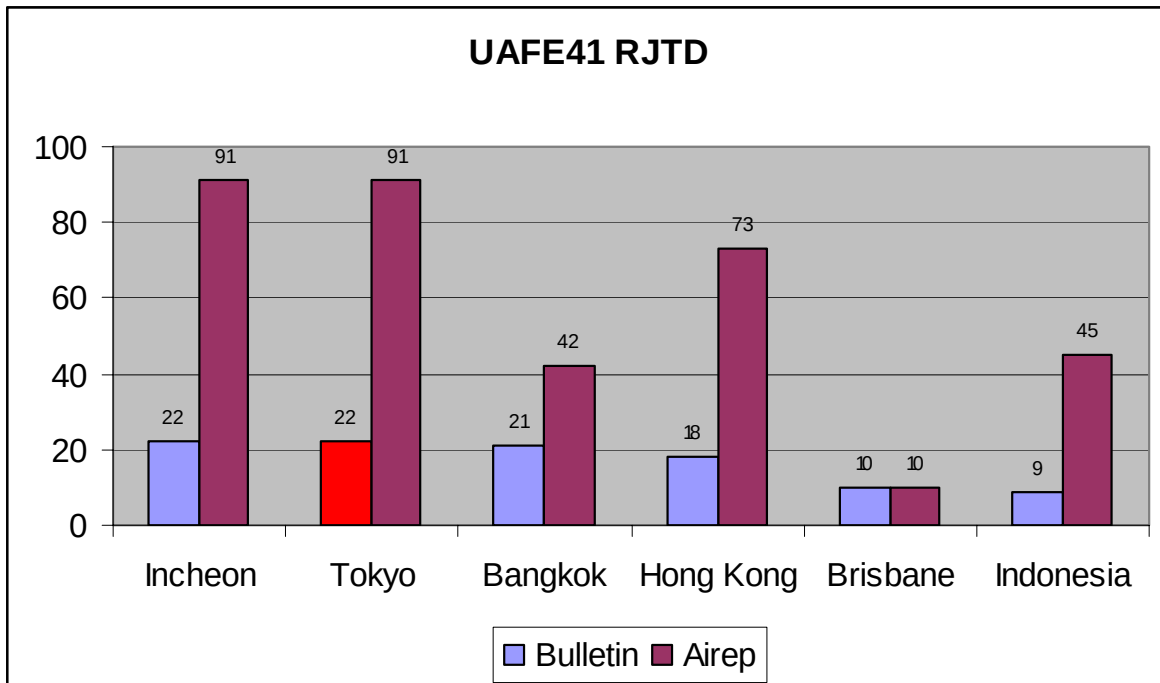


Figure 7 – UAFE41 RJTD

The distribution addresses for this bulletin as advised by Tokyo were: PANCYMYX ZBBBYPYX PGUMCOAX VTBBYPYX WMZZYPYR WIZZMGMG AYPMYMYX VHZZYPYX YBZZSPRX RKSIPYX

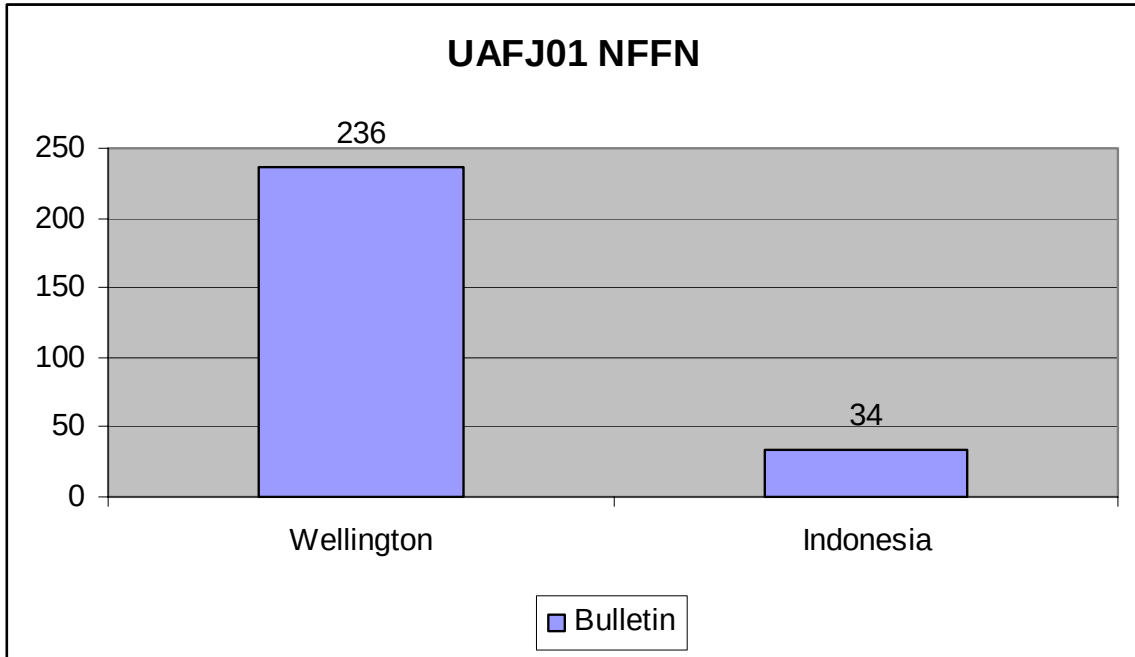


Figure 8 – UAFJ01 NFFN

The distribution addresses for this bulletin as advised by Nadi were: NFKWYMYX + GTS - AMMC

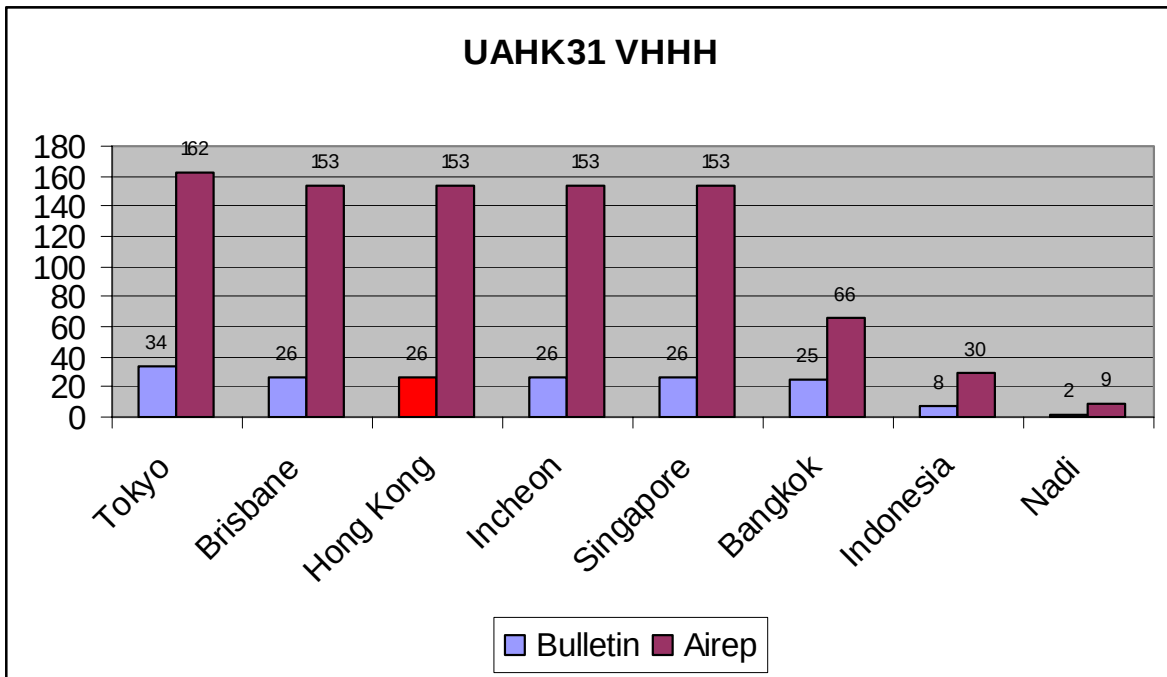


Figure 9 – UAHK31 VHHH

The distribution addresses for this bulletin as advised by Hong Kong were: RCTPYPYX RJAAYPYX RPLLYPYX VHHHYMYX VMMCXYMYX VTBBYPYX WMZZYPYR WSSSYMYX YBZZSSYX ZBBBYPYX EGRRYMYX KWBCYMYX

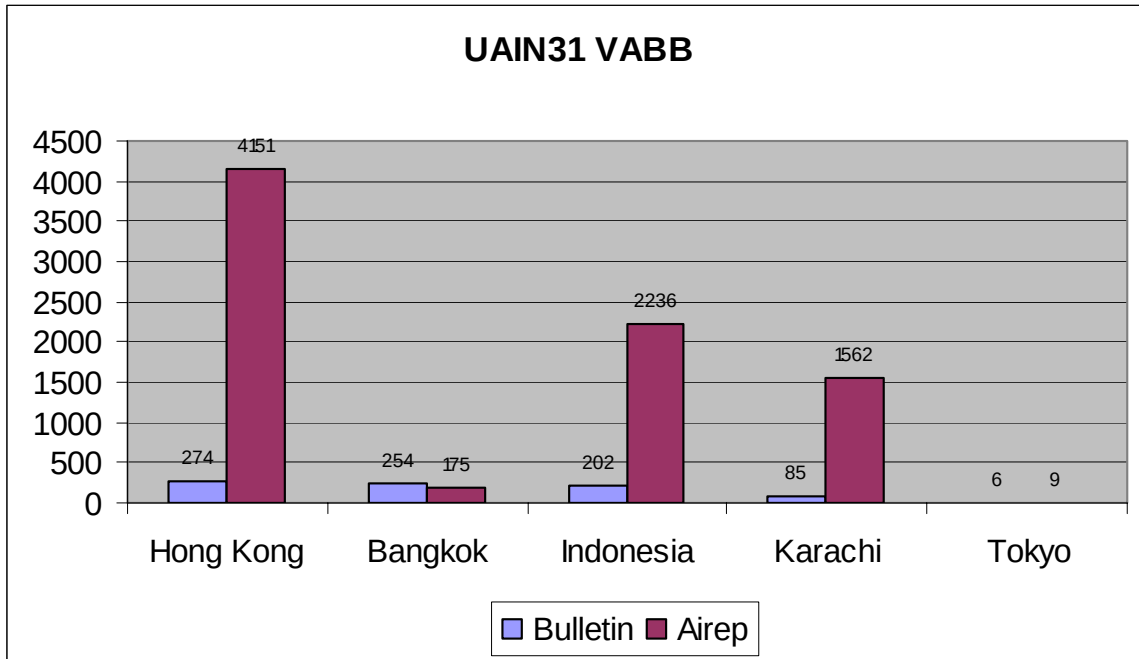


Figure 10 – UAIN31 VABB

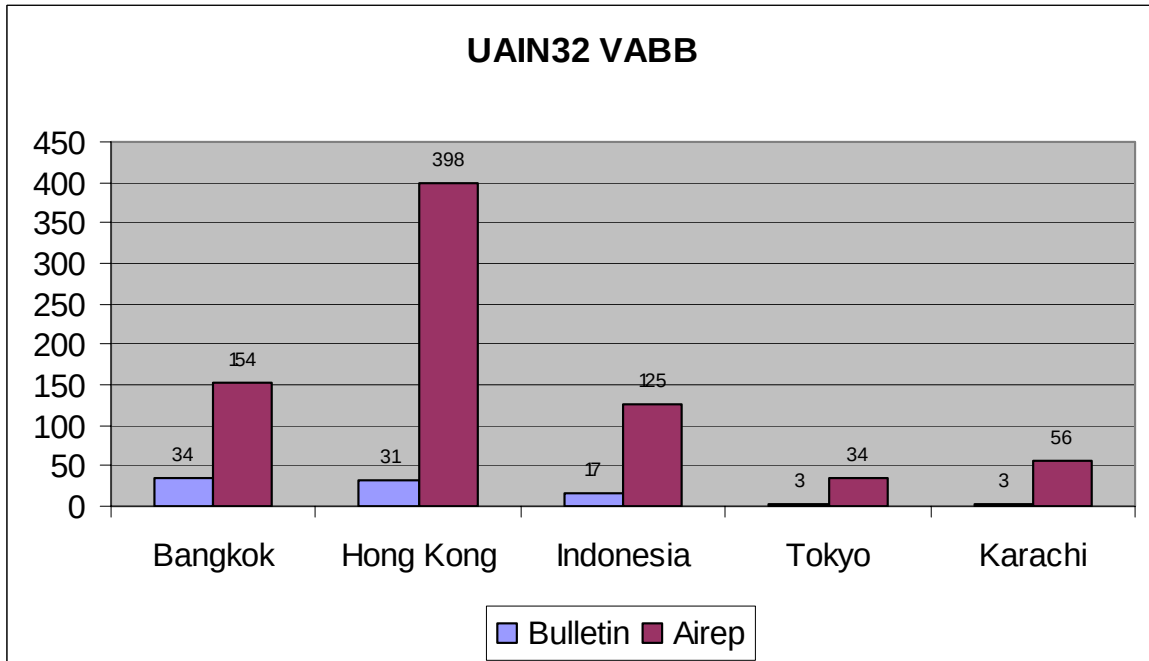


Figure 11– UAIN32 VABB

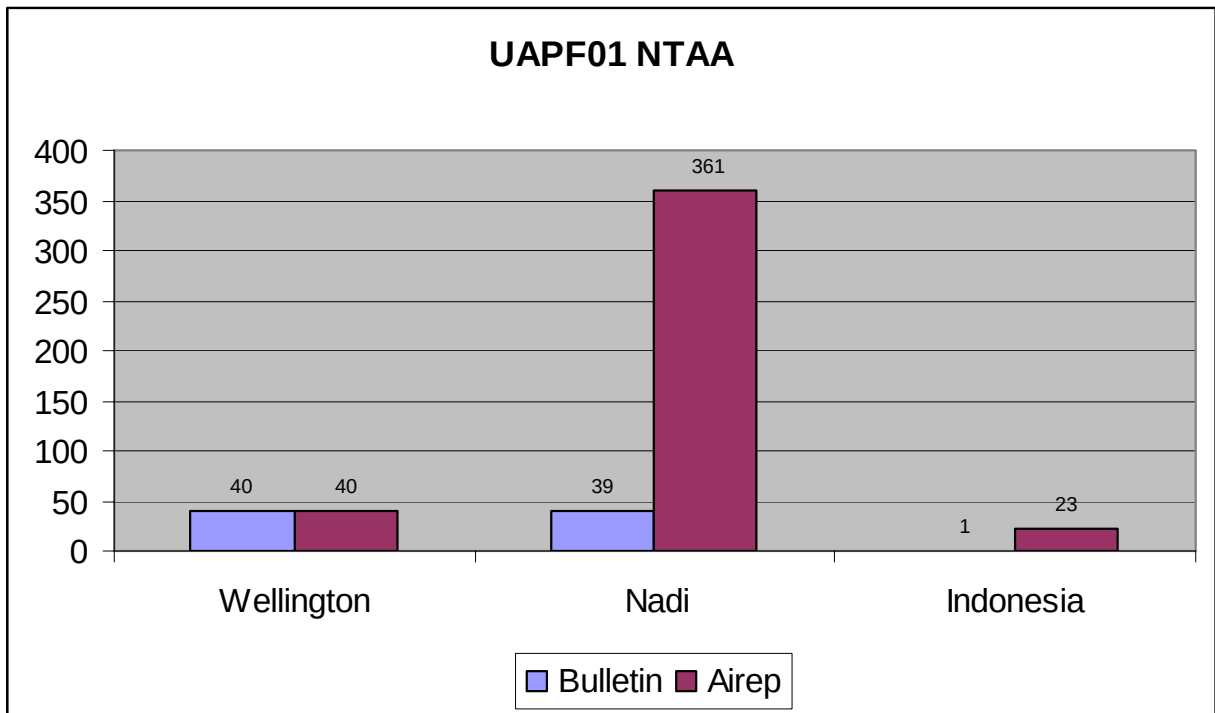


Figure 12 – UAPF01 NTAA

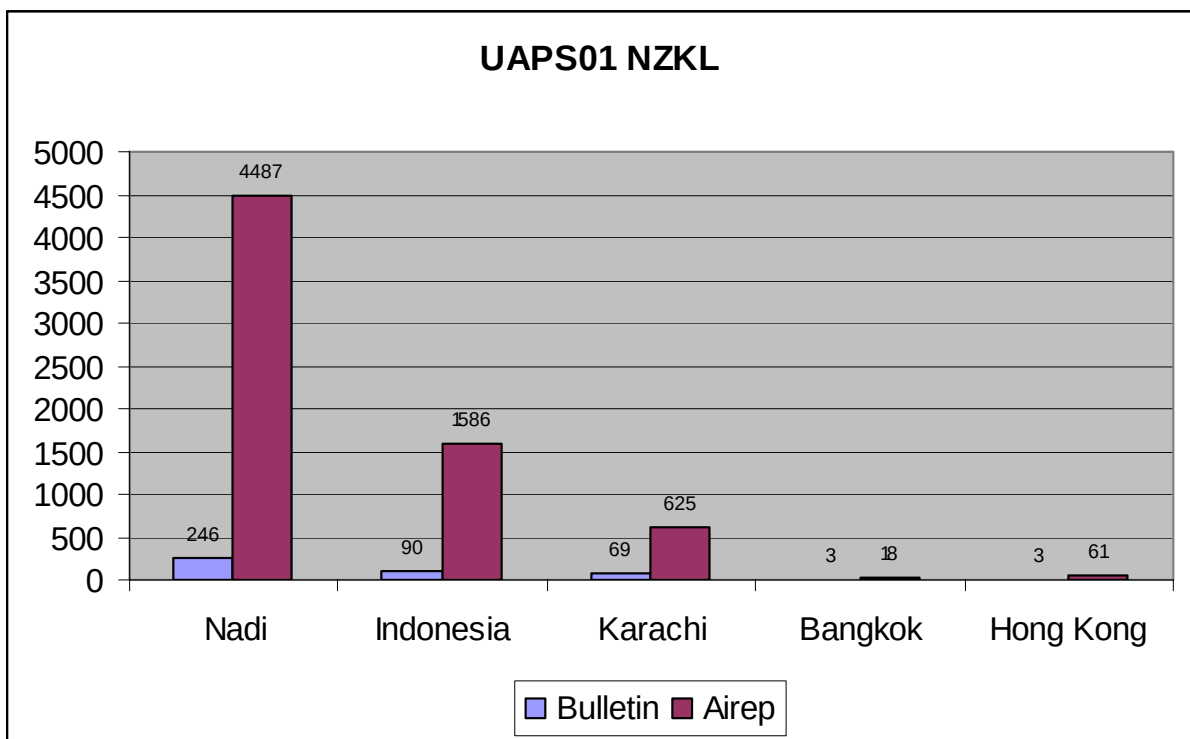


Figure 13– UAPS01 NZKL

The distribution addresses for this bulletin as advised by New Zealand were: No AFTN distribution - Sent on the WMO GTS to Melbourne.

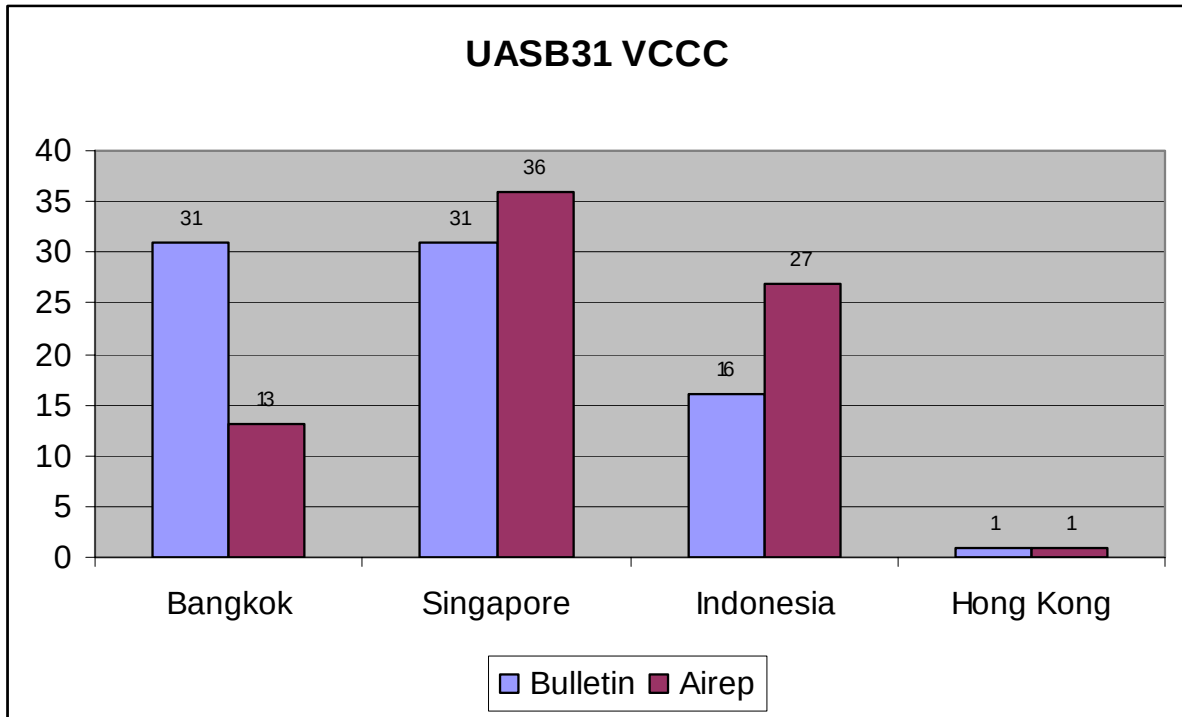


Figure 14– UASB31 VCCC

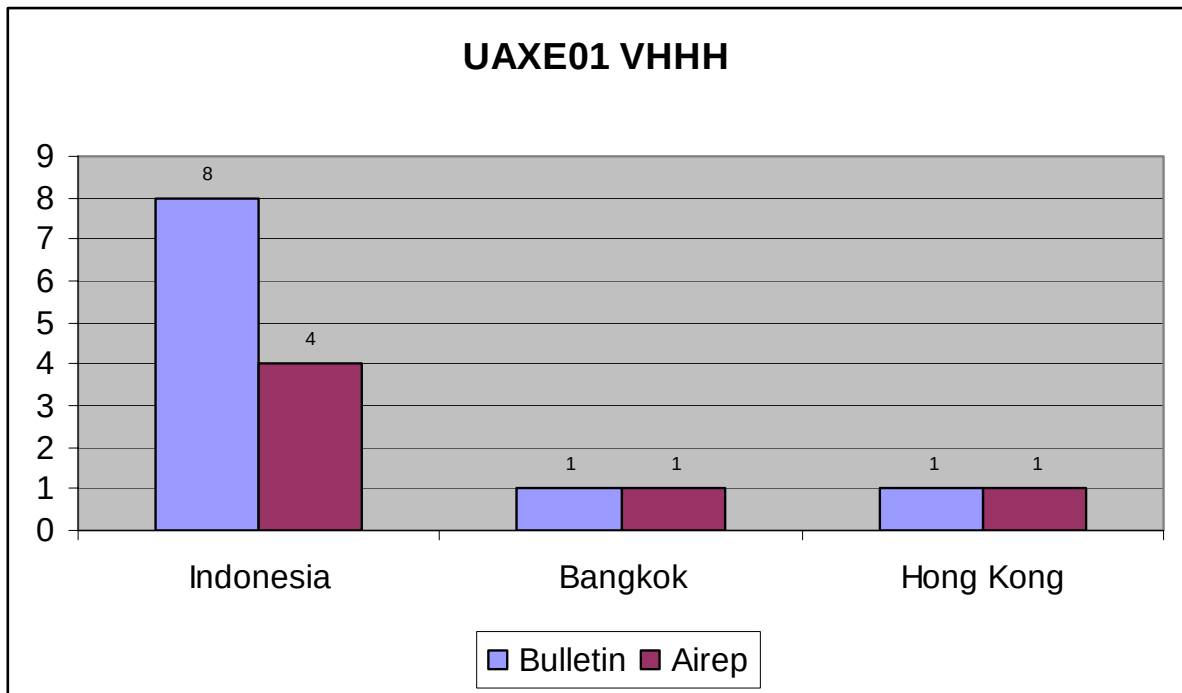


Figure 15 – UAXE01 VHHH

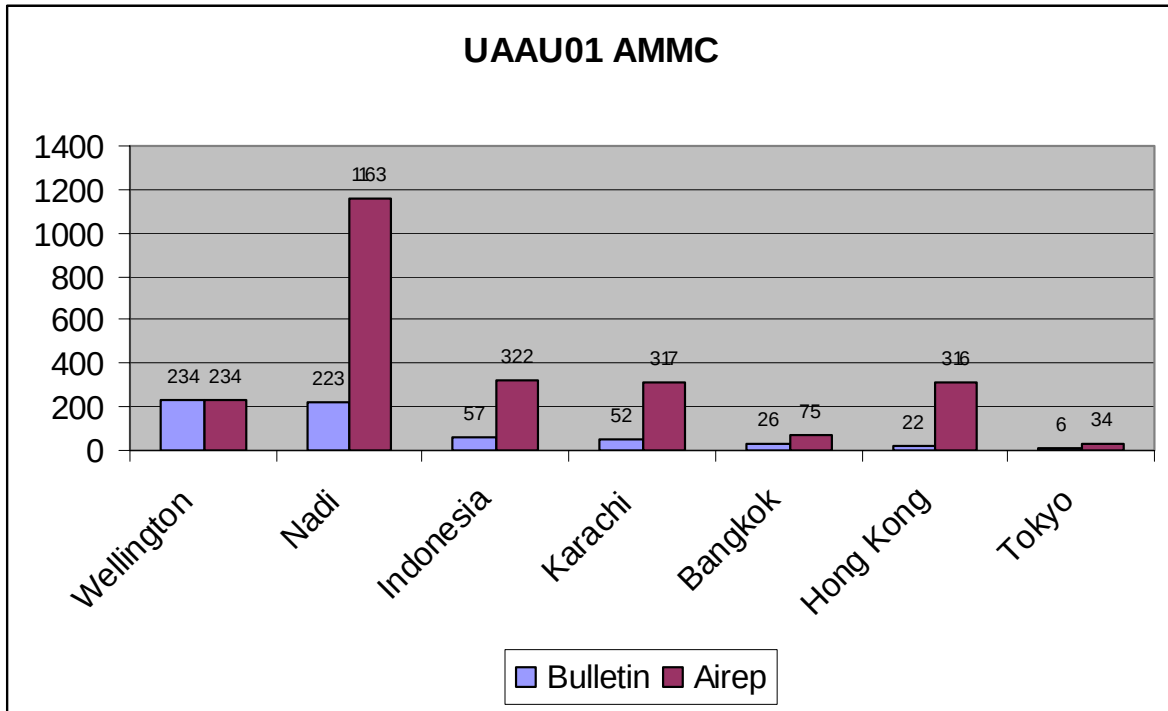


Figure 16– UAAU01 AMMC

10 Centre Summary

Each Bulletin generated during the survey period was tracked to determine which centre receives and stores copies of bulletins and how many copies were received by each centre?

Note: Bulletins highlighted in red indicates bulletin was generated by the centre being reported:

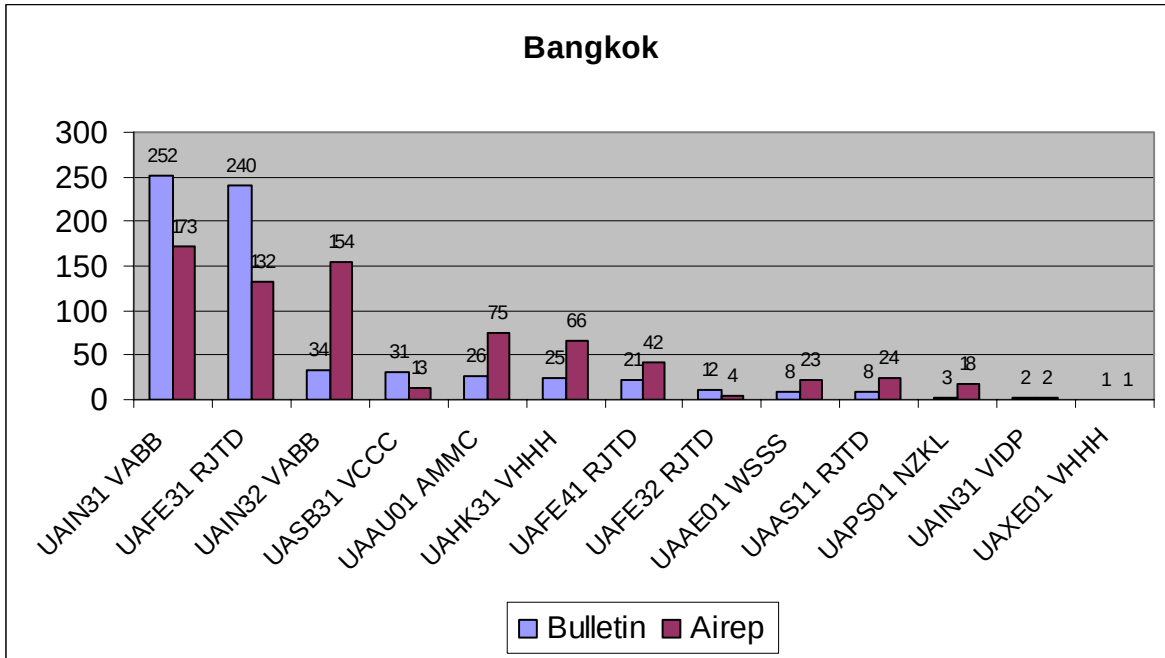


Figure 17 – Bangkok Bulletins

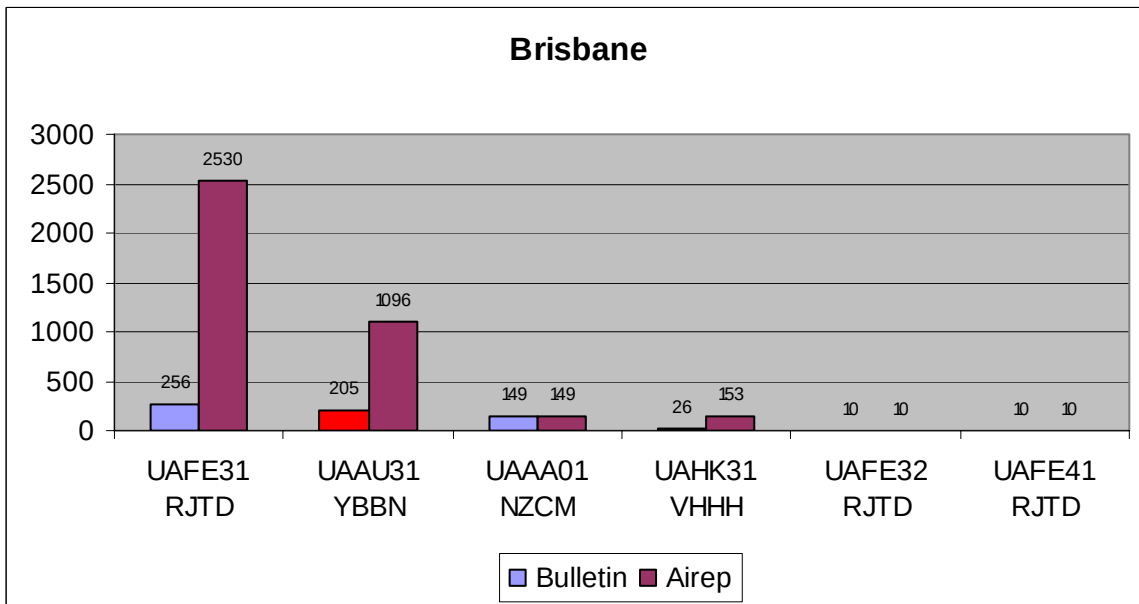


Figure 18 – Brisbane Bulletins

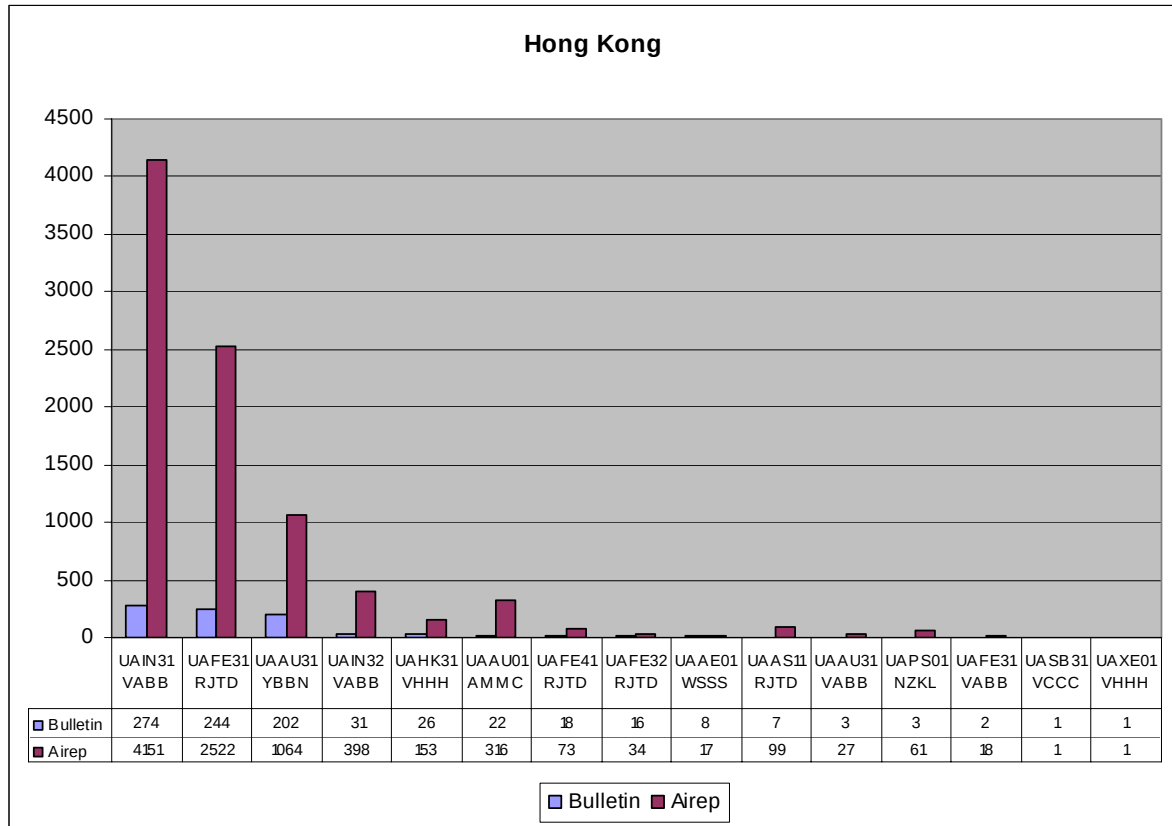


Figure 19– Hong Kong Bulletins

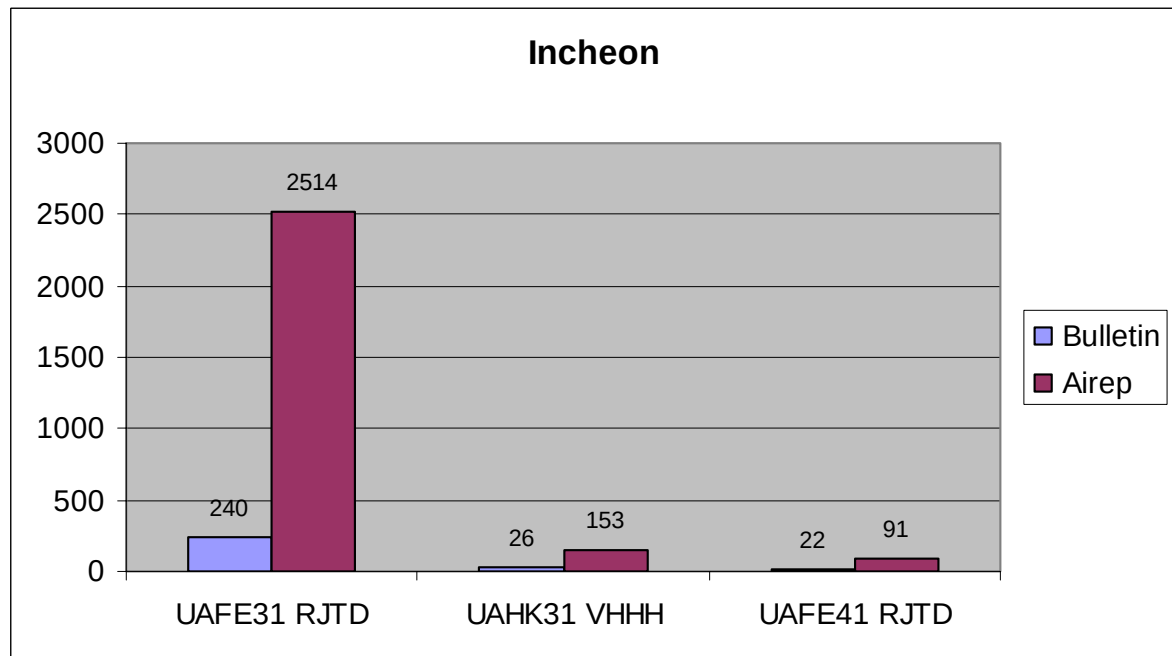


Figure 20 – Incheon Bulletins

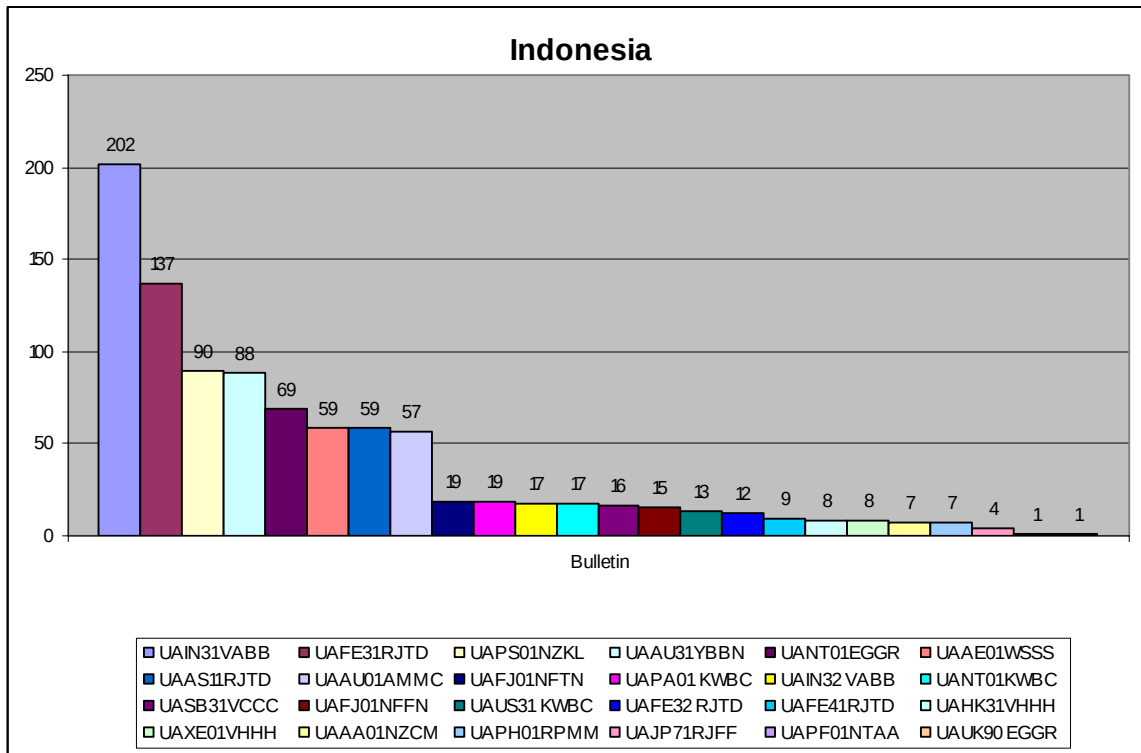


Figure 21 – Indonesia Bulletins

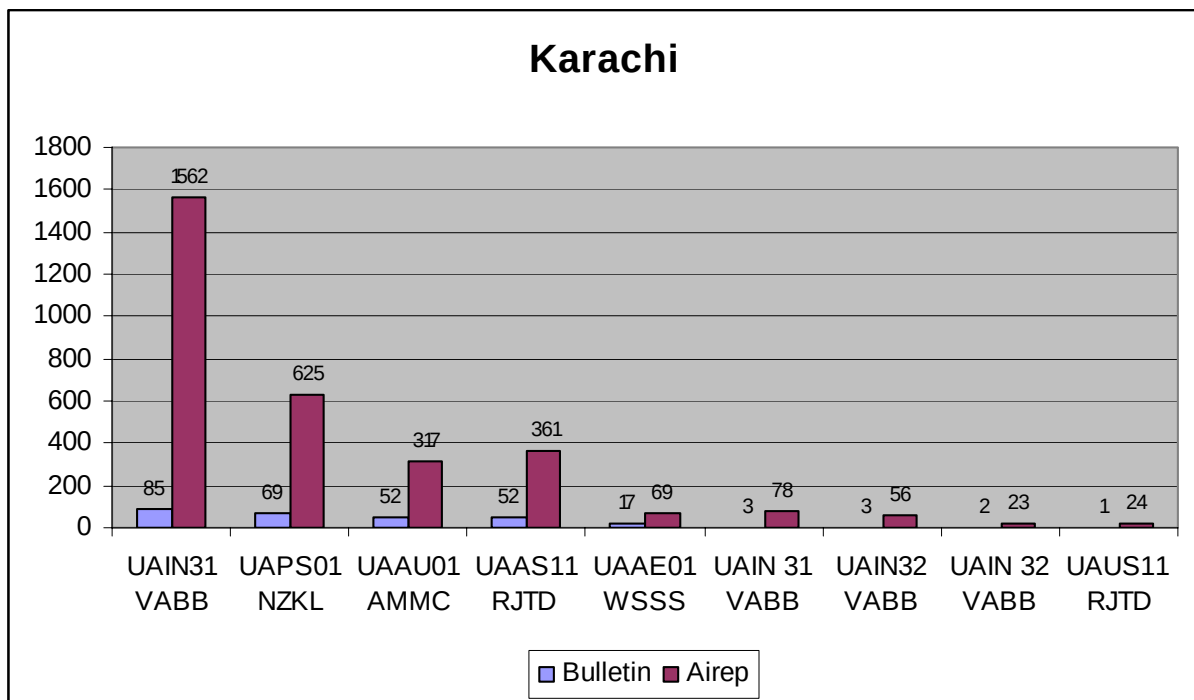


Figure 22 – Karachi Bulletins

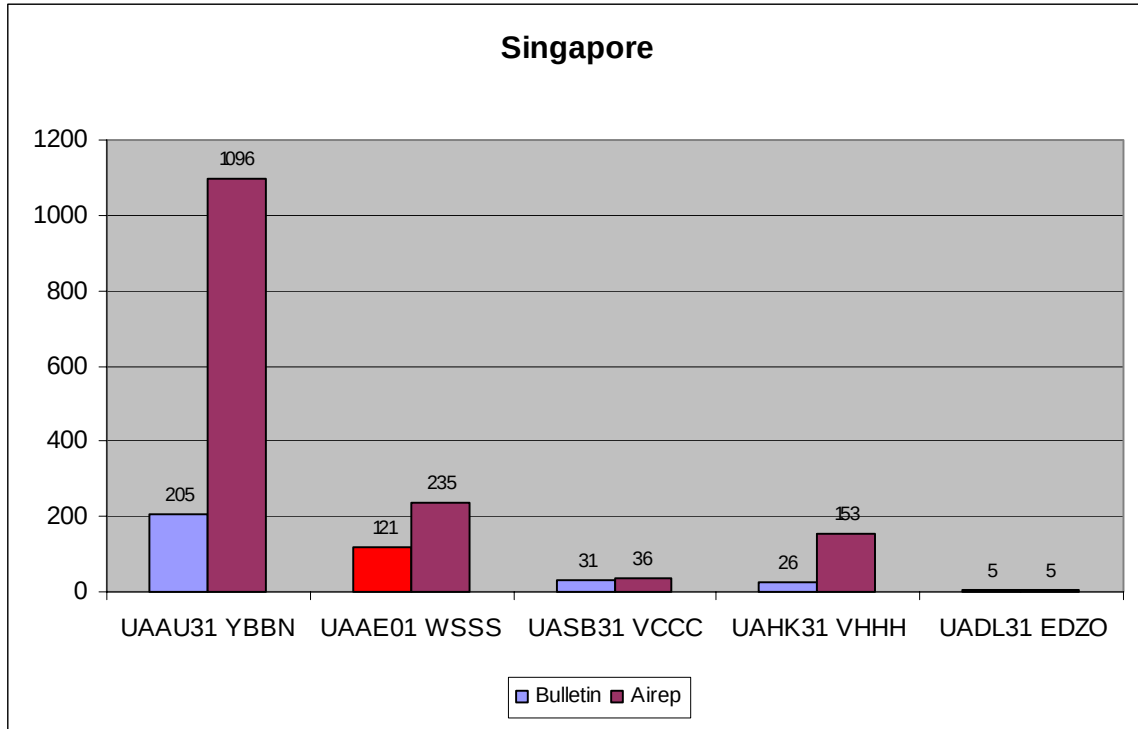


Figure 23 – Singapore Bulletins

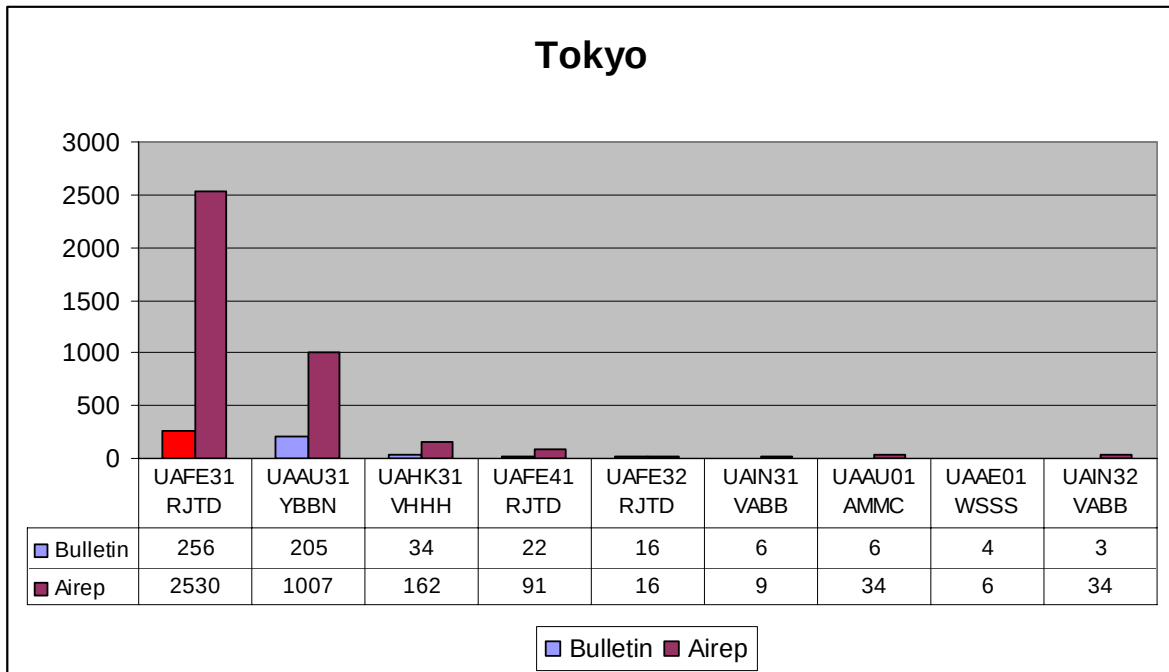
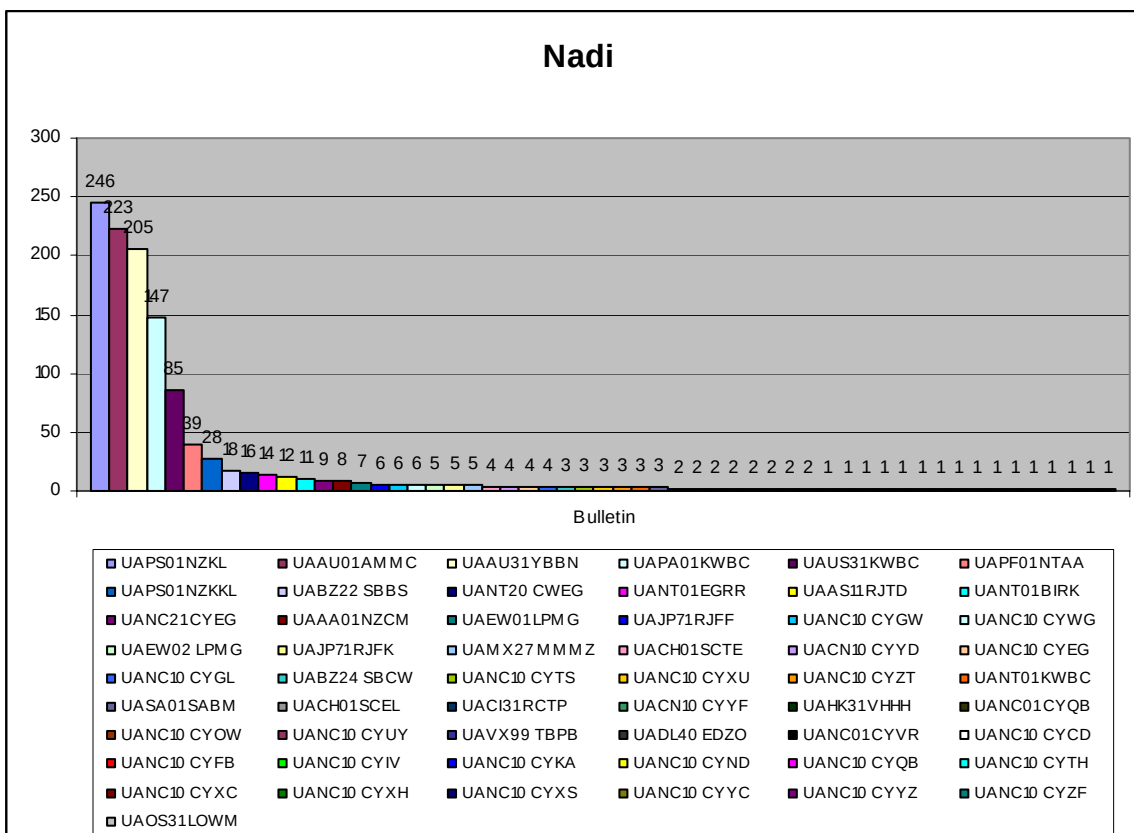
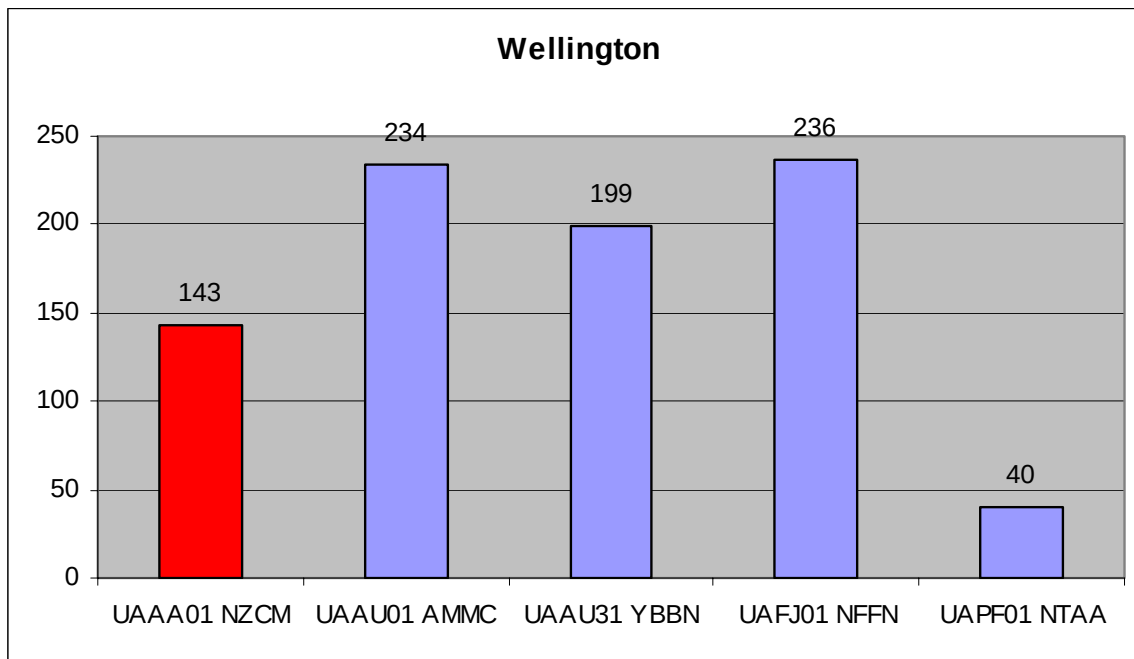


Figure 24 – Tokyo Bulletins



11 ARS Information contained in bulletins

The following centres reported ARS information in bulletins:

Tokyo	
Bulletin	ARS Information
UAFE32 RJTD	MOD TURB (2) and/or SMOOTH TURB

Singapore	
Bulletin	ARS Information
UANT90 EGRR	MOD to SEV TURB (2)
UADL31 EDZO	MOD to SEV TURB (2)
UADL31 EDZO	SEV ICE (3)

12 Incorrect bulletin format

ROBEX bulletins should be formatted in accordance with ICAO Annex 3 and ROBEX Handbook. The following centres reported incorrectly formatted bulletins and/or associated errors:

Bangkok	
Bulletin	Reported Error
UAIN31 VABB UAIN32 VABB UAAE01 WSSS UAAU01 AMMC Received from VABBYMYX	Bulletin too long
UAPS01 NZKL	Error reported - No other remarks provided

Tokyo	
Bulletin	Reported Error
UAAU01 AMMC UAAE01 WSSSS Received from VABBYMYX	Bulletin switched by VABBYMYX
UAIN31 VABB	Bulletin included UAAU01AMMC
UAIN32 VABB	Bulletin included UAAE01WSSS

Brisbane	
Bulletin	Reported Error
UAAU31YBBN generated by YBBBZEZX	Aircraft position – coded in ATS reporting points should be Latitude/Longitude.

Singapore	
Bulletin	Reported Error
UAAU31YBBN	Aircraft position – coded in ATS reporting points
UAAE01 WSSS UAAS11 RJTD UAAU01 AMMC UAPS01 NZKL UASB31 VCCC UAXE01 VHHH Received from VABBYMYX	Incorrect WMO abbreviated headers and relaying other centres' AIREP bulletins via AFTN
UAAU01 AMMC UAAS11 RJTD UAAU31 VABB UAIN32 VABB UAIN31 VIDP UAAE01 WSSS UAAU01 AMMC Doubled Bulletin Headers: UAIN31 VABB and UAPS01 NZKL UAIN31 VABB and UAAE01 WSSS UAIN31 VABB and UAAU01 AMMC UAIN31 VABB and UAAS11 RJTD UAIN31 VABB and UASB31 VCCC UAIN31 VIDP and UAAE01 WSSS UAIN32 VABB and UAAS11 RJTD UAIN32 VABB and UAPS01 NZKL UAIN32 VABB and UAAS11 RJTD Received from VABBYMYX	1) Incorrect WMO abbreviated header 2) Relaying other centres' AIREP bulletins via AFTN using more than one bulletin headers 3) Some of the ARPs compiled in the UAIN31 and UAIN32 VABB were not originated from VABB

13 Results and Observations

The response to the survey from participating centres was excellent. Responses were received on time and no follow up action was required.

13.1 Data Deficiencies

The data provided by some centres was deficient.

An example of this was:

Number of AIREP messages in bulletins was reported as 3-19 (between 3 and 19 AIREP messages), 1-45 (between 1 and 45 AIREP messages).

An average number was used from the figures provided, which distorted the overall figures.

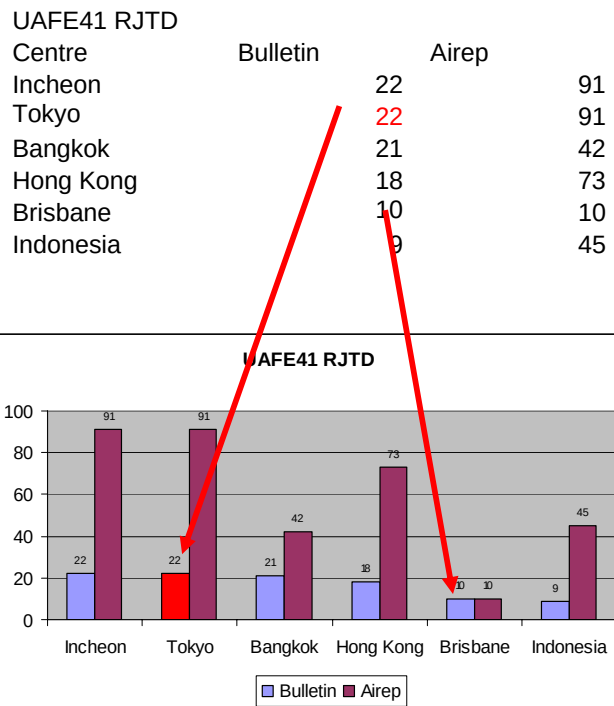
13.2 Data Discrepancies

There were some discrepancies in the data received from some participating centres.

An example of this:

Tokyo generated 22 “UAFE41” bulletins during the sample period.

Some centres reported bulletin figures less than those generated by Tokyo.



There are some possible reasons for this:

- Non-receipt of data on specific days due to problems with AFTN
- Non-receipt of data on specific days due to RODB system problems
- Data not stored by RODB system due to formatting errors
- Incorrect data reported by centres in the survey.

13.3 Recommendations

The following actions are recommended:

1. Centres should be commended for their participation.
2. Centres should review and check survey information to confirm accuracy of reported data.
3. Centres should review survey information to determine if the distribution of their AIREP bulletins is adequate.
4. Centres should review the survey information to determine if they require copies of other AIREP bulletins and advise generating centres to include in their distribution.
5. Centres generating UA bulletins and not distributing via AFTN should be advised to do so.
6. VABB Mumbai should be advised to check current ROBEX procedures and requested not to re-distribute or re-generate "UA" bulletins received from other centres.
7. Exchange procedures should be reviewed. Survey results show a fairly large number of AIREP bulletins exchanged over the GTS (WMO system). ARP generated by YBBN, RJTD and VHHH are exchanged regularly in the region over the AFTN. This shows some deficiencies in the current system.
8. One of the goals was to assess the availability of special air-reports. During the sample period less than ten (<10) ARS were exchanged. Existing ARS procedures should be assessed for adequacy.
9. A copy of all data compiled during the AIREP sample period to be made available to requesting centres.
10. A compact disk containing all survey information will be provided to attendees at the OPMET/M TF3 meeting to be held in Bangkok from 2nd to 4th March 2005.