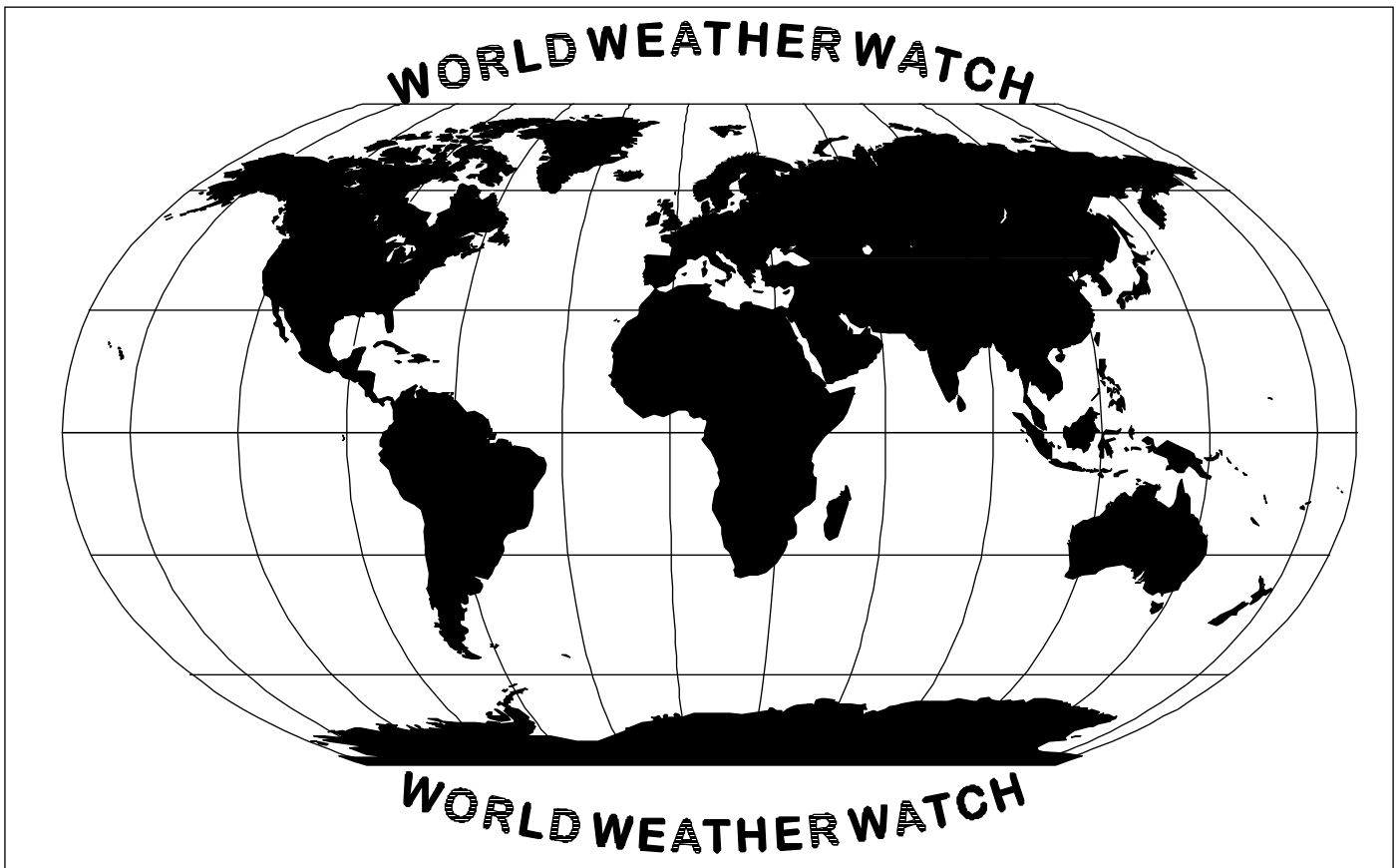


OPERATIONAL NEWSLETTER

VOLUME 1997

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WORLD METEOROLOGICAL ORGANIZATION
GENEVA
SWITZERLAND

The WMO Secretariat would like to express its appreciation to all those who have contributed material to the “Operational Newsletter”.



EDITORIAL

The Operational Newsletter on the World Weather Watch (WWW) and Marine Meteorological Services (MMS) has been issued since 1982 at the request of the Commission for Basic Systems. It is distributed by the WMO Secretariat and is aimed at providing WWW Centres with a summary of the latest operational information on:

- The Global Observing System
- The Global Telecommunication System
- The Global Data-Processing System
- Codes
- Marine Meteorological Services

A feedback form is included in the Newsletter to assist WMO Members in reporting changes in the present status of implementation of observing programmes of SYNOP, TEMP and PILOT reporting stations.

Your co-operation in ensuring that the above information reaches the appropriate operational units of your service is greatly appreciated.

In addition to the printed version which is distributed by mail, the Operational Newsletter is also available at the following locations:

For access via FTP:

<ftp://WWW.WMO.CH/wmo-ddbs/Newsltrxxxx.html>

For access via html:

<http://WWW.WMO.CH/web/www/Newsltrxxxx.html>
(xxxx indicates the year/month (eg. 9701))

PLEASE check our World Weather Watch home page for the most recent edition.

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To view the Newsletter you will require "Adobe Acrobat Reader", which can be downloaded from:

<http://www.adobe.com/Acrobat/readstep.html>

We apologize to those readers who may have experienced difficulties with our electronic version of the 11/12 1996 Newsletter produced in .html. You may be pleased to know that this was done on a trial basis. This year we hope to keep to our standard format of .pdf.

Comments are more than welcome. Should you have any difficulties downloading, viewing or printing the Newsletter ... Our e-mail address is as follows:

PWOI@WWW.WMO.CH

We look forward to hearing from you.

Rising costs demand that we scale down the distribution of the Newsletter by letter mail, so we strongly encourage our readers to help us become more cost-effective by using our new on-line service.

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I. GLOBAL OBSERVING SYSTEM

Information on the Operational Status of Elements of the Surface-based Sub-System

Publication No. 9
Volume A - Observing Stations

Index No.	Station Name	POSITION		ELEVATION		OBSERVATION PROGRAM						OBS. H	UPPER-AIR				Remarks and Abbreviated Headings of Bulletins
		Latitude	Longitude	HP	H/HA	00	03	06	09	12	15	18	21	OBS. S	00	06		12	18

Region I: SEYCHELLES

Date Effective: 1/12/1996

New Stations:

63985	SEYCHELLES INTERNATIONAL AIRPORT (RAWINSONDE STATION)	04 40S	55 32E	04 m	-	.	.	.	.	.	.	.	.	RW	.	RW	.	USSC01 FSIA; UKSC01 FSIA ULSC01 FSIA; UESC01 FSIA
63998	DESROCHES	05 41S	53 40E	03 m	03 m	X	X	X	X	X	X	X	X	.	.	.	.

Region II: CHINA

Date Effective: 31/12/1996

Amended Station

56144	DEGE	31.48N	98.35E	3185 m	3184 m	X	X	X	X	X	.	X	X	
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Region III: GUYANA

Date Effective: 12/12/1996

Amended Stations (Global/Regional):

81001	GEORGETOWN	06 48N	58 09W	2 m	1 m	.	.	.	.	X	X	X	X	.	.	.	.	SMGY01 SYTM
81002	TIMEHRI AIRPORT	06 30N	58 15W	30 m	28 m	X	X	X	X	X	X	X	X	.	.	.	.	SMGY01 SYTM
81005	KAMARANG	05 53N	60 30W	495 m	494 m	.	.	.	.	X	X	X	X	.	.	.	.	Not transmitting real time due to telecommunication problem SMGY01 SYTM
81006	LETHEM	03 22N	59 48W	82 m	82 m	.	.	.	.	X	X	X	X	.	.	.	.	Not transmitting real time due to telecommunication problem SMGY01 SYTM
81010	EBINI	05 34N	57 47W	29 m	28 m	.	.	.	.	X	X	X	X	.	.	.	.	Not transmitting real time due to telecommunication problem SMGY01 SYTM
81058	NEW AMSTERDAM	06 15N	57 18W	1 m	1m	.	.	.	.	X	X	X	X	.	.	.	.	SMGY01 SYTM
81080	KAIETEUR FALLS	05 11N	59 29W	439 m	438 m	.	.	.	.	X	X	X	X	.	.	.	.	SMGY01 SYTM
81100	MABARUMA	18 12N	59 47W	50 m	50 m	.	.	.	.	X	X	X	X	.	.	.	.	Not transmitting due to unavailability of observers; SMGY01 SYTM

Region III: ISLANDS IN SOUTH AMERICA

Date Effective: 10/12/1996

Amended Station (Global/Regional):

88903	GRYTVIKEN, SOUTH GEORGIA	54 16S	36 30W	3 m	-	X	X	X	X	AUT
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Region IV: UNITED STATES OF AMERICA

Date Effective: 5/12/1996

New Stations:

74547	HILLSBORO, KS.	38 37N	97 18W	447 m	446 m	RW		Mon-Fri; (2)
74641	VICI, OK.	36 04N	99 20W	622 m	621 m	.	.	.	.	.	.	.	.	.	.	RW		Mon-Fri; (2)
74646	LAMONT, OK.	36 37N	97 29W	318 m	317 m	.	.	.	.	.	.	.	.	RW	RW	RW		Mon-Fri; also 15 & 21 UTC (2)
74650	MORRIS, OK.	35 41N	95 52W	217 m	216 m	.	.	.	.	.	.	.	.	.	.	RW		Mon-Fri; (2)
74651	PURCELL, OK.	34 58N	97 42W	344 m	343 m	.	.	.	.	.	.	.	.	.	.	RW		Mon-Fri; (2)
89049	AGO-2	85 40S	46 23W	1860 m	-	X	.	X	.	X	.	X	.	.	.	.	.	AUT; (3)
89528	AGO-3	82 46S	28 35E	2912 m	(1)	X	.	X	.	X	.	X	.	.	.	.	.	AUT; (3)
89598	AGO-4	82 01S	96 46E	3565 m	-	X	.	X	.	X	.	X	AUT; (3)
89627	AGO-5	77 14S	123 31E	3084 m	-	X	.	X	.	X	.	X	AUT; (3)

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Index No.	Station Name	POSITION		ELEVATION		OBSERVATION PROGRAM						OBS. H	UPPER-AIR				Remarks and Abbreviated Headings of Bulletins		
		Latitude	Longitude	HP	H/HA	00	03	06	09	12	15	18	21	OBS. S	00	06		12	18
89628	AGO-1	83 52S	129 37E	2865 m	-	X	X	X	X	.	.	.	.	.	.	.	.	.	AUT; (3)
89637	AGO-6	69 31S	130 01E	2560 m	-	X	X	X	X	.	.	.	.	.	.	.	.	.	AUT; (3)

(1) The elevation H/HA has not been furnished

(2) Station operated by US Department of Energy's Atmospheric Radiation Measurement Program. There will be three to five Intensive Operational Periods (IOP) per year, with a duration of 3 to 5 weeks each. During the IOPs, all sites will launch on a 3-hour schedule, 7 days per week. All sites use Vaisala RS-80 sondes.

(3) Station operated by Antarctic Support Associates for US National Science Foundation. The observations will be relayed through Service ARGOS in Landover, Maryland, and entered onto the GTS through the RTH Washington.

Amended Stations:

72662	(P) RAPID CITY REGIONAL AIRPORT, SD	44 03N	103 03W	965 m	976 m	X	X	X	X	.	.	.	.	H00-24	.	.	.	.	A;CLIMAT(C);RSD; SUNDUR;BAPMON
	(P) RAPID CITY WFO, SD	44 05N	103 13W	1029 m	1028 m	.	.	.	.	.	.	.	.	RW	.	RW	.	.	WT

Region V: AUSTRALIA

Date Effective: 02/01/97

Deleted Stations (Regional)

Index No.	Station Name
94175	THURSDAY ISLAND TOWNSHIP
94239	MCARTHUR RIVER
95573	INGLEWOOD FORESTRY
95574	TEWANTIN
94603	ROTTNEST ISLAND
94685	CADELL
94703	BOURKE (POST OFFICE)
94731	MUDGE
94858	WEST CHANNEL AWS
94931	BEGA
95871	LEMNOS
95950	WARATAH
95954	ROSEBERRY STATION

New Stations (Regional):

94128	DOUGLAS RIVERAWS	13.50.00S	131.11.00E	50 m	49 m	23	02	05	08	11	14	17	20	(no changes)	AUT;EVAP;SOILTEMP; SUNDUR SNAU46 AMMC
94293	TOWNSVILLE DOTSWOOD	19.38.00S	146.17.00E	281 m	280 m	23	02	05	08	11	14	17	20	(no changes)	AUT SNAU47 AMMC
94316	PARABURDOO PARABURDOO AERO	23.10.00S	117.45.00E	424 m	423 m	01	04	07	10	13	16	19	22	(no changes)	A;AUT SNAU47 AMMC, SNAU40 AMMC
94429	MT MAGNET MT MAGNET AERO	28.07.00S	117.50.00E	409 m	411 m	01	04	07	10	13	16	19	22	(no changes)	A;AUT SNAU41 AMMC
94475	MOUNT DARE STATION	26.04.00S	135.15.00E	(1)	150 m	23	-	05	-	-	-	-	-	(no changes)	SNAU44 AMMC
94560	SAMFORD CSIRO	27.22.00S	152.53.00E	(1)	53 m	23	-	-	-	-	-	-	-	(no changes)	EVAP;SOILTEMP;RAD
94570	TEWANTIN TEWANTIN RSL PARK	26.23.00S	153.02.00E	7 m	6 m	23	02	05	08	11	14	17	20	(no changes)	AUT SNAU49 AMMC
94583	ALSTONVILLE TROPICAL FRUIT RESEARCH STN	28.51.00S	153.27.00E	(1)	140 m	23	-	-	-	-	-	-	-	(no changes)	EVAP;SOILTEMP;SUNDUR SNAU50 AMMC
94585	GLEN INNES GLEN INNES AGR RESEARCH STN	29.42.00S	151.42.00E	(1)	1060 m	23	-	-	-	-	-	-	-	(no changes)	EVAP;SOILTEMP;SUNDUR SNAU50 AMMC
94588	GLEN INNES GLEN INNES AIRPORT	29.41.00S	151.41.00E	1045 m	1046 m	23	02	05	08	11	14	17	20	(no changes)	A;AUT SNAU50 AMMC
94628	NEWDEGATE NEWDEGATE RES.STATION	33.07.00S	118.50.00E	321 m	320 m	01	04	07	10	13	16	19	22	(no changes)	AUT SNAU42 AMMC
94631	ROCKY GULLY	34.34.00S	117.01.00E	251 m	250 m	01	04	07	10	13	16	19	22	(no changes)	AUT;SNAU42 AMMC
94662	CLEVE CLEVEAERODROME	33.43.00S	136.30.00E	176 m	180 m	23	02	05	08	11	14	17	20	H00-24 (no changes)	A;AUT;METAR; SNAU44 AMMC

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		Latitude	Longitude	HP	H/HA	00	03	06	09	12	15	18	21	OBS. S	00	06	12	18	
94704	QUANDIALLA QUANDIALLA POST OFFICE	34.01.00S	147.47.00E	(1)	250 m	23	-	05	-	-	-	-	-		(no changes)				SNAU50 AMMC
94714	COOTAMUNDRA COOTAMUNDRA AIRPORT	34.38.00S	148.02.00E	(1)	335 m	23	02	05	-	-	-	-	20		(no changes)				SNAU50 AMMC
94715	FORBES FORBES AIRPORT AWS	33.22.00S	147.55.00E	231 m	232 m	23	02	05	08	11	14	17	20	H00-24	(no changes)				A;AUT;METAR SNAU51 AMMC
94722	TEMORA AGRICULTURAL RESEARCH STATION	34.24.00S	147.32.00E	(1)	270 m	23	-	-	-	-	-	-	-		(no changes)				EVAP;SOILTEMP SNAU51 AMMC
94732	GULGONG GULGONG POST OFFICE	32.22.00S	149.32.00E	(1)	475 m	23	-	05	-	-	-	-	-		(no changes)				SNAU51 AMMC
94737	KIAMA KIAMA BOWLING CLUB	34.41.00S	150.51.00E	(1)	10 m	23	-	-	-	-	-	-	-		(no changes)				SNAU51 AMMC
94779	PEATS RIDGE WARATAH ROAD	33.19.00S	151.15.00E	(1)	280 m	23	-	05	-	-	-	-	-		(no changes)				EVAP SNAU52 AMMC
94783	YARRAS MOUNT SEAVIEW	31.23.00S	152.15.00E	(1)	155 m	23	-	05	-	-	-	-	-		(no changes)				EVAP SNAU52 AMMC
94792	WOOLBROOK DANGLEMAH ROAD	30.58.00S	151.21.00E	(1)	910 m	23	-	05	-	-	-	-	-		(no changes)				SNAU52AMMC
94814	STRATHALBYN STRATHALBYN RACECOURSE	35.17.00S	138.54.00E	63 m	62 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU45 AMMC
94836	STAWELL STAWELLAERODROME	37.04.00S	142.44.00E	229 m	228 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU54 AMMC
94875	SHEPPARTON SHEPPARTON AIRPORT	36.26.00S	145.24.00E	115 m	114 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU54 AMMC
94881	EILDON EILDON FIRE TOWER	37.13.00S	145.50.00E	(1)	638 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU55 AMMC
94919	KHANCOBAN KHANCOBAN	36.14.00S	148.08.00E	340 m	339 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU52 AMMC
94925	TUGGERANONG ISABELLA PLAINS	35.25.00S	149.06.00E	588 m	587 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU52 AMMC
94930	MT NOWA NOWA MT NOWA NOWA AWS	37.42.00S	148.05.00E	(1)	345 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU55 AMMC
94942	NERRIGA NERRIGA COMPOSITE	35.07.00S	150.05.00E	(1)	630 m	23	-	05	-	-	-	-	-		(no changes)				SNAU53 AMMC
94953	SMITHTON SMITHTON AERODROME	40.50.00S	145.05.00E	9 m	10 m	23	02	05	08	11	14	17	20	H00-24	(no changes)				A;AUT;METAR SNAU56 AMMC
94955	SHEFFIELD SHEFFIELD SCHOOL FARM	41.23.00S	146.19.00E	295 m	294 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU56 AMMC
94959	BARREN TIER BARREN TIER AWS	42.01.00S	146.45.00E	(1)	1186 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU56 AMMC
95204	BROOME SOUTH EAST WATERBANK	17.51.00S	122.16.00E	42 m	41 m	01	04	07	10	13	16	19	22		(no changes)				AUT SNAU42 AMMC
95612	GINGIN GINGIN AERO	31.28.00S	115.52.00E	75 m	74 m	01	04	07	10	13	16	19	22	H00-24	(no changes)				A;AUT;METAR SNAU42 AMMC
95617	NORTHCLIFFE SHANNON CALM	34.35.00S	116.21.00E	191 m	190 m	01	04	07	10	13	16	19	22		(no changes)				AUT SNAU43 AMMC
95625	CUNDERDIN CUNDERDIN AIRFIELD	31.37.00S	117.13.00E	217 m	213 m	01	04	07	10	13	16	19	22		(no changes)				A;AUT SNAU43 AMMC
95633	SOUTHERN CROSS MT WALTON EAST IWDF	30.23.00S	120.09.00E	501 m	500 m	01	04	07	10	13	16	19	22		(no changes)				AUT SNAU43 AMMC
95634	SOUTHERN CROSS SOUTHERN CROSS AIRFIELD	31.14.00S	119.21.00E	348 m	355 m	01	04	07	10	13	16	19	22		(no changes)				A;AUT SNAU43 AMMC

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95635	RAVENSTHORPE HOPETOUN AWS	33.56.00S	120.08.00E	27 m	26 m	01	04	07	10	13	16	19	22		(no changes)				AUT SNAU43 AMMC
95662	MINNIPA MINNIPA DPI	32.51.00S	135.09.00E	166 m	165 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU45 AMMC
95726	ORANGE ORANGE AIRPORT AWS	33.23.00S	149.08.00E	948 m	950 m	23	02	05	08	11	14	17	20	H00-24	(no changes)				A;AUT;METAR SNAU53 AMMC
95766	SYDNEY HARBOUR WEDDING CAKE WEST	33.50.00S	151.16.00E	(1)	5 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU53 AMMC
95772	LOSTOCK LOSTOCK DAM SITE	32.20.00S	151.27.00E	(1)	200 m	23	-	05	-	-	-	-	-		(no changes)				EVAP SNAU53 AMMC
95806	STENHOUSE BAY	35.17.00S	136.56.00E	44 m	42 m	23	02	05	08	11	14	17	20		(no changes)				AUT;SNAU45 AMMC
95829	HAMILTON RESEARCH STATION	37.49.00S	142.04.00E	205 m	200 m	23	-	-	-	-	-	-	-		(no changes)				EVAP;SOILTEMP;SUNDUR SNAU55 AMMC
95867	SCORESBY SCORESBY RESEARCH INSTITUTE	37.52.00S	145.15.00E	(1)	90 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU55 AMMC
95916	CABRAMURRA CABRAMURRA SMHEA	35.56.00S	148.23.00E	1483 m	1482 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU55 AMMC
95952	MT READ	41.51.00S	145.32.00E	(1)	1120 m	23	02	05	08	11	14	17	20		(no changes)				AUT; SNAU57 AMMC
95956	LUNCHEON HILL FORESTRY	41.09.00S	145.09.00E	(1)	340 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU57 AMMC
95958	SCOTTS PEAK DAM AWS	43.03.00S	146.16.00E	(1)	(1)	-	-	-	-	-	-	-	-		(no changes)				

Amended Stations (Regional):

94119	PIRLANGIMPI GARDEN POINT POLICE	11.24.00S	130.25.00E	12 m	12 m	23	02	05	08	11	-	17	20		(no changes)				SNAU46 AMMC
94121	CHANNEL POINT	13.10.00S	130.07.00E	4 m	3 m	23	-	05	-	11	-	17	-		(no changes)				SNAU46 AMMC
94124	MIDDLE POINT RESEARCH STATION	12.35.00S	131.19.00E	(1)	10 m	23	-	-	-	-	-	-	-		(no changes)				EVAP;SUNDUR SNAU46 AMMC
94135	MCCLUER ISLAND AWS	11.03.00S	132.59.00E	<u>2</u> m	<u>1</u> m	23	02	05	08	11	14	17	20		(no changes)				AUT;SIAU40 AMMC; SMAU40 AMMC
94137	JABIRU AIRPORT AWS	12.40.00S	132.54.00E	<u>28</u> m	26 m	23	02	05	08	11	14	17	20	H00-24	(no changes)				A;AUT;METAR;SNAU46 AMMC
94138	OENPELLI GUNBALUNYA	12.20.00S	133.03.00E	9 m	7 m	23	-	05	-	-	-	-	<u>20</u>		(no changes)				SNAU46 AMMC
94139	WARRUWI	11.39.00S	133.23.00E	5 m	4 m	23	-	05	-	-	-	-	20		(no changes)				SNAU46 AMMC
94140	MILINGIMBI AWS	<u>12.07.00S</u>	134.54.00E	5 m	<u>16</u> m	23	02	05	08	11	14	17	20		(no changes)				A;AUT;SNAU46AMMC
94142	MANINGRIDA GUDGERAMA	12.03.00S	134.13.00E	13 m	11 m	23	-	05	08	11	-	-	<u>20</u>		(no changes)				EVAP SNAU46 AMMC
94187	MUSGRAVE	14.47.00S	143.30.00E	82 m	79 m	23	-	<u>05</u>	-	-	-	-	20		(no changes)				A; SNAU47 AMMC
94202	BROOME BIDYADANGA	18.41.00S	121.47.00E	12 m	11 m	01	-	07	-	-	-	-	<u>22</u>		(no changes)				SNAU40 AMMC
94208	KURI BAY	15.29.00S	124.31.00E	<u>17</u> m	<u>12</u> m	01	-	07	-	-	-	-	22		(no changes)				SNAU40 AMMC
94210	ADELE ISLAND	15.31.00S	123.09.00E	<u>6</u> m	5 m	01	04	07	10	13	16	19	22		(no changes)				AUT;SMAU40 AMMC; SIAU40 AMMC
94216	KUNUNURRA KUNUNURRA AERO	15.47.00S	128.43.00E	<u>44</u> m	44 m	01	04	07	10	13	16	19	22		(no changes)				A;AUT SNAU40 AMMC
94229	WAVE HILL NEW STATION	17.23.00S	131.07.00E	<u>198</u> m	<u>196</u> m	23	-	05	-	-	-	17	20		(no changes)				SNAU46 AMMC
94276	PALMERVILLE	<u>16.00.00S</u>	144.04.00E	<u>207</u> m	205 m	23	-	05	-	-	-	-	-		(no changes)				EVAP; SNAU47 AMMC
94285	LOW ISLES	16.23.00S	145.34.00E	4 m	3 m	23	-	05	-	11	-	-	20		(no changes)				C;SEA; SNAU47 AMMC
94286	MAREEBA AIRPORT	17.04.00S	145.26.00E	476 m	<u>476</u> m	23	-	05	-	11	-	17	20		(no changes)				A; SNAU47 AMMC
94307	KARRATHA LEGENDRE ISLAND	20.22.00S	116.51.00E	<u>30</u> m	<u>29</u> m	01	04	07	10	13	16	19	22		(no changes)				AUT SIAU40 AMMC;SMAU40 AMMC

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		Latitude	Longitude	HP	H/HA	00	03	06	09	12	15	18	21	OBS. S	00	06	12	18			
94309	ROEBOURNE ROEBOURNE POST OFFICE	20.47.00S	117.09.00E	13 m	12 m	01	04	07	10	-	16	19	22		(no changes)				SNAU40 AMMC		
94311	PORT HEDLAND PARDOO	20.06.00S	119.35.00E	10 m	9 m	01	04	07	-	-	-	19	22		(no changes)				SNAU40 AMMC		
94315	MARBLE BAR	21.11.00S	119.45.00E	189 m	189 m	01	04	07	10	-	16	19	22		(no changes)				SNAU40 AMMC		
94317	NEWMAN NEWMANAERO	23.25.00S	119.48.00E	525 m	526 m	01	04	07	10	13	16	19	22		(no changes)				A;AUT SNAU40 AMMC		
94318	NYANG NYANG STATION	23.02.00S	115.02.00E	112 m	111 m	01	04	07	10	-	16	-	22		(no changes)				SNAU40 AMMC		
94319	TELFER TELFER AERO	21.43.00S	122.13.00E	294 m	296 m	01	04	07	10	13	16	19	22		(no changes)				A;AUT SNAU40 AMMC		
94320	BALGO HILLS	20.09.00S	127.59.00E	421 m	420 m	01	-	07	-	-	-	-	-		(no changes)				EVAP;SOILTEMP;SNAU40 AMMC		
94323	WATARRKA KINGS CANYON	24.18.00S	131.33.00E	613 m	614 m	23	02	05	-	11	-	-	20		(no changes)				SNAU46 AMMC		
94327	JERVOIS	22.57.00S	136.08.00E	323 m	325 m	23	02	05	-	11	-	-	20		(no changes)				SNAU46 AMMC		
94343	HUGHENDEN HUGHENDEN POST OFFICE	20.51.00S	144.12.00E	326 m	324 m	23	02	05	-	-	-	17	20		(no changes)				EVAP; SNAU47 AMMC		
94351	BLACKALL BLACKALL POST OFFICE	24.25.00S	145.28.00E	284 m	283 m	23	02	05	-	11	-	17	20		(no changes)				SNAU47 AMMC		
94358	MORANBAH MORANBAH TOWNSHIP	22.00.00S	148.02.00E	255 m	254 m	23	-	05	-	11	-	-	20		(no changes)				EVAP SNAU47 AMMC		
94364	ROLLESTON	24.27.00S	148.37.00E	219 m	217 m	23	-	05	-	-	-	-	-		(no changes)				SNAU47 AMMC		
94365	PROSERPINE PROSERPINE AIRPORT	20.30.00S	148.32.00E	20 m	21 m	23	02	05	08	11	14	17	20	H00-24	(no changes)				A;AUT;METAR SNAU47 AMMC		
94368	PROSERPINE HAMILTON ISLAND	20.21.00S	148.57.00E	17 m	5 m	23	02	05	-	11	-	-	20		(no changes)				A SNAU47 AMMC		
94369	ST LAWRENCE POST OFFICE	22.21.00S	149.32.00E	18 m	17 m	23	02	05	08	11	-	17	20		(no changes)				EVAP SNAU48 AMMC		
94373	YEPPON AWS	23.08.00S	150.45.00E	6 m	6 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU48 AMMC		
94375	BARALABA POST OFFICE	24.11.00S	149.49.00E	(1)	94 m	23	-	05	-	-	-	-	-		(no changes)				SNAU48 AMMC		
94384	MIRIAM VALE TOWN OF 1770	24.09.00S	151.53.00E	47 m	34 m	23	02	05	08	11	-	17	20		(no changes)				SNAU48 AMMC		
94401	KALBARRI KALBARRI P.O.	27.43.00S	114.10.00E	7 m	9 m	01	04	07	10	-	-	-	22		(no changes)				SNAU40 AMMC		
94410	GASCOYNE JUNCTION	25.03.00S	115.13.00E	145 m	144 m	01	-	07	-	-	-	-	-		(no changes)				SNAU40 AMMC		
94415	CARNAMAH CARNAMAH POST OFFICE	29.41.00S	115.53.00E	(1)	268 m	01	-	07	-	-	-	-	-		(no changes)				SNAU40 AMMC		
94440	WILUNA YEELIRRIE	27.17.00S	120.06.00E	488 m	498 m	01	-	07	-	-	-	-	22		(no changes)				A SNAU41 AMMC		
94444	SANDSTONE CASHMERE DOWNS	28.58.00S	119.34.00E	453 m	450 m	01	-	07	-	-	-	-	-		(no changes)				SNAU41 AMMC		
94446	MENZIES	29.42.00S	121.02.00E	427 m	426 m	01	-	07	-	-	-	-	-		(no changes)				SNAU41 AMMC		
94462	YULARAAWS CONNELLAN AIRPORT	25.12.00S	130.59.00E	493 m	496 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT;METAR SNAU46 AMMC		
94485	TIBOOBURRA TIBOOBURRA POST OFFICE	29.26.00S	142.01.00E	184 m	183 m	23	-	05	08	11	-	-	20		(no changes)				SNAU50 AMMC		
94494	QUILPIE QUILPIE AIRPORT	26.37.00S	144.15.00E	198 m	200 m	23	02	05	08	11	-	17	20		(no changes)				A;EVAP SNAU48 AMMC		
94511	INJUNE POST OFFICE	25.51.00S	148.34.00E	(1)	390 m	23	-	05	-	-	-	-	20		(no changes)				SNAU49 AMMC		

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94529	MILES MILES POST OFFICE	26.39.00S	150.11.00E	307 m	305 m	23	-	05	-	-	-	-	20		(no changes)				EVAP SNAU48 AMMC
94567	MARYBOROUGH COMPOSITE	25.31.00S	152.43.00E	11 m	6 m	23	02	05	08	11	-	17	20		(no changes)				A SNAU49 AMMC
94568	AMBERLEY AMBERLEYAMO	27.39.00S	152.43.00E	31 m	28 m	23	-	05	-	-	-	-	-		(no changes)				A;EVAP SNAU49 AMMC
94574	CASINO CASINO AIRPORT	28.53.00S	153.03.00E	(1)	22 m	23	02	05	-	-	-	-	-		(no changes)				A SNAU50AMMC
94575	ARCHERFIELD AMO (AWS)	27.34.00S	153.00.00E	15 m	19 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT SNAU49 AMMC
94594	CAPE MORETON CAPE MORETON LIGHTHOUSE AWS	27.02.00S	153.28.00E	101 m	100 m	23	02	05	08	11	14	17	20		(no changes)				C;AUT SNAU49 AMMC
94595	CAPE BYRON CAPE BYRON LIGHTHOUSE	28.38.00S	153.38.00E	98 m	91 m	23	-	05	-	-	-	-	-		(no changes)				C;SEA SNAU50 AMMC
94600	BUSSELTON CAPE NATURALISTE	33.32.00S	115.01.00E	110 m	109 m	01	04	07	10	13	16	19	22		(no changes)				AUT SNAU41 AMMC
94602	ROTTNEST ISLAND	32.01.00S	115.30.00E	43 m	43 m	01	04	07	10	13	16	19	22		(no changes)				AUT;SNAU41 AMMC
94604	BUNBURY	33.21.00S	115.39.00E	6 m	5 m	01	-	07	-	-	-	-	-		(no changes)				SNAU41 AMMC
94609	JANDAKOT JANDAKOT AERO	32.06.00S	115.53.00E	31 m	30 m	01	04	07	10	13	16	19	22		(no changes)				A;AUT SNAU41 AMMC
94612	BULLSBROOK PEARCEAMO	31.40.00S	116.01.00E	49 m	45 m	01	04	07	10	13	16	19	22		(no changes)				A;AUT;SOILTEMP SNAU41 AMMC
94613	NORTHCLIFFE WINDY HARBOUR	34.50.00S	116.02.00E	(1)	6 m	01	-	07	-	-	-	-	-		(no changes)				SNAU41 AMMC
94617	MANJIMUP MANJIMUP SHIRE	34.15.00S	116.09.00E	(1)	280 m	01	-	07	-	-	-	-	-		(no changes)				SNAU41 AMMC
94622	WONGAN HILLS WONGAN HILLS P.O.	30.54.00S	116.43.00E	284 m	283 m	01	04	07	10	-	-	19	22		(no changes)				SNAU41 AMMC
94623	YORK	31.54.00S	116.46.00E	198 m	179 m	01	-	07	-	-	-	-	-		(no changes)				SNAU41 AMMC
94625	BROOKTON	32.22.00S	117.00.00E	(1)	250 m	01	-	07	-	-	-	-	-		(no changes)				SNAU42 AMMC
94632	BENCUBBIN	30.49.00S	117.52.00E	356 m	355 m	01	-	07	-	-	-	-	22		(no changes)				SNAU42 AMMC
94636	RAVENSTHORPE	33.35.00S	120.03.00E	233 m	232 m	01	-	07	-	-	-	-	-		(no changes)				SNAU42 AMMC
94642	BALLADONIA	32.27.00S	123.52.00E	149 m	148 m	01	-	07	10	-	-	19	22		(no changes)				SNAU42 AMMC
94647	EUCLA EUCLA MO	31.41.00S	128.53.00E	102 m	93 m	01	04	07	10	13	16	19	22	S00-24	(no changes)				AUT;EVAP;SOILTEMP; METAR;CLIMAT(CT) SNAU42 AMMC;SNAU21 AMMC
94651	NULLARBOR	31.27.00S	130.54.00E	65 m	64 m	23	02	05	08	11	14	17	20		(no changes)				AUT;SNAU44 AMMC
94655	TARCOOLA	30.43.00S	134.35.00E	120 m	120 m	23	02	05	-	11	-	-	20		(no changes)				SNAU44 AMMC
94657	KYANCUTTA KYANCUTTA POST OFFICE	33.08.00S	135.33.00E	61 m	57 m	23	02	05	08	11	-	17	20		(no changes)				SNAU44 AMMC
94665	MAITLAND MAITLAND POST OFFICE	34.23.00S	137.40.00E	186 m	185 m	23	02	05	08	11	-	-	20		(no changes)				SNAU44 AMMC
94669	PORT PIRIE BHAS	33.11.00S	138.01.00E	(1)	4 m	23	-	05	-	-	-	-	-		(no changes)				SNAU44 AMMC
94671	VIRGINIA VIRGINIA 3	34.39.00S	138.32.00E	(1)	12 m	23	-	-	-	11	-	-	-		(no changes)				SNAU44 AMMC
94673	HAWKER	31.53.00S	138.25.00E	316 m	315 m	23	-	05	-	-	-	-	20		(no changes)				SNAU44 AMMC
94675	ADELAIDE REGIONAL OFFICE KENT TOWN	34.55.00S	138.37.00E	51 m	48 m	23	02	05	08	11	14	17	20		(no changes)				AUT;EVAP;SOILTEMP;SUNDUR SNAU44 AMMC
94676	ARKAROOOLA	30.19.00S	139.20.00E	(1)	340 m	23	-	05	-	-	-	-	-		(no changes)				SNAU44 AMMC
94677	GOOLWA GOOLWA MARINA	35.31.00S	138.48.00E	(1)	3 m	23	02	05	-	-	-	-	-		(no changes)				SNAU44 AMMC
94679	YONGALA	33.02.00S	138.43.00E	(1)	515 m	23	02	05	-	11	-	-	20		(no changes)				SNAU44 AMMC

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94680	EUDUNDA	34.11.00S	139.05.00E	416 m	415 m	23	02	05	-	11	-	-	20		(no changes)				SNAU44 AMMC
94681	NURIOOTPA NURIOOTPA VITICULTURAL	34.29.00S	139.00.00E	276 m	275 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU44 AMMC
94691	BROKEN HILL BROKEN HILLAWS	32.00.00S	141.28.00E	282 m	292 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT;METAR SNAU45 AMMC
94695	WILCANNIA REID ST	31.34.00S	143.22.00E	(1)	75 m	23	02	05	08	-	-	-	-		(no changes)				SNAU50 AMMC
94707	CONDOBOLIN CONDOBOLIN AG RESEARCH STN	33.04.00S	147.14.00E	(1)	195 m	23	-	-	-	-	-	-	-		(no changes)				SNAU50 AMMC
94712	YOUNG YOUNG AIRPORT AWS	34.15.00S	148.15.00E	381 m	383 m	23	02	05	08	11	14	17	20	H00-24	(no changes)				A;AUT;METAR SNAU50 AMMC
94718	COONAMBLE COONAMBLEAIRPORT	30.59.00S	148.23.00E	(1)	180 m	23	02	05	-	-	-	-	-		(no changes)				SNAU51 AMMC
94723	WELLINGTON ZOUCH ST	32.34.00S	148.57.00E	(1)	300 m	23	-	05	-	-	-	-	-		(no changes)				SNAU51 AMMC
94726	ORANGE ORANGEAIRPORT	33.23.00S	149.07.00E	951 m	950 m	23	02	05	08	11	-	17	20		(no changes)				A SNAU51 AMMC
94752	BADGERY'S CREEK BADGERY'S CREEK AIRPORT	33.54.00S	150.44.00E	82 m	81 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU51 AMMC
94756	MURRURUNDI POST OFFICE	31.46.00S	150.50.00E	466 m	466 m	23	02	05	08	11	-	17	20		(no changes)				SNAU52 AMMC
94761	BARRABA BARRABA POST OFFICE	30.23.00S	150.37.00E	(1)	500 m	23	-	05	-	-	-	-	-		(no changes)				SNAU52 AMMC
94766	CANTERBURY CANTERBURY RACECOURSE AWS	33.54.00S	151.07.00E	4 m	3 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU52 AMMC
94773	ARMIDALE RADIO STATION 2AD	30.31.00S	151.40.00E	(1)	980 m	23	02	05	08	-	-	-	20		(no changes)				SNAU52 AMMC
94778	GLEN INNES GLEN INNES POST OFFICE	29.44.00S	151.44.00E	(1)	1062 m	23	02	05	08	-	-	17	20		(no changes)				SNAU52 AMMC
94784	TAREE TAREE RADIO STATION 2RE	31.54.00S	152.29.00E	7 m	5 m	23	02	05	08	11	-	17	20		(no changes)				EVAP; SNAU52 AMMC
94809	EDITHBURGH EDITHBURGH AWS	35.07.00S	137.44.00E	7 m	6 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU45 AMMC
94820	MOUNT BURR MOUNT BURR FOREST RESERVE	37.33.00S	140.25.00E	(1)	65 m	23	-	05	-	-	-	-	20		(no changes)				EVAP; SNAU45 AMMC
94822	CAPE WILLOUGHBY	35.51.00S	138.08.00E	59 m	55 m	23	02	05	08	11	14	17	20		(no changes)				C;AUT;SEA;SNAU45 AMMC
94826	CAPE NELSON CAPE NELSON LIGHTHOUSE	38.26.00S	141.33.00E	47 m	45 m	23	02	05	08	11	14	17	20		(no changes)				C;AUT;SEA SNAU54 AMMC
94828	PORTLAND CASHMORE AIRPORT	38.19.00S	141.28.00E	82 m	81 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT;METAR+R347 SNAU54 AMMC
94833	STAWELL COMPOSITE	37.04.00S	142.47.00E	(1)	203 m	23	-	05	-	-	-	-	-		(no changes)				EVAP SNAU54 AMMC
94843	SWAN HILL SWAN HILL AERODROME	35.23.00S	143.32.00E	71 m	71 m	23	02	05	08	11	14	17	20	H00-24	(no changes)				A;AUT;METAR SNAU54 AMMC
94852	BALLARAT AERODROME	37.31.00S	143.47.00E	436 m	441 m	23	02	05	08	11	-	17	20		(no changes)				SNAU54 AMMC
94857	GEE LONG AIRPORT GEE LONG AIRPORT AWS	38.14.00S	144.20.00E	35 m	43 m	23	02	05	08	11	14	17	20		(no changes)				A;AUT SNAU54 AMMC
94867	BMTCANNEXE GLENLITTA AVENUE	37.41.00S	144.58.00E	110 m	132 m	23	-	-	-	-	-	-	-		(no changes)				A;EVAP;SOILTEMP;SUNDUR SNAU54 AMMC
94869	DENILIQVIN DENILIQVIN POST OFFICE	35.33.00S	144.57.00E	93 m	96 m	23	02	05	-	-	-	-	20		(no changes)				A;EVAP SNAU52 AMMC

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94874	MANGALOREAWS COMPOSITE	36.53.00S	145.11.00E	141 m	142 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT SNAU54 AMMC
94884	BENALLA SHADFORTH STREET	36.33.00S	145.58.00E	170 m	170 m	23	02	05	08	11	-	-	20	(no changes)				SNAU55 AMMC	
94894	MOUNT BULLER AWS	37.09.00S	146.26.00E	(1)	1707 m	23	02	05	08	11	14	17	20	(no changes)				M;AUT SNAU55 AMMC	
94896	ALBURY ALBURY AIRPORT	36.04.00S	146.57.00E	171 m	164 m	23	02	05	-	-	-	-	-	(no changes)				A SNAU52 AMMC	
94901	HUME RESERVOIR	36.06.00S	147.02.00E	182 m	184 m	23	-	-	-	-	-	-	-	(no changes)				EVAP;SNAU52 AMMC	
94923	COOMA VISITORS CENTRE	36.14.00S	149.07.00E	(1)	778 m	23	-	05	-	-	-	-	-	(no changes)				SNAU52 AMMC	
94927	BRAIDWOOD BRAIDWOOD RACECOURSE AWS	35.26.00S	149.47.00E	666 m	665 m	23	02	05	08	11	14	17	20	(no changes)				AUT SNAU52 AMMC	
94928	BOMBALA BOMBALA POST OFFICE	36.55.00S	149.14.00E	(1)	705 m	23	-	-	-	-	-	-	-	(no changes)				SNAU52 AMMC	
94932	POINT HICKS LIGHTHOUSE POINT HICKS	37.48.00S	149.16.00E	(1)	25 m	23	02	05	-	-	-	-	20	(no changes)				SNAU55 AMMC	
94937	MORUYA HEADS PILOT STATION	35.55.00S	150.09.00E	17 m	17 m	23	02	05	08	11	14	17	20	(no changes)				SNAU53 AMMC	
94951	ERRIBA	41.27.00S	146.07.00E	(1)	590 m	23	-	05	-	-	-	-	-	(no changes)				SNAU56 AMMC	
94952	SMITHTON GRANT STREET	40.51.00S	145.07.00E	8 m	7 m	23	02	05	-	-	-	-	20	(no changes)				SNAU56 AMMC	
94970	HOBART ELLERSLIE ROAD	42.53.00S	147.20.00E	51 m	51 m	23	02	05	08	11	14	17	20	(no changes)				AUT SNAU56 AMMC	
94971	MELTON MOWBRAY NORTH STOCKMAN	42.30.00S	147.12.00E	(1)	(1)	23	-	05	-	-	-	-	-	(no changes)				SNAU56 AMMC	
94972	SCOTTSDALE WEST MINSTONE ROAD	41.10.00S	147.29.00E	(1)	190 m	23	02	05	-	-	-	-	20	(no changes)				EVAP SNAU56 AMMC	
95295	AYR DPI RESEARCH STATION	19.37.00S	147.23.00E	(1)	12 m	23	-	05	-	-	-	-	-	(no changes)				EVAP;SOILTEMP;SUNDUR SNAU49 AMMC	
95307	KARRATHA KARRATHA AERO	20.43.00S	116.46.00E	6 m	9 m	01	04	07	10	13	16	19	22	(no changes)				A;AUT SNAU43 AMMC	
95310	PARABURDOO	23.12.00S	117.40.00E	391 m	429 m	01	-	07	-	-	-	-	-	(no changes)				A;EVAP;SOILTEMP;SNAU42AMMC SNAU42 AMMC	
95520	COLLARENEBRI VIEWPOINT	29.33.00S	148.35.00E	(1)	145 m	23	-	05	-	-	-	-	-	(no changes)				SNAU53 AMMC	
95600	JURIEN	30.18.00S	115.02.00E	5 m	3 m	01	04	07	10	-	16	19	22	(no changes)				SNAU42 AMMC	
95608	KWINANA MEDINA RESEARCH CENTRE	32.13.00S	115.48.00E	(1)	14 m	01	-	07	-	-	-	-	-	(no changes)				EVAP;SOILTEMP SNAU43 AMMC	
95610	KALAMUNDA BICKLEY	32.01.00S	116.08.00E	385 m	384 m	01	-	-	-	-	-	-	-	(no changes)				SNAU43 AMMC	
95618	WAGIN WAGIN POST OFFICE	33.18.00S	117.20.00E	(1)	256 m	01	04	07	-	-	-	-	22	(no changes)				SNAU42 AMMC	
95627	HYDEN HYDEN COMPOSITE	32.27.00S	118.54.00E	(1)	299 m	01	-	07	-	-	-	-	-	(no changes)				SNAU43 AMMC	
95638	ESPERANCE ESPERANCE AERO	33.41.00S	121.50.00E	144 m	143 m	01	04	07	10	13	16	19	22	(no changes)				A;AUT SNAU43 AMMC	
95645	MUNGLINUP MUNGLINUP MELALEUCA	33.36.00S	120.45.00E	(1)	210 m	01	-	07	-	-	-	-	-	(no changes)				EVAP SNAU43 AMMC	
95659	ROXBY DOWNS OLYMPIC DAM	30.27.00S	136.52.00E	105 m	105 m	23	02	05	08	11	-	17	20	(no changes)				A;EVAP SNAU45 AMMC	

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Index No.	Station Name	POSITION		ELEVATION		OBSERVATION PROGRAM						OBS. H	UPPER-AIR				Remarks and Abbreviated Headings of Bulletins		
		Latitude	Longitude	HP	H/HA	00	03	06	09	12	15	18	21	OBS. S	00	06		12	18
95661	PORT LINCOLN PORT LINCOLN AWS	34.36.00S	135.53.00E	9 m	11 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT;METAR; SNAU45 AMMC
95666	PORTAUGUSTA PORT AUGUSTA AWS	32.29.00S	137.44.00E	19 m	14 m	23	02	05	08	11	14	17	20	H00-24	(no changes)				A;AUT;METAR SNAU44 AMMC
95676	EDINBURGH M.O.	34.42.00S	138.37.00E	20 m	20 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT;EVAP;METAR; SNAU45 AMMC
95704	GRIFFITH GRIFFITH AERO	34.16.00S	146.04.00E	(1)	136 m	-	-	05	-	-	-	-	20		(no changes)				A SNAU53 AMMC
95706	NARRANDERA AIRPORT	34.43.00S	146.31.00E	(1)	144 m	-	-	-	-	-	-	-	20		(no changes)				A;SNAU53 AMMC
95716	GOULBURN AIRPORT AWS	34.49.00S	149.44.00E	641 m	653 m	23	02	05	08	11	14	17	20	H00-24	(no changes)				A;AUT;METAR;SNAU53 AMMC
95723	YASS LINTON HOSTEL	34.50.00S	148.55.00E	(1)	520 m	23	-	05	-	-	-	-	-		(no changes)				SNAU53 AMMC
95750	LIVERPOOL WHITLAM CENTRE	33.56.00S	150.55.00E	(1)	20 m	23	-	05	-	-	-	-	-		(no changes)				SNAU53 AMMC
95812	MURRAY BRIDGE MURRAY BRIDGE POST OFFICE	35.07.00S	139.16.00E	(1)	15 m	23	02	05	08	-	-	-	20		(no changes)				SNAU45 AMMC
95814	MENINGIE MENINGIE POST OFFICE	35.42.00S	139.20.00E	(1)	3 m	23	02	05	-	-	-	-	20		(no changes)				SNAU45 AMMC
95904	LAKES ENTRANCE	37.52.00S	148.00.00E	(1)	35 m	23	-	05	-	11	-	-	20		(no changes)				SNAU55AMMC
95951	QUEENSTOWN COPPER MINES OF TASMANIA (CMT)	42.04.00S	145.34.00E	(1)	191 m	23	-	05	-	-	-	-	-		(no changes)				EVAP SNAU57 AMMC
95974	FINGAL FORESTRY LEGGE STREET	41.38.00S	147.58.00E	(1)	234 m	23	-	05	-	-	-	-	-		(no changes)				SNAU57 AMMC
95980	SWAN ISLAND SWAN ISLAND LIGHTHOUSE	40.44.00S	148.07.00E	9 m	9 m	23	02	05	08	11	-	-	20		(no changes)				C;LH;SEA SNAU57 AMMC
95982	STORYS CREEK STORYS CREEK ROAD	41.38.00S	147.44.00E	781 m	779 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU57 AMMC
Amended Stations (Global):																			
94101	KALUMBURU	14.18.00S	126.39.00E	24 m	23 m	01	-	07	-	-	-	-	22		(no changes)				A;SNAU01 AMMC; SNAU21 AMMC
94111	PORT KEATS INJUN BEACH	14.14.00S	129.25.00E	22 m	21 m	23	02	05	08	11	14	17	20		(no changes)				AUT SNAU02 AMMC; SNAU22 AMMC
94120	DARWIN AIRPORT	12.25.00S	130.53.00E	31 m	31 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP;SUNDUR; RAD;METAR;CLIMAT(CT); SNAU22 AMMC; SNAU02 AMMC
94146	ELCHO ISLAND	12.02.00S	135.34.00E	36 m	18 m	23	-	05	-	11	-	-	20		(no changes)				C;SEA;SNAU02 AMMC; SNAU22 AMMC
94150	GOVEAIRPORT	12.17.00S	136.49.00E	53 m	54 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR;CLIMAT(CT) SNAU02 AMMC; SNAU22 AMMC
94151	NORTH EAST ISLAND	13.39.00S	136.56.00E	18 m	17 m	01	04	07	10	13	16	19	22		(no changes)				AUT;SIAU21 AMMC; SMAU01 AMMC
94200	MANDORA	19.44.00S	120.51.00E	8 m	7 m	01	04	07	-	-	-	19	22		(no changes)				SNAU21 AMMC; SNAU01 AMMC
94203	BROOME BROOMEAMO	17.57.00S	122.14.00E	9 m	17 m	01	04	07	10	13	16	19	22	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR;CLIMAT(CT) SNAU21AMMC; SNAU01AMMC
94212	HALLS CREEK	18.14.00S	127.40.00E	424 m	410 m	01	04	07	10	13	16	19	22	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; METAR;CLIMAT(C) SNAU21 AMMC; SNAU01 AMMC
94214	WYNDHAM WYNDHAM P.O.	15.29.00S	128.07.00E	16 m	15 m	01	04	07	10	-	16	19	22		(no changes)				SNAU21 AMMC SNAU01 AMMC
94238	TENNANT CREEK MET OFFICE	19.38.00S	134.11.00E	377 m	377 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR;CLIMAT(C) SNAU02 AMMC; SNAU22 AMMC
94248	CENTRE ISLAND	15.45.00S	136.48.00E	21 m	20 m	23	02	05	08	11	14	17	20		(no changes)				AUT;SNAU02 AMMC; SNAU22 AMMC

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Index No.	Station Name	POSITION		ELEVATION		OBSERVATION PROGRAM						OBS. H	UPPER-AIR				Remarks and Abbreviated Headings of Bulletins		
		Latitude	Longitude	HP	H/HA	00	03	06	09	12	15	18	21	OBS. S	00	06		12	18
94255	CAMOOWEAL POST OFFICE	19.55.00S	138.07.00E	235 m	<u>234</u> m	23	-	05	08	11	-	-	20		(no changes)				EVAP;SNAU24 AMMC; SNAU04 AMMC
94267	NORMANTON NORMANTON POST OFFICE	17.40.00S	141.05.00E	10 m	<u>8</u> m	23	02	05	08	11	-	17	20		(no changes)				EVAP; SNAU04 AMMC; SNAU24 AMMC
94287	CAIRNS AMO	16.53.00S	145.45.00E	7 m	3 m	23	02	05	08	11	<u>14</u>	17	20	S00-24	(no changes)				A;AUT;EVAP;SUNDUR; METAR;CLIMAT(C) SNAU24 AMMC; SNAU04 AMMC
94300	CARNARVON CARNARVON AMO	24.53.00S	113.40.00E	<u>8</u> m	4 m	01	04	07	10	13	16	19	22		(no changes)				A;AUT;EVAP;SOILTEMP SNAU21 AMMC; SNAU01 AMMC
94302	LEARMONTH LEARMONTH AMO	22.14.00S	114.05.00E	6 m	<u>6</u> m	01	04	07	10	13	16	19	22		(no changes)				A;AUT;EVAP SNAU21 AMMC; SNAU01 AMMC
94312	PORT HEDLAND PORT HEDLAND AMO	<u>20.22.00S</u>	<u>118.38.00E</u>	<u>6</u> m	<u>10</u> m	01	04	07	<u>10</u>	<u>13</u>	<u>16</u>	<u>19</u>	22	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; METAR;CLIMAT(CT) SNAU21 AMMC; SNAU01 AMMC
94313	WITTENOOM	22.15.00S	118.20.00E	464 m	463 m	01	-	07	10	-	-	<u>19</u>	22		(no changes)				EVAP;SNAU21 AMMC; SNAU01 AMMC
94332	MOUNT ISA MOUNT ISA AMO	20.41.00S	139.29.00E	341 m	342 m	23	02	05	08	11	<u>14</u>	17	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR;CLIMAT(CT) SNAU24 AMMC; SNAU04 AMMC
94346	LONGREACH LONGREACH AMO	23.26.00S	144.17.00E	193 m	<u>191</u> m	23	02	05	08	11	<u>14</u>	17	20	S00-24	(no changes)				A;AUT;EVAP;METAR;CLIMAT(C) SNAU24 AMMC; SNAU04 AMMC
94367	MACKAY MACKAY MO (MT BASSET)	21.07.00S	149.13.00E	<u>33</u> m	<u>30</u> m	23	02	05	08	11	14	17	20	H00-24	(no changes)				AUT;SUNDUR;METAR CLIMAT(C) SNAU04 AMMC; SNAU24 AMMC
94380	GLADSTONE GLADSTONE AWS	23.51.00S	151.16.00E	<u>75</u> m	75 m	23	02	05	08	11	14	17	20						AUT SNAU24 AMMC; SNAU04 AMMC
94388	LADY ELLIOTT ISLAND LADY ELLIOTT ISLAND AWS	24.07.00S	152.43.00E	<u>6</u> m	4 m	23	02	05	08	11	-	-	20		(no changes)				SNAU24 AMMC SNAU04 AMMC
94403	GERALDTON GERALDTON AMO	28.48.00S	114.42.00E	<u>35</u> m	37 m	01	04	07	10	13	16	19	22	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; RAD;METAR;CLIMAT(CT) SNAU21 AMMC; SNAU01 AMMC
94430	MEEKATHARRA MEEKATHARRA AMO	26.37.00S	118.33.00E	<u>519</u> m	522 m	01	04	07	10	13	16	19	22	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; METAR;CLIMAT(CT) SNAU01 AMMC; SNAU21 AMMC
94466	KULGERA	25.51.00S	<u>133.18.00E</u>	<u>510</u> m	<u>509</u> m	23	02	05	-	11	-	17	20		(no changes)				SNAU02 AMMC SNAU22 AMMC
94477	MARLA MARLA POLICE STATION	27.18.00S	133.37.00E	324 m	<u>323</u> m	23	02	05	08	11	-	17	20		(no changes)				SNAU23AMMC SNAU03 AMMC
94482	BIRDSVILLE POLICE STATION	25.54.00S	139.21.00E	<u>48</u> m	47 m	23	02	05	08	11	-	17	20		(no changes)				EVAP SNAU24 AMMC; SNAU04 AMMC
94500	CUNNAMULLA POST OFFICE	28.04.00S	<u>145.41.00E</u>	191 m	189 m	23	02	05	08	11	-	17	20		(no changes)				SNAU04 AMMC SNAU24 AMMC
94510	CHARLEVILLE CHARLEVILLE AMO	26.25.00S	146.16.00E	<u>303</u> m	306 m	23	02	05	08	11	14	17	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR SNAU24 AMMC; SNAU04 AMMC
94601	AUGUSTA CAPE LEEUWIN	34.22.00S	115.08.00E	14 m	<u>13</u> m	01	04	07	10	<u>13</u>	16	19	22		(no changes)				AUT SNAU21 AMMC; SNAU01 AMMC
94634	SOUTHERN CROSS SOUTHERN CROSS P.O	<u>31.14.00S</u>	119.20.00E	356 m	355 m	01	04	07	10	-	16	-	22		(no changes)				SNAU01 AMMC; SNAU21 AMMC
94638	ESPERANCE ESPERANCE MO	33.50.00S	121.53.00E	<u>27</u> m	25 m	01	04	07	10	13	16	19	22		(no changes)				AUT;EVAP;SOILTEMP SNAU21 AMMC; SNAU01 AMMC
94643	RAWLINNA BALGAIR	31.05.00S	125.39.00E	163 m	162 m	01	04	07	-	-	<u>16</u>	-	22		(no changes)				EVAP;SOILTEMP SNAU21 AMMC; SNAU01 AMMC

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Index No.	Station Name	POSITION		ELEVATION		OBSERVATION PROGRAM								UPPER-AIR				Remarks and Abbreviated Headings of Bulletins	
		Latitude	Longitude	HP	H/HA	00	03	06	09	12	15	18	21	OBS. S	00	06	12		18
94649	COOK COOK HOSPITAL	30.37.00S	130.24.00E	121 m	120 m	23	02	05	08	11	-	-	-	(no changes)				SNAU23 AMMC SNAU03 AMMC	
94653	CEDUNA AMO	32.08.00S	133.42.00E	<u>16 m</u>	<u>24 m</u>	23	02	05	08	11	<u>14</u>	<u>17</u>	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR;CLIMAT(C) SNAU23 AMMC; SNAU03 AMMC
94659	WOOMERA AERODROME M O	31.09.00S	136.49.00E	167 m	<u>166 m</u>	23	02	05	08	11	<u>14</u>	<u>17</u>	20	S00-24	(no changes)				A;AUT;EVAP;SUNDUR;METAR SNAU23 AMMC; SNAU03 AMMC
94666	PORT AUGUSTA POWER STATION	32.32.00S	137.47.00E	8 m	4 m	23	02	05	08	11	-	-	-	(no changes)				EVAP SNAU03 AMMC; SNAU23 AMMC	
94693	MILDURA MO MILDURA AIRPORT MO	34.14.00S	142.05.00E	52 m	<u>51 m</u>	23	02	05	08	11	<u>14</u>	<u>17</u>	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR;CLIMAT(C) SNAU05 AMMC; SNAU25 AMMC
94711	COBAR COBAR MO	31.29.00S	145.50.00E	<u>264 m</u>	<u>260 m</u>	23	02	05	08	11	-	<u>17</u>	20	S00-24	(no changes)				EVAP;SOILTEMP;SUNDUR; CLIMAT(CT);METAR SNAU25 AMMC; SNAU05 AMMC
94719	DUBBO COOREENARD	32.13.00S	148.34.00E	<u>276 m</u>	275 m	23	-	05	-	11	-	<u>17</u>	-	(no changes)				SNAU05 AMMC	
94767	SYDNEY AIRPORT SYDNEY AIRPORT AMO/AWS	33.56.00S	151.10.00E	<u>5 m</u>	6 m	23	02	05	08	11	<u>14</u>	<u>17</u>	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR;CLIMAT(CT) SNAU25 AMMC; SNAU05 AMMC
94776	WILLIAMTOWN AMO RAAF	32.48.00S	151.50.00E	8 m	10 m	23	02	05	08	11	-	<u>17</u>	20	S00-24	(no changes)				A;EVAP;SUNDUR; METAR;CLIMAT(CT) SNAU05 AMMC; SNAU25 AMMC
94804	NEPTUNE ISLAND	35.20.00S	136.07.00E	<u>32 m</u>	32 m	23	02	05	08	11	<u>14</u>	<u>17</u>	20	(no changes)				AUT;SNAU23 AMMC; SNAU03 AMMC	
94842	CAPE OTWAY LIGHTHOUSE	38.51.00S	143.31.00E	83 m	82 m	23	02	05	08	11	<u>14</u>	<u>17</u>	20	(no changes)				AUT;SUN;SNAU25 AMMC; SNAU05 AMMC; NAU54 AMMC	
94861	ECHUCAERODROME	36.09.00S	144.46.00E	97 m	<u>99 m</u>	23	-	05	-	-	-	-	-	(no changes)				A;SNAU05 AMMC	
94907	EAST SALE EAST SALE AMO	38.06.00S	147.08.00E	8 m	<u>7 m</u>	23	02	05	08	11	<u>14</u>	<u>17</u>	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR;CLIMAT(C) SNAU05 AMMC; SNAU25 AMMC
94910	WAGGA WAGGA WAGGA WAGGA AMO/AWS	35.10.00S	147.27.00E	213 m	221 m	23	02	05	08	11	<u>14</u>	<u>17</u>	20	S00-24	(no changes)				A;AUT;EVAP;SOILTEMP; SUNDUR;METAR;CLIMAT(CT) SNAU05 AMMC; SNAU25 AMMC
94926	CANBERRA CANBERRA AMO/AWS	35.18.00S	<u>149.12.00E</u>	580 m	<u>576 m</u>	23	02	05	08	11	<u>14</u>	<u>17</u>	20	S00-24	(no changes)				A;AUT;EVAP;SUNDUR; METAR;CLIMAT(C) SNAU25 AMMC; SNAU05 AMMC
94996	NORFOLK ISLAND AMO	29.03.00S	167.56.00E	109 m	113 m	01	04	07	10	13	16	-	22	(no changes)				A;EVAP SMNF01 AMMC; SINF21 AMMC	

(1) No Barometer

NOTIFICATION FROM AUSTRALIA
Upper-air flights

94865 - Laverton Aerodrome and
94867 - Glenlitta Avenue

Site details:

Due to upgrading work on the wind finding radar at Laverton Aerodrome, radiosonde and radar upper wind flights will cease for approximately three weeks, commencing 17 February 1997.

To ensure that data is available, the Autosonde system will be trialled during this period at the Bureau of Meteorology Training Annexe (Glenlitta Avenue) 94867. The Autosonde will be scheduled to release at 00 UTC and 12 UTC daily with occasional flights at 17 UTC.

Index No.: 94867
Station Name: Bureau of Meteorology Training Centre Annexe (Glenlitta Avenue)
Latitude: 37 41 29 S
Longitude: 144 57 32 E
HP: 110 m
H/HA: 108m
Program: 00 UTC and 12 UTC Upper Temp and Upper Wind daily
Message Format: The Autosonde reports in international combined wind temp format
Date: From 17 February 1997 to 03 March 1997 (approximately)

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Index No.	Station Name	POSITION		ELEVATION		OBSERVATION PROGRAM						OBS. H		UPPER-AIR				Remarks and Abbreviated Headings of Bulletins
		Latitude	Longitude	HP	H/HA	00	03	06	09	12	15	18	21	OBS. S	00	06	12		18

Region VI: BELGIUM**Deleted Station****Date effective:20/11/1996**

06470 SINT-TRUIDEN

Amended Station**Date effective:01/09/1996**

06463	GOETSENHOVEN	50 47N	04 57E	81 m	71 m	.	.	X	X	X	X	.	.	S04-16	.	.	.	.	SYNOP/METAR/SPECI IRREG; *SUMMER TIME
														S03-15*					

Region VI: GERMANY**Deleted Station****Date effective: 01/01/1997**

10893 PASSAU This station is replaced by 10895 FURSTENZELL

New Station (Global/Regional):

10895	FURSTENZELL	48 33N	13 21E	480 m	476 m	X	X	X	X	X	X	X	X	H00-24	AGRIMET;MB;RAD;RADSAMP; SOILTEMP CSDL45 EDZW; SMDL43 EDZW SIDL43 EDZW; SNDL43 EDZW
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Amended Station (Global/Regional):

10184	GREIFSWALD	54 06N	13 24E	6 m	2 m	X	X	X	X	X	X	X	X	H00-24	RW	<u>W</u>	RW	<u>W</u>	WT;AGRIMET;CLIMAT(CT); MB; SOILTEMP; At 06 & 18 UTC: UPDL02 EDZW;UGDL02 EDZW; UHDL02 EDZW; UQDL02 EDZW
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**MOBILE SEA STATIONS
AUTOMATED SHIPBOARD AEROLOGICAL PROGRAMME
(ASAP)**

NOTIFICATION FROM ASAP COORDINATING COMMITTEE

The Danish ASAP OXVH2 is temporarily replaced by OXTS2, which will operate as an ASAP until the middle of April 1997. The OXVH2 is expected to start operating again in the middle of May 1997. The launch height on the OXTS2 is 10 m, and the data are communicated via Inmarsat-C.

**FEED-BACK FROM
MEMBERS TO THE SECRETARIAT
ON ANY CHANGES
IN THE
OBSERVING NETWORK**

In view of the difficulties experienced in identifying non-implemented observing stations or implemented stations which are closed or suspended for a certain period, or stations making observations that do not reach their NMCs, a special table accompanied by explanatory notes is included in this Newsletter. The table will serve as feed-back from Members to the Secretariat on any changes of the present state of implementation of observing programmes of SYNOP, TEMP and PILOT reporting stations.

Members are urged to fill in the special table as and when appropriate, and to return it to the Secretariat before the 20th of each month to enable changes to be included in the next "OPERATIONAL NEWSLETTER".

EXPLANATORY NOTES

Separate tables should be prepared for global exchange and regional exchange respectively. These tables should contain information concerning any changes of the present state of implementation of observing programmes of SYNOP, TEMP and PILOT reporting stations for Volume A, the Catalogue of Meteorological Bulletins, and particularly for stations included in the Regional Basic Synoptic Networks (RBSN).

For entries in these tables, the following should be taken into account:

COLUMN A: The station index number (Iliii) and station name;

COLUMN B: Latitude and Longitude in degrees and minutes with the appropriate letters (N, S, E and W);

COLUMN C: The TTAaii CCCC of the abbreviated headings of the meteorological bulletins which contain reports from the station should be inserted;

COLUMN D: "X" for implementation and "-" for non-implementation should be inserted as appropriate. In order to easily identify changes in the programme, these should be marked in red;

COLUMN E: HP = Elevation of the station in metres (the datum level to which barometric pressure reports at the station refer);

H = Elevation of the ground, in metres, (average level of terrain in immediate vicinity of station), for stations not located on aerodromes;

HA = Official altitude of the aerodrome given for stations located on aerodromes is indicated by the letter "A" in the column "Other observations and Remarks" of Volume A;

COLUMN F: For those stations not indicating pressure reduced to mean sea level (group 4PPPP) in their synoptic reports, the entry in this column shows which information is reported in lieu of group 4PPPP (see table 1):

STATION	Pressure at station level reported using group 3P _o P _o P _o P _o
1000 hPa	geopotential of the given standard isobaric surface reported using group 4a ₃ hhh
850 hPa	
700 hPa	
500 hPa	

Table 1

COLUMN G Reasons for temporary suspension of observing programmes and an expected date of resumption of the programmes should be given as far as possible. Non-standard collection and/or distribution times should also be included, and also possible alternate observing stations, as appropriate.

These tables should be sent to the Secretariat **BEFORE the 20th of the month** for inclusion in the "OPERATIONAL NEWSLETTER", as appropriate.

AUTOMATIC MARINE STATIONS

FOR YOUR INFORMATION

Please note that a complete listing of moored/drifted buoys will be provided bi-annually, in May/June and November/December. All other issues will contain an updated listing showing changes. For the drifters this would be buoys which ceased to operate or new deployments; for the moorings this would be buoys which were withdrawn or redeployed to new locations.

KEY: Observed or Technical Parameters			
Column	Parameters	Column	Parameters
1	Wind direction, speed and peak wind	11	Visibility
2	Air temperature	-	Parameter not observed
3	Air pressure	X	Buoy observes this parameter
4	Pressure tendency	.	Data under evaluation, not reported
5	Sea-surface temperature		
6	Wave period and height	B	Buoy beached, sensor reporting
7	Wave spectra	N	No sensor installed
8	Drogued	Q	Data questionable, but reported
9	Subsurface temperatures	R	Buoy Retrieved
10	Relative humidity	S	Sensor/system failure

Canada (complete listing)

Moored Buoys

North-east Pacific Ocean (SNVD17 & SXCN50 CWVR,SNVD04 CWEG)

WMO Buoy Id.	ARGOS Id.	Position: 04.01.97		Observed or Technical Parameters										
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11
46004	7180	50 58' N	135 48' W	S	S	S	S	S	S	S	N/A	-	-	-
46036	5324	48 21' N	133 55' W	X	X	X	X	X	X	X	N/A	-	-	-
46131	4484	49 54' N	124 59' W	X	X	X	X	X	X	X	N/A	-	-	-
46132	7197	49 44' N	127 55' W	X	X	X	X	X	X	X	N/A	-	-	-
46145	4485	54 23' N	132 26' W	X	X	X	X	X	X	X	N/A	-	-	-
46146	7196	49 20' N	123 44' W	X	X	X	X	X	X	X	N/A	-	-	-
46147	N/A	51 49' N	131 12' W	X	X	X	X	X	X	X	N/A	-	-	-
46181	7187	53 50' N	128 50' W	X	X	X	X	X	X	X	N/A	-	-	-
46183	8678	53 37' N	131 06' W	X	X	X	X	X	X	X	N/A	-	-	-
46184	7182	53 54' N	138 52' W	X	X	X	X	X	X	X	N/A	-	-	-
46185	8677	52 24' N	129 47' W	X	X	X	X	X	X	X	N/A	-	-	-
46204	7192	51 22' N	128 45' W	X	X	X	X	X	X	X	N/A	-	-	-
46205	7183	54 10' N	134 20' W	X	X	X	X	X	X	X	N/A	-	-	-
46206	7184	48 50' N	126 00' W	X	X	X	X	X	X	X	N/A	-	-	-
46207	7193	50 52' N	129 55' W	X	X	X	X	X	X	X	N/A	-	-	-
46208	7186	52 30' N	132 42' W	X	X	X	X	X	X	X	N/A	-	-	-

Moored Buoys: North-west Atlantic Ocean

WMO Buoy Id.	ARGOS Id.	Position: : 04.01.97		Observed or Technical Parameters											
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11	
44131	N/A	44 30' N	066 47' W	X	X	X	X	X	X	X	X	N/A	-	-	-
44137	5579	41 39' N	059 57' W	X	X	X	X	X	X	X	X	N/A	-	-	-
44138	5577	44 16' N	053 37' W	X	X	X	X	X	X	X	X	N/A	-	-	-
44139	3448	44 08' N	057 38' W	S	S	S	S	S	S	S	S	N/A	-	-	-
44140	5576	42 51' N	051 34' W	S	S	S	S	S	S	S	S	N/A	-	-	-
44141	3449	42 04' N	056 09' W	X	X	X	X	X	X	X	X	N/A	-	-	-
44142	5578	42 27' N	064 06' W	S	S	S	S	S	S	S	S	N/A	-	-	-

Moored Buoys: Great Slave Lake, Lake Winnipeg, Great Lakes, Gulf of St. Lawrence

WMO Buoy Id.	ARGOS Id.	Position: 04.01.97		Observed or Technical Parameters											
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11	
45132	N/A	42 28' N	081 13' W	.	.	.	.	.	.	.	.	N/A	-	-	-
45135	N/A	43 47' N	076 52' W	X	X	X	X	X	X	X	X	N/A	-	-	-
45136	N/A	48 32' N	086 57' W	.	.	.	.	.	.	.	.	N/A	-	-	-
45137	N/A	45 33' N	081 01' W	.	.	.	.	.	.	.	.	N/A	-	-	-
45138	8249	49 32' N	065 44' W	.	.	.	.	.	.	.	.	N/A	-	-	-
45139	N/A	43 26' N	079 23' W	X	X	X	X	X	X	X	X	N/A	-	-	-
45140	3439	50 47' N	096 44' W	.	.	.	.	.	.	.	.	N/A	-	-	-
45141	N/A	61 11' N	115 19' W	.	.	.	.	.	.	.	.	N/A	-	-	-
45142	N/A	42 44' N	079 17' W	.	.	.	.	.	.	.	.	N/A	-	-	-
45144	8671	53 23' N	098 29' W	.	.	.	.	.	.	.	.	N/A	-	-	-

Drifting Buoys: North-east Pacific Ocean

WMO Buoy Id.	ARGOS Id.	Position: 04.01.97		Observed or Technical Parameters											
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11	
46632	7149	46 36' N	131 36'W	.	.	.	.	.	.	.	.	.	-	-	-
46641	12511	47 24' N	162 18'W	.	X	X	X	X	.	.	.	.	-	-	-
46682	7140	48 24' N	153 12'W	.	.	.	.	.	.	.	.	.	-	-	-
46701	8674	48 42' N	166 18'W	X	X	X	X	X	.	.	.	.	-	-	-
46707	12514	46 12' N	139 18'W	X	X	X	X	X	.	.	.	.	-	-	-

46004 Removed due to damage.

44139,44140,44142, stopped transmitting.

45132, 45136, 45137, 45138, 45140, 45141, 45142, 45144 removed for the Winter.

46632 stopped transmitting during December

46682 stopped transmitting beginning of January

46707 New buoy deployed December

United States of America

List of U.S.A. Ocean Data Acquisition Systems (ODAS) included in the **January 1997** Data Platform Status Report of the Data Buoy Centre of the National Oceanic and Atmospheric Administration (NOAA). Data from moored buoys and platforms are collected by geostationary meteorological satellites and reports are distributed on the GTS in SHIP code. Data from drifting buoys are collected by the ARGOS system and distributed on the GTS in DRIFTER CODE.

Moored Buoys (for a complete listing see Newsletter Vol. 1996 No. 11-12)

WMO Buoy Id.	ARGOS Id.	Position: 9-16.01.97		Observed or Technical Parameters										
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11
41004	-	32.51N	79.10W	X	X	X	-	X	X	X	-	-	-	-
41010	-	28.90N	<u>78.53W</u>	X	X	X	-	X	X	X	-	-	-	-
42002*	-	25.89N	93.57W	S	S	S	-	S	S	S	-	-	-	-
42020	-	27.01N	96.51W	S	S	S	-	S	S	S	-	-	-	-
44005*	-	42.90N	68.94W	X	S	X	-	X	S	S	-	-	-	-
44009*	-	38.46N	74.70W	X	S	X	-	X	X	X	-	-	-	-
45007*	-	42.68N	87.03W	R	R	R	-	R	R	R	-	-	-	-
46005*	-	46.08N	31.00W	S	S	S	-	S	S	S	-	-	-	-
46011	-	34.88N	<u>20.87W</u>	X	X	X	-	X	X	X	-	-	-	-
46012	-	37.39N	<u>122.73W</u>	X	X	X	-	S	X	X	-	-	-	-
46013	-	38.23N	<u>123.30W</u>	X	X	X	-	X	X	X	-	-	-	-
46014	-	39.22N	<u>123.97W</u>	X	X	X	-	X	X	X	-	-	-	-
<u>46022</u>	-	<u>40.74N</u>	<u>124.51W</u>	X	X	X	-	X	X	X	-	-	-	-
46025	-	33.75N	<u>119.07W</u>	X	X	X	-	X	X	X	-	-	-	-
46026*	-	37.75N	<u>122.82W</u>	X	X	X	-	X	X	X	-	-	-	-
46027	-	41.85N	<u>124.39W</u>	X	X	X	-	X	X	X	-	-	-	-
46028	-	35.74N	<u>121.88W</u>	X	X	X	-	X	X	X	-	-	-	-
46029*	-	<u>46.18N</u>	<u>124.19W</u>	X	X	X	-	X	X	X	-	-	-	-
46030	-	40.42N	<u>124.53W</u>	X	X	X	-	X	X	X	-	-	-	-
46035	-	56.91N	<u>177.81W</u>	X	X	X	-	X	X	X	-	-	-	-
46041	-	47.42N	<u>124.52W</u>	X	S	X	-	X	X	X	-	-	-	-
46042	-	36.75N	<u>122.41W</u>	X	S	X	-	X	X	X	-	-	-	-
46045	-	33.84N	<u>118.45W</u>	S	X	X	-	X	X	X	-	-	-	-
<u>46050</u>	-	<u>44.62N</u>	<u>124.53W</u>	X	X	X	-	X	X	X	-	-	-	-
46054	-	34.27N	<u>120.45W</u>	X	X	X	-	X	X	X	-	-	-	-
46059	-	37.98N	<u>130.00W</u>	X	X	X	-	X	X	X	-	-	-	-
46060	-	60.58N	<u>146.83W</u>	X	X	X	-	X	X	X	-	-	-	-
46061	-	60.22N	<u>146.83W</u>	X	X	X	-	X	X	X	-	-	-	-
51001*	-	23.40N	<u>162.27W</u>	X	X	X	-	X	X	X	-	-	-	-
51002	-	17.19N	<u>157.83W</u>	X	X	X	-	X	X	X	-	-	-	-
51003*	-	19.14N	<u>160.81W</u>	X	X	X	-	X	X	X	-	-	-	-
51004*	-	17.44N	<u>152.51W</u>	X	X	X	-	S	X	X	-	-	-	-

* Base funded station of National Weather Service (NWS), however, all stations report data to NWS.

Remove buoys 41022, 46053 and 51026

I

Drifting Buoys (complete listing)

WMO Buoy Id.	ARGOS Id.	Position: 15-16.01.97		Observed or Technical Parameters										
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11
16811	17180	27°S	062°E	N	X	X	-	X	N	N	N	-	-	-
17810	17182	19°S	040°W	N	S	B	-	X	N	N	N	-	-	-
41529	23637	41°N	045°W	X	X	X	-	S	N	N	N	-	-	-
41530	23641	38°N	046°W	X	X	X	-	X	N	N	N	-	-	-
41611	23635	13°N	048°W	X	X	X	-	X	N	N	N	-	-	-
41612	23638	17°N	055°W	X	X	X	-	X	N	N	N	-	-	-
41613	23642	16°N	053°W	X	X	X	-	X	N	N	N	-	-	-
41614	23643	15°N	061°W	X	X	X	-	X	N	N	N	-	-	-
46551	20705	33°N	135°W	S	S	X	-	X	N	N	N	-	-	-
46554	20712	38°N	136°W	X	S	X	-	X	N	N	N	-	-	-
46555	20707	29°N	138°W	X	X	X	-	X	N	N	N	-	-	-
46556	20711	60°N	145°W	S	S	B	-	S	N	N	N	-	-	-
46558	20708	34°N	135°W	S	S	X	-	X	N	N	N	-	-	-
54809	20719	34°S	159°W	N	X	X	-	X	N	N	N	-	-	-
54811	20713	34°S	100°W	N	X	X	-	X	N	N	N	-	-	-
54812	17178	23°S	120°W	N	X	X	-	X	N	N	N	-	-	-
54813	20717	36°S	104°W	N	X	X	-	X	N	N	N	-	-	-
54814	05127	27°S	140°W	N	X	X	-	X	N	N	N	-	-	-
56808	20720	39°S	044°E	N	X	X	-	X	N	N	N	-	-	-
56810	17185	33°S	047°E	N	X	X	-	X	N	N	N	-	-	-

339 drifting buoys have been deployed in support of TOGA; 9 are operational.

Australia

Shipboard Data Collection (DCP) (complete listing)

WMO Buoy Id.	ARGOS Id.	Position: 31.12.1996		Observed or Technical Parameters										
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11
55513	11581	-34.75	134.741	-	X	X	-	-	-	-	-	-	-	-
55515	11580	-10.301	151.794	-	X	X	-	-	-	-	-	-	-	-
55516	11527	26.205	50.615	-	X	X	-	-	-	-	-	-	-	-
55521	7866	-69.297	74.452	-	X	X	-	-	-	-	-	-	-	-
55524	11662	-37.992	137.94	-	X	X	-	-	-	-	-	-	-	-

Buoy 55520 removed

Drogued Drifting Buoys

(complete listing)

WMO Buoy Id.	ARGOS Id.	Position: 31.12.1996		Observed or Technical Parameters										
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11
52623	2946	-12.735	138.977	X	X	X	X	S	-	-	-	-	-	-
53548	17179	-21.119	95.25	-	X	X	-	X	-	-	-	-	-	-
53549	2951	-12.527	123.552	X	X	X	X	X	-	-	-	-	-	-
56521	2934	-48.266	-160.032	-	-	S	-	X	-	-	-	-	-	-
56523	17183	9.628	60.022	-	X	X	-	X	-	-	-	-	-	-
56525	2933	-41.514	142.489	-	S	X	X	X	-	-	-	-	-	-
56529	4873	-22.344	105.966	-	-	X	-	X	-	-	-	-	-	-
56530	4871	-30.248	101.261	-	-	X	-	X	-	-	-	-	-	-
56531	4872	-33.277	86.931	-	-	X	-	X	-	-	-	-	-	-
56532	2949	-42.71	110.464	-	X	X	X	X	-	-	-	-	-	-
56533	2948	-46.862	117.685	-	X	X	X	X	-	-	-	-	-	-

Buoy 56524 removed

France

Moored Buoys

(for a complete listing see Newsletter Vol. 1996 No. 11-12)

Drifting Buoys: Indian Ocean

(for a complete listing see Newsletter Vol. 1996 No. 11-12)

Remove buoy:
23.12.96

WMO Buoy Id.	Argos Id.
16536	10108

Drifting Buoys: North Atlantic (complete listing)

WMO Buoy Id.	ARGOS Id.	Position: 23.12.96		Observed or Technical Parameters										
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11
62503	14427	37.5N	13.9W	-	-	X	X	X	-	-	-	-	-	-
62504	14428	34.9N	9.0W	-	-	X	X	X	-	-	-	-	-	-
62507	05793	35.2N	22.5W	-	-	X	X	X	-	-	-	-	-	-
62508	05792	50.2N	18.4W	-	-	X	X	S	-	-	-	-	-	-
62510	05797	38.5N	16.1W	-	-	X	X	X	-	-	-	-	-	-
62513	05798	43.8N	18.6W	-	-	X	X	X	-	-	-	-	-	-
62515	14426	46.6N	16.8W	-	-	X	X	X	-	-	-	-	-	-
62517	10118	48.0N	17.2W	S	X	X	X	X	-	-	-	-	-	-
62518	15534	43.5N	20.0W	S	-	X	X	X	-	-	-	X	-	-
62551	27939	46.5N	8.4W	X	-	X	X	X	-	-	-	-	-	-
64516	15528	71.8N	4.9W	-	X	-	-	X	-	-	-	X	-	-

62516 removed

**United Kingdom of Great
Britain and
Northern Ireland**

Moored Buoys, including Light Vessels, Islands and Fixed Platforms
(for a complete listing see Newsletter Vol. 1996 No. 11-12)

WMO Buoy Id.	ARGOS Id.	Position: 17.01.97		Observed or Technical Parameters										
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11
62103**		49°55'N	02°54'W	X	X	X	X	X	X	-	X	-	X	-

** Automatic Light Vessels

Drifting Buoys (complete listing)

The large number of new drifters is due to the FASTEX experiment

WMO Buoy Id.	ARGOS Id.	Position: 17.01.97		Observed or Technical Parameters										
		Longitude	Latitude	1	2	3	4	5	6	7	8	9	10	11
44614	1256	62.0N	28.7W	X	X	X	X	-	-	-	-	-	-	-
44726	2955	52.3N	32.1W	X	X	X	X	X	-	-	-	-	-	-
44728	3024	62.7N	16.5W	X	X	X	X	-	-	-	-	-	-	-
44728	1254	58.0N	41.8W	X	X	X	X	-	-	-	-	-	-	-
44742	26753	45.6N	35.6W	X	X	X	X	X	-	-	-	-	-	-
44743	1248	49.1N	34.5W	X	X	X	X	-	-	-	-	-	-	-
44760	2947	29.8N	63.8W	X	X	X	X	-	-	-	-	-	-	-
44762	26754	41.0N	34.3W	X	X	X	X	X	-	-	-	-	-	-
44763	3098	62.5N	20.4W	X	X	X	X	-	-	-	-	-	-	-
44764	1259	56.1N	42.9W	X	X	X	X	-	-	-	-	-	-	-
44767	3013	62.3N	21.3W	X	X	X	X	-	-	-	-	-	-	-
44770	3035	24.0N	64.4W	X	X	X	X	-	-	-	-	-	-	-
44776	2957	52.2N	32.0W	X	X	X	X	-	-	-	-	-	-	-
44777	1249	56.6N	27.8W	X	X	X	X	-	-	-	-	-	-	-
44779	3186	44.6N	37.4W	-	X	-	X	-	-	-	-	-	-	-
44780	1257	52.0N	28.0W	X	X	X	X	-	-	-	-	-	-	-
44778	1258	58.9N	24.2W	X	X	X	X	-	-	-	-	-	-	-
48102	1261*	80.7N	46.6W	X	X	-	-	-	-	-	-	-	-	-
-	2958	52.9N	42.6W	X	X	X	X	X	-	-	-	-	-	-
62697	2959	56.7N	35.3W	X	X	X	X	X	-	-	-	-	-	-
62713	3185	43.9N	32.5W	-	X	-	X	-	-	-	-	-	-	-
62714	26750	40.4N	30.0W	X	X	X	X	-	-	-	-	-	-	-
62804	26743	49.0N	29.0W	X	X	X	X	-	-	-	-	-	-	-
64561	1247	62.6N	34.1W	X	X	X	X	-	-	-	-	-	-	-
65594	1252	57.5N	24.2W	X	X	X	X	-	-	-	-	-	-	-

Remove buoys 25565, 44773, 44771

*Ice drifter

ARGOS SERVICE

• Reports handled by ARGOS Service
(list of monthly collected ARGOS platforms sorted by type of platform)

ARGOS
Monthly Status Report

Date of statistics
computation:
9 January 1997

Drifting Buoys	1192
Boats (<20 knots)	-
Marine Stations	159
Moored Buoys	305
Fixed Stations	499
Marine Animals	138
Terrestrial Animals	59
Birds	79
Balloons	3
TOTAL:	2434

•Reports inserted into the GTS
(list of monthly collected ARGOS platforms on indicated GTS sites
sorted by type of platform)

Inserted by RTH Toulouse:

Drifting Buoys	92
Fixed Stations	20
Moored Buoys	6
XBT Ships	-

Inserted by RTH/WMC Washington:

Drifting Buoys	657
Fixed Stations	40
Moored Buoys	58
XBT Ships	-

•Coding statistics of platforms
reporting through ARGOS and distributed over the GTS:

BATHY	382
BUOY	214990
SHIP:	473
SYNOP:	34245
TOTAL:	250090

III. GLOBAL TELECOMMUNICATION SYSTEM

Information on the Operation of the GTS

Publication No. 9
Volume C1
Catalogue of Meteorological Bulletins

Region V: AUSTRALIA

Date effective: 01.02.1997

Compiling or Editing Centre: Melbourne (Australia)

Deleted Bulletins:

Abb.Heading		Time Group	Content of Bulletin	Abb.Heading		Time Group	Content of Bulletin
TAAii	CCCC	(GG)		TAAii	CCCC	(GG)	
SMAU01	AMMC	00,06,12,18	94102	SNAU23	AMMC	02,08	94461 94649
SNAU01	AMMC	01,07	94101 94205 94402 95314	SNAU23	AMMC	14	94461
SNAU01	AMMC	19	94402	SNAU23	AMMC	20	94461 94649 94666
SNAU03	AMMC	05,11,23	94461 94649	SNAU24	AMMC	02	94380
SNAU03	AMMC	17	94461	SNAU24	AMMC	08	94380
SNAU04	AMMC	05,23	94175 94355 94380	SNAU24	AMMC	14	94380
SNAU04	AMMC	11	94380	SNAU24	AMMC	20	94380
SNAU04	AMMC	17	94380	SNAU25	AMMC	02	94527 94940 94967
SNAU05	AMMC	05	94689 94861 94967 94940	SNAU25	AMMC	08	94527 94940 94967
SNAU05	AMMC	11	94940 94527 94967	SNAU25	AMMC	20	94527 94940 94967
SNAU05	AMMC	17	94527 94689 94967	SNAU40	AMMC	01	94317 94319
SNAU05	AMMC	23	94527 94689 94940 94851 94861 94967	SNAU40	AMMC	07	94319
SNNG01	AMMC	05,23	94001 94003 94004 94014 94035 94044 94047 94076	SNAU42	AMMC	01	94642 94647 95205
SNNG01	AMMC	11	94085 94087	SNAU42	AMMC	04	94642 94647 95205
SNNG01	AMMC	17	94004 94014 94035 94044 94047 94076 94085	SNAU42	AMMC	07	94642 94647 95205
SNNG01	AMMC	17	94014 94035 94044 94047	SNAU42	AMMC	10	94642 94647 95205
UEAU01	AMMC	00	94403 94461	SNAU42	AMMC	13	94642 94647 95205
UEAU03	AMMC	00	94380 95527	SNAU42	AMMC	16	94642 94647 95205
UEAU04	AMMC	00	94750	SNAU42	AMMC	19	94642 94647 95205
UEAU04	AMMC	18	94750	SNAU42	AMMC	22	94642 94647 95205
UENG01	AMMC	00,12	94014 94035 94044	SNAU44	AMMC	02	94651
UHAU01	AMMC	00,06,12,18	94403 94430 94461	SNAU44	AMMC	05	94651
UHAU03	AMMC	00,06,12,18	95527	SNAU44	AMMC	08	94651
UHAU04	AMMC	00,06,12,18	94750	SNAU44	AMMC	11	94651
UHNG01	AMMC	00,06,12,18	94014 94035 94044 92047 94076 94087	SNAU44	AMMC	14	94651
UKAU01	AMMC	00	94403 94461	SNAU44	AMMC	17	94651
UKAU03	AMMC	00	94380 95527	SNAU44	AMMC	20	94651
UKAU04	AMMC	00	94750	SNAU44	AMMC	23	94651
UKAU04	AMMC	18	94750	SNAU45	AMMC	02	94691 95458 95481
UKNG01	AMMC	00,12	94014 94035 94044	SNAU45	AMMC	05	94691 95458 95481
ULAU01	AMMC	00	94403 94461	SNAU45	AMMC	08	94691 95458 95481
ULAU03	AMMC	00	95527 94380	SNAU45	AMMC	11	94691 95458 95481
ULAU04	AMMC	00	94750	SNAU45	AMMC	14	94691 95458 95481
ULAU04	AMMC	18	94750	SNAU45	AMMC	17	94691 95458 95481
ULNG01	AMMC	00,12	94014 94035 94044	SNAU45	AMMC	20	94691 95458 95481
UPAU01	AMMC	00,06,12,18	94403 94430 94461	SNAU45	AMMC	23	94691 95458 95481
UPAU03	AMMC	00,06,12,18	95527	SNAU46	AMMC	02	94236 94327 94462
UPAU04	AMMC	00,06,12,18	94750	SNAU46	AMMC	05	94236 94327 94462
UPNG01	AMMC	00,06,12,18	94014 94035 94044 92047 94076 94087	SNAU46	AMMC	08	94236 94462
USAU01	AMMC	00	94403 94461	SNAU46	AMMC	11	94236 94327 94462
USAU03	AMMC	00	94380 95527	SNAU46	AMMC	14	94236 94462
USAU04	AMMC	00	94750	SNAU46	AMMC	17	94236 94462
USAU04	AMMC	18	94750	SNAU46	AMMC	20	94236 94327 94462
USNG01	AMMC	00,12	94014 94035 94044	SNAU46	AMMC	23	94236 94327 94462
SIAU21	AMMC	03,09,15,21	94102	SNAU48	AMMC	05	94542
SNAU21	AMMC	04	94402	SNAU48	AMMC	11	94542
SNAU21	AMMC	10	94402 95314	SNAU48	AMMC	20	94542
SNAU21	AMMC	16	94402 95314	SNAU48	AMMC	23	94542
SNAU21	AMMC	22	94101 94402	SNAU49	AMMC	02	94170 94584
				SNAU49	AMMC	05	94170 94584
				SNAU49	AMMC	08	94170 94584
				SNAU49	AMMC	11	94170 94584
				SNAU49	AMMC	14	94170 94584
				SNAU49	AMMC	17	94170 94584
				SNAU49	AMMC	20	94170 94584
				SNAU49	AMMC	23	94170 94584
				SNAU50	AMMC	02	94485
				SNAU50	AMMC	05	94485
				SNAU50	AMMC	08	94485
				SNAU50	AMMC	11	94485

III

Abb.Heading		Time Group	Content of Bulletin	Abb.Heading		Time Group	Content of Bulletin
TAAii	CCCC	(GG)		TAAii	CCCC	(GG)	
SNAU50 AMMC		14	94485	SNAU54 AMMC		14	94842
SNAU50 AMMC		17	94485	SNAU54 AMMC		17	94842
SNAU50 AMMC		20	94485	SNAU54 AMMC		20	94842
SNAU50 AMMC		23	94485	SNAU54 AMMC		23	94842
SNAU51 AMMC		02	94720				
SNAU51 AMMC		05	94720	SNNG21 AMMC		02,08,20	94001 94003 94004 94014 94035 94044 94047 94076 92077 94085 94087
SNAU51 AMMC		08	94720				
SNAU53 AMMC		02	95703 95762	SNNG21 AMMC		14	94035
SNAU53 AMMC		05	95703 95762	SNNG40 AMMC		02,05,08,11, 14,17,20,23	94006 94011 94012 94016 94017 94021 94022 94023 94031 94040 94042 94051 94057 94068 94069 94070 94071 94072 94077 94080 94082 94083 94084 94090 94092
SNAU53 AMMC		08	95703 95762				
SNAU53 AMMC		11	95703 95762				
SNAU53 AMMC		17	95703 95762				
SNAU53 AMMC		20	95703 95762				
SNAU53 AMMC		23	95703 95762	UGAU21 AMMC		00,06,12,18	94403 94430 94461
SNAU54 AMMC		02	94842	UGAU23 AMMC		00,06,12,18	95527
SNAU54 AMMC		05	94842	UGAU24 AMMC		00,06,12,18	94750
SNAU54 AMMC		08	94842	UGNG21AMMC		00,06,12,18	94014 94035 94044 92047 94076 94087
SNAU54 AMMC		11	94842				

Region V: AUSTRALIA

Date effective: 01.02.1997

Compiling or Editing Centre: Melbourne (Australia)

New Bulletins:

SNAU01 AMMC	01,07	94102 94317 94319 94461 94642 94647 94651 95205	ULNG01 AMMC	00	92014 92035 92044
SNAU01 AMMC	13	94102 94212 94319 94461 94601 94647 94651 95205	UPAU02 AMMC	00,06,18	94403 94430 94461
SNAU01 AMMC	19	94102 94200 94313 94642 94319 94647 94651 95205	UPAU02 AMMC	12	94403 94461
SNAU02 AMMC	05,23	94236 94327 94462	UPAU04 AMMC	00,06,12,18	95527
SNAU02 AMMC	11	94236 94327 94462	UPNG01 AMMC	00,06	92014 92035 92044 92047 92076 92087
SNAU02 AMMC	17	94236 94462	UPNG01 AMMC	12,18	92014 92035 92044
SNAU03 AMMC	05,11,23	95458 95481			
SNAU03 AMMC	17	95458 95481	USAU01 AMMC	12	94120 94203
SNAU04 AMMC	05,23	94170 94374 94542 94584	USAU02 AMMC	00	94403 94461
SNAU04 AMMC	11	94170 94374 94542 94584	USAU02 AMMC	12	94672 94610 94637 94638 94802
SNAU04 AMMC	17	94170 94374 94584	USAU03 AMMC	12	94510 94578
SNAU05 AMMC	05	94485 94527 94720 94875 95527 95703 95762 94691	USAU04 AMMC	00	95527
SNAU05 AMMC	11	94485 94691 94875 95527 95703 95762	USAU04 AMMC	12	94975
SNAU05 AMMC	17	94875 95527 95703 95762 94691	USNG01 AMMC	00	92014 92035 92044
SNAU05 AMMC	23	94720 94875 95527 95703 95762 94485 94691			
SNNG01 AMMC	05,23	92001 92003 92004 92014 92035 92044 92047 92076 92077 92087	SNAU21 AMMC	04	94102 94319 94461 94647 94651 95205
SNNG01 AMMC	11	92004 92014 92035 92044 92047 92076	SNAU21 AMMC	10	94102 94212 94319 94461 94642 94647 94651 95205
SNNG01 AMMC	17	92014 92035 92044 92047	SNAU21 AMMC	16	94102 94319 94461 94647 94651 95205
			SNAU21 AMMC	22	94102 94319 94461 94642 94647 94651 95205
UEAU01 AMMC	12	94120 94203	SNAU22 AMMC	02	94146 94236 94327 94462
UEAU02 AMMC	00	94403 94461	SNAU22 AMMC	08	94462
UEAU02 AMMC	12	94672 94610 94637 94638 94802	SNAU22 AMMC	14	94462
UEAU03 AMMC	12	94510 94578	SNAU22 AMMC	20	94236 94327 94462
UEAU04 AMMC	00	95527	SNAU23 AMMC	02,08	95458 95481
UEAU04 AMMC	12	94975	SNAU23 AMMC	14	94804 95458 95481
UENG01 AMMC	00	92014 92035 92044	SNAU23 AMMC	20	95458 95481
			SNAU24 AMMC	02	94170 94374 94584
UHAU02 AMMC	00,06,18	94403 94430 94461	SNAU24 AMMC	08	94170 94374 94584
UHAU02 AMMC	12	94403 94461	SNAU24 AMMC	14	94346 94374 94584
UHAU04 AMMC	00,06,12,18	95527	SNAU24 AMMC	20	94170 94374 94542 94584
UHNG01 AMMC	00,06	92014 92035 92044 92047 92076 92087	SNAU25 AMMC	02	94691 94720 94875 95527 95703 95762
UHNG01 AMMC	12,18	92014 92035 92044	SNAU25 AMMC	08	94485 94691 94720 94875 95527 95703 95762
			SNAU25 AMMC	14	94691 94842 94875 94907 94910 94995 95527 95762
			SNAU25 AMMC	20	94485 94691 94720 94875 95527 95703 95762
UKAU01 AMMC	12	94120 94203	SNNG21 AMMC	02,08,20	92001 92003 92004 92014 92035 92044 92047 92076 92077 92087
UKAU02 AMMC	00	94403 94461			
UKAU02 AMMC	12	94672 94610 94637 94638 94802	SNNG21 AMMC	14	92035
UKAU03 AMMC	12	94510 94578	SNNG40 AMMC	02,05,08,11, 14,17,20,23	92005 92006 92010 92011 92012 92013 92016 92017 92021 92022 92023 92026 92031 92040 92057 92068 92069 92070 92071 92072 92075 92080 92082 92083 92084 92088 92090 92092 92100
UKAU04 AMMC	00	95527			
UKAU04 AMMC	12	94975	UGAU22 AMMC	00,06,18	94403 94430 94461
UKNG01 AMMC	00	92014 92035 92044	UGAU22 AMMC	12	94403 94461
			UGAU24 AMMC	00,06,12,18	95527
ULAU01 AMMC	12	94120 94203	UGNG21AMMC	00,06	92014 92035 92044 92047 92076 92087
ULAU02 AMMC	00	94403 94461	UGNG21AMMC	12,18	92014 92035 92044
ULAU02 AMMC	12	94672 94610 94637 94638 94802			
ULAU03 AMMC	12	94510 94578			
ULAU04 AMMC	00	95527			
ULAU04 AMMC	12	94975			

Region V: AUSTRALIA
Compiling or Editing Centre: Melbourne (Australia)
Amended Bulletins:

Date effective: 01.02.1997

Time Group (GG) should be changed to read as follows:

	Former (GG)	New (GG)
UHKK01 AMMC	00,06,12,18	00,06,12
UPKK01 AMMC	00,06,12,18	00,06,12
UGKK21 AMMC	00,06,12,18	00,06,12

Region V: Papua New Guinea
Compiling or Editing Centre: Melbourne (Australia)

Date effective: 1/1/1997

Due to the change of WMO index numbers from '94' series to '92' series by Papua New Guinea as from 1 January 1997, the content of PNG bulletins prepared by WMC Melbourne will be as follows from that date :

Abbreviated Heading	Code Form Used	Time Group (GG)	Content of Bulletin
SNNG01 AMMC	FM 12-X EXT	05,23	92001 92003 92004 92014 92035 92044 92047 92076 92087
SNNG01 AMMC	FM 12-X EXT	11	92004 92014 92035 92044 92047 92076
SNNG21 AMMC	FM 12-X EXT	02,08, 20	92001 92003 92004 92014 92035 92044 92047 92076 92087
SNNG21 AMMC	FM 12-X EXT	14	92035
SNNG01 AMMC	FM 12-X EXT	17	92014 92035 92044 92047
UPNG01 AMMC	FM 32-IX	00,06,12, 18	92014 92035 92044 92047 92076 92087
UGNG21 AMMC	FM 32-IX	00,06,12, 18	92014 92035 92044 92047 92076 92087
UHNG01 AMMC	FM32-IX	00,06,12, 18	92014 92035 92044 92047 92076 92087
USNG01 AMMC	FM 35-X EXT	00,12	92014 92035 92044
UKNG01 AMMC	FM 35-X EXT	00,12	92014 92035 92044
ULNG01 AMMC	FM 35-X EXT	00,12	92014 92035 92044
UENG01 AMMC	FM 35-X EXT	00,12	92014 92035 92044

Region VI: Lithuania
Compiling or Editing Centre: Vilnius

Date effective: 8/11/1996

- Amend Annex I: *Location Indicators used in the Abbreviated Headings TTAAii CCCC* to read:
 UMWW Vilnius, Lithuanian Hydrometeorological Service
- Amend the following Meteorological Bulletins in Region VI Europe to read:

Abbreviated Heading	
TTAA(ii)	CCCC
CSLT10	UMWW
SDLT10	UMWW
SMLT10	UMWW
UFLT10	UMWW
UKLT10	UMWW
ULLT10	UMWW
USLT10	UMWW
FELT40	UMWW
FPLT40	UMWW
SILT20	UMWW
SILT44	UMWW
SMLT44	UMWW
SRLT40	UMWW

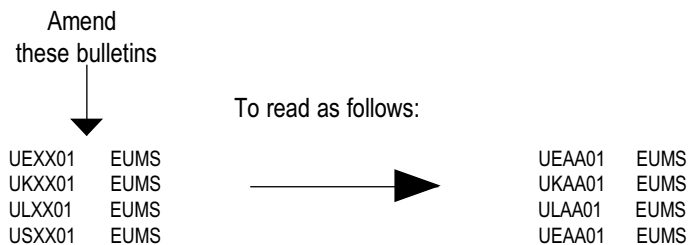
Antarctic
Compiling or Editing Centre: In Region III: Buenos Aires, Santiago

Date effective: 3/12/1996

	Abbreviated Heading	Time Group	Content of Bulletin and Remarks
NEW	SMAA01 SCEF	00,06,12,18	89054 89056 89057 89058 89059 89251
AMEND	SMAA02 SCEF	00,06,12,18	<u>89002 89022 89042 89061 89062 89063 89065</u>
AMEND	SIAA21 SCEF	03,09,15,21	<u>89054 89056 89057 89058 89059 89251</u>
NEW	SIAA22 SCEF	03,09,15,21	89002 89022 89042 89061 89062 89063 89065

Date effective: 9/12/1996
Compiling or Editing Centre in Region VI: Offenbach (EUMETSAT, DARMSTADT)

- The headings of the Antarctic upper air bulletins for the distribution of stations:
 89002, 89022 and 89532 will be changed.



- Following the request from Japan the following changes will be included in Volume C1:
Insert station:
 89532 (Antarctic Station SYOWA) into the bulletins: CSAA01 EUMS and CUA01 EUMS
Delete Station:
 89524 (Antarctic Station ASUKA) from the content of bulletins: SMAA01 EUMS and SIAA21 EUMS.

OPERATION OF THE GTS
Routeing catalogues

The routeing catalogue of RTH Tokyo is available via Internet on the FTP server of the Japan Meteorological Service:

ddb.kishou.go.jp

In accordance with the formats given in Annex II of the Abridged Final Report of the tenth session of CBS, the routeing catalogue consists of two files named RJTDCIRC and RJTDROUT included in the sub-directory:

[pub/RoutingCatalog.](#)

IMPLEMENTATION OF THE
GTS

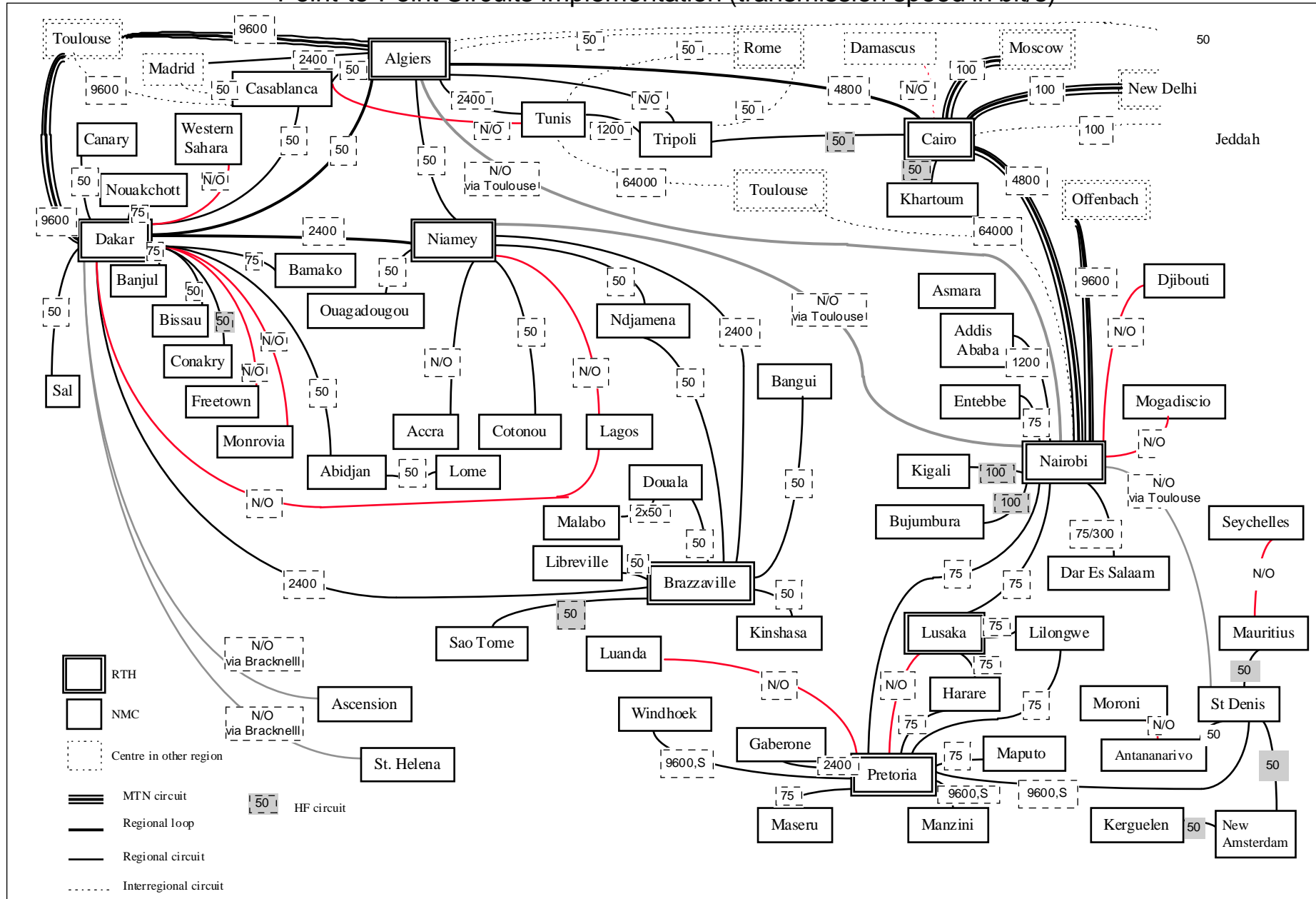
REGIONAL METEOROLOGICAL
TELECOMMUNICATION NETWORK

The diagrams that follow provide updated information on the implementation of the GTS for Regions I to VI. Please note that the indicated transmission speed gives the total capacity of the circuit.

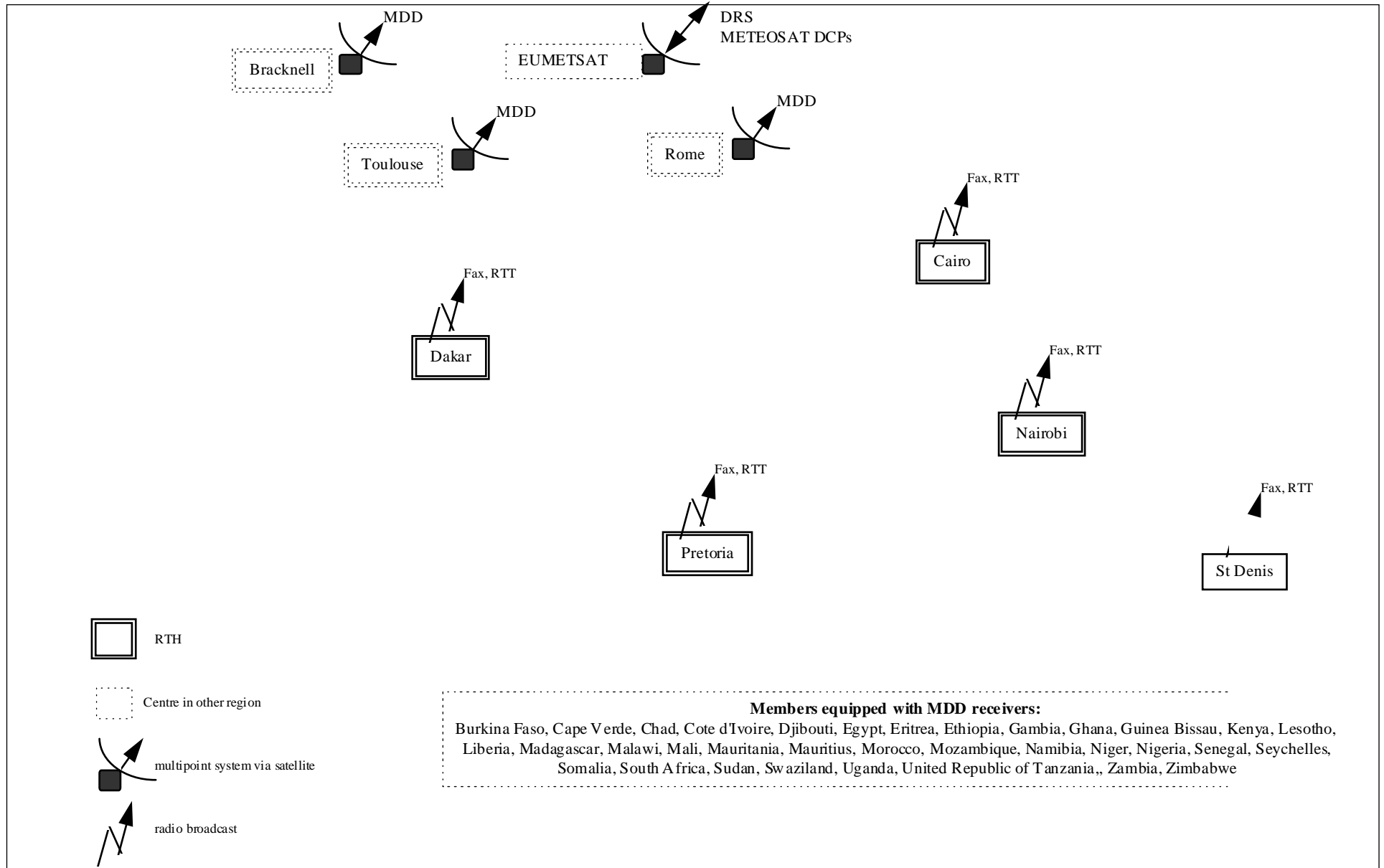
Members are invited to notify the Secretariat of any error or changes of the status of implementation of the GTS as reflected in the attached diagrams.

REGION I (AFRICA)

Point-to-Point Circuits Implementation (transmission speed in bit/s)

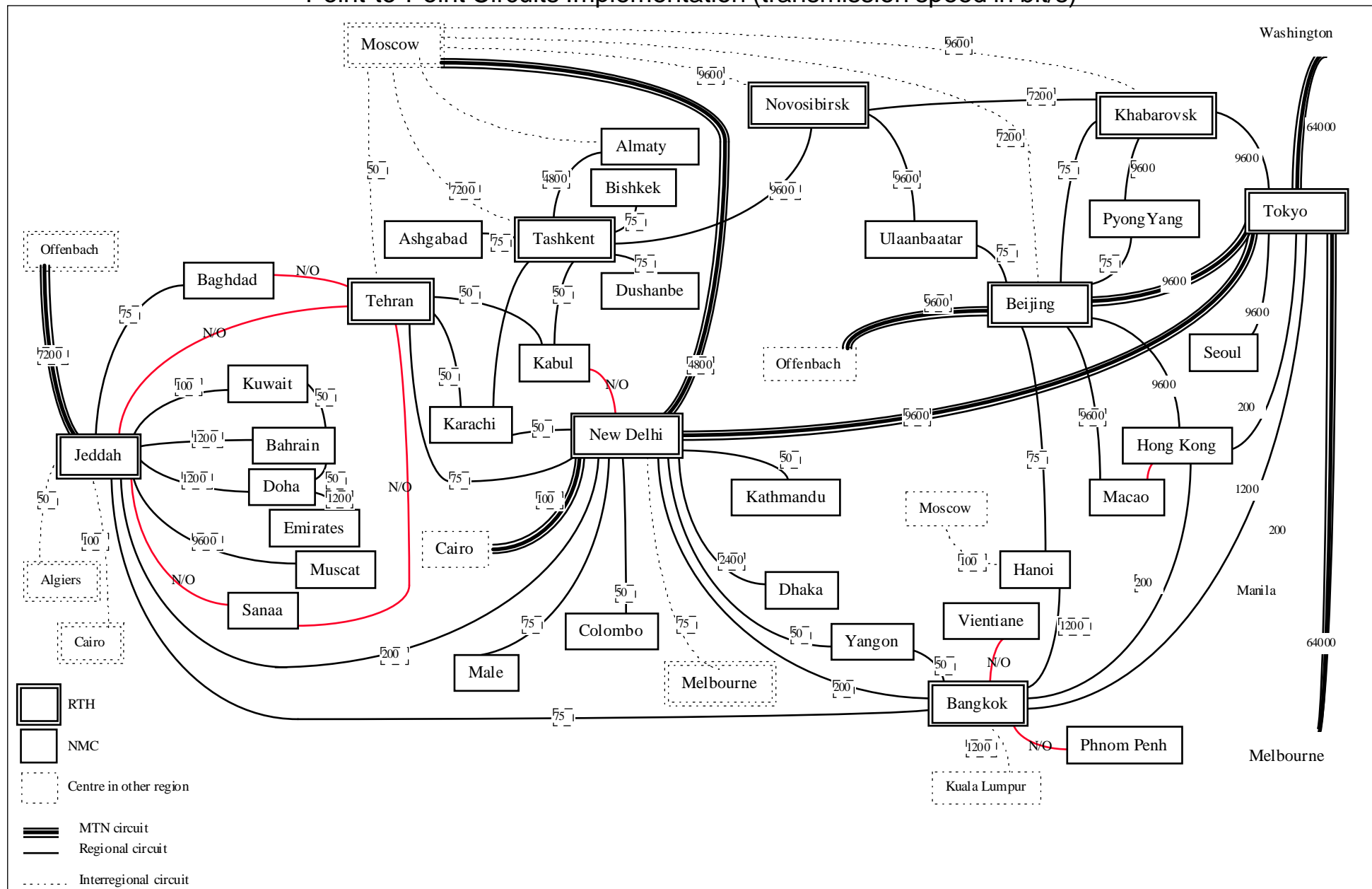


REGION I (AFRICA) Multipoint Telecommunication Systems

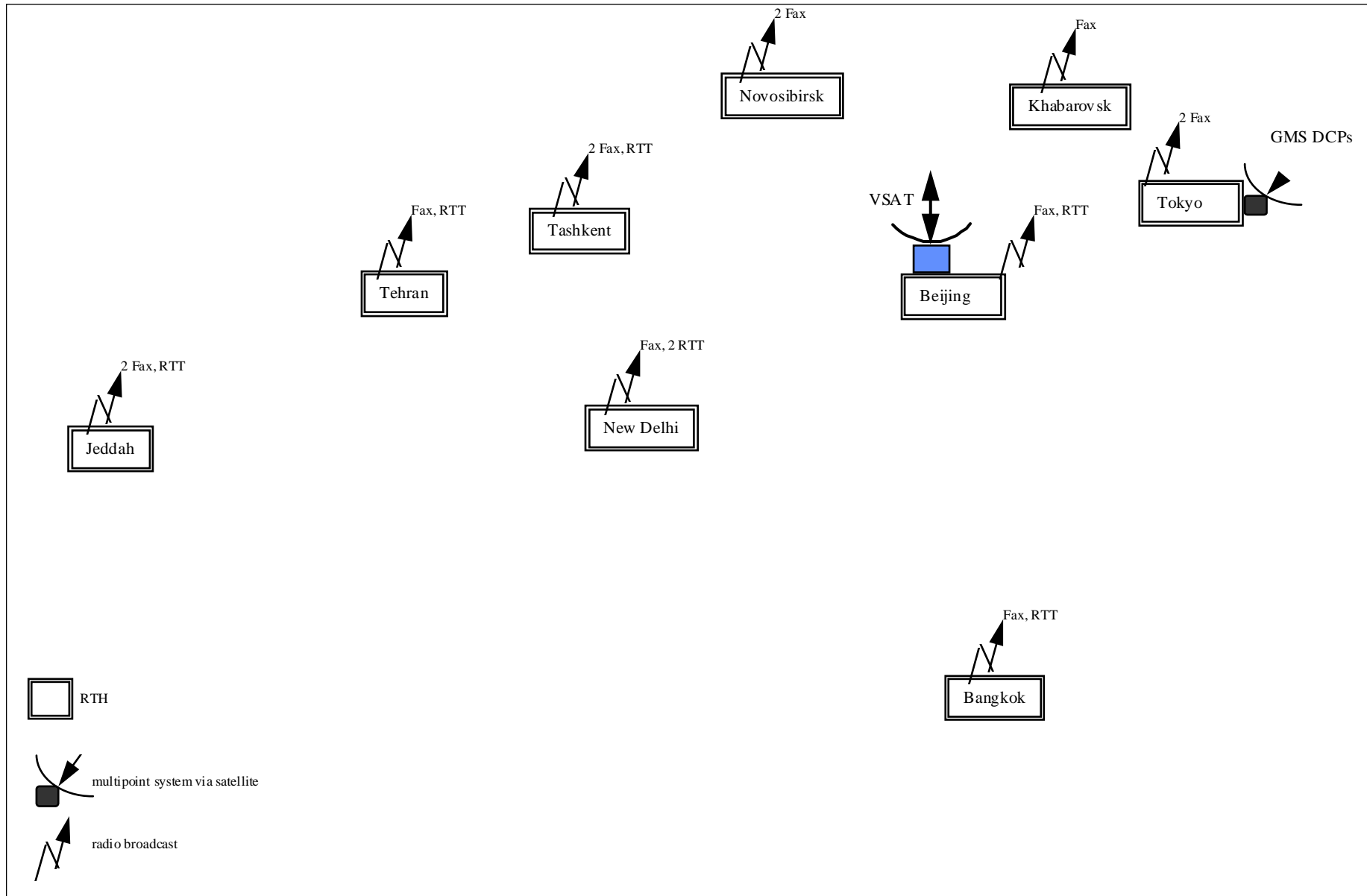


REGION II (ASIA)

Point-to-Point Circuits Implementation (transmission speed in bit/s)

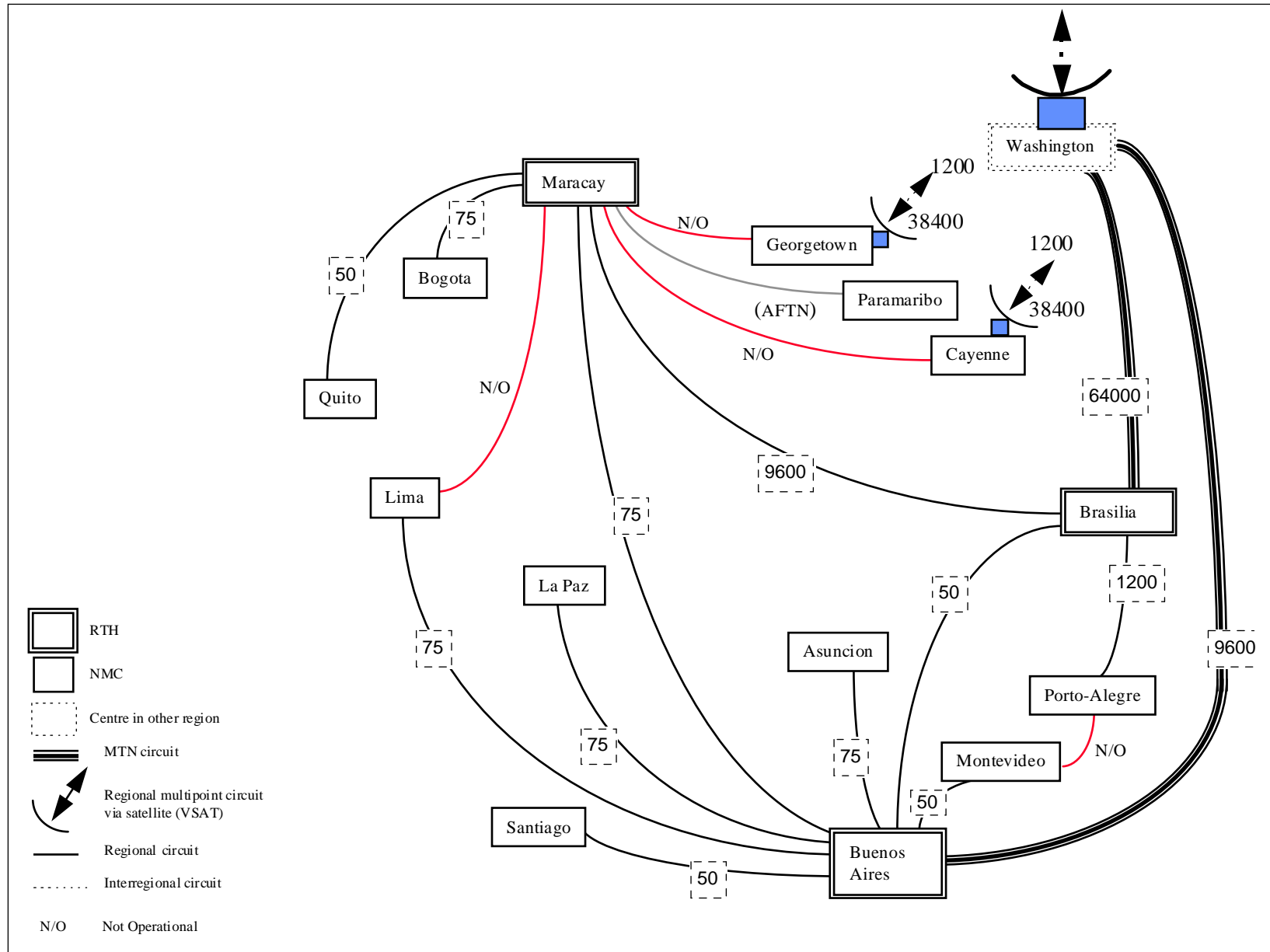


REGION II (ASIA) Multipoint Telecommunication Systems

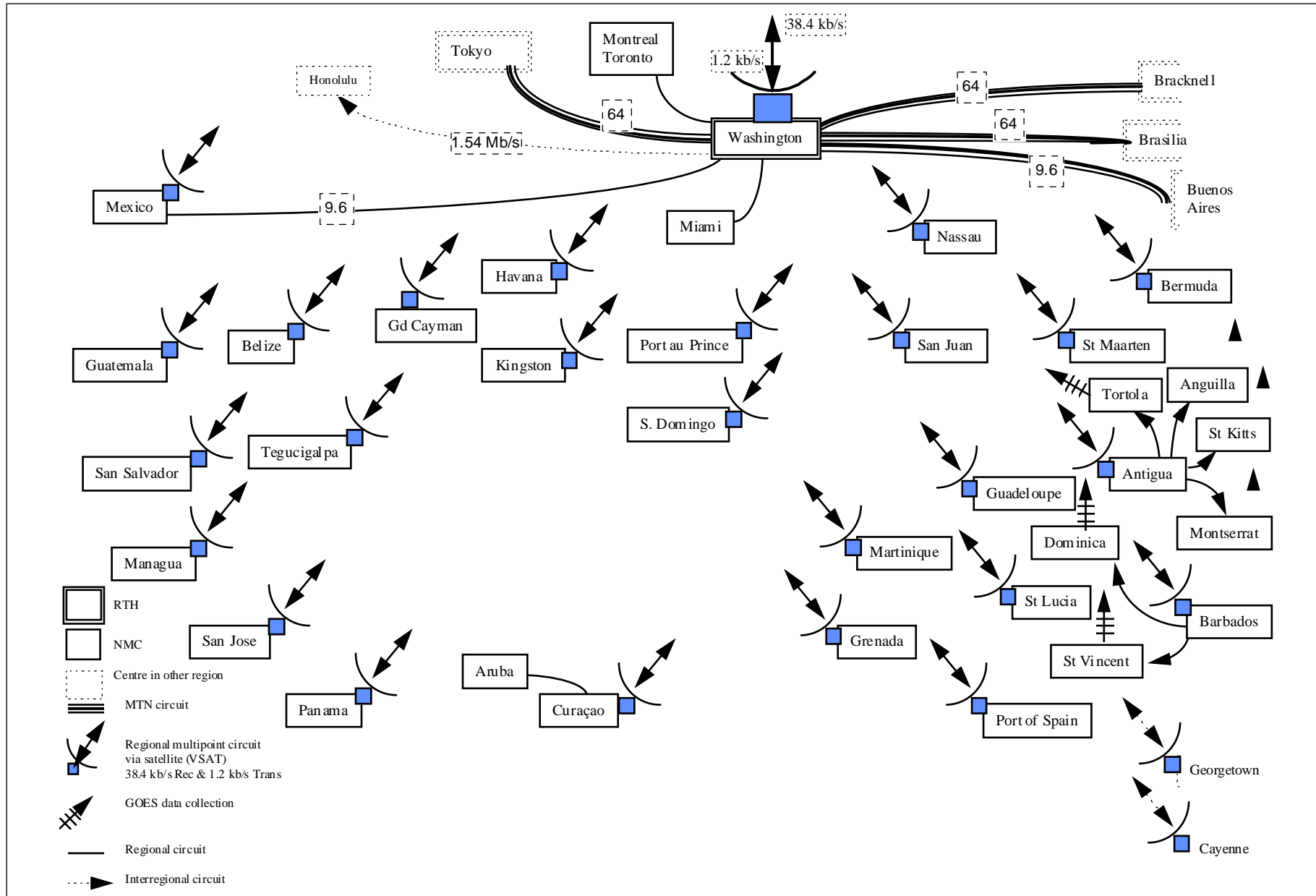


REGION III (SOUTH AMERICA)

Point-to-Point and Multipoint Circuits Implementation (transmission speed in bit/s)

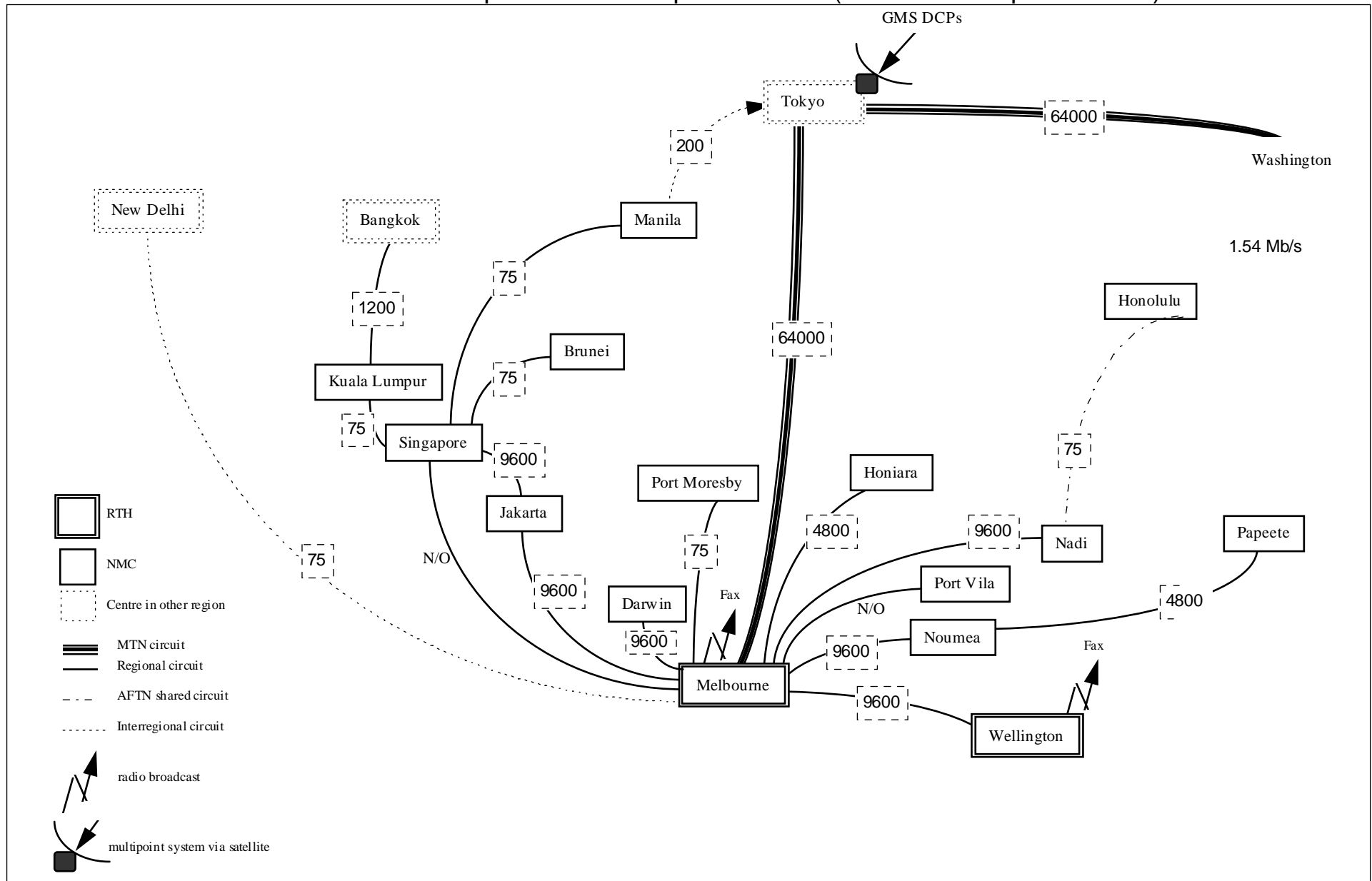


REGION IV (NORTH AND CENTRAL AMERICA)
 Point-to-Point and Multipoint Circuits Implementation (transmission speed in kilobit/s)



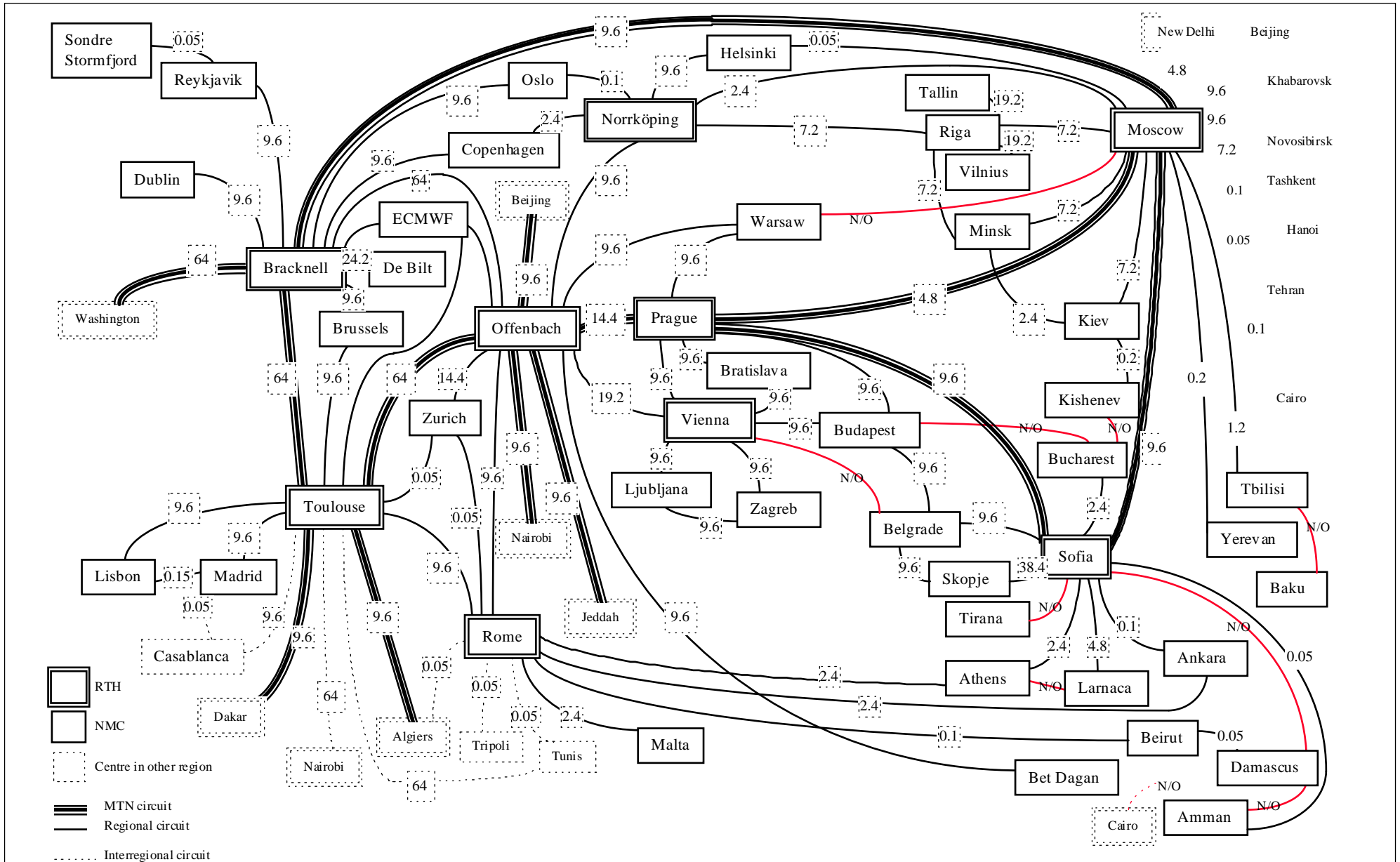
REGION V (SOUTH-WEST PACIFIC)

Point-to-Point and Multipoint Circuits Implementation (transmission speed in bit/s)

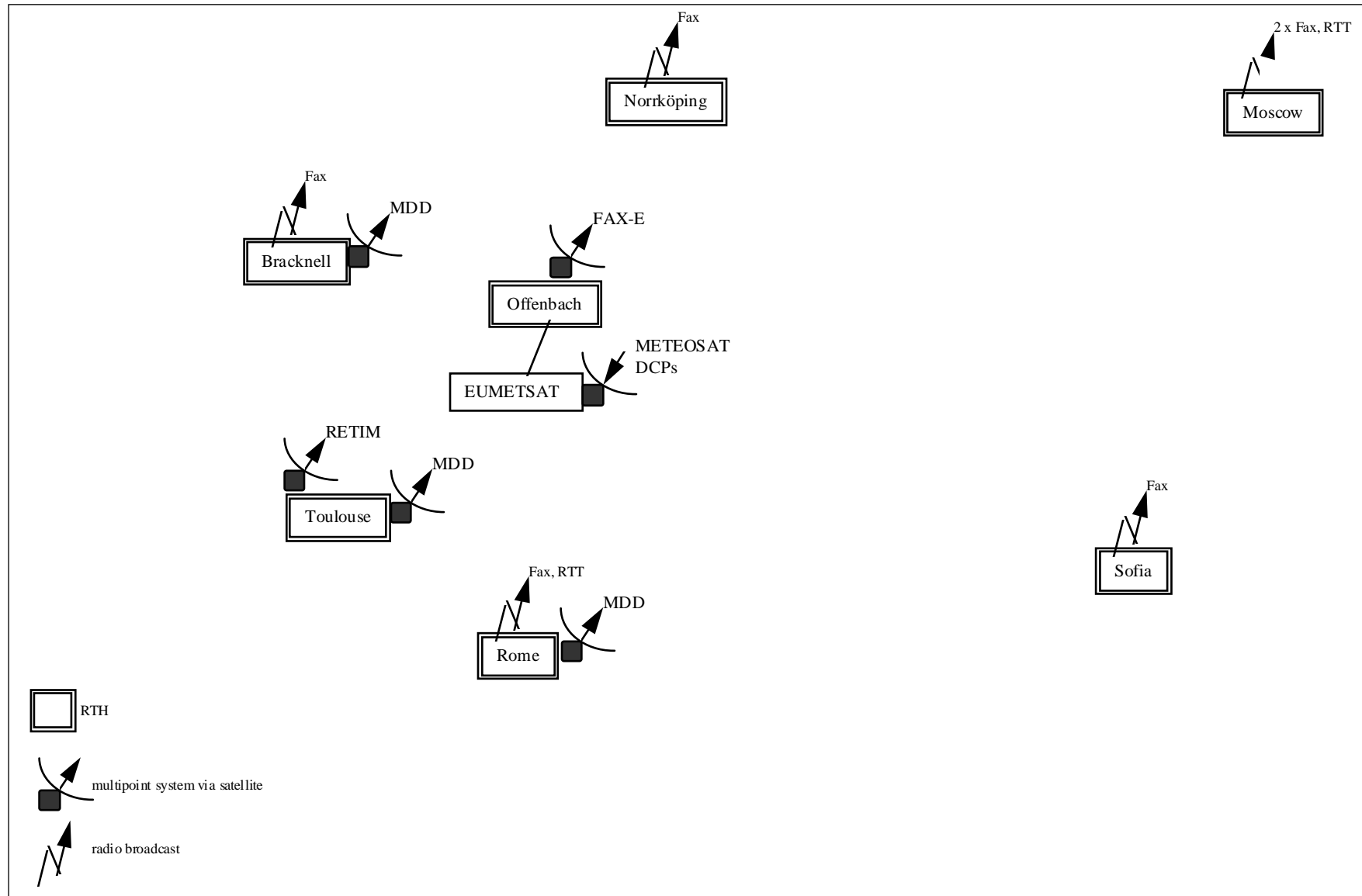


REGION VI (EUROPE)

Point-to-Point circuits implementation (transmission speed in kilobit/s)



REGION VI (EUROPE) Multipoint Telecommunication Systems



IV. CODES

MANUAL ON CODES

NATIONAL PRACTICES CHANGES TO CODES OR PROCEDURES NOTIFICATION FROM CANADA

The text for Canada on pages II-4-E-2 to II-4-E-2c (the page numbering is related to the English version) should be replaced with the following text:

Region IV

E — NATIONAL CODING PROCEDURES WITH REGARD TO INTERNATIONAL CODE FORMS:

FM 15-X Ext. METAR and FM 16-IX Ext. SPECI
replace text for CANADA as below:

SECTION	GROUP	COMMENTS
15.1.1	METAR or SPECI	METAR or SPECI shall appear as the first word of each report.
15.4		Groups not reported shall be omitted. Solidi shall only be used for missing wind speed and/or direction.
New Group	(BBB)	The BBB format may appear immediately preceding the wind group to indicate if the report has been corrected.
15.5	dddfGf _m f _m KT	The averaging period for mean wind speed and direction is two minutes. Speed is reported in nautical miles per hour.
15.5.2	dddfGf _m f _m KT	The term VRB shall not be used.
15.5.3	d _n d _n Vd _x d _x	This group shall not be reported by AUTO stations.
15.6	VVVVD _v	Prevailing visibility is reported in statute miles and fractions up to 3 miles, then in whole miles up to 15 miles, and in units of 5 miles thereafter, where suitable visibility markers are available. Automatic weather stations report sensor visibility in statute miles and fractions up to 4 miles, then in whole miles up to a maximum of 9 miles. Statute miles and fractions of statute miles shall be encoded with a space; for example, 1 1/8 statute mile shall be reported as 1 1/8SM. D _v is not reported, but sector visibilities half (or less) of prevailing visibility are reported in supplementary information (manned sites only). The letters SM (statute miles) are appended, without a space, to each observation to identify the units.
15.6.3	V _x V _x V _x V _x D _v	The group V _x V _x V _x V _x D _v is not used.
15.7.1	RD _R D _R /V _R V _R V _R V _R i	RVR is reported whenever the prevailing visibility is one statute mile or less and/or the RVR is 6000 feet or less. The units of measurement are feet and the abbreviation FT will be included in each message according to the following symbolic format: RD _R D _R /V _R V _R V _R V _R FT/i. When the one minute mean minimum and maximum values are reported, FT/i follows the maximum value without a space. RVR is not used as one of the criteria for reporting a SPECI. RVR is not reported by AUTO stations. RVR may not be reported at some aerodromes.
15.8.1	w'w'	The following weather phenomena/qualifiers will not be reported by automatic weather stations: FC, IC, PE, SG, GS, BR, FG, FU, VA, SA, HZ, SS, DS, TS, MI, BC, PR, DR, BL, SH, VC, PO. AUTO stations will only report one group at a time, otherwise more than three w'w' groups may be reported.

IV

SECTION	GROUP	COMMENTS
15.8.6	w'w'	The term +FC will be used to report any tornado or waterspout when within sight. The term FC will be used to report any funnel cloud when within sight. The symbol UP with appropriate intensity shall be used to describe unknown precipitation reported from an automatic weather station.
15.8.6	w'w'	Precipitation preceded by the descriptor FZ shall always appear as a separate group with its own intensity.
15.8.8	w'w'	Thunderstorms are reported when thunder is heard or if overhead lightning or hail occurs within the 15 minute period preceding the time of the report.
15.8.10	w'w'	The terms VCFC and VCTS shall not be used in Canada. Automatic weather stations cannot report the qualifier VC.
15.8.12	w'w'	Occurrences of IC (diamond dust) are reported whenever visibility is reduced to 6 miles or less.
15.8.13	w'w'	The phenomena represented by FU, HZ, DU and SA are reported whenever the visibility is reduced by the reported phenomena to 6 miles or less.
15.8.14	w'w'	BR (mist) is reported when it reduces visibility to between 5/8 mile and 6 miles inclusive.
15.8.19	w'w'	The letter abbreviation SQ is reported at manned stations when the wind speed increases by 15 kt over the two minute average speed that preceded the increase and the duration of the peak speed period is at least two minutes and the wind speed attains a one minute mean of at least 20 kts, during the peak speed period and the wind speed diminishes by at least 5 kts.
15.9.1.1	N _S N _S N _S h _S h _S h _S	The letters CLR may be used when no clouds below 10,000 feet are reported by automatic weather stations.
15.9.1.2	N _S N _S N _S h _S h _S h _S	The summation principle is used in determining cloud amount. Automatic weather stations report cloud directly overhead, layer amounts are determined by persistence of cloud over top of the sensor. Clouds above 10,000 feet cannot be reported by automatic weather stations.
15.9.1.3	N _S N _S N _S h _S h _S h _S	Significant convective cloud (CB and TCU) information is not available from automated weather stations.
15.9.1.4	N _S N _S N _S h _S h _S h _S	All cloud layers observed are reported.
15.10	CAVOK	The abbreviation CAVOK is not used.
15.11	T'T'/T' _d T' _d	This group is not reported in staffed SPECI reports.
15.12	QP _H P _H P _H P _H	This group is not reported in staffed SPECI reports.
15.13.2.1	REw'w'	Automatic weather stations cannot report this group.
15.13.3	WS RWYD _R D _R or WS ALL RWY	Automatic weather stations cannot report this group.
15.13.4	RMK	Supplementary remarks may be included in observations from Canadian stations following the identifier group RMK . Remarks will appear in the following order: (layer type and opacity)(general remarks) and SLP ppp where ppp is the last 3 digits of the sea level pressure. TORNADO, FUNNEL CLOUD or WATERSPOUT shall be spelled out and entered in the general remarks section whenever observed.
15.14		Trend forecasts shall not be used.