



International Civil Aviation Organization

Eight Meeting of the Communications/Navigation/Surveillance and Meteorology Sub-Group (CNS/MET/SG/8) of APANPIRG

Bangkok, Thailand, 12 – 16 July 2004

Agenda Item 9: Exchange of OPMET Information

STUDY ON THE AIREP EXCHANGE

(Presented by Australia and Singapore)

SUMMARY

This paper presents a proposal for conducting a regional survey on the current status of AIREP exchange. The study is intended at providing up-to-date information on the exchange of air-reports to the OPMET/M Task Force in order to support its work on this subject.

1 INTRODUCTION

1.1 The Second Meeting of ASIA/PAC OPMET Management Task Force reviewed the ROBEX Handbook and a draft new version (12th edition) has been created. The meeting noted that due to the lack of up-to-date information regarding the AIREP exchange, chapter 9 of the Handbook has not been updated. It was felt that a survey on AIREP exchange with the ASIA/PAC and MID States would be necessary in order to collect information on the availability and the usage of the AIREP bulletins, and to verify the adequacy of the ROBEX procedures on the AIREP exchange.

1.2 The term AIREP is used to cover the routine and special air-reports described in Annex 3, Chapter 5: *Aircraft Observations and Reports*. In addition to Annex 3 provisions, regional procedures related to AIREP exchange for ASIA/PAC and MID regions are included in the *ROBEX Handbook*. All provisions related to AIREP exchange are summarized in the following table:

Type of air-report	Action by ATS	Action by MWO	Remark
DL - ARP	Relay to WAFCs (p. 5.9.1 b)	-	
V - ARP	Relay to MWO (p. 5.9.1 a)	1) Assemble and send to WAFCs; 2) Send to other met offices according to RAN (p. 5.9.2)	Regional dissemination to MET offices is done by ROBEX centres
DL - ARS	Relay to MWO and WAFCs (p. 5.9.1 c)	1) If ARS is for volcanic ash – relay to VAAC (p. 5.9.4)	
V - ARS	Relay to MWO	1) Transmit without delay to WAFCs (p. 5.9.3) 2) If ARS is for volcanic ash – relay to VAAC (p. 5.9.4) 3) If necessary – issue SIGMET 4) If no SIGMET issued – send the ARS in the same way as SIGMET (p. 5.9.5)	

Note: “DL” indicates messages received via data-link; “V” indicates messages received via voice communication

1.3 As seen from the table, the exchange of air-reports is a complex matter, therefore, OPMET/M TF/2 meeting 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.

2 DISCUSSION

2.1 The majority of the AIREP messages are still received from the aircrafts by means of voice communication and these are the messages to be exchanged through the ROBEX scheme. As seen from the table above, according to Annex 3, the ATS units and their associated MWOs are responsible for collecting and processing the AIREP messages within their FIRs. The MWOs are required to send the AIREP bulletins (usually, hourly collectives) to the WAFCs and to other meteorological offices as specified in the regional ANP.

2.2 However, according to the ROBEX Handbook (eleventh edition, 1998), AIREP messages should be collected by METAR collection centres (MCC) and the compiled hourly AIREP bulletins should be exchanged between the centres, according to the prescribed distribution lists. This ROBEX procedure should be validated through the survey and, therefore, the survey should encompass all States with designated MWOs. It should be noted also that according to the revised ROBEX scheme, the MCCs were replaced by ROBEX centres.

2.3 The AIREP Team developed a draft survey document, shown in Attachment 1 to this paper, for circulation to all States in the ASIA/PAC and MID region. The States will be requested to answer questionnaires related to the procedures utilized by the ATS units and MWOs, as well as by the ROBEX centres involved in collection and dissemination of AIREP messages/bulletins.

2.4 It is proposed that the survey would encompass a 10-day sampling period during which all ROBEX centres will be requested to file all AIREP bulletins received and transmitted and to forward this information to the AIREP team for processing.

2.5 In order to assist in preparing the survey, RODB Brisbane and Singapore carried out some preliminary tests on the availability of AIREP bulletins in their respective databases. Some results of this preliminary survey are given in Attachment 2. Based on this results, some observations have been made, as follows:

- Only few ROBEX centres participate in the regular AIREP exchange with Singapore and Brisbane;
- The abbreviation “ARP” and “ARS”, which should be used in the beginning of each individual AIREP to identify AIREP and AIREP SPECIAL respectively, are not used by most of the issuing centres; therefore, the recognition of special air-reports is difficult; in this regards, OPMET/M TF/2 proposal for designating a separate data type designator should be supported;
- The Annex 3 requirement for converting the position information to latitude/longitude value is not followed by all centres.

2.6 It is expected that the full-scale AIREP survey would provide much more information on the subject and would allow the OPMET/M TF to develop proposals for updating the ROBEX scheme as regards the AIREP exchange as necessary.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information in this paper;
- b) review the draft AIREP survey document and propose any changes;
- c) review and comment the preliminary results on the AIREP exchange.

ASIA/PAC OPMET Management Task Force – AIREP



**ASIA/PAC OPMET Management Task Force (OPMET/M TF/2)
of CNS/MET Sub-group of APANPIRG**

AIREP Survey

(AIREP Team comprising Singapore and Australia –assisted by RODB's and ROBEX)

ASIA/PAC OPMET Management Task Force – AIREP

1. Introduction

1.1 The Second Meeting of ASIA/PAC OPMET Management Task Force reviewed the ROBEX Handbook and a draft new version (12th edition) has been created. The meeting could not update Chapter 9 of the Handbook, AIREP Exchange, due to the lack of up-to-date information regarding the AIREP exchange carried out by the States in the ASIA/PAC and MID Regions. Therefore, it was decided that a survey with the ASIA/PAC and MID States on AIREP exchange should be conducted in order to verify the current AIREP exchange procedures, as well as to receive feed-back on the availability and the usage of the AIREP bulletins.

1.2 OPMET/M TF/2 meeting 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 AIREP Team developed a questionnaire to be circulated to all ROBEX centres involved in collection and dissemination of AIREP messages/bulletins. The survey would be carried out over a 10-day sampling period during which all ROBEX centres will be invited to file the AIREP bulletins received/transmitted and to forward this information to the AIREP team for processing.

1.3 In their response to the survey States should take into account the Annex 3 provisions for air-reporting and the regional requirements, which are reflected in the ROBEX Handbook.

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

2. Objective and expected goals

2.1 The main objective of this survey is to provide information on the existing procedures for the collection and dissemination of AIREP messages and bulletins 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.

2.2 The main goals to be achieved are:

- To assess if the procedures used by the States for collection and dissemination of AIREP are in line with the Annex 3 requirements;
- To assess if the procedures in use ensure the transmission of all required AIREP information to the WAFCS;
- To check the procedures used by the ROBEX centres and the availability of AIREP bulletins based on a 10-day sampling period
- To show the availability of special air-reports;
- To check the correctness of the format of the AIREP messages and bulletins;
- To allow the OPMET/TF to assess the adequacy of the AIREP exchange under the ROBEX scheme and make any proposal thereupon.

ASIA/PAC OPMET Management Task Force – AIREP

3. Survey Procedures

3.1 The States are requested to provide information on the procedures used by their ATS units and MWOs in collecting and disseminating AIREP messages by answering the questions in the questionnaire provided in the **Appendix A**.

3.2 ROBEX centres are requested to carry out a 10-day sampling period for the AIREP bulletins and to provide summaries and/or filed information, as follows:

3.2.1 Participating ROBEX centres

All ASIA/PAC and MID RODBs and ROBEX centres are invited to participate in the AIREP survey. Each centre is requested to advise the AIREP team if they are unable to take part in the survey by advising the AIREP team prior to the commencement of the sampling period.

ROBEX Centres:**ASIA/PAC Regions**

Beijing	Colombo	Delhi	Hong Kong	Jakarta
Karachi	Kolkata	Kuala Lumpur	Mumbai	Port Moresby

MID Region

Baghdad	Bahrain	Beirut	Jeddah	Tehran
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RODB:

Bangkok	Brisbane	Nadi	Singapore	Tokyo
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3.2.2 AIREP Bulletin Sampling

3.2.2.1 To ensure that comprehensive sampling is carried out, a 10 day AIREP bulletin sampling period has been selected. The sampling period will last from 0000 UTC on 1 October until 2359 UTC on 10 October 2004. All participating centres should make arrangements that the required information is stored during the sampling period.

3.2.2.2 The survey will involve two separate components:

- AIREP Bulletin information received or collected by the centre; and
- AIREP Bulletin information compiled and disseminated by the centre

3.2.2.3 The following information is to be recorded or notated

For AIREP bulletins received or collected by the centre
1. Collection Date
2. Number of daily AIREP (UA) Bulletins received at ROBEX Centre via AFTN
3. UA bulletin Header (TTAAii CCCC) sent by MWOs
4. Originator of the UA bulletin
5. Number of AIREP messages in the bulletin (if available)
6. Any Special Air-Reports (ARS) received; type of ARS (volcanic activity etc.).
7. Remarks or comments, including information on the correctness of the bulletin/message format in accordance with ICAO Annex 3

ASIA/PAC OPMET Management Task Force – AIREP

For AIREP bulletins compiled and/or disseminated by the centre
1. Collection Date
2. Number of daily UA bulletins compiled, generated and distributed via AFTN
3. UA bulletin Header (TTAAii CCCC) used on the generated bulletin
4. AFTN address/s used to distribute the bulletin, including WAFC address/s used to distribute AIREP
5. Number of AIREP messages in the bulletin (if available)
6. Any Special Air-Reports (ARS) generated; type of ARS (volcanic activity etc.)
7. Remarks or comments, including information on the correctness of the bulletin/message format in accordance with ICAO Annex 3

3.3 Format of the data

3.3.1 The data sampled by the ROBEX centres and RODBs should be summarized and the summaries presented in the table format using the forms provided herewith in the **Appendix A** and **Appendix B**. Some examples of AIREP bulletins are provided in the **Appendix C**.

3.3.2 If the ROBEX centre is not capable of doing the summary, it is requested that the sampled “raw” data is sent to the AIREP team for processing. In any case, it is desirable that all AIREP bulletins collected during the sampling period are stored and send to the AIREP team for further processing, as necessary. An example of some sample survey information has been included as Attachment C.

3.3.3 For ROBEX centres that currently do not handle AIRMET information it is requested to provide a simple message describing the reasons for which AIRMET is not collected/distributed and any future plans thereupon.

3.4 **Submitting completed forms or compiled information**

3.4.1 At the end of the sampling period, completed forms or compiled sampling information is to be forwarded to the AIREP collection point as soon as practicable and no later than **22 October 2004**.

3.4.2 Participating ROBEX centres/RODBs can either:

- Forward an electronic copy of all AIREP information collected during the sample period to the following email address: aidan.cooley@airservicesaustralia.com ; or
- Complete and forward the attached AIREP Sampling Sheets (Attachment A and B) by electronic mail to aidan.cooley@airservicesaustralia.com or
- Post any materials/results to:
Aidan Cooley (AIREP REPORT)
Locked Bag 747, Eagle Farm QLD 4009
Australia

ASIA/PAC OPMET Management Task Force – AIREP

4. Coordination

4.1 If any centre has any questions or requires assistance to participate in this important AIREP survey please contact the AIREP team:

Mr. Aidan COOLEY Data Administrator Airservices Australia Locked Bag 747 Eagle Farm Brisbane QLD 4009 Tel: +61 (7) 38663762 Fax: +61 (7) 38663553 e-mail: aidan.cooley@airservicesaustralia.com	Ms. CHUA Guat Mui Supervisor, Main Meteorological Office Meteorological Services Division National Environment Agency Singapore Changi Airport P.O. Box 8 Singapore 918141 Tel: +65 65422861 Fax: +65 65425026 e-mail: chua_guat_mui@nea.gov.sg
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Appendices:

Appendix A – QUESTIONNAIRE – GENERAL INFORMATION ON AIREP

Appendix B – Information on AIREP bulletin exchange by the ROBEX centres

Appendix C – Sample AIREP Bulletins

Asia/ Pacific Regional Survey on AIREP Exchange

APPENDIX A

QUESTIONNAIRE – GENERAL INFORMATION ON AIREP

(Place X in box where applicable)

The purpose of this questionnaire is:

- 1) to acquire basic information on the State's procedures regarding the AIREP exchange ;
and
- 2) to collect views for future development of the regional procedures for AIREP exchange.

DEFINITION: The term AIREP Exchange is used here to cover the collection, dissemination and exchange of routine and special air-reports as described in Annex 3, Chapter 5, *Aircraft Observations and Reports*.

Q1. State: _____

1.1 Name and address of the administration unit to which AIREP exchange related issues should be addressed

Note: Collection and dissemination of AIREP requires cooperation between the ATS units and the Meteorological Watch Offices (MWO). If necessary, list both administrations that may be concerned with AIREP.

Q2. Is/are the Meteorological Watch Office/s (MWO) in your State tasked to collect air-reports as per Annex 3, Chapter 5? Yes _____ No _____

Q3. Describe in brief the procedures in place for relaying air-reports by the ATS unit(s) to the associated MWO(s):

Q4. Describe in brief the procedures used by MWO(s) for handling air-reports, in particular:

A) coding procedures:

B) AIREP bulletin preparation:

C) transmission of AIREP bulletins to WAFCs:

D) transmission of AIREP bulletins to responsible ROBEX centre:

E) procedures for handling special air-reports (ARS):

Q5. Comments and/or requirements on future development of the regional procedures for AIREP exchange:

*Please return completed questionnaire to ICAO Asia and Pacific Office by
(e-mail: icao_apac@bangkok.icao.int / facsimile: +66 (2) 537 8199)*

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Asia/ Pacific Regional Survey on AIREP Exchange

APPENDIX B

INFORMATION ON AIREP BULLETIN EXCHANGE BY THE ROBEX CENTRES

ROBEX Centre Name _____

Name of the administration unit to which AIREP related issued should be addressed _____

Name of a contact person _____

Tel: _____

Fax: _____

E-mail Address: _____

[illegible]

Form for Recording AIREP Information Compiled and Generated by the Centre						
Date (YYMMDD)	Number of Bulletins Generated	UA AIREP Bulletin Headers (TTAAii CCCC)	AFTN address/s used to distribute the bulletin, including WAFC address/s if used	Number of AIREP messages in the bulletin (if available)	Any Special Air-Reports (ARS) generated; type of ARS (volcanic activity etc.)	Remarks or comments. Correctness of the bulletin/message format in accordance with ICAO Annex 3

Asia/ Pacific Regional Survey on AIREP Exchange

APPENDIX C

Sample AIREP Bulletins

Some examples of AIREP (UA) bulletins as currently exchanged under the ROBEX scheme are provided below:

301840 VCCCYPYX

UASB31 VCCC 301840

CPA748 KADAP1817 FL370 T MS48 SPOT 085/35=

(Above bulletin contain 1 ARP but is not in the correct Annex 3 format – Positions should be reported as Latitude/Longitude)

210014 RJAAYPYX

UAFE31 RJTD 210000

JAL601 4144N 14813E 2312 F340 MS39 280/65=

JAL640 4144N 14813E 2322 F320 MS33 270/65=

FDX87 4900N 16001E 2321 F380 MS55 320/47=

NWA907 4223N 14729E 2328 F360 MS47 265/60=

NCA103 4223N 14729E 2330 F370 MS47 275/55=

FDX79 4144N 14813E 2341 F340 MS40 280/60=

JAL606 4144N 14813E 0002 F360 MS44 280/65=

NWA78 2100N 14259E 0006 F360 MS46 050/37KT=

NWA912 2835N 13349E 0011 F290 MS25 230/15KT=

(Above bulletin contain 9 ARP and is in the correct Annex 3 format - Positions reported as Latitude/Longitude)

290355 VHHHPYX

UAHK31 VHHH 290300

CAL652 1702N 11341E 0326 F320 MS37 190/12KT=

CAL652 1814N 11433E 0337 F320 MS36 180/06KT=

(Above bulletin contain 2 ARP and is in the correct Annex 3 format - Positions reported as Latitude/Longitude)

302350 YBBBZEZX

UAAU31 YBBN 302350

VHFNY KAGUX 2256 F350 ROSEY 2322 MS47 245/65=

ANZ123 MIKEL 2325 F360 GEMAC 0012 MS60 193/44=

PAO855 OLREL 2250 F380 MAGDA 2343 180/68 MS66=

PBI42 PLUGA 2320 F390 SASRO 0020 MS66 160/40=

ANZ123 SASRO 2249 F360 MIKEL 2325 MS60 188/80=

(Above bulletin contain 5 ARP but is not in the correct Annex 3 format - Positions should be reported as Latitude/Longitude)

— END —



**ASIA/PAC OPMET Management Task Force (OPMET/M TF/2)
of CNS/MET Sub-group of APANPIRG**

**Brisbane and Singapore AIREP Sample Survey
15th to 21st May 2004**

1. Background

In preparation for a combined AIREP survey involving all ROBEX centres Brisbane and Singapore conducted a preliminary survey to test procedures and obtain advanced information on what AIREP information is being exchanged.

All AIREP ROBEX bulletins type “UA“ received and transmitted by Brisbane and Singapore RODB were captured and examined during the sample period.

Separate reports were compiled and generated by Singapore and Brisbane.

The following survey results are attached:

- Annex A – Completed sample survey forms submitted by Brisbane
- Annex B – Completed Survey results submitted by Singapore
Note: Includes number of ARP reports in each bulletin
- Annex C – Completed Survey results submitted by Brisbane
Note: Number of ARP in each bulletin not included
- Annex D – Inter-comparison of the AIREP exchange via AFTN and GTS by Singapore
Note: Number of ARP in each bulletin not included

Annex “A” Sample Survey Forms Part 1

Name of the administration unit to which AIREP related issued should be addressed **Australian Flight Information Centre (AusFIC)**

Name of a contact person regarding AIREP Aidan Cooley

Address: Locked Bag 747 Eagle Farm QLD 4009

Tel: 61 7 3866 3762

Fax: 61 7 3866 3553

E-mail Address: aidan.cooley@airservicesaustralia.com

Form for Recording AIREP Information Received or Collected by the Centre						
Date	Number of Bulletins received	UA AIREP Bulletin Header (TTAAii CCCC)	Originator of Bulletin (AFTN address)	Remarks or comments	Special Air Report (ARS) YES/NO ***Volcanic Activity or Volcanic Ash***	Bulletin formatted correctly YES/NO (In accordance with Annex 3)
15/5/04	24	UAFE31	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
16/5/04	24	UAFE31	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
17/5/04	25	UAFE31	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
18/5/04	26	UAFE31	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
19/5/04	25	UAFE31	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
20/5/04	25	UAFE31	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
21/5/04	30	UAFE31	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
15/5/04	15	UAFE32	RJAAYPYX	Addressed to YBZZSPRX	NO	No - incorrectly formatted
16/5/04	5	UAFE32	RJAAYPYX	Addressed to YBZZSPRX	NO	No - incorrectly formatted
17/5/04	3	UAFE32	RJAAYPYX	Addressed to YBZZSPRX	NO	No - incorrectly formatted
18/5/04	13	UAFE32	RJAAYPYX	Addressed to YBZZSPRX	NO	No - incorrectly formatted
19/5/04	2	UAFE32	RJAAYPYX	Addressed to YBZZSPRX	NO	No - incorrectly formatted
20/5/04	13	UAFE32	RJAAYPYX	Addressed to YBZZSPRX	NO	No - incorrectly formatted
21/5/04	17	UAFE32	RJAAYPYX	Addressed to YBZZSPRX	NO	No - incorrectly formatted
15/5/04	2	UAFE41	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
17/5/04	1	UAFE41	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
18/5/04	2	UAFE41	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
19/5/04	1	UAFE41	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
20/5/04	3	UAFE41	RJAAYPYX	Addressed to YBZZSPRX	NO	YES

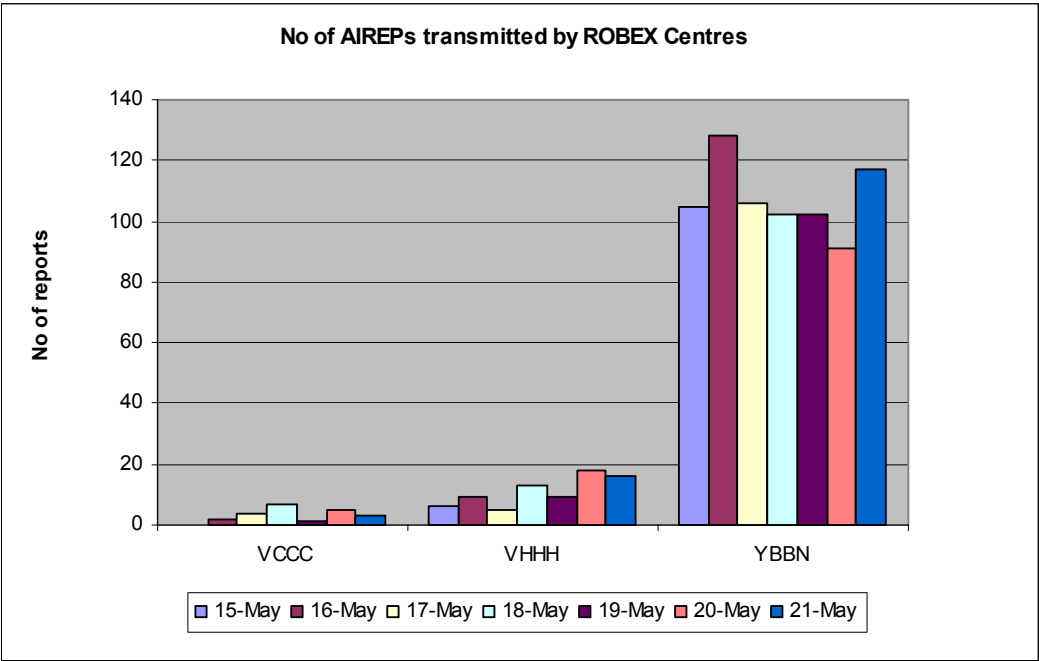
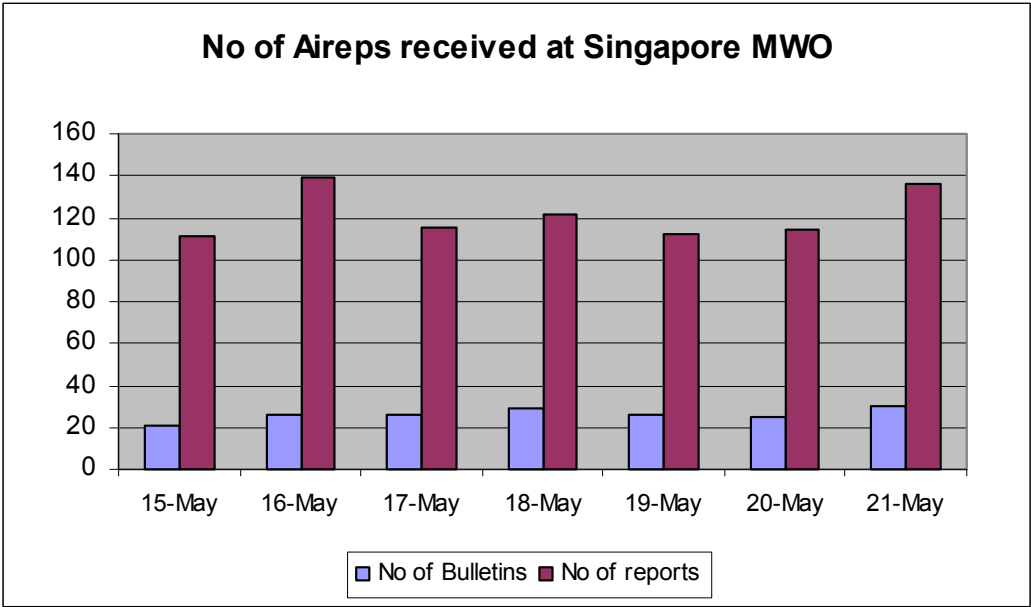
Form for Recording AIREP Information Received or Collected by the Centre						
Date	Number of Bulletins received	UA AIREP Bulletin Header (TTAAii CCCC)	Originator of Bulletin (AFTN address)	Remarks or comments	Special Air Report (ARS) YES/NO ***Volcanic Activity or Volcanic Ash***	Bulletin formatted correctly YES/NO (In accordance with Annex 3)
21/5/04	3	UAFE41	RJAAYPYX	Addressed to YBZZSPRX	NO	YES
15/5/04	2	UAHK31	VHHHPYX	Addressed to YBZZSSYX	NO	YES
16/5/04	2	UAHK31	VHHHPYX	Addressed to YBZZSSYX	NO	YES
17/5/04	3	UAHK31	VHHHPYX	Addressed to YBZZSSYX	NO	YES
18/5/04	2	UAHK31	VHHHPYX	Addressed to YBZZSSYX	NO	YES
20/5/04	2	UAHK31	VHHHPYX	Addressed to YBZZSSYX	NO	YES
210/5/04	2	UAHK31	VHHHPYX	Addressed to YBZZSSYX	NO	YES
21/5/04	2	UASS20	VHHHPYX	Addressed to YBZZSSYX	YES ARS Not Volcanic	YES

Annex “A” Sample Survey Forms Part 2

Centre Name **Australia - Brisbane**

Form for Recording AIREP Information Compiled or Disseminated by the Centre						
Date	Number of Bulletins Generated	UA AIREP Bulletin Header (TTAAii CCCC)	AFTN address/s used to distribute the Bulletin	Remarks or comments	Special Air Report (ARS) YES/NO ***Volcanic Activity or Volcanic Ash***	Bulletin formatted correctly YES/NO (In accordance with Annex 3)
15/5/04	19	UAAU31	AYPMYMYX NFFNYMYX NZKLYMYX RJAAYMYX VHZZYPYX WIZZMGMG WMZZNBXX WSSSYMYX YMMCYMYX		NO	NO – location names/abbreviations - should be lat/long
16/5/04	21	UAAU31	AYPMYMYX NFFNYMYX NZKLYMYX RJAAYMYX VHZZYPYX WIZZMGMG WMZZNBXX WSSSYMYX YMMCYMYX		NO	NO – location names/abbreviations - should be lat/long
17/5/04	21	UAAU31	AYPMYMYX NFFNYMYX NZKLYMYX RJAAYMYX VHZZYPYX WIZZMGMG WMZZNBXX WSSSYMYX YMMCYMYX		NO	NO – location names/abbreviations - should be lat/long
18/5/04	25	UAAU31	AYPMYMYX NFFNYMYX NZKLYMYX RJAAYMYX VHZZYPYX WIZZMGMG WMZZNBXX WSSSYMYX YMMCYMYX		NO	NO – location names/abbreviations - should be lat/long
19/5/04	24	UAAU31	AYPMYMYX NFFNYMYX NZKLYMYX RJAAYMYX VHZZYPYX WIZZMGMG WMZZNBXX WSSSYMYX YMMCYMYX		NO	NO – location names/abbreviations - should be lat/long
20/5/04	22	UAAU31	AYPMYMYX NFFNYMYX NZKLYMYX RJAAYMYX VHZZYPYX WIZZMGMG WMZZNBXX WSSSYMYX YMMCYMYX		NO	NO – location names/abbreviations - should be lat/long
21/5/04	25	UAAU31	AYPMYMYX NFFNYMYX NZKLYMYX RJAAYMYX VHZZYPYX WIZZMGMG WMZZNBXX WSSSYMYX YMMCYMYX		NO	NO – location names/abbreviations - should be lat/long

Annex “B” Singapore Survey Results



Annex “B” Singapore Survey Results

Sample data compiled by Singapore - Single Day 15 th May					
S/N	AFTN	WMO Header			
	Originator	TTAAii	CCCC	No of ARP reports	Remarks/RX Time
1	VHHHYPYX	UAHK31	VHHH	5	150855
2	VHHHYPYX	UAHK31	VHHH	1	151255
3	YBBBZEZX	UAAU31	YBBN	14	150050
4	YBBBZEZX	UAAU31	YBBN	10	150150
5	YBBBZEZX	UAAU31	YBBN	2	150250
6	YBBBZEZX	UAAU31	YBBN	4	150450
7	YBBBZEZX	UAAU31	YBBN	4	150350
8	YBBBZEZX	UAAU31	YBBN	13	150550
9	YBBBZEZX	UAAU31	YBBN	11	150650
10	YBBBZEZX	UAAU31	YBBN	2	150750
11	YBBBZEZX	UAAU31	YBBN	5	150850
12	YBBBZEZX	UAAU31	YBBN	5	150950
13	YBBBZEZX	UAAU31	YBBN	6	151050
14	YBBBZEZX	UAAU31	YBBN	1	151150
15	YBBBZEZX	UAAU31	YBBN	1	151250
16	YBBBZEZX	UAAU31	YBBN	1	151850
17	YBBBZEZX	UAAU31	YBBN	3	151950
18	YBBBZEZX	UAAU31	YBBN	14	152050
19	YBBBZEZX	UAAU31	YBBN	1	152150
20	YBBBZEZX	UAAU31	YBBN	5	152250
21	YBBBZEZX	UAAU31	YBBN	3	152350

Sample AIREP Bulletin received by Singapore

GG WSSSYMYX

150050

YBBBZEZX

UAAU31 YBBN 150050

PBI62 COOPS 0032 F390 OMKIN 0102 MS58 262/48=

ANZ192 ECKHO 0008 F370 COOPS 0053 MS54 307/29=

QFA35 ECKHO 0004 F350 COOPS 0050 MS56 315/24=

QFA33 GEMAC 0025 F380 MIKEL 0106 MS51 292/40=

QFA37 GILLY 0015 F350 TOMAR 0053 MS57 353/10=

VHFNJ KAGUX 0000 F350 ROSEY 0028 MS43 265/130=

FOM422 LEPAR 0035 F350 GILLY 0114 MS55 308/27=

FOM926 LOKET 0003 F360 RUNOD 0103 MS47 265/11=

PBI42 PLUGA 0016 F405 ASC F410 SASRO 0106 271/84 MS49=

QFA47 PLUGA 0011 F330 SASRO 0105 MS46 275/45=

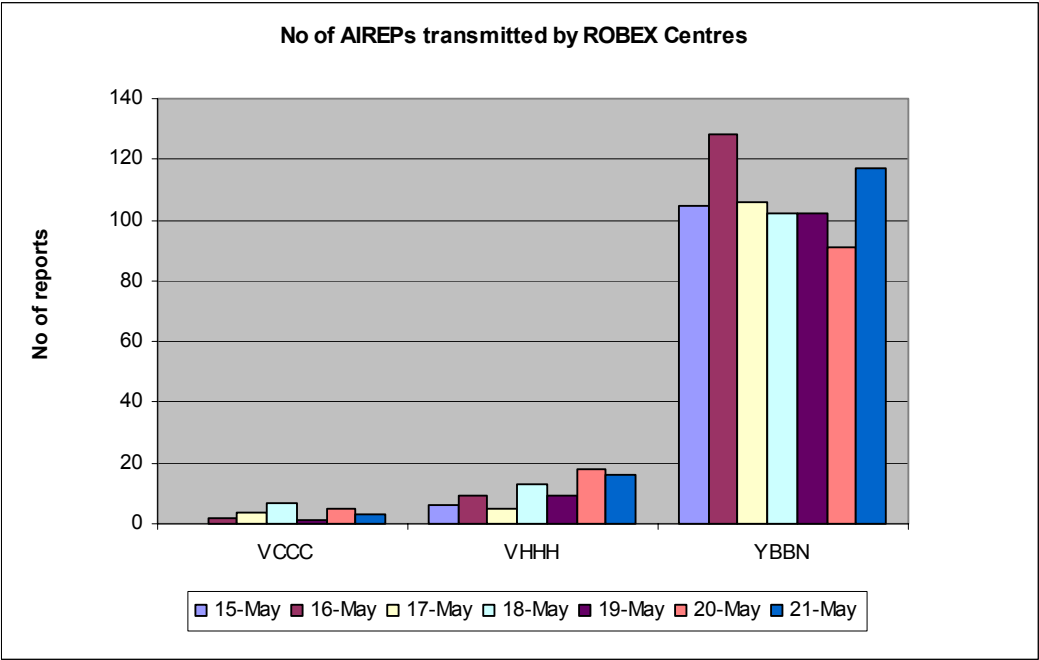
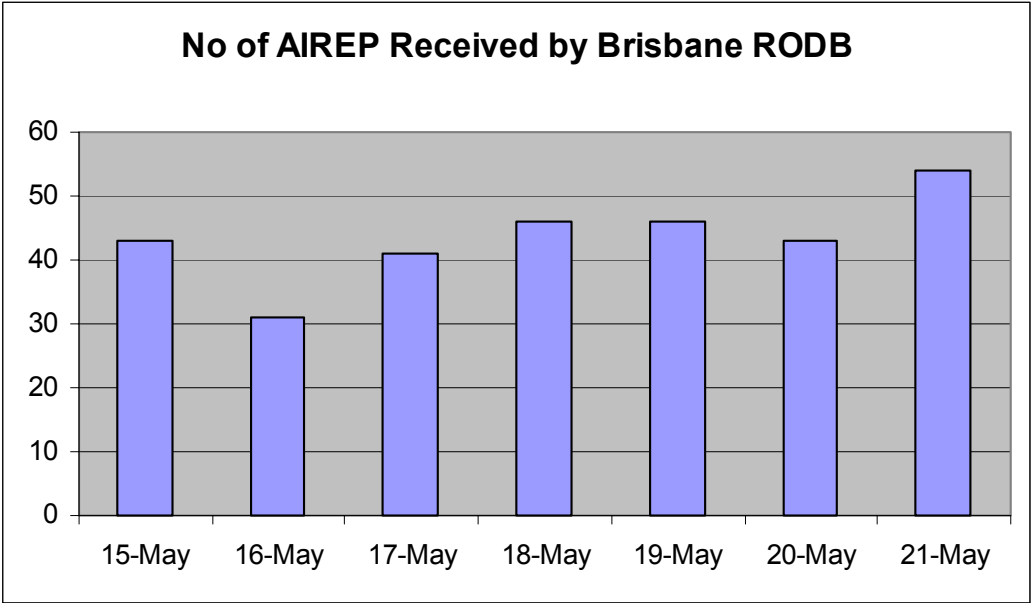
ASY601 TEKEP 0032 F280 LHI 0132 248/78 MS31=

ANZ232 TONIM 0046 F340 MIKEL 0114 270/50 MS48=

QFA119 WALTZ 0046 F350 ESKEL 0115 250/40 MS50=

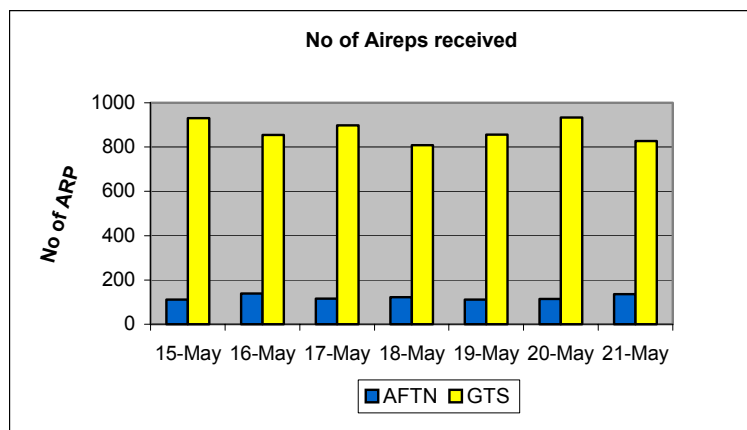
ANZ102 WALTZ 0038 F370 ESKEL 0108 MS47 260/60=

Annex “C” Brisbane Survey Results



Annex “D” Inter-comparison of AIREP exchange via AFTN and GTS Singapore

Collection of AIREPs at Singapore MWO		
15-21 May 2004		
No of Air-Reports received		
	AFTN	GTS
15-May	111	931
16-May	139	854
17-May	116	898
18-May	122	809
19-May	112	856
20-May	114	933
21-May	136	827



No of UA Bulletins Received		
	AFTN	GTS
15-May	21	124
16-May	26	124
17-May	26	124
18-May	29	123
19-May	26	122
20-May	25	123
21-May	30	122

