

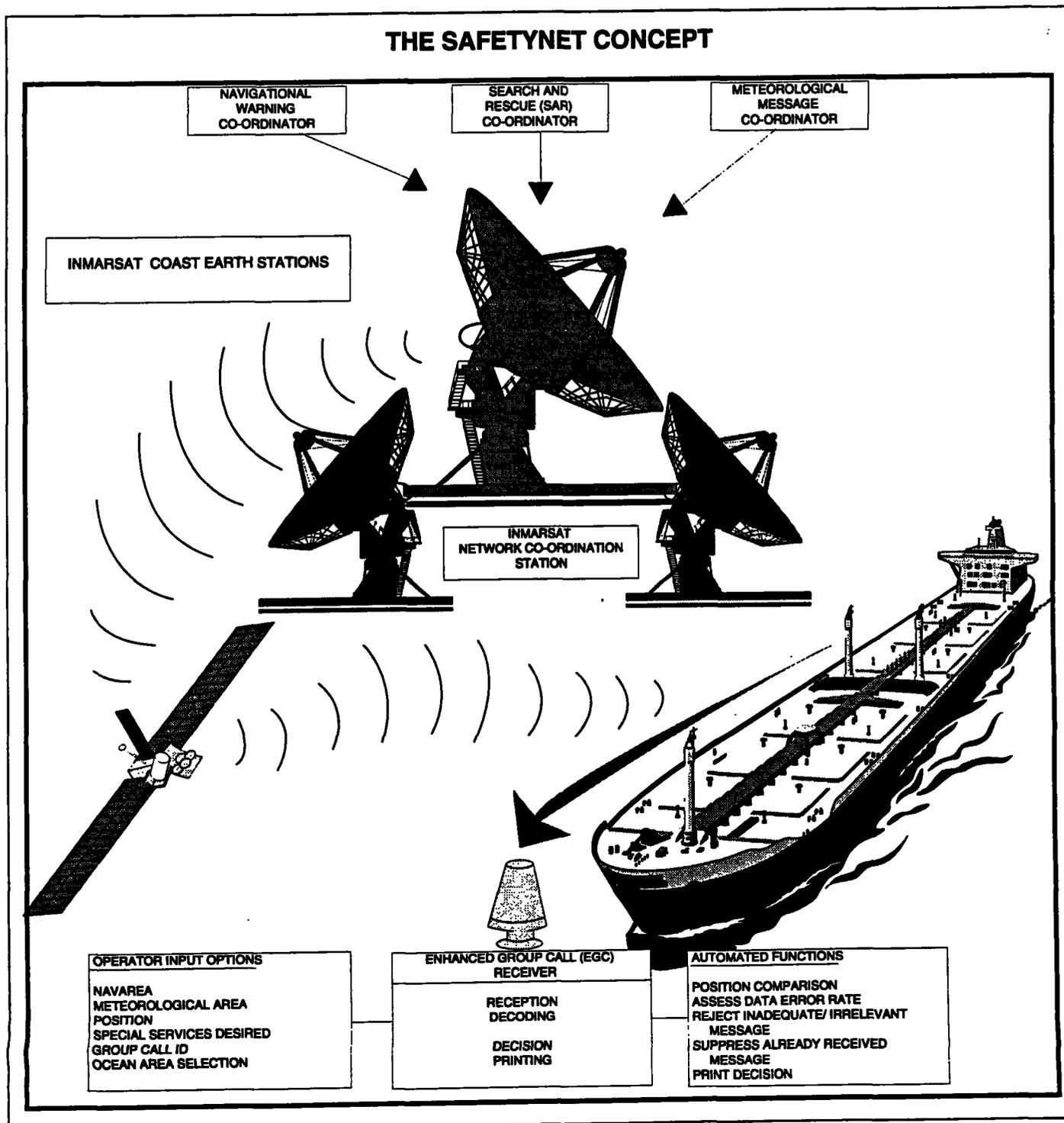
OPERATIONAL NEWSLETTER



OPERATION OF THE WORLD WEATHER WATCH AND MARINE METEOROLOGICAL SERVICES

Volume 1993 — No. 6

THE SAFETYNET CONCEPT



Cover picture: SafetyNETSM* is an international automatic direct-printing satellite-based service for the promulgation of navigational and meteorological warnings, meteorological forecasts and other urgent safety related messages - Maritime Safety Information (MSI) - to ships. It has been developed as a safety service of Inmarsat's Enhanced Group Call (EGC) system to provide a simple and automated means of receiving MSI on-board ships at sea and in coastal waters, where appropriate. The information transmitted is relevant to all sea-going vessels and the message selection features ensure that mariners can receive safety information broadcasts which are tailored to their particular needs.

SafetyNET fulfills an integral role in the Global Maritime Distress and Safety System (GMDSS) developed by the International Maritime Organization (IMO) and incorporated into the 1988 amendments to the International Convention for the Safety of Life at Sea (SOLAS) 1974 as a requirement for ships to which the Convention applies. The ability to receive SafetyNET service information will be generally necessary for all ships which sail beyond coverage of NAVTEX and is commended to all administrations having responsibility for maritime affairs and mariners who require an effective MSI service in waters not served by NAVTEX.

The WMO Secretariat would like to express its appreciation to all those who have contributed material to the OPERATIONAL NEWSLETTER.

* SafetyNETSM is a registered servicemark of the International Maritime Satellite Organization (Inmarsat)

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FOREWORD

As you are aware, all the information on changes to the operation of the World Weather Watch (WWW) and Marine Meteorological Services (MMS) is being assembled and distributed by the Secretariat on a monthly basis to facilitate updating and follow-up action. In this connection we have created the "OPERATIONAL NEWSLETTER" to provide you with the latest operational information on WWW and MMS.

The CBS Advisory Working Group recommended that a special table should be added to the "OPERATIONAL NEWSLETTER" to report changes of the present status of implementation of observing programmes of SYNOP, TEMP and PILOT reporting stations. You will note, therefore, that an item, 'Feed-back from Members to the Secretariat on any changes in the observing network' has been added to Annex I - Global Observing System.

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



(G.O.P. Obasi)
Secretary-General

C. INFORMATION ON OPERATIONAL STATUS OF ELEMENTS OF THE SURFACE-BASED SUB-SYSTEM

1. Publication No. 9, Volume A - Stations

1.1 New stations

Index No.	Name	Latitude	Longitude	Elevation		Pressure Level	Surface observations							Obs. H Obs. S	Upper air				Remarks	
				HP	H/A		00	03	06	09	12	15	18		21	00	06	12		18
02171	BODEN	65° 49'N	21° 42'E	23	16		.	X	X	X	X	X	X	.		.	.	.	.
02473	UNDERSTEN	60° 17'N	18° 55'E	40	8		X	X	X	X	X	X	X	X		.	.	.	.
02543	FAGRE	58° 39'N	14° 08'E	97	95		.	.	X	X	X	X	X	.		.	.	.	.
02662	VISSEFJARDA	56° 31'N	15° 37'E	115	114		.	X	X	X	X	.	.	.		.	.	.	.
06079	ANHOLT	56° 43'N	11° 31'E	3	2		X	X	X	X	X	X	X	X	H00-24	.	.	.	.	AUT
42110	PAURI	30° 09'N	78° 47'E		-1845		.	X	.	.	X	.	.	.		.	.	.	.
42279	BASTI	26° 48'N	82° 44'E		- 89		.	X	.	.	X	.	.	.		.	.	.	.
42364	ETAWAH	26° 27'N	79° 01'E	151	151		.	X	.	.	X	.	.	.		.	.	.	.
43182	NANDIGAMA	16° 47'N	80° 17'E	51	-		.	X	.	.	X	.	.	.		.	.	.	.

1.2 Deleted stations

Index No.	Name
06078	ANHOLT
42105	CHANGIGARH
42704	PANAGARH
71080	MACKAR INLET, N.W.T.
71091	LONGSTAFF BLUFF, N.W.T.
71093	CAPE HOOPER, N.W.T.
71096	BROUGHTON ISLAND, N.W.T.
71923	ENNADAI LAKE, N.W.T.
71927	GLADMAN POINT, N.W.T.

1.3 Changes to existing stations

Index No.	Name	Surface observations							Obs. H Obs. S	Upper air				Remarks	
		00	03	06	09	12	15	18		21	00	06	12		18
02570	NORRKOPING/BRAVALLA	.	X	X	X	X	.	.	.		.	.	.	.
43220	BAPATLA	X	X	X	X	X	X	X	X		.	.	.	.
71092	DEWAR LAKES, N.W.T.	X	.	.	.	X	.	X	.	H00,12,18	.	.	.	.
71094	CAPE DYER, N.W.T.	X	.	.	.	X	.	X	.	H00,12,18	.	.	.	.
71911	SHEPHERD BAY, N.W.T.	X	.	.	.	X	.	X	.	H00,12,18	.	.	.	.
71929	BYRON BAY, N.W.T.	X	.	X	.	X	.	X	.	H00, 06,12,18	.	.	.	.
71932	FORT MCMURRAY, ALTA	X	.	X	.	X	.	X	.	H00-24	.	.	.	.
71937	LADY FRANKLIN POINT	X	.	.	.	X	.	X	.	H00,12,18	.	.	.	.
71948	CAPE PARRY, N.W.T.	X	.	.	.	X	.	X	.	H00,12,18	.	.	.	.
71968	SHINGLE POINT, Y.T.	X	.	.	.	X	.	X	.	H00,12,18	.	.	.	.

1. Publication No. 9, Volume A - Stations (continued)

1.5 Temporary changes

Notification from Hungary:

That as from 1 July 1993 RADIOSONDE observations at station 12982 SZEGED will be discontinued due to financial reasons. RADAR WIND observations will be made at 0000 and 1200 UTC and transmitted on the GTS in code FM 32 PILOT under abbreviated headings:

UPHU02 HABP and UGHU02 HABP

4. Automatic marine stations

4.2 United States of America

List of U.S.A. Ocean Data Acquisition System (ODAS) included in the June 1993 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.

Legend - Observed or technical parameters

Column	Parameters	Column	Parameters
1	Wind direction and speed	5	Sea-surface temperature
2	Air temperature	6	Wave period and height
3	Air pressure	7	Wave spectra
4	Pressure tendency	8	Peak wind gust

4.2.1 Moored Buoys

WMO buoy Identifier	ARGOS Identifier	Position: 17-24 June 1993		Observed or technical parameters									
		Latitude	Longitude	1	2	3	4	5	6	7	8		
32302		18.0S	85.1W	X	X	X		X	X	X			
41001**		34.7N	72.7W	X	X	X		X	X	X			
41002**		32.3N	75.2W	X	X	X		X	X	X			
41004		32.5N	79.1W	*	*	*		*	*	*			
41006**		29.3N	77.4W	X	X	X		X	X	X			
41009		28.5N	80.2W	X	X	X		X	X	X			
41010		28.9N	78.5W	X	X	X		X	X	X			
41015		35.4N	75.2W	X	X	X		X	X	X			
41016		24.6N	76.5W	X	X	X		X	X	X			
41017		35.4N	75.1W	X	X	X		X	X	X			
42001**		25.9N	89.7W	X	X	X		X	X	X			
42002**		25.9N	93.6W	X	X	X		X	X	X			
42003**		25.9N	85.9W	X	X	X		X	X	X			
42007		30.1N	88.8W	X	X	X		X	E	E			
42019		27.9N	95.0W	X	X	X		X	X	X			
42020		27.0N	96.5W	X	X	X		X	X	X			
42025		24.9N	80.4W		X			X	X	X			
42035**		29.2N	94.4W	X	X	X		X	X	X			
44004**		38.5N	70.7W	X	X	X		X	X	X			
44005**		42.6N	68.6W	X	X	X		X	X	X			

* Sensor/system failure

** Primarily for National Weather Service (NWS) support; however, all stations report data to NWS

4. Automatic marine stations / 4.2 United States of America (continued)

4.2.1 Moored Buoys (continued)

WMO buoy Identifier	ARGOS Identifier	Position: 17-24 June 1993		Observed or technical parameters									
		Latitude	Longitude	1	2	3	4	5	6	7	8		
44007**		43.5N	70.1W	X	X	X		X	X	X			
44008**		40.5N	69.4W	X	X	X		X	X	X			
44009		38.5N	74.7W	*	X	X		X	X	X			
44011**		41.1N	66.6W	X	X	X		X	X	X			
44013**		42.4N	70.8W	X	X	X		X	X	X			
44014		36.6N	74.8W	X	X	X		X	X	X			
44025		40.3N	73.2W	X	X	X		X	X	X			
45001**		48.0N	87.8W	X	X	X		X	X	X			
45002**		45.3N	86.4W	X	X	X		X	X	X			
45003**		45.3N	82.7W	X	X	X		X	X	X			
45004**		47.5N	86.5W	X	X	X		X	X	X			
45005**		41.7N	82.4W	X	X	X		X	X	X			
45006**		47.3N	89.9W	X	X	X		X	X	X			
45007**		42.7N	87.1W	X	X	X		X	X	X			
4500F		44.3N	82.4W	X	X	X		X	X	X			
4600		56.3N	148.2W	X	X	X		X	X	X			
46002**		42.5N	130.3W	X	X	X		X	X	X			
46003**		51.9N	155.9W	*	*	*		*	*	*			
46005**		46.1N	131.0W	*	*	*		*	*	*			
46006**		40.9N	137.5W	X	X	X		X	X	X			
46012		37.4N	122.7W	X	X	X		X	X	X			
46013		38.2N	123.3W	X	X	X		X	X	X			
46014		39.2N	124.0W	X	X	X		X	X	X			
46022		40.7N	124.5W	X	X	X		X	X	X			
46023		34.3N	120.7W	X	X	X		X	X	X			
46025		33.7N	119.1W	X	X	X		X	X	X			
46026**		37.7N	122.7W	X	X	X		X	X	X			
46027**		41.8N	124.4W	*	*	*		*	*	*			
46028		35.8N	121.9W	*	*	*		*	*	*			
46029**		46.2N	124.2W	X	X	X		X	X	X			
46030**		40.4N	124.5W	X	X	X		X	X	X			
46035		57.0N	177.7W	X	X	X		X	X	X			
46041		47.4N	124.5W	X	X	X		X	X	X			
46042		36.8N	122.4W	X	X	X		*	X	X			
46045		33.8N	118.4W	X	X	X		X	X	X			
46047		32.7N	119.6W	X	X	X		X	X	X			
46048		32.9N	117.9W	X	X	X		X	X	X			
46050		44.6N	124.5W	X	X	X		X	X	X			
46051		34.5N	120.7W	X	X	X		X	X	X			
51001**		23.4N	162.3W	X	X	X		X	X	X			
51002**		17.2N	157.8W	X	X	X		X	X	X			
51003**		19.3N	160.8W	X	X	X		X	X	X			
51004**		17.4N	152.5W	X	X	X		X	X	X			
51026		21.4N	157.0W	*	*	*		*	*	*			
52009		13.7N	144.7E	X	*	X		X	X	X			

* Sensor/system failure

Primarily for National Weather Service (NWS) support; however, all stations report data to NWS

4. Automatic marine stations (continued)

4.2 United States of America (continued)

4.2.2 Drifting Buoys

WMO buoy Identifier	ARGOS Identifier	Position: 16-24 June 1993 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
16809	12314	39°S	108°E	.	X	*		X	.	.	.
16810	12309	61°S	174°E	.	X	*		X	.	.	.
17814	1968	47°S	165°E	.	X	X		X	.	.	.
17815	1965	51°S	023°E	.	X	X		X	.	.	.
17817	1986	32°S	005°E	.	*	X		X	.	.	.
33831	1967	25°S	040°E	.	X	X		*	.	.	.
33833	1974	34°S	023°W	.	X	X		X	.	.	.
33834	1979	33°S	016°W	.	X	X		X	.	.	.
33835	1987	58°S	001°E	.	X	X		X	.	.	.
33838	17163	35°S	030°W	.	X	X		X	.	.	.
33839	17164	40°S	048°W	.	X	X		X	.	.	.
33840	17165	45°S	041°W	.	X	X		X	.	.	.
33841	17166	39°S	039°W	.	X	X		X	.	.	.
33842	17167	49°S	041°W	.	X	X		X	.	.	.
53823	5131	08°S	114°E	.	*	X		*	.	.	.
53824	1989	16°S	116°E	.	X	X		X	.	.	.
54801	1973	27°S	149°W	.	X	X		X	.	.	.
54802	1993	32°S	136°W	.	X	X		X	.	.	.
54803	1975	40°S	145°W	.	X	X		X	.	.	.
54804	1970	40°S	135°W	.	X	X		X	.	.	.
54838	8823	39°S	102°W	.	X	X		X	.	.	.
54846	1969	41°S	145°W	.	X	X		X	.	.	.
56801	5130	25°S	051°E	.	X	X		X	.	.	.
56802	5119	10°S	085°E	.	X	X		X	.	.	.
56803	1994	24°S	081°E	.	X	X		X	.	.	.
56835	12291	30°S	052°E	.	X	X		X	.	.	.

4.3 France

Data from drifting buoys are collected by the ARGOS system. They are distributed on the GTS in DRIFTER code, either from CLS/ARGOS in Toulouse (heading SSVX01 LFPW), or from the Centre de Météorologie Marine in Brest (headings SSVX51 and SSVX55 LFPW).

Legend - Observed or technical parameters

Column	Parameters	Column	Parameters
1	Wind direction and speed	6	Wave period and height
2	Air temperature	7	Wave spectra
3	Air pressure	8	Peak wind gust
4	Pressure tendency	9	Subsurface temperatures
5	Sea-surface temperature		

• Sensor/system failure

4. Automatic marine stations / 4.3 France (continued)

4.3.2 Drifting Buoys

WMO buoy Identifier	ARGOS Identifier	Position: 21 June 1993		Observed or technical parameters									
		Latitude	Longitude	1	2	3	4	5	6	7	8	9	
52575	17618	1°28'S	171°39'E	.	.	.	.	X	.	.	.	.	X
52576	17623	17°57'N	142°04'E	.	.	.	.	X	.	.	.	.	X
52577	17624	15°57'N	143°15'E	.	.	.	.	X	.	.	.	.	X
52579	17629	0°32'S	172°41'E	.	.	.	.	X	.	.	.	.	X
52580	17619	14°47'N	146°07'E	.	.	.	.	X	.	.	.	.	X
52581	17620	5°18'S	178°04'E	.	.	.	.	X	.	.	.	.	X
52582	17627	3°00'S	153°28'E	.	.	.	.	*	.	.	.	.	*
52583	17621	2°51'S	173°27'E	.	.	.	.	X	.	.	.	.	X
52584	17626	9°29'N	144°01'E	.	.	.	.	X	.	.	.	.	X
52588	17628	14°26'N	144°14'E	.	.	.	.	X	.	.	.	.	X
52589	17622	7°31'N	153°22'E	.	.	.	.	X	.	.	.	.	X
52886	14415	3°44'S	159°10'E	.	.	*	.	.	.	.	.	.	.
52887	14416	4°22'S	156°12'E	X	.	X	.	X	.	.	.	.	.
52889	02678	13°05'N	169°58'E	.	.	.	.	X	.	.	.	.	X
52890	02679	18°44'N	179°33'W	.	.	.	.	X	.	.	.	.	X
52891	02676	1°46'S	160°53'E	.	.	.	.	*	.	.	.	.	*
62503	05834	46°24'N	11°45'W	.	.	*	*	*	.	.	.	.	*
62511	01354	44°42'N	6°37'W	.	.	X	.	X	.	.	.	.	.
62516	10107	47°30'N	11°49'W	.	.	X	X	X	.	.	.	.	.
62517	10108	48°38'N	12°53'W	.	.	X	X	X	.	.	.	.	.
62518	10113	44°41'N	11°56'W	X	.	X	.	X	.	.	.	.	.

* Failure or retrieved

5. ARGOS Service

5.1 ARGOS monthly status report

Date of statistics computation : 1 June 1993

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

Drifting Buoy	:	1053
Boat(<20knots)	:	28
Marine Station	:	4
Moored Buoy	:	298
Terrestrial Animal	:	128
Marine Animal	:	82
Balloons	:	6
Birds	:	41
Fixed Station	:	432
TOTAL :		2072

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

- Reports for insertion into the GTS (list of monthly collected GTS platforms on every GTS site sorted by type of platform)

Transmission to RTH Paris:

Drifting Buoys	:	105
Fixed Stations	:	10
Marine Stations	:	4
Moored Buoys	:	1

Transmission to NWS Washington:

Drifting Buoys	:	500
Fixed Stations	:	5
High Speed	:	5
Moored Buoys	:	19

- List of platforms reporting through ARGOS and distributed over the GTS:

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOP/ T=TESAC/U=BUFR/ H=HYDRA	NB. MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS	
Australia	33320	03042	D	49	24	Y	
	52621	02937	D	198	11	Y	
	55513	00421	D	267	6	Y	
	55515	00415	D	245	3	Y	
	55516	00417	D	4	0	Y	
	55517	00413	D	145	2	Y	
	55520	03042	D	187	13	Y	
	56003	03101	D	97	11	Y	
	56504	08036	D	238	31	Y	
	56506	04875	D	186	34	Y	
	56507	04876	D	280	17	Y	
	56509	02938	D	320	21	Y	
	56511	02942	D	101	9	Y	
		GYRW*	09197				
		GYSA*	09189				
		GYSE*	09199				
		S6FK*	09193				
		VJBQ*	09192				
		VJDI*	09188				
		VJDP*	09198				
	9VBZ*	09194					
	9VUU*	09190					
	9VWM*	09191					
Canada	21551	01333	D	813	54	Y	
	21553	01332	D	49	6	N	
	42606	07183		0	656	Y	
	44137	05579		0	616	Y	
	44138	05577		0	653	Y	

* PTT's transmitting at irregular intervals

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOPI/ T=TESAC/U=BUFR/ H=HYDRA	NB_MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
Canada (continued)	44139	03448		0	653	Y
	44140	05576		0	4	Y
	44141	03449		0	642	Y
	44142	05578		0	534	Y
	46004	07180		0	898	Y
	46036	05324		0	892	Y
	46145	07193		0	1028	Y
	46181	08676		0	821	Y
	46184	07182		0	607	Y
	46204	07197		0	331	Y
	46205	07196		0	1011	Y
	46207	07187		0	855	Y
	46208	07186		0	994	Y
	46251	01318	D	24	197	Y
	Finland	71091	05895	D	553	89	Y
France	52575	17618	D	28	19	Y
	52576	17623	D	28	16	Y
	52577	17624	D	13	29	Y
	52579	17629	D	29	14	Y
	52580	17619	D	90	36	Y
	52581	17620	D	21	23	Y
	52582	17627	D	33	10	Y
	52584	17626	D	74	38	Y
	52889	02678	D	34	11	Y
	52890	02679	D	32	15	Y
	62503	05834	D	224	103	Y
	62507	05794	D	215	48	N
	62516	10107	D	341	63	Y
	62517	10108	D	319	118	Y
	62518	10113	D	334	74	Y
	ELEH4*	08747				
	ELIL9*	04719				
	ELIS8*	04705				
	FNDK*	08748				
	FNGS*	04707				
FNZQ*	04711					
FNWC*	04722					
GQEK*	04708					
HPEW*	04703					
ZDAZ6*	04714					
Germany	63662	09360	D	628	212	Y
	63663	09372	D	721	210	Y
	71042	03317	D	571	61	Y
	71524	03315	D	660	1	Y

* PTT's transmitting at irregular intervals

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOF/ T=TESAC/U=BUFR/ H=HYDRA	NB_MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
Germany (continued)	71551	09357	D	492	20	Y
	71552	09358	D	435	32	Y
	71553	09359	D	201	17	Y
	71554	09366	D	396	44	Y
	71555	09367	D	2	12	Y
	71556	09368	D	422	31	Y
	71557	09369	D	419	40	Y
Italy	63904	15919	D	229	73	Y
	63905	15888	D	186	91	Y
	63906	15906	D	194	76	Y
	63907	15917	D	342	75	Y
	63909	05589	D	158	97	Y
	63910	05584	D	117	62	Y
	64146	15911	D	286	42	Y
	64149	15916	D	223	44	Y
	64629	15902	D	308	19	Y
	64631	15904	D	301	32	Y
	64634	15912	D	242	20	Y
	64635	15915	D	187	104	Y
	64638	15893	D	291	32	Y
	64639	15895	D	100	43	Y
	64640	15896	D	247	46	Y
	64642	15899	D	243	67	Y
	64645	15909	D	140	66	Y
	64648	15914	D	117	46	Y
	64652	15921	D	236	68	Y
	64905	08633	D	242	79	Y
	64908	08639	D	264	33	Y
	64922	15925	D	172	25	Y
	64923	15926	D	78	16	N
64925	02459	D	15	5	N	
Netherlands	65596	04271	D	750	5	Y
Norway	17001	01591	D	253	107	Y
	25011	03690	D	472	85	Y
	25012	03691	D	487	73	Y
	25561	01556	D	777	236	Y
	26531	01791	D	793	244	Y
	26532	01790	D	729	225	Y
	44766	03675	D	579	122	Y
	63006	09400	D	671	391	Y
	65591	06666		0	629	N
	71003	09498	D	510	136	Y
	71004	09499		0	653	N
	74002	09497	D	459	55	Y

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOP/ T=TESAC/U=BUFR/ H=HYDRA	NB. MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS	
New Zealand	55580	06439	D	239	15	Y	
	55583	07179	D	278	9	Y	
	55585	07177	D	202	22	Y	
	55586	07176		0	7	N	
	55587	08584	D	249	14	Y	
	55588	08585	D	241	48	Y	
	55589	08586	D	204	15	Y	
	Republic of Korea	22607	11013	D	32	5	Y
South Africa**	17545	03524	D	65	1	Y	
	17547	03521	D	245	28	Y	
	17548	03520	D	141	20	Y	
	17549	00945	D	223	15	Y	
	17550	00946	D	183	15	Y	
	17551	00954	D	228	13	Y	
	17554	00955	D	4	58	Y	
	17556	00952	D	226	22	Y	
	17557	00948	D	228	25	Y	
	17558	00959	D	240	22	Y	
	17559	00961	D	206	38	Y	
	33021	09222	D	475	17	Y	
	United Kingdom	25013	04065	D	484	105	Y
		25562	01639	D	500	343	Y
44762		01253	D	516	20	Y	
44764		01254	D	286	80	Y	
44765		01255	D	279	81	Y	
44770		06287	D	407	70	Y	
44772		02960	D	710	6	Y	
44773		04624	D	607	12	Y	
44774		02961	D	518	10	Y	
44775		02962	D	500	11	Y	
44776		01248		0	245	Y	
44777		01257		0	142	Y	
62601		08336	D	322	55	Y	
62602		03909	D	140	17	Y	
62606		03916	D	30	2	N	
62694		02958	D	402	5	Y	
62711		01258	D	256	4	N	
62712		01247		0	255	Y	
62713		01363	D	265	80	Y	
62714		01364	D	325	73	Y	
62805		06285	D	150	214	Y	
64043		06270		0	22	Y	

** The Government of the Republic of South Africa has been suspended by Resolution 38 (Cg-VII) from exercising its rights and enjoying its privileges as a Member of WMO

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOP/ T=TESAC/U=BUFR/ H=HYDRA	NB_MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS	
United States of America (continued)	12501	03753	D	374	55	Y	
	12503	03754	D	391	57	Y	
	12504	03755	D	291	50	Y	
	12505	03756	D	70	51	Y	
	12508	03951	D	252	54	Y	
	13003	06865	D	498	29	Y	
	13004	06869	D	489	57	Y	
	13902	14456	D	112	31	Y	
	13903	01763	D	126	27	Y	
	13904	14445	D	134	26	Y	
	13905	14447	D	125	27	Y	
	13906	05919	D	115	30	Y	
	13907	14461	D	140	37	Y	
	13909	08598	D	99	49	Y	
	13910	14464	D	154	13	Y	
	13911	14448	D	115	37	Y	
	13912	14439	D	137	21	Y	
	13913	14450	D	97	85	Y	
	13914	14452	D	124	23	Y	
	13915	14453	D	152	19	Y	
	13917	02072	D	99	39	Y	
	13919	14442	D	147	15	Y	
	13922	02005	D	139	26	Y	
	13923	02006	D	137	30	Y	
	13924	14436	D	133	16	Y	
	13925	14438	D	145	12	Y	
	13926	02070	D	111	23	Y	
	16809	12314	D	19	104	Y	
	16810	12309	D	628	12	Y	
	17812	01981	D	0	385	Y	
	17814	01968	D	380	39	Y	
	17815	01965	D	478	39	Y	
	17816	01992	D	264	107	Y	
	17817	01986	D	315	17	Y	
	17825	05129	D	0	1	Y	
	21431	02875	D	91	18	Y	
	21432	02075	D	38	20	Y	
	21433	15588	D	67	15	Y	
	21434	15591	D	73	29	Y	
	21436	00509	D	61	5	Y	
	21438	02873	D	103	13	Y	
	21439	02878	D	71	17	Y	
	21440	02883	D	73	20	Y	
	21441	08873	D	88	19	Y	
	21442	00525			0	42	N
	21522	15323	D	45	6	Y	
	21523	15324	D	185	75	N	
	21524	15329	D	214	34	Y	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOPI/ T=TESAC/U=BUFR/ H=HYDRA	NB_MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	21525	16332		0	1	Y
	21526	01535	D	478	190	Y
	21527	15331	D	272	76	Y
	21528	05260	D	354	52	Y
	21529	06814	D	317	21	Y
	21532	16323		0	1	Y
	21533	15325	D	135	51	Y
	21534	05254	D	166	15	Y
	21572	01151	D	442	115	Y
	21573	04648	D	504	187	Y
	21576	15326	D	454	110	Y
	21578	15328	D	97	17	N
	21901	15537	D	185	37	Y
	21902	15536	D	109	28	Y
	21904	14981	D	174	32	Y
	21906	00501		0	3	N
	21908	15572	D	199	38	Y
	21909	16191		0	1	N
	21910	16192	D	158	53	Y
	21911	16194	D	179	29	Y
	21912	16213	D	93	87	Y
	21913	16214	D	198	28	Y
	21915	15574	D	141	53	Y
	21918	16210	D	232	25	Y
	21920	15583	D	161	54	Y
	21921	15584	D	68	72	Y
	21922	15586	D	90	32	N
	21923	14980	D	149	28	Y
	21924	15585	D	171	30	Y
	21925	02399	D	195	24	Y
	21926	15587		0	28	Y
	21927	16209	D	229	14	Y
	21928	16257	D	140	45	Y
	21929	01780	D	94	9	Y
	21930	02396	D	93	16	Y
	21931	02875	D	69	14	Y
	21932	02075	D	36	7	Y
	21933	15588	D	62	6	Y
	21934	15591	D	56	22	Y
	21936	00509	D	44	2	Y
	21938	02873	D	72	10	Y
	21939	02878	D	53	19	Y
	2194C	02883	D	63	15	Y
	21941	08873	D	76	15	Y
	22901	00524		0	2	N
	22902	14977	D	93	10	Y
	22904	00531	D	58	13	Y
22905	00519	D	14	16	N	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOP/ T=TESAC/U=BUFR/ H=HYDRA	NB_MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	22937	00508	D	42	3	Y
	23502	15355	D	70	59	Y
	23503	15357	D	11	57	Y
	23504	15358	D	14	113	Y
	23506	15360	D	66	3	Y
	23507	16350	D	128	3	Y
	23508	16372	D	124	4	Y
	23509	03748	D	124	7	Y
	25537	08354	D	686	42	Y
	25538	08356	D	724	37	Y
	25539	08357	D	753	52	Y
	25540	08358	D	761	36	Y
	25541	08363	D	800	71	Y
	32513	11917	D	57	17	Y
	32514	11948	D	32	32	Y
	32515	15648	D	91	7	Y
	32516	11927	D	186	52	Y
	32517	15093	D	119	13	Y
	32518	15091	D	99	15	Y
	32519	11952	D	10	44	Y
	32520	15649	D	96	4	Y
	32522	15598	D	93	9	Y
	32523	16254	D	91	8	Y
	32524	15695	D	88	2	Y
	32525	11953	D	11	32	Y
	32526	15696	D	65	20	Y
	32527	02398	D	73	15	Y
	32528	03048	D	107	6	Y
	32529	15028	D	84	9	Y
	32531	00153	D	83	33	Y
	32532	00473	D	74	14	Y
	32533	15017	D	86	13	Y
	32534	15018	D	83	8	Y
	32535	15025	D	97	4	Y
	32536	15026	D	78	19	Y
	32537	03225	D	81	9	Y
	32538	15602	D	2	3	Y
	32539	02884	D	66	9	Y
	32540	08879	D	75	9	Y
	32541	15595	D	100	3	Y
	32542	15596	D	89	5	Y
	32543	03567	D	74	12	Y
	32544	05912	D	77	8	Y
	32545	15679	D	93	3	Y
32546	02885	D	85	10	Y	
32547	15597	D	80	3	Y	
32548	15599	D	93	6	Y	
32549	11163	D	68	20	Y	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOPI/ T=TESAC/U=BUFR/ H=HYDRA	NB. MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	32550	04200	D	49	34	Y
	32551	15600	D	90	2	Y
	32552	11195	D	83	25	Y
	32553	15603	D	85	3	Y
	32554	04201	D	53	20	Y
	32555	15625	D	89	3	Y
	32556	11934	D	37	24	Y
	32557	15626	D	107	10	Y
	32558	09276	D	101	4	Y
	32559	15627	D	102	4	Y
	32560	03252	D	79	5	Y
	32801	08874	D	69	11	Y
	32802	16278	D	80	9	Y
	32803	16284	D	70	15	Y
	32866	02400	D	61	11	Y
	32867	02872	D	73	12	Y
	32868	02896	D	84	6	Y
	32869	16252	D	70	16	Y
	32870	16259	D	62	10	Y
	32901	03565	D	75	5	Y
	32902	15045	D	75	12	Y
	32903	15050	D	106	7	Y
	32904	15128	D	96	8	Y
	32905	15684	D	96	10	Y
	32906	15685	D	86	10	Y
	32907	03044	D	78	2	Y
	32908	15687	D	80	11	Y
	32909	04204	D	68	16	Y
	32910	15540	D	100	10	Y
	32911	15541	D	78	7	Y
	32912	15542	D	86	14	Y
	32913	15546	D	89	7	Y
	32914	03568	D	86	23	Y
	32915	15048	D	93	4	Y
	32916	15545	D	96	8	Y
	32917	00474	D	74	21	Y
	32918	00483	D	84	17	Y
	32919	16272	D	57	13	Y
	32920	16275	D	69	11	Y
	33831	01967	D	281	25	Y
	33833	01974	D	313	22	Y
	33834	01979	D	315	15	Y
	33835	01987	D	617	16	Y
	33837	01991	D	11	41	N
	34901	15123	D	90	11	Y
	34902	15125	D	73	12	Y
	41501	03955	D	379	63	Y
41502	03956	D	91	368	Y	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOPI/ T=TESAC/U=BUFR/ H=HYDRA	NB_MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	41504	03957	D	411	73	Y
	41505	03958	D	127	23	Y
	41521	05094	D	439	48	Y
	41522	01125	D	463	45	Y
	41523	01128	D	357	81	Y
	41524	05095	D	450	58	Y
	41901	12326	D	63	45	Y
	41902	08594	D	97	39	Y
	41903	08596	D	15	47	Y
	41904	08599	D	116	20	Y
	41906	12333	D	128	25	Y
	41907	12329	D	163	19	Y
	41908	12339	D	131	15	Y
	41909	00130	D	155	24	Y
	41910	12324	D	122	36	Y
	41911	12325	D	117	36	Y
	41912	02008	D	128	19	Y
	41913	12330	D	158	15	Y
	41914	12334	D	98	23	Y
	41915	12328	D	117	45	Y
	41916	12327	D	111	32	Y
	41917	12337	D	145	16	Y
	41918	12338	D	130	33	Y
	41919	01861	D	146	23	Y
	41920	01863	D	77	18	Y
	41921	03045	D	141	20	Y
	41922	00468	D	127	33	Y
	41923	00482	D	148	16	Y
	41924	00484	D	127	33	Y
	42026	00937	D	261	127	Y
	42027	00930	D	241	143	Y
	42028	00932	D	275	121	Y
	42029	00934	D	164	111	Y
	42030	00931	D	255	119	Y
	42031	00936	D	128	92	Y
	42032	00933		0	5	Y
	42033	00935	D	89	37	Y
	43501	00451	D	69	29	Y
	43503	15656	D	1	1	Y
	43504	11198	D	55	20	Y
	43505	15657	D	137	27	Y
	43508	15008	D	102	15	Y
	43801	16287	D	65	21	Y
	44501	02607	D	117	12	Y
	44502	02587	D	82	29	Y
	44508	02579	D	319	53	N
	44510	02585	D	600	40	Y
44511	02580	D	369	155	Y	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOPT/ T=TESAC/U=BUFR/ H=HYDRA	NB_MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	44512	02584	D	343	162	Y
	44901	00486	D	181	11	Y
	44905	12335	D	126	26	Y
	44906	12332	D	2	61	Y
	44908	01867	D	161	24	Y
	46508	01146	D	502	198	Y
	46509	04649	D	522	174	Y
	46513	16364	D	14	51	Y
	46514	16365	D	356	144	Y
	46515	16375	D	198	40	Y
	46519	15338	D	426	41	Y
	46521	15351	D	160	20	Y
	46535	02009	D	103	66	Y
	46536	15609	D	91	23	Y
	46537	15612	D	129	20	Y
	46538	15579	D	129	69	Y
	46539	15622	D	173	34	Y
	46540	15577	D	68	72	Y
	46541	15643	D	60	47	Y
	46545	15589	D	159	40	Y
	46548	15580	D	192	44	Y
	46549	15076	D	130	33	Y
	46550	01135	D	37	13	N
	46901	15655	D	87	42	Y
	46903	15566	D	117	34	Y
	46904	15573	D	206	28	Y
	46906	15582	D	154	39	Y
	46907	15578	D	156	47	Y
	46908	02889	D	102	64	Y
	46909	01766	D	219	34	Y
	46911	17232	D	120	34	Y
	46912	17233	D	131	34	Y
	47601	12823	D	608	161	Y
	48518	08361	D	678	45	Y
	48519	08362	D	448	24	Y
	48520	12801		0	778	Y
	48557	08364	D	788	56	Y
	48558	12821	D	625	91	Y
	48559	12822	D	744	112	Y
	48561	08365	D	792	59	Y
	48562	12826	D	807	95	Y
	48564	12828	D	780	95	Y
	48565	12829	D	751	86	Y
	51025	12878		0	394	Y
	51509	16370	D	42	48	Y
	51511	03376	D	89	18	Y
	51512	15089	D	98	28	Y
51514	02433	D	61	16	Y	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOPT/ T=TESAC/U=BUFR/ H=HYDRA	NB MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	51515	14432	D	283	16	Y
	51516	11949	D	67	31	Y
	51518	15077	D	116	38	Y
	51519	02437	D	4	45	Y
	51520	03117	D	34	30	Y
	51801	14433	D	423	95	Y
	51802	02434	D	58	3	Y
	51803	03049	D	130	49	Y
	51804	14434	D	392	105	Y
	51806	03378	D	73	9	Y
	51807	03379	D	80	2	Y
	51808	02435	D	26	74	Y
	51809	14435	D	350	56	Y
	51810	11956	D	64	36	Y
	51811	15653	D	99	27	Y
	51812	15654	D	9	1	N
	51814	11946	D	61	25	Y
	51815	03222	D	63	17	Y
	51816	01762	D	87	10	Y
	51817	15617	D	81	55	Y
	51818	03467	D	52	31	Y
	51819	01784	D	6	5	N
	51820	03468	D	60	21	Y
	51821	11690	D	202	77	Y
	51822	03570	D	68	8	Y
	51823	03223	D	28	33	Y
	51824	02436	D	26	24	Y
	51826	03119	D	53	23	Y
	51827	03572	D	67	22	Y
	51829	01772	D	94	25	Y
	51830	15088	D	112	7	Y
	51831	02074	D	110	47	Y
	51832	11955	D	61	15	Y
	51835	09271	D	92	8	Y
	51836	09270	D	111	29	Y
	51838	03170	D	40	4	Y
	51840	15090	D	134	28	Y
	51841	11950	D	90	15	Y
	51843	03375	D	76	12	Y
	51847	15027	D	88	4	Y
	51848	15009	D	113	8	Y
	51856	15082	D	92	9	Y
	51861	15099	D	90	6	Y
	51865	15638	D	57	67	Y
51866	15644	D	94	63	Y	
51867	15645	D	83	41	Y	
51869	11674	D	63	36	Y	
51871	15646	D	102	18	Y	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOPT/ T=TESAC/U=BUFR/ H=HYDRA	NB_MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	51878	15072	D	102	24	Y
	51885	15086	D	141	42	Y
	51902	15671	D	122	3	Y
	51905	15674	D	94	10	Y
	52506	15031	D	87	21	Y
	52507	15394	D	76	11	Y
	52508	15104	D	83	6	Y
	52510	11939	D	46	18	Y
	52511	16199	D	83	17	Y
	52512	15023	D	91	25	Y
	52513	16226	D	81	19	Y
	52515	16228	D	94	12	Y
	52517	15390	D	100	16	Y
	52518	15114	D	97	7	Y
	52521	04451	D	176	24	Y
	52522	01143	D	261	34	Y
	52523	01144	D	261	40	Y
	52524	01145	D	213	28	Y
	52525	04452	D	173	23	Y
	52526	04453	D	166	18	Y
	52527	04632	D	177	12	Y
	52528	05101	D	90	5	Y
	52530	05103	D	72	6	Y
	52616	15021	D	87	11	Y
	52801	15035	D	105	8	Y
	52803	15029	D	42	11	Y
	52804	16202	D	87	12	Y
	52805	15012	D	99	11	Y
	52806	16229	D	75	16	Y
	52807	16232	D	76	11	Y
	52808	15666	D	6	2	N
	52810	15701	D	174	35	Y
	52811	16206	D	48	14	N
	52812	15126	D	93	12	Y
	52813	15103	D	44	8	N
	52814	00457	D	83	7	Y
	52815	15660	D	82	8	Y
	52817	15553	D	87	14	Y
	52818	15670	D	89	12	Y
	52826	15668		0	82	Y
	52827	16200	D	93	16	Y
	52828	15669	D	82	11	Y
	52829	00458	D	43	5	Y
	52830	16196	D	91	17	Y
	52831	16204	D	77	17	Y
	52833	01215	D	88	14	Y
52834	16195	D	80	11	Y	
52835	15548	D	102	3	Y	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOF/ T=TESAC/U=BUFR/ H=HYDRA	NB_MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	52836	15549	D	84	12	Y
	52837	16198	D	81	5	Y
	52838	15556	D	94	13	Y
	52839	16203	D	88	13	Y
	52840	03046	D	100	12	Y
	52841	16205	D	86	15	Y
	52842	16253	D	89	8	Y
	52843	15558	D	93	13	Y
	52844	15559	D	81	7	Y
	52845	15561	D	92	11	Y
	52846	15391	D	75	18	Y
	52847	15392	D	89	22	Y
	52848	15560	D	77	8	Y
	52849	16211	D	83	17	Y
	52850	16234	D	75	11	Y
	52851	16238	D	77	11	Y
	52852	16239	D	74	19	Y
	52853	00459	D	86	11	Y
	52854	16235	D	73	8	Y
	52855	16237	D	88	19	Y
	52856	16241	D	88	10	Y
	52857	16242	D	7	1	N
	52858	16243	D	88	11	Y
	52859	16244	D	77	8	Y
	52860	16245	D	91	16	Y
	52861	16246	D	79	16	Y
	52862	16247	D	81	19	Y
	52863	16248	D	79	16	Y
	52864	16249	D	78	12	Y
	52865	16250	D	45	13	Y
	52866	16227	D	69	24	Y
	52867	16230	D	76	11	Y
	52868	00460	D	93	10	Y
	52869	16207	D	80	14	Y
	52870	00461	D	69	6	Y
	52871	16208	D	72	22	Y
	52873	16231	D	89	19	Y
	53501	05105	D	163	11	Y
	53502	05106	D	122	47	Y
	53505	05107	D	155	4	Y
	53823	05131	D	215	24	Y
	53824	01989	D	266	14	Y
	53901	14983	D	89	7	Y
	54801	01973	D	295	23	Y
	54802	01993	D	315	13	Y
	54803	01975	D	352	22	Y
	54804	01970	D	350	22	Y
	54805	01985	D	230	68	Y

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOPT/ T=TESAC/U=BUFR/ H=HYDRA	NB MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	54838	08823		0	2	Y
	54843	05134	D	384	45	Y
	54846	01969	D	236	134	Y
	54901	15049	D	99	11	Y
	54902	15115	D	89	23	Y
	54903	15118	D	103	9	Y
	54904	15020	D	98	14	Y
	54905	15024	D	95	11	Y
	54906	15539	D	105	11	Y
	54907	15044	D	94	2	Y
	54908	15129	D	98	4	Y
	54909	15120	D	95	6	Y
	54910	15033	D	91	10	Y
	54911	15036	D	83	4	Y
	54912	15101	D	88	16	Y
	54914	15119	D	103	18	Y
	54915	15678	D	100	13	Y
	54916	15630	D	87	4	Y
	54917	15631	D	86	21	Y
	54918	15632	D	90	14	Y
	54920	03047	D	94	5	Y
	54921	15675	D	99	14	Y
	54922	15682	D	99	11	Y
	54923	15683	D	12	47	Y
	54924	15693	D	92	8	Y
	54925	15694	D	72	20	Y
	54926	15676	D	101	11	Y
	54927	15538	D	99	4	Y
	54928	15692	D	101	11	Y
	54929	15681	D	106	20	Y
	54930	15690	D	104	16	Y
	54931	15543	D	105	3	Y
	54932	15547	D	55	5	N
	54933	15544	D	97	7	Y
	54934	01768	D	109	8	Y
	55901	15557	D	102	8	Y
	56801	05130	D	292	20	Y
	56802	05119	D	262	15	Y
	56803	01994	D	276	16	Y
	56835	12291	D	301	9	Y
	56837	05116	D	37	23	Y
	61521	15320	D	72	80	N
	61523	15352	D	102	49	Y
61524	15353	D	66	111	Y	
61525	15354	D	496	90	Y	
61526	16304	D	479	78	Y	
61527	03749	D	42	125	Y	
61528	03950	D	31	10	Y	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

Operating country	WMO Identifier	ARGOS Identifier	CODE (GTS code used) B=BATHY/D=DRIFTER/ P=SHIP/S=SYNOP/ T=TESAC/U=BUFR/ H=HYDRA	NB. MESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y=still on GTS N=No longer on GTS
United States of America (continued)	61530	03752	D	401	90	Y
	61531	15322	D	320	74	Y
	61532	16376	D	271	146	Y
	61533	16382	D	391	69	Y
	61534	16362	D	52	399	Y
	61538	16374	D	261	148	Y
	62426	02078	D	164	27	Y
	62427	02079	D	118	24	Y
	62428	02401	D	81	12	Y
	62429	02892	D	75	14	Y
	62430	02002	D	128	37	Y
	62431	00476	D	155	14	Y
	62432	02003	D	174	33	Y
	62433	00456	D	65	23	Y
	62673	01131	D	1	508	Y
	62675	01129	D	17	29	Y
	62901	15569	D	122	27	Y
	62903	15571	D	118	26	Y
	62904	01862	D	243	54	Y
	62907	08591	D	152	27	Y
	62908	01868	D	131	26	Y
	62909	01869	D	153	25	Y
	62910	01865	D	139	24	Y
	62926	02078	D	104	21	Y
	62927	02079	D	93	12	Y
	62928	02401	D	57	10	Y
	62929	02892	D	43	15	Y
	62930	02002	D	86	20	Y
	62931	00476	D	102	14	Y
	62932	02003	D	135	10	Y
	62933	00456	D	48	12	Y
	64429	01860	D	192	41	Y
	64430	00455	D	161	40	Y
	64431	00467	D	122	55	Y
	64929	01860	D	134	26	Y
	64930	00455	D	114	20	Y
	64931	00467	D	105	25	Y
	91251	12873	D	1	325	Y
	91353	12872		0	305	Y
	KOSP2	12891		0	297	Y
				Drifter =	107628	

5. ARGOS Service / 5.1 ARGOS monthly status report (continued)

• ATLAS buoys

WMO Identifier	ARGOS Identifier
32315	06461
32316	11117
32317	11118
31318	12522
32319	06371
32320	11121
32321	11120
32322	11119
43001	11116
51006	04597
51008	04596
51009	00989
51010	04591
51011	17647
51014	04595
51015	01114
51016	17648
51017	00992
51018	00991
51019	00786
51020	00988
51021	04594
51022	06370
51023	00787
51301	06380
51302	04593
51303	06474
51304	00789
51305	00791
51306	00793
51307	04595
51308	00990
51309	00792
51310	00790
52001	15813
52002	06476
52003	15815
52004	12528
52006	06519
52007	00773

• ATLAS buoys (continued)

WMO Identifier	ARGOS Identifier
52008	06472
52010	06798
52011	12524
52012	12525
52301	00776
52302	00777
52303	00772
52304	00775
52305	00771
52306	00770
52307	00774
52308	06521
52309	17634
52310	17633
52311	17632
52312	17631
52313	17630
52314	17653

• Other NDBC Buoys on GTS (processed same way as ATLAS Buoys)

WMO Identifier	ARGOS Identifier
17803	05571
46507	05567
54832	06585
54833	06586
54834	06583
51025	12878
9A222	12879
9A251	12873
9A328	12892
9A353	12872
9A355	12891

8. Feed-back from Members to the Secretariat on any changes in the observing network

In view of the difficulties experienced at present in identifying non-implemented observing stations or implemented stations which are closed or suspended for a certain period, or stations making observations but not reaching their NMCs, the ninth session of the CBS Advisory Working Group recommended that a special table be added to the WWW monthly "OPERATIONAL NEWSLETTER" to 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.

The special table, accompanied by explanatory notes (see Appendix, pages 1 and 2) is attached as an appendix to this annex. Members are urged to fill in this appendix, as and when appropriate, and to return it to the Secretariat before the 1st of each month to enable changes to be included in the next "OPERATIONAL NEWSLETTER".

Feed-back from members to the Secretariat on any changes in the observing network

(Explanatory Notes overleaf)

Global Exchange/Regional Exchange (delete as appropriate)

Country: _____

Station index number	Bulletin identification TTAAiCCCC	Implementation of observing programme							Alternate observing station	Remarks	
		00	03	06	09	12	15	18			21
1. SYNOP											
1. TEMP											
1. PILOT											

EXPLANATORY NOTES**Feed-back from Members to the Secretariat
on any changes in the observing network**

1. 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 given in Attachment I-4 of the Manual on the GTS, Volume I for global exchange and, as applicable, Attachments AF-I, AI-1, SA-1, NA-1, PS-1 and EU-1 of the Manual on the GTS, Volume II for regional exchange.

2. For entries in these tables, the following should be taken into account:
 - (a) In the column "Station index number", the index number (IIiii) of each station should be entered in case of any changes in the observing programmes of the stations;
 - (b) In the column "Bulletin identification", the TTAAii CCCC of the abbreviated heading of the meteorological bulletins which contains reports from the station should be inserted;
 - (c) In the column "Implementation of observing programme", "X" for implementation and "-" for non-implementation should be inserted as appropriate. In order to easily identify changes in the programme, this should be marked in red;
 - (d) In the column "Alternate observing station", the index number (IIii) of an alternate observing station should be inserted in case another station is available with a view to filling gaps which are caused by suspension of observing programmes of the original station;
 - (e) The required information concerning the observing programme of the alternate station should be inserted in the next horizontal line of the original station;
 - (f) In the column "Remarks", reasons of 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.

3. These tables should be sent to the Secretariat before the 1st of the month for inclusion of the changes in the monthly "OPERATIONAL NEWSLETTER", as appropriate.

B. MANUAL ON CODES

1. Global practices

1.3 Changes to codes

The President of CBS has approved the allocation of "reserved for allocation of radiosonde" entries in code tables 002 011 and 3685, for use with immediate effect with the following radiosonde types:

VOLUME I — INTERNATIONAL CODES

Part A - Alphanumeric Codes

3685

Code Figure	
48	VALCOM (Canada)
49	VIZ MARK II (USA)
50)	Reserved for allocation of radiosondes
..)	
59)	

VOLUME I — INTERNATIONAL CODES

Part B - Binary Codes

FM 94-IX Exl. BUFR

0 02 011

Radiosonde type

Code Figure	
48	VALCOM (Canada)
49	VIZ MARK II (USA)
50)	Reserved for allocation of radiosondes
..)	
59)	

B. MANUAL ON CODES (continued)

3. National practices

3.1 New codes

VOLUME II — REGIONAL CODES AND NATIONAL CODING PRACTICES

F — NATIONAL CODE FORMS

FRANCE

NIVOMET - Code form for the transmission of NIVO-METEOROLOGICAL observations

Code Form:

SECTION 1	lliii	i _R 1hVV	Nddff	1s _n TTT	7wwW ₁ W ₂ 8N _h C _L C _M C _H
SECTION 3	333	(1s _n T _x T _x T _x	2s _n T _n T _n T _n)	4/sss	7R ₂₄ R ₂₄ R ₂₄ R ₂₄ 931s's'
SECTION 5	555	1s _n T _s T _s T _s	E _n P _s P _s N _v C _n	L ₁ L ₂ L ₃ L ₄ L ₅	(4F ₁ F ₂ D _m D _m) (5IM _v M _v M _v)
		(2ddff	ssss's')	(3UUT _L T _L)	

Section No.	Symbolic figure groups	Contents
1	—	Data common to code form SYNOP
3	333	Data common to Section 3 of the code form SYNOP
5	555	Data for snow

Specifications of symbolic letters other than those given either in Volume I or in Section C of Chapter VI of Volume II:

C _n	Blowing snow at altitude (the direction of the blowing snow depends on the direction of the wind)
D _m D _m	Average diameter of the grains, in tenths of mm
E _n	State of snow
F ₁ F ₂	Type of grain on the surface
ff	Wind speed, in knots
l	Indicator on the homogeneity on the snow layer
L ₁	Description of avalanche(s) observed
L ₂	Type of avalanche
L ₃	Altitude of avalanche
L ₄	Orientation of avalanche
L ₅	Evaluation of the avalanche risk
M _v M _v M _v	Density of snow in kg/m ³
N _v	Clouds in the valley(s)
P _s P _s	Depth of the ramsonde in centimetres
s's'	Depth, in centimetres, of newly fallen snow at altitude, since the last observation
sss	Total depth, in centimetres, from the snow lying on the ground to the measuring point at altitude
T _s T _s T _s	Temperature of the surface snow in tenths of a degree Celsius
T _L T _L	Liquid water content of snow
UU	Relative humidity of the air in percentage

B. Manual On Codes / 3. National Practices / 3.1 New Codes (continued)

CODE TABLE 6-1

C_n Blowing snow at altitude (the direction of the blowing snow depends on the direction of the wind)

Code figure	Direction and Force	Code figure	Direction and Force
0	No blowing snow	5	Moderate blowing snow from the North
1	There has been blowing snow since the last observation and no blowing snow at altitude	6	Severe blowing snow from the East
2	Moderate blowing snow from the East	7	Severe blowing snow from the South
3	Moderate blowing snow from the South	8	Severe blowing snow from the West
4	Moderate blowing snow from the West	9	Severe blowing snow from the North
		/	No observations (due to clouds or fog)

CODE TABLE 6-2

D_mD_m Average diameter of the grains

1. The average diameter of the grain is measured in tenths of a mm.

Examples:

Code Figure	Average diameter
05	0,5 mm
16	1,6 mm

2. The '/' is coded twice: D_mD_m// in the following cases:

- a crust of ice coded F₁F₂=77
- recently fallen snow, dendritic (fresh snow, recognizable particles) made up of a group of particles with extremely varied dimensions

CODE TABLE 6-3

E_n State of snow

Code figure	State of snow	Code figure	State of snow
0	Fresh, dry snow (or recently fallen)	5	Old, moist snow, unbearing (rotten)
1	Fresh, dry snow (or recently fallen), with ice on the surface	6	Old, moist snow, bearing (not crusted)
2	Fresh moist snow (or recently fallen)	7	Unbearing refrozen crust
3	Unbearing drifted snow	8	Bearing refrozen crust
4	Bearing drifted snow	9	Surface smooth and icy

CODE TABLE 6-4

F₁F₂ Type of grain on surface

Code figure	Type of grain	Code figure	Type of grain
1	Fresh snow	6	Rounded grains
2	Recognizable particles	7	Crusts
3	Ice grains	8	Surface hoar
4	Acetated crystals	9	Graupel
5	Depth hoar		

- F₁ indicates the type of grain predominant in the layer
- F₂ indicates the most predominant type of grain after F₁
- The layer is made up of only one type of grain, F₁=F₂. Example: layer of fresh snow F₁F₂=11
- The snow cover is made up of a crust of hard ice, F₁=7
 - The grains are not identifiable - F₂=7. Coding: F₁F₂=77
 - The grains are identifiable - F₂=type of grain
Example: crust of hard ice, F₁=7, rounded grains, F₂=6, coding: F₁F₂=76
- The snow cover is made up of an ice crust in the process of breaking up. Coding: F₂=7.
F₁ is then the type of grain.
Example: Ice crust in the process of breaking up, F₂=7, rounded grains, F₁=6, coding: F₁F₂=67

B. Manual On Codes / 3. National Practices / 3.1 New Codes (continued)

CODE TABLE 6-5

I Indicator on the homogeneity of the layer (10 cm from the surface)

Code figure	
0	It has snowed at least 5 cm since the last observation (s's'>=5 cm) - fresh snow vertical core drilling
1	It has not snowed (or less than 5 cm) and the layer 10 cm below the surface is homogenous (only one strata) - horizontal core drilling between the surface of the snow and the level -10 cm.**
2	It has not snowed (or less than 5 cm) and the layer 10 cm below the surface is made up by, nature, of one or several stratas or of a different hardness - No measurement for the density of the snow*

CODE TABLE 6-6

L₁ Description of avalanche(s) observed

Code figure		
0	Nothing to signal	No natural avalanches
1	Accidental release	
2	Artificial release	
3	Fissure in the mantle of snow	
4	Artificial flow (one or several)	
5	Only one avalanche seen	
6	Two avalanches seen	
7	Three to five avalanches seen	
8	Five to ten avalanches seen	
9	More than ten avalanches seen	
/	Unknown (observation impossible: fog, storm...)	Natural avalanche

L₂ Type of avalanche

Code figure		Code figure	
0	Nothing to signal (even if L ₁ =3)	4	Surface slab avalanche
1	Avalanche of recently fallen dry snow, specific starting point	5	Wind slab avalanche
2	Avalanche of recently fallen moist snow, specific starting point	6	Deep slab avalanche
3	Avalanche of recently fallen snow, with crowned fracture	7	Wet surface avalanche
		8	Wet deep avalanche
		9	Several different types of avalanches
		/	Unknown

L₃ Altitude of avalanche release

Code figure		Code figure	
0	Nothing to signal	6	Between 2750 and 3000 m
1	Below 1750 m	7	Between 3000 and 3500 m
2	Between 1750 and 2000 m	8	Above 3500 m
3	Between 2000 and 2250 m	9	Starting from different altitudes
4	Between 2250 and 2500 m	/	Unknown
5	Between 2500 and 2750 m		

L₄ Orientation of avalanche

Code figure		Code figure	
0	Nothing to signal	6	West
1	North-East	7	North-West
2	East	8	North
3	South-East	9	Starting from different altitudes
4	South	/	Unknown
5	South-West		

B. Manual On Codes / 3. National Practices / 3.1 New Codes (continued)

L₅ Evaluation of avalanche risk

Code figure		Code figure	
1	Minimum risk	6	Natural high risk
2	Slight risk	7	Avalanche situation
3	Local risk of release	8	Exceptional avalanche situation
4	General risk of release	/	Unknown
5	Natural moderate risk		

CODE TABLE 6-7

M_VM_VM_V Density in kg/m³

- 1*. If l=2 and liquid water content has been measured, M_VM_VM_V = density measured for content of liquid water
- 2.** If l=2 and liquid water content has been measured, M_VM_VM_V = density measured for content of liquid water (it is not necessary to make a new measure)
3. No measurement: M_VM_VM_V is coded with 3 slashes (M_VM_VM_V = ///)

CODE TABLE 6-8

N_V Clouds in the valley

Code Figure		Altitude of cloud top
0	No clouds in the valley	
1	Isolated clouds	Below 1000 m
2	Isolated clouds	Between 1000 and 1500 m
3	Isolated clouds	Above 1500 m
4	Partial sea of clouds	Below 1000 m
5	Partial sea of clouds	Between 1000 and 1500 m
6	Partial sea of clouds	Above 1500 m
7	Complete sea of clouds	Below 1000 m
8	Complete sea of clouds	Between 1000 and 1500 m
9	Complete sea of clouds	Above 1500 m
/	No observations	(station in the fog)

1. The cloud base is below the level of the station

CODE TABLE 6-9

P_SP_S Depth of penetration of ramsonde in centimetres

1. The ram tube has to be placed vertically (without pressure) on the snow layer
2. If the penetration is more than 99 cm. Code 99 and explain clearly, at the end of the message, the depth of the penetration.

CODE TABLE 6-10

T_LT_L

1. T_LT_L is coded when the surface temperature of the snow is equal to 0°C (T_sT_sT_s=000)
2. T_LT_L is coded as // when the surface temperature of the snow is negative - T_LT_L=//
3. The water content of the volume of snow is expressed in tenths of a percentage. Values equal to or above 9.9% are coded: 99

Examples:

Code Figure	Water content
25	2,5 %
99	9,9%
99	10,8%
//	Measure not calculated

Note: The drill has to be pushed horizontally (between the surface of the snow and at the level - 10 cm)

B. Manual on Codes / 3. National practices (continued)
3.3 Changes to codes or procedures

The following national deviations regarding the new code forms:

FM 15-IX Ext. METAR, FM 16-IX Ext. SPECI and FM 51-IX Ext. TAF will be effective as of 1 July 1993:

VOLUME II — REGIONAL CODES AND NATIONAL CODING PRACTICES

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

REGION II

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI

INDIA

REw'w' *This group is not used.*

JAPAN

VVVVD_v V_xV_xV_xV_xD_v — *Even if marked directional variation in horizontal visibility is observed, the prevailing horizontal visibility is reported as VVVV and other parts of the groups are not reported.*

REGION IV

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI

CANADA

GGggZ *The time of observation is included in each individual METAR report.*

dddffGf_mf_mKT *The averaging period for mean wind speed and direction is two minutes.*

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. D_v is not reported, but sector visibilities of half or less than prevailing visibility are reported in Supplementary information. The letters SM (statute miles) are appended, without a space, to each observation of prevailing visibility to identify the units.
The group V_xV_xV_xV_xD_v is not used.*

RD_RDR/V_RV_RV_RV_Ri *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_RDR/V_RV_RV_RV_RFT/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.*

w'w'

15.7.12 *Occurrences of IC (diamond dust) are reported whenever visibility is reduced to 6 miles or less.*

15.7.13 *The phenomena represented by FU, HZ, DU and SA are used whenever the visibility is reduced by the reported phenomenon to 6 miles or less.*

15.7.14 *BR (mist) is reported when it reduces visibility to between 5/8 mile and 6 miles inclusive.*

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION IV

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)

CANADA (continued)

N₅N₅N₅h₅h₅h₅

5.9.1.2 *The amount of each cloud layer is determined with respect to the previous lower layer. The summation principle is used in determining cloud amount.*

15.9.1.4 *All cloud layers observed are reported.*

CAVOK *The term CAVOK is not used in Canada.*

AUTO *All METARs based on observations generated by automatic weather stations include the symbol AUTO immediately following the station identifier and one space; for example, CZBT AUTO.*

UNITED STATES OF AMERICA

1. *The symbolic and abbreviated language code described below will continue to be used within the United States of America until 1 January 1996, when the United States of America will complete its transition to the METAR and SPECI codes.*

KEY TO AVIATION WEATHER REPORTS . . .

LOCATION IDENTIFIER AND TYPE OF REPORT*	DATA DESIGNATOR	TIME GROUP	SKY AND CEILING	VISIBILITY WEATHER AND OBSTRUCTION TO VISION	SEA-LEVEL PRESSURE	TEMPERATURE AND DEW POINT	WIND	ALTIMETER SETTING	RUNWAY VISUAL RANGE	CODED PIREPS
MIKC	RS	1155	15SCT M25 OVC	1R-K	132	/58/58	/180/7	/993/	R04LVR20V40	UAOVCS5
DATA DESIGNATOR		TIME GROUP		WEATHER AND OBSTRUCTION TO VISION SYMBOLS		ALTIMETER SETTING				
SA	Record observation	Time of the observation in Universal Time Co-ordinated to the nearest minute		A Hail		The first figure of the actual altimeter setting is always omitted from the report				
SP	Special observation	SKY		BD Blowing dust		RUNWAY VISUAL RANGE (RVR)				
RS	Record special observation	Sky cover contractions are in ascending order. Figures preceding contractions are heights in hundreds of feet above station		BN Blowing sand		RVR is reported from some stations. Extreme values for 10 minutes prior to observation are given in hundreds of feet. Runway identification precedes RVR report.				
		Sky cover contractions are:		BS Blowing snow		CODED PIREPS				
CLR	Clear: less than 0.1 sky cover	CLR Clear: less than 0.1 sky cover		D Dust		Pilot reports of clouds not visible from ground are coded with MSL height data preceding and/or following sky cover contraction to indicate cloud bases and/or tops, respectively.				
SCT	Scattered: 0.1 to less than 0.6 sky cover	SCT Scattered: 0.1 to less than 0.6 sky cover		F Fog		DECODED REPORT				
BKN	Broken: 0.6 to 0.9 sky cover	BKN Broken: 0.6 to 0.9 sky cover		GF Ground fog		Kansas City: record special observation 1155 UTC, 1500 feet scattered, measured ceiling 2500 feet overcast, visibility 1 mile, light rain, smoke, sea-level pressure 1013.2 hPa, temperature 58°F, dew point 58°F, wind 180°, 7 knots, altimeter setting 29.93 inches. Runway 04 left, visual range 2000 ft variable to 4000. Pilot reports top of overcast 5500 feet (MSL).				
OVC	Overcast: more than 0.9 sky cover	OVC Overcast: more than 0.9 sky cover		H Haze		TYPE OF REPORT				
-	Thin (when prefixed to the above symbols)	- Thin (when prefixed to the above symbols)		IC ice crystals		The omission of type-of-report data identifies a scheduled record observation for the hour specified in the sequence heading; the time of an out-of-sequence, special observation is given as "SP" followed by a time group (24-hour clock UTC), e.g. "PIT SP 0715-XM1OVC...". A special report indicates a significant change in one or more elements. Local reports are identified by "LCL" and a time group. Locals are transmitted on local teletypewriter circuits only.				
-X	Partly obscured: 0.1 to less than 1.0 sky hidden by precipitation or obstruction to vision (bases at surface)	-X Partly obscured: 0.1 to less than 1.0 sky hidden by precipitation or obstruction to vision (bases at surface)		IF ice fog						
X	Obscured: 1.0 sky hidden by precipitation or obstruction to vision (bases at surface)	X Obscured: 1.0 sky hidden by precipitation or obstruction to vision (bases at surface)		IP ice pellets						
		CEILING		IPW ice pellet showers						
		Letter preceding height of layer identifies ceiling layer and indicates how ceiling height was obtained. Thus:		K Smoke						
E	Estimated	"V" immediately following numerical value indicates a variable ceiling height		Precipitation intensities are indicated thus: - Light; (no sign) Moderate; + Heavy						
M	Measured			WIND						
W	Indefinite			Direction in tens of degrees from true north speed in knots 0000 indicates calm. G indicates gusty. Peak speed follows G or Q when gusts or squalls are reported. The contraction WSHFT followed by UTC time group in remarks indicates windshift and its time of occurrence (knots x 1.15 = statute miles per hour).						
				Examples: 3027 — 360 degrees, 27 knots; 3027/040 — 360 degrees 27 knots, peak speed in gusts 40 knots.						

Note: Temperature and dew point are given in degrees Fahrenheit and altimeter setting in inches.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)**REGION IV****FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)****UNITED STATES OF AMERICA (continued)**

2. *The revised FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI codes will be implemented by the United States of America for those surface observations sent outside of WMO Regions IV and V. Observations will be converted into the revised METAR and SPECI code forms using a computer program within the National Weather Service Telecommunication Gateway processors.*

The corresponding national deviations from the following global regulations and additions to the code tables are listed below:

15.4.1

The mean direction and speed of the wind over the two minutes immediately preceding the observation shall be reported for dddff.

15.4.2

In the case of variable wind direction, ddd may be encoded as VRB when the mean wind speed is 6 knots or less.

15.4.3

If, during the two minutes immediately preceding the observation, the total variation in wind direction is 60 degrees or more and the mean wind speed is greater than 6 knots, the wind direction may be reported as variable.

15.4.5

Wind gust speed shall be reported when there are rapid fluctuations of speed with a variation between peaks and lulls of 10 knots or more in the 10-minute period immediately preceding the observation.

15.5.1

Prevailing visibility shall be reported in statute miles and fractions of statute miles as described in coding practices 15.5.4 below. The value of the visibility shall be followed immediately by the letters SM to indicate the units.

NOTE: Outside of North America, US military stations may report prevailing visibility in metres.

15.5.2 and 15.5.3

Directional variations in visibility shall not be reported as called for by these regulations.

15.5.4

Prevailing visibility shall be reported using the following steps:

- (a) *Up to $\frac{3}{8}$ statute mile, rounded down to the nearest $\frac{1}{16}$ statute mile;*
- (b) *From $\frac{3}{8}$ statute mile to 2 statute miles, rounded down to the nearest $\frac{1}{8}$ statute mile. (Statute miles and fractions of statute miles shall be encoded with a space; for example, 1 $\frac{1}{8}$ statute mile shall be reported as 1 $\frac{1}{8}$ SM.);*
- (c) *From 2 statute miles to 3 statute miles, rounded down to the nearest $\frac{1}{4}$ statute mile;*
- (d) *From 3 statute miles to 15 statute miles, rounded down to the nearest 1 statute mile;*
- (e) *Beyond 15 statute miles, rounded down to the nearest 5 statute miles.*

15.6

Groups $RD_R D_R V_R V_R V_R V_R FT$ or $RD_R D_R V_N V_N V_N V_N VV_X V_X V_X V_X FT$

15.6.1

Runway visual range shall be reported in feet. Runway visual range shall be included in the report using the format shown in Regulation 15.6 during periods when the prevailing visibility is 1 statute mile or less and/or the runway visual range for the designated instrument runway is 6000 feet or less. The value of the runway visual range shall be followed immediately by the letters FT to indicate the units of measure (feet).

NOTE: US military stations may not report runway visual range.

B. Manual on Codes / 3. National practices / Changes to codes or procedures (continued)**REGION IV****FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)****UNITED STATES OF AMERICA (continued)****15.6.2**

Runway visual range shall only be reported for the designated instrument runway. The values reported shall be based on light setting 5. The lowest reportable value shall be 1 000 feet (1000FT) and the highest reportable value shall be 6 000 feet (6000FT). When the runway visual range is less than 1 000 feet, the group $V_R V_R V_R V_R$ shall be preceded by M as M1000FT; when the runway visual range is greater than 6 000 feet, the group $V_R V_R V_R V_R$ shall be preceded by P as P6000FT.

15.6.4.3

The runway visual range tendency shall not be reported.

15.6.5

When the runway visual range varies by more than a reportable increment during the 10-minute period preceding the observation time report, the lowest reportable value in feet for the 10 minutes preceding the observation shall be reported as $V_N V_N V_N V_N$. The highest reportable value in feet for the 10 minutes preceding the observation shall be reported as $V_X V_X V_X V_X$.

15.7.1

US stations shall report for w'w' significant weather and obstructions to vision occurring at the time of observation in accordance with Code table 4678. Appropriate intensity indicators shall be prefixed to all significant weather in accordance with 15.7.4. The following weather phenomena/qualifiers will not be reported by automated stations without manual augmentation: FC, GR, IC, PE, SG, GS, DZ, BR, FU, VA, SA, HZ, SS, DS, TS, MI, BC, DR, BL, SH, VC, PO.

15.7.6

If more than one significant weather phenomenon is observed, separate w'w' groups shall be used in accordance with Code table 4678. If more than one significant weather phenomenon is observed, entries shall be made in the following order: tomadic activity, thunderstorms, precipitation (in the order liquid, supercooled, frozen; and in the order of decreasing intensity within each type of precipitation), and obstructions to vision.

15.7.8

A thunderstorm shall be regarded as having ceased 15 minutes after thunder was last heard.

15.7.12

For w'w' = IC to be reported, the visibility shall be reduced by this phenomenon to 6 statute miles or less.

15.7.13

Obstructions to vision shall only be reported when the visibility is reported as 6 statute miles or less. Volcanic ash shall, however, always be reported.

15.7.14

For w'w' = BR to be reported, the prevailing visibility shall be at least $5/8$ statute mile but no more than 6 statute miles.

15.9.1.1

The acronym CLR may be used when no clouds below 12 000 feet are reported by automated stations.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION IV

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)

UNITED STATES OF AMERICA (continued)

15.9.1.2

US stations shall report the cumulative amount of clouds occurring at and below each level up to the first overcast layer. Clouds above 12 000 feet cannot be reported from automated stations without manual augmentation.

15.9.1.3

US stations shall report all cloud layers (not limited to three) in ascending order up to the first overcast layer. CB and TCU shall always be reported. Significant convective cloud (CB and TCU) information is not available from automated stations without manual augmentation.

15.9.1.4

These procedures shall not be used.

15.10

CAVOK shall not be used.

15.13.1, 15.13.2 and 15.13.3

US stations shall not report supplementary information using the methods described in 15.13.2 and 15.13.3. Similar information may be included as additional supplementary information using the methods described in the US coding practices 15.13.4.

15.13.4

Supplementary remarks may be included in observations from US stations following the identifier group RMK. These data are intended as national interest only and are equivalent to Section 5 of FM 12-IX Ext. SYNOP. Observations from automated stations shall have one of the following contractions as the first entry following RMK:

AO2 Automated station without manual augmentation;

AO2A Automated station with manual augmentation.

TORNADO, FUNNEL CLOUD or WATER SPOUT shall be spelled out and entered as the first remark whenever observed (unless the report is from an automated station).

15.14

Trend forecasts shall not be used.

Code table 0300

B — Turbulence

Code figure X = Extreme turbulence

Extreme turbulence: Turbulence in which the aircraft is violently tossed about and is practically impossible to control. It will cause structural damage.

Note: May be forecast by US military stations.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)**REGION IV****FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)****UNITED STATES OF AMERICA (continued)**

Code table 4678

w'w' — Significant present and forecast weather

At aerodromes with automated observing stations, precipitation may be reported as of an unknown type (UP) when the precipitation discriminator cannot identify it.

UP = Precipitation of unknown type

PY = Spray

Notes:

- (1) UP shall only be reported at automated stations when the precipitation discriminator cannot identify the type of precipitation.
- (2) PY shall be used only in combination with descriptor BL. Blowing spray is water droplets torn by the wind from a body of water, generally from crests of waves, and carried into the air in such quantities that horizontal visibility is reduced to 6 statute miles (9 000 m) or less.

FM 51-IX Ext. TAF**CANADA**

VVVV *Prevailing visibility, rather than minimum visibility, is forecast in statute miles and fractions up to 3 miles, then in whole miles up to 6 miles. Visibilities greater than 6 miles are forecast as P6SM. The letters SM (statute miles) are appended, without a space, to each forecast visibility to identify the units.*

CAVOK *The abbreviation CAVOK is not used.*

w'w' *VA (volcanic ash), when expected, is always forecast regardless of visibility. The phenomena represented by FU (smoke), IC (diamond dust), HZ (haze), DU (widespread dust) and SA (sand) are forecast when they are expected to reduce the visibility to 6 miles or less. BR (mist) is forecast when it is expected to reduce the visibility to between 5/8 mile and 6 miles inclusive. FG (fog) is forecast when the visibility is expected to be less than 5/8 mile.*

N_sN_sN_sh_sh_sh_s *Forecast cloud amounts are cumulative and are forecast for all layers up to, and including, the first overcast layer, if any.*

NSC *The abbreviation NSC (no significant cloud) is not used.*

TT_rT_r/G_rG_rZ *Temperature, at the present time, is not forecast.*

6L_ch₁h₁h₁l₁ *Icing is forecast whenever a reasonably high degree of confidence may be placed upon its occurrence.*

5B_Bh_Bh_Bl_B *Turbulence is forecast whenever a reasonably high degree of confidence may be placed upon its occurrence.*

AUTO *All TAFs based on reports from automatic weather observing stations include the symbol AUTO right after the station identifier separated, from the station identifier, by a space (e.g. CYYZ AUTO).*

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION IV

FM 51-IX Ext. TAF (continued)

UNITED STATES OF AMERICA

National deviations from the following global regulations:

51.3.3

In the case of variable wind direction, ddd may be encoded as variable, VRB, when the mean wind speed is forecast to be 6 knots or less.

51.3.4

When the peak wind speed is forecast to exceed the lull by 10 knots or more, the maximum wind speed shall be indicated by adding G_mf_m immediately after dddff.

51.4.1

The prevailing visibility shall be forecast.

51.4.3

Prevailing visibility shall be forecast in statute miles and fractions of statute miles as described in US coding practice to Regulation 15.5.4. The value of the prevailing visibility shall be followed immediately by the letters SM to indicate the units.

NOTE: US military stations may forecast prevailing visibility in metres.

51.5.1

Obstructions to vision shall be forecast whenever the prevailing visibility is forecast to be 6 statute miles or less. Visibilities greater than 6 statute miles shall be indicated by prefixing P as in P6SM. Volcanic ash shall be forecast as relevant, regardless of the degree of obstruction to vision.

51.6.1.2

All cloud layers up to the first overcast layer shall be forecast. N_sN_sN_s shall be the cumulative amount of sky cover forecast to be at the level h_sh_sh_s and all lower layers.

51.6.1.3

All cloud layers shall be forecast in ascending order. CB clouds, when forecast, shall always be included.

51.6.1.4

These procedures shall not be followed.

51.7

CAVOK shall not be used.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)**REGION V****FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI****MALAYSIA**

1. *The RVR group, i.e. RD_RD_RV_RV_RV_RV_Ri or RD_RD_RV_RV_RV_RV_RV_RV_RV_RV_Ri, shall not be reported as the stations are located quite a distance from the runways and RVR equipments are not installed at the airports.*
2. *Wind shear group, i.e. WS TKOF RWYD_RD_R and/or WS LDG RWYD_RD_R, shall not be reported.*

NEW ZEALAND

National deviations from the following global regulations:

15.1

The criteria governing the issue of SPECI are described in the table on page II-5-E-3.

15.1.1

Routine reports are identified as SPECI reports when the observed conditions meet the criteria used for special observations.

15.4

Wind speed will be reported in knots.

15.4.2

Wind speed may be coded as VRB for wind speeds of 5 knots or less.

15.5.4

When the horizontal visibility is 10 km or more, it will be coded as whole kilometres followed immediately by the letters KM, e.g. 15KM.

15.5.5 and 15.10

CAVOK is not used.

15.6

Runway visual range (RVR) is not reported.

15.8

The group ww will be reported.

15.9

Clouds will be reported in the form N_sCCh_sh_sh_s where the symbols have the same meaning as in old code form FM 15-VIII Ext.

15.9.2

Vertical visibility is not reported.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION V

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)

NEW ZEALAND (continued)

CHANGE CRITERIA

ELEMENT	SPECI	TTL	TAF
WIND DIRECTION A change of 60 degrees or more provided mean speed is 10 knots or more before and/or after the change:	yes	yes	yes
MEAN WIND SPEED a. A change by 10 knots or more since the last report:	yes	yes	no
b. An expected change of 10 knots or more	no	no	yes
c. A change of crosswind of 5 knots or more provided the crosswind is 10 knots or more before and/or after the change:	yes	no	no
GUSTINESS An increase of 10 knots or more provided mean wind speed is 15 knots or more before and/or after the change:	yes	no	no
VISIBILITY Value changes to or passes through:	8 km 5 000 m 1 500 m 800 m	8 km 5 000 m 1 500 m 800 m	8 km 5 000 m 1 500 m 800 m
CLOUD Provided cloud amount is more than 4 oktas before and/or after the change, when the height changes to or passes through:	1 500 ft 1 000 ft 500 ft 200 ft*	1 500 ft 1 000 ft 500 ft 200 ft*	1 500 ft 1 000 ft 500 ft 200 ft*
Provided the height of base is below 1500 ft:	When the amount is observed or forecast to change from SCT or SKC to BKN or OVC or vice versa		
When CB are forecast to develop or dissipate:	no	yes	yes
WEATHER PHENOMENA When onset, cessation or change in intensity of any of the following occurs:	freezing precipitation moderate or heavy: rain, snow, ice pellets, hail, small hail and/or snow pellets, rain and snow mixed low drifting dust, sand and snow blowing dust, sand and snow (including snow-storm) duststorm sandstorm thunderstorm (with rain, ice pellets, hail, small hail and/or snow pellets, snow or combinations thereof) squall funnel cloud (tornado or waterspout) other phenomena that are expected to cause a significant change in visibility		

* Auckland and Christchurch only.

15.12

The value of QNH is given in tenths of a hectopascal.

15.14

The criteria governing the issue of TREND forecasts are described in the table on page II - 5 - E - 3.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION V

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI *(continued)*

SINGAPORE

Singapore will implement the new aeronautical meteorological codes with effect from 1 July 1993 *except for the following deviations:*

Until 31 December 1993, the procedure for the reporting of RVR values in METAR and SPECI reports for Singapore Aerodrome during periods when either the horizontal visibility or the runway visual range is observed to be less than 1 500 metres, will differ from that stipulated in the new code as follows:

- (a) *The runways visual range reported is the mean value during the 30-second period immediately preceding the observation;*
- (b) *The extreme RVR values and RVR tendency during the 10-minute period preceding the observation are not reported.*

UNITED STATES OF AMERICA

Stations in Hawaii use the same symbolic and abbreviated language code form for aviation weather reports as used by US stations in Regional Association IV.

REGION V

FM 51-IX Ext. TAF

NEW ZEALAND

National deviations from the following global regulations:

51.1.4 and 51.11

The criteria governing change groups are described in the table on page II - 5 - E - 3.

51.3

Wind speed will be given in knots.

51.3.3

VRB may be used for wind speeds of 5 knots or less.

51.4.2 and 51.7

CAVOK is not used.

51.4.3

When the forecast horizontal visibility is 10 km or more, it will be coded as whole kilometres followed immediately by the letters KM, e.g. 15KM.

51.6

Clouds will be reported in the form N_sCCh_sh_sh_s where the symbols have the same meaning as in old code form FM 51-VIII Ext.

51.6.2

Vertical visibility is not used.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION V

FM 51-IX Ext. TAF (continued)

NEW ZEALAND (continued)

51.6.3

NSC is not used.

51.8, 51.9 and 51.10

The optional groups for temperature, icing and turbulence are not used.

51.12.1

Probabilities of less than 30 per cent may be used.

REGION VI

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI

AUSTRIA

General: *In Austria, aeronautical meteorological stations are divided in two groups:
Meteorological stations at international airports
 These are aeronautical meteorological stations at the following international airports:
 Wien, Linz, Salzburg, Innsbruck, Graz, Klagenfurt.*

Other stations:

Aeronautical meteorological stations at:

- aerodromes for international general aviation;
- other airfields;
- military aerodromes;
- not located at aerodromes/airfields.

CCCC

Other stations:

Instead of a location indicator, the station index number IIiii is used by stations not located at an aerodrome/airfield.

CAVOK

International airport stations:
Additional condition: Clouds — no TCU.

Other stations:
The code word CAVOK is not used.

VVVD_v V_xV_xV_xV_xD_v — All stations:

For reporting V_xV_xV_xV_xD_v, additional criteria are used; so this group will be reported more often.

Other stations:

When the visibility is 10 km or more, at some stations it is coded in steps of 1 km up to 30 km and in steps of 5 km above 30 km, followed by the abbreviation KM (e.g. visibility of 23 km is coded as 23KM), and 99KM indicates a visibility of 100 km or more.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION VI

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)

AUSTRIA (continued)

w'w' **All stations:**

If deposit of rime is observed, the descriptor FZ is used in combination with the letter abbreviations BCFG and BR too.

ww **All stations:**
Not used.N_sN_sN_sh_sh_sh_s **Other stations:****Amount:**

The cloud amount is reported according to the following table:

N _s N _s N _s	Cloud amount
SKC	Sky clear
FEW	1/8 - 2/8
SCT	3/8 - 4/8
BKN	5/8 - 7/8
OVC	8/8

Types:

All cloud types are reported; e.g. OVC010ST

Height of the cloud base:

Not reported for the cloud types: CI, CC and CS; e.g. SCTCI.

h_sh_sh_s = NIL: cloud base not visible (reported if, in mountainous region, top but not the cloud base of a convective cloud is visible);

e.g. FEWNILCB.

Supplementary information — Other stations:

All supplementary information available is added and distributed internationally.

The total amount of cloud is reported at the end of the report using the same abbreviation as for N_sN_sN_s.

BELGIUM

ww **This group is not used**

WS TKOF RWYD_RD_R **These groups are not used.**
WS LDG RWYD_RD_R

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION VI

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)

ESTONIA

- dddfGf_mf_m *The mean of wind direction, wind speed and maximum wind speed is reported for the two-minute period.*
d_nd_nd_nVd_xd_xd_x *This group is not used.*
V_RV_RV_RV_R *The mean of runway visual range is reported for the one-minute period.*
RD_RRD_RV_RV_RV_RV_RV_RV_RV_RV_RV_R — *This group is not used.*
w'w' *For w'w' = BR to be reported, the horizontal visibility shall be at least 1 000 metres but not more than 10 000 metres.*

FINLAND

National deviations from the following global regulations:

15.7.9

In addition to Regulation 15.7.9: *The qualifier FZ is also used with precipitation forming ice on cold ground or surface (icing).*

15.9.2

In the group VVh_sh_sh_s, information on vertical visibility is always based on estimation of vertical visibility.
National deviation from the regulations of the ICAO:
Technical Regulation [3.1], paragraph 4.3.3 e) 2)
Concerning visibility, both 5 000 m and 8 000 m are considered as significant threshold values in selected special reports and aerodrome forecasts.

FRANCE

VVh_sh_sh_s *This group is used in the form VV/// when the group N_sN_sN_sh_sh_sh_s is not coded due to invisible sky (fog, drift snow, etc.).*

WS TKOF RWYD_RD_R
and/or *The groups related to wind shear are not used.*
WS LDG RWYD_RD_R

Group Mw₂ or Bw₂ — *France continues to use the supplementary group Mw₂ or Bw₂ and the related code table. The supplementary group is added at the end of the SPECI report. The symbolic letters have the following specifications:*

M or B *Indicator letters signifying respectively that the report concerns a deterioration or an improvement of weather.*

w₂ *Indication of the meteorological element which is the feature of the SPECI report*

Code
figure

- 0 Gusts
- 1 Wind (either wind direction or speed, or both)
- 2 Visibility
- 3 Cloud (amount or height)
- 4 Precipitation
- 5 Pressure
- 6 State of sea or of swell, i.e. waves
- 7 Duststorm, sandstorm or blowing snow
- 8 Thunderstorm (with or without precipitation)
- 9 Squall or tornado

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)**REGION VI****FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)****NETHERLANDS**

National deviations from the global regulations:

a. CIVIL STATIONS:

1. *The code name METAR/SPECI shall be omitted from the text of the bulletin by civil stations.*
2. **Groups VVVVD_v and V_xV_xV_xV_xD_v:**
 - *D_v in the group VVVVD_v shall not be used.*
 - *The group V_xV_xV_xV_xD_v shall not be used.*
3. **Groups w'w', ww and REw'w':**
 - *One or two groups w'w', but not more than two, shall be used to report all present weather phenomena.*
 - *The group ww shall be omitted from the report.*
 - *Not more than one REw'w' shall be included in the report.*
4. **Group N_sN_sN_sh_sh_sh_s:**
 - *Not more than five cloud groups shall be included in the report.*
 - *In the case of more than one CB and/or one TCU with different cloud bases, the lowest CB and/or TCU shall be reported.*
5. **Trend forecasts:**
 - (i) **Visibility**
 - *An extra criterium of 8 000 metres for the horizontal visibility shall be used.*
 - (ii) **Wind**
 - *A deviated criterium for the mean surface wind is: if the mean surface wind direction has changed by 30° or more and the mean speed before and/or after the change is 10 knots or more.*

b. STATIONS of the ROYAL AIR FORCE and the ROYAL NAVY:

1. **Group d_nd_nd_nVd_xd_xd_x:**
 - *The group d_nd_nd_nVd_xd_xd_x shall not be used.*
2. **Groups VVVVD_v, V_xV_xV_xV_xD_v and RD_RD_R/V_RV_RV_RV_RV_RV_RV_RV_RV_Ri:**
 - *D_v in the group VVVVD_v shall not be used.*
 - *The group V_xV_xV_xV_xD_v shall not be used.*
 - *The group RD_RD_R/V_RV_RV_RV_RV_RV_RV_RV_Ri shall not be used.*
3. **Groups w'w' and ww:**
 - *One or two groups w'w', but not more than two, shall be used to report all present weather phenomena.*
 - *The group ww shall be omitted from the report.*
4. **Group N_sN_sN_sh_sh_sh_s:**
 - *Not more than five cloud groups shall be included in the report.*
 - *In the case of more than one CB and/or one TCU with different cloud bases, the lowest CB and/or TCU shall be reported.*
5. **Code word CAVOK:**
 - *The code word CAVOK shall not be used.*
6. **Groups WS TKOF RWYD_RD_R and/or WS LDG RWYD_RD_R:**
 - *No "wind shear" groups shall be included in the report.*
7. **Trend forecasts:**
 - *The stations of the Royal Air Force and the Royal Navy shall use the colour code, together with the change groups without a time group.*

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)**REGION VI****FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)****NETHERLANDS (continued)**

2-ATAF WEATHER COLOUR CODE			
Colour code		Visibility	Cloud base
Blue	BLU	8 km or more	2500 ft or more
White	WHT	5 km – 8 km	1500 ft – 2500 ft
Green	GRN	3,7 km – 5 km	700 ft – 1500 ft
Yellow	YLO	1,6 km – 3,7 km	300 ft – 700 ft
Amber	AMB	0,8 km – 1,6 km	200 ft – 300 ft
Red	RED	Less than 0,8 km	Less than 200 ft
BLACK	Aerodrome not in use due to other reasons than visibility and cloud base		

National deviations from the regulations of the ICAO (in accordance with the Meteorological Service for International Air Navigation, Annex 3):

a. CIVIL STATIONS:

The national deviations from the international standards for civil stations are:

1. Visibility

An extra criterium of 8000 metres for the horizontal visibility shall be used.

2. Wind

A deviated criterium for the mean surface wind is: if the mean surface wind direction has changed by 30° or more and the mean speed before and/or after the change is 10 knots or more.

b. STATIONS of the ROYAL AIR FORCE and the ROYAL NAVY:

The stations of the Royal Air Force and the Royal Navy shall use the colour code, together with the change groups without a time group.

NORWAY

National deviation from the following global regulation:

15.5.4

Horizontal visibility will be reported in steps rounded down to the nearest 100 metres also for visibility up to 500 metres.

SWEDEN

National deviations from the following global regulations:

15.1.1

SPECI reports are not issued in Sweden. METARs are instead issued every 30 minutes.

15.5

When a directional variation (reduction) in visibility is restricted to a minor sector (e.g. due to local fog patches) and this sector does not coincide with the area of final approach, then the reduction in visibility is not considered significant and thus disregarded.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)**REGION VI****FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)****SWEDEN (continued)****15.6**

Tendencies, discontinuities and significant variations of RVR are given only when values of RVR are taken from automatic systems.

15.7.12

Diamond dust (IC) will be reported independent of the associated visibility.

15.7.13

Haze (HZ) will be reported independent of the associated visibility.

15.7.14

Mist (BR) will be reported when visibility is expected to be at least 1 000 metres but no more than 10 km.

15.10

The restriction "or below the highest minimum sector altitude" will not be applied since only two airports have highest minimum sector altitudes just slightly above 5 000 feet.

SWITZERLAND

Regulations 15.5.2 and 15.5.3 will not be used by Switzerland and will be replaced by the following regulation:

If the meteorological visibility is not identical in all directions, the prevailing visibility will be indicated by the group VVVV. The prevailing visibility is defined as the value which is reached or exceeded at least within a half-circle. This could be formed by different sectors, which are separated among them.

CAVOK The code word **CAVOK** is inserted when, the other conditions being satisfied, there is no cloud below the following altitudes:

Zurich-Kloten	8 000 ft
Genève-Cointrin	12 000 ft
Bern-Belp	10 000 ft
Lugano-Agno	9 000 ft
Altenrhein	9 000 ft
Grenchen	7 000 ft
Sion	16 000 ft

UKRAINE

National deviation from the following global regulations:

15.6.4 and 15.6.

Runway visual range (RVR) will be reported as the value obtained at the time of observation (with one-minute averaging) instead of the mean value over the 10-minute period preceding the observation. The reason for this is that the instruments used at Ukrainian aerodromes for determining horizontal visibility do not, according to their technical specifications, carry out averaging of the measured values.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION VI

FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI (continued)

UKRAINE (continued)

15.13.2.1

"Squall" and "spout" will be added to the list of dangerous weather phenomena.

15.13.4

The supplementary information will be expanded to include information on icing and turbulence, which will be coded according to FM 51-IX Ext. TAF, Regulations 51.9 and 51.10.

UNITED KINGDOM

Surface wind

Military aerodromes will not report variations in wind direction.

Horizontal visibility

Military aerodromes will not report maximum visibility, nor the directions of the minimum and maximum visibility.

Runway visual range

Civil aerodromes will continue to report instantaneous values of RVR; until further notice means and trends in RVR will not be reported. Military aerodromes will continue not reporting RVR.

Present weather

At military aerodromes, there will be no restriction placed on the reporting or forecasting of mist, haze, smoke, dust, sand and diamond dust at visibilities above 3000 metres.

Vertical visibility

Values of vertical visual range will not be specified. When sky is obscured and cloud is not discernible, VV/// will be reported or forecast.

Supplementary groups

Information on wind shear will not be reported.

REGION VI

FM 51-IX Ext. TAF

AUSTRIA

Meteorological stations at international airports (see list in paragraph "General" in FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI):

No deviations are used.

Meteorological stations at aerodromes for international general aviation:

The same deviations are used, as in the METAR, concerning cloud amount and cloud type.

BELGIUM

TT_FT_F/G_FG_FZ

6I_ch₁h₁h₁h₁L

5Bh_Bh_Bh_Bh_BL

These groups are not used.

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION VI

FM 51-IX Ext. TAF (continued)

FRANCE

VVh_sh_sh_s See FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI.

NETHERLANDS

National deviations from the global regulations:

For all stations in the Netherlands:

The additional groups (TT_FT_F/G_FG_FZ) (6I_ch_ih_ih_it_i) (5Bh_Bh_Bh_Bt_i) shall not be included in the TAF reports of the Dutch stations.

National deviations from the regulations of the ICAO (in accordance with the Meteorological Service for International Air Navigation, Annex 3):

a. **CIVIL STATIONS:**

The national deviations from the international standards for civil stations are:

1. **Visibility**

An extra criterium of 8000 metres for the horizontal visibility shall be used.

2. **Wind**

A deviated criterium for the mean surface wind is: if the mean surface wind direction has changed by 30° or more and the mean speed before and/or after the change is 10 knots or more.

b. **STATIONS of the ROYAL AIR FORCE and the ROYAL NAVY:**

The stations of the Royal Air Force and the Royal Navy shall use the colour code (see page II - 6 - E - 13), together with the change groups without a time group.

NORWAY

National deviation from the following global regulation:

51.4.3

Forecasted visibility will be given in 100 m steps also for visibility up to 500 metres.

SWEDEN

National deviations from the following global regulations:

51.1.2

The group YYGGggZ will not be included in each individual forecast.

51.4.1

No deviation, but the issue may be reconsidered after a six-month trial period. (See Regulation 15.5 — FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI).

B. Manual on Codes / 3. National practices / 3.3 Changes to codes or procedures (continued)

REGION VI

FM 51-IX Ext. TAF (continued)

SWEDEN (continued)

51.5.1

The list of significant forecast weather phenomena (w'w') will be extended to include:

"Ice pellets, snow grains, and rain and snow mixed, independent of intensity; (inserted after the second clause: Moderate or heavy ... rain and snow mixed;)"

The last clause will read:

"Other weather phenomena given in Code table 4678 which are expected to cause a reduction in visibility below 10 kilometres."

Mist (BR) will be forecast when visibility is expected to be at least 1000 metres but no more than 10 km. Haze (HZ) and diamond dust (IC) will be forecast independent of the associate visibility.

The combination freezing rain and snow (±FZRASN or ±FZSNRA) will be allowed.

51.6.1.5

Will read: *"The height of the base of forecast cloud layer (mass) shall be coded in units of 30 m (100 ft) up to 3000 metres (10000 ft), and above 10000 ft in units of 300 m (1000 ft), in the form h_sh_sh_s" (in alignment with Annex 3 (1/7/93), paragraph 4.9.5).*

51.6.3

See Regulation 15.10 — FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI.

51.7

UNITED KINGDOM

See FM 15-IX Ext. METAR and FM 16-IX Ext. SPECI.

**ANNEX V - MARINE METEOROLOGICAL SERVICES (MMS)
AND RELATED OCEANOGRAPHIC ACTIVITIES**

C. INFORMATION ON THE OPERATION OF MARINE METEOROLOGICAL SERVICES

2. Marine meteorological services available for main ports (Publication No. 9, Volume D, Part C)

DENMARK - DANEMARK (3.V.1993)

Change column (3) to read as follows:

(1)	(2)	(3)
Copenhagen	John Rassel Danish Meteorological Institute, Observations Division Lyngbyvej 100, DK 2100 Copenhagen Ø	39157500

FRANCE - FRANCE (3.V.1993)

Change column (5) to read as follows:

(1)	(2)	(3)
Dunkerque	Bureau météorologique, Place du Minck, 59140 DUNKERQUE	28.66.45.25

(5) For warnings, forecasts and other weather information contact the harbour master or the Meteorological Office, Place du Minck. (Answering machine: 36.68.08.59)
Pour les avis, les prévisions et autres renseignements météorologiques contacter la Capitainerie ou le Bureau météorologique, Place du Minck. (Répondeur: 36.68.08.59)

Change column (5) to read as follows:

(1)	(2)	(3)
La Rochelle	Station météorologique, Le Bout Blanc	46.50.62.32

(5) For warnings, forecasts and other weather information contact the harbour master or the Meteorological Office, Le Bout Blanc. (Answering machine: 36.68.08.17)
Pour les avis, les prévisions et autres renseignements météorologiques contacter la Capitainerie ou le Bureau météorologique, Le Bout Blanc. (Répondeur: 36.68.08.17)

Change column (5) to read as follows:

(1)	(2)	(3)
Le Havre	Station météorologique, Nouveau sémaphore, Quai des Abeilles, 76600 LE HAVRE	35.42.21.06 Fax: 35.41.31.19

(5) Warnings of strong winds to shipping companies, oil tankers; provision of warnings for strong winds and of forecasts twice daily to harbour master and to towing operations for dissemination to all services and for the planning of the ship movements, display and signals; telephone responses for marine forecasts and data for coasts from the Somme to La Hague (36.68.08.76); assistance to all kinds of port activities. High sea areas 36.68.08.08/
Avis de vent fort aux Compagnies maritimes et aux pétroliers; fourniture d'avis de vent fort et prévisions bi-quotidiennes à la Capitainerie et aux services de remorquage pour diffusion, affichage et signalisation dans tous les services et planification des mouvements de navires; répondeur téléphonique pour prévisions pour la zone côtière de la Somme à la Hague (36.68.08.76); assistance pour tous travaux et études portuaires. Zones du large 36.68.08.08

**ANNEX V - MARINE METEOROLOGICAL SERVICES (MMS)
AND RELATED OCEANOGRAPHIC ACTIVITIES**

C. INFORMATION ON THE OPERATION OF MARINE METEOROLOGICAL SERVICES (continued)

2. Marine meteorological services available for main ports (Publication No. 9, Volume D, Part C) (continued)

FRANCE - FRANCE (continued)

Change column (5) to read as follows:

(1)	(2)	(3)
Rouen	Centre Départemental de la Météorologie, Aérodrome de Rouen-Vallée de Seine 76520 BOOS	35.79.41.45

(5)	Provision of forecasts to harbour master for dissemination to services at port and display; specific assistance to all kinds of port activities (36.68.08.76). High sea areas 36.68.08.08/ Fourniture de prévisions à la Capitainerie pour diffusion et affichage aux services du port; assistance pour toutes activités portuaires (36.68.08.76). Zones du large 36.68.08.08
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NETHERLANDS - PAYS-BAS (15.VI.1993)

Change column (5) to read as follows:

(1)	(2)	(3)
Rotterdam	PMO Office Rotterdam, Aeronautical Meteorological Division of KNMI Rotterdam Airport	(010) 4370766

(5)	Bulletins are distributed via (a) a closed harbour teleprinter circuit; (b) telephone 06-9771; (c) channel 14 (VHF) hourly in English./ Les bulletins sont distribués (a) par le circuit fermé de téléimprimeur du port; (b) par téléphone 06-9771; (c) toutes les heures, en anglais, voie 14 (VHF).
-----	--

NORWAY - NORVÈGE (6.V.1993)

Change columns (2), (3) and (6) to read as follows:

(1)	(2)	(3)
Bergen	Mr. Tor I. MATHIESEN Vervarslinga på Vestlandet, Allégt. 70, 5007 Bergen	Tel.: +47-5-236600 Telefax: +47-5-236703 Telex: 40427

(6)	For forecasts contact duty forecaster. For other information contact PMO (Tel. +47-5-236600). / Pour les prévisions contacter le prévisionniste de service. Pour les autres renseignements contacter l'AMP (Tél. +47-5-236600).
-----	--

Change columns (2) and (6) to read as follows:

(1)	(2)	(3)
Oslo	Chief of Weather Forecasting Section	Tel.: +47-22-963000 Telefax: +47-22-963050

(6)	For forecasts and other information contact duty officer (Tel. +47-22-963000). / Pour les prévisions et autres renseignements contacter le fonctionnaire de service (Tél. +47-22-963000).
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**ANNEX V - MARINE METEOROLOGICAL SERVICES (MMS)
AND RELATED OCEANOGRAPHIC ACTIVITIES**

C. INFORMATION ON THE OPERATION OF MARINE METEOROLOGICAL SERVICES (continued)

2. Marine meteorological services available for main ports (Publication No. 9, Volume D, Part C) (continued)

**UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND -
ROYAUME-UNI DE GRANDE-BRETAGNE ET D'IRLANDE DU NORD**

Change column (2) to read as follows:

(1)	(2)	(3)
Clyde (Glasgow)	Captain S.M. Norwell, Navy Buildings, Eldon Street, GREENOCK PA16 7SL	Greenock (0475) 24700

Change column (2) to read as follows:

(1)	(2)	(3)
Humber (Hull)	Captain E.J. O'Sullivan Customs Building Albert dock HULL HU1 2DN	Hull (0482) 20158

Change column (3) to read as follows:

(1)	(2)	(3)
London	Captain C.R. Downes Daneholes House Hogg Lane, GRAYS Essex RM17 5QH	Grays, (0375) 378369

Change column (2) to read as follows:

(1)	(2)	(3)
Southampton	Captain D.R. McWhan 8 Viceroy House, Mountbatten Business Centre Millbrook Road East SOUTHAMPTON SO1 0HY	Southampton (0703) 220632

Change column (2) to read as follows:

(1)	(2)	(3)
Tyne (Newcastle)	Captain J. Steel Room D418, Corporation House 73/75 Albert Road, MIDDLESBROUGH, Cleveland TS1 2RZ	Middlesbrough (0642) 231622

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