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GENEVA, 31 March 1993

Annexes: 4

Subject: Monthly letter on the operation of the World Weather Watch (WWW) and Marine Meteorological Services (MMS) – March 1993

Action required: To be noted and brought to the attention of appropriate operational units

Dear Sir/Madam,

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, please find attached the annexes providing the latest operational information on WWW and MMS. Those items and sub-items for which information is provided are listed below:

ANNEX I – Global Observing System

C. Information on operational status of elements of the surface-based sub-system

1. Publication No. 9, Volume A - Stations
 - 1.1 New stations
 - 1.2 Deleted stations
 - 1.3 Changes to existing stations
4. Automatic marine stations
 - 4.1 Canada
 - 4.1.1 Moored Buoys
 - 4.1.2 Drifting Buoys
 - 4.2 United States of America
 - 4.2.1 Moored Buoys
 - 4.2.2 Drifting Buoys

To: Permanent Representatives (or Directors of Meteorological or Hydro-meteorological Services) of Members of WMO (PR-4842)
 Directors of Meteorological Services of non-Member countries (MC-2478)
 Presidents and Vice-Presidents of Regional Associations (P.RA-1326)
 Presidents and Vice-Presidents of Technical Commissions (P.TC-1443)
 Chairmen of CBS Working Groups
 Secretary-General of ICAO
 Director-General of IATA
 Secretary of IOC
 Director-General of ASECNA
 Director of ECMWF

ANNEX I – Global Observing System (cont.)

- 4.3 France
 - 4.3.2 Drifting Buoys
- 5. ARGOS service
 - 5.1 ARGOS monthly status report
- 7. Wind Profiler Demonstration Network (WPDN)
- 8. Feed-back from Members to the Secretariat on any changes in the observing network

ANNEX III – Global Telecommunication System

- A. GTS regulatory or guidance material
 - 3. Amendments to the Manual on the Global Telecommunication System
- C. Information on the operation of the GTS
 - 2. Transmission schedules (Publication No. 9, Volume C, Chapter II)
 - 2.3 Changes in schedules/technical specifications

ANNEX IV – Codes

- B. Manual on Codes
 - 1. Global practices
 - 1.3 Changes to codes

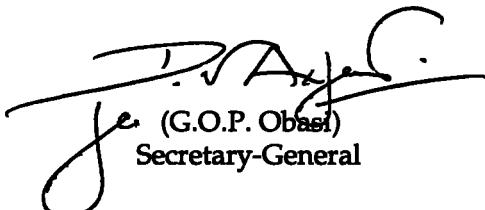
**ANNEX V – Marine Meteorological Services (MMS)
and related oceanographic activities**

- C. Information on the operation of Marine Meteorological Services
 - 1. Broadcasts for shipping and other marine activities (Publication No. 9, Volume D, Part A)
 - 1.3 Changes in schedules/technical specifications

The CBS Advisory Working Group recommended that a special table should be added to the monthly letter to report changes of the present status of implementation of observing programmes of SYNOP, TEMP and PILOT reporting stations. You will note, therefore, that a new item, number 8, "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. If you wish to receive additional copies of the monthly circular letter, please inform the Secretariat accordingly.

Yours faithfully,



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

ANNEX I - Global Observing System

Date: March 1993

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 00 Obs. S	Upper-air				Re- marks		
				HP	H/HA		00	03	06	09	12	15	18	21	00	06	12	18			
08544	OVAR/MACEDA	40° 55' N	08° 38' W	22	17		X	.	X	X	X	X	X	.	H06-18	.	.	.	.
08555	FARO/CIDADE	37° 01' N	07° 55' W	8	27		.	.	.	X	X	X	X	X	X		.	.	.	.
08560	VISEU	40° 43' N	07° 53' W	644	644		X	.	X	X	X	X	X	X	X		.	.	.	.
26339	PRIBALTIISKAJA	57° 08' N	25° 55' E	180	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26346	ALUKSNE	57° 26' N	27° 02' E	193	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26350	VILJAKA	57° 14' N	27° 44' E	107	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26403	PAVLOSTA	56° 53' N	21° 11' E	9	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26416	SALDUS	56° 41' N	22° 30' E	112	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26424	DOBELE	56° 37' N	23° 19' E	44	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26429	BAUSKA	56° 24' N	24° 13' E	33	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26435	SKRMERI	56° 39' N	25° 08' E	83	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26436	ZILANI	56° 31' N	25° 55' E	109	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26446	REZEKNE	56° 32' N	27° 16' E	157	-		X	X	X	X	X	X	X	X	X		.	.	.	.
26551	DAGDA	56° 06' N	27° 33' E	181	-		X	X	X	X	X	X	X	X	X		.	.	.	.
45012	MACAU/PORTO	22° 11' N	113° 31' E	-	8		X	X	X	X	X	X	X	X	X	H00-24	.	.	.	AUT	
45015	TAIPA	22° 09' N	113° 32' E	-	6		X	X	X	X	X	X	X	X	X	H00-24	.	.	.	AUT	
45018	KAHO	22° 08' N	113° 34' E	-	27		X	X	X	X	X	X	X	X	X	H00-24	.	.	.	AUT	

1.2 Deleted stations

Index No.	Name
02026	ALUOKTA
02171	BODEN
02473	UNDERSTEN
02543	FAGRE
02594	STORA KARLSO
02610	ORJA
02622	LJUNGBY
02662	VISSEFJARDA
08547	AVEIRO/S.JACINTO

1.3 Changes to existing stations

Index No.	Name	Surface observations									Obs. H Obs. S	Upper-air				Re- marks
		00	03	06	09	12	15	18	21	00		06	12	18		
02535	SKOVDE FLYGPLATS	.	.	X	X	X	X	X	.	H00-24	.	.	.	.	.
08501	FLORES (AÇORES)	X	.	X	X	X	X	X	X	H00-24	.	.	.	.	.
08505	HORTA/CASTELO BRANCO (AÇORES)	X	.	X	X	X	X	X	X	H00-24	.	.	.	.	.
08506	HORTA (AÇORES)	.	.	.	X	.	X	.	X	.	.	.	.	.	.
08511	ANGRA DO HEROISMO (AÇORES)	.	.	.	X	.	X	.	X	.	.	.	.	.	.
08532	SINTRA/GRANJA	X	.	X	X	X	X	X	.	H06-18	.	.	.	.	.
08534	MONTIJO	X	.	X	X	X	X	X	.	H06-18	.	.	.	.	.
08535	LISBOA/GEOF	.	.	.	X	X	X	.	.	.	.	.	.	.	.
08538	SAGRES	X	.	X	X	X	X	X	X	X	.	.	.	.	.
08540	MONTE REAL	X	.	X	X	X	X	X	.	H06-18	.	.	.	.	.
08546	PORTO/SERRA DO PILAR	.	.	.	X	X	X	X	.	.	.	.	.	.	.
08552	TANCOS	X	.	X	X	X	X	X	X	.	H06-18	.	.	.	.
08570	CASTELO BRANCO	X	X	X	X	X	X	X	X	X	.	.	.	.	.
10026	HUSUM	X	X	X	X	X	X	X	X	X	H00-24	.	.	.	.
10235	SOLTAU	X	X	X	X	X	X	X	X	X	H00-24	.	.	.	.
10286	WOLDEGK	X	X	X	X	X	X	X	X	X	H00-24	.	.	.	.
10317	OSNABRUECK	X	X	X	X	X	X	X	X	X	H00-24	.	.	.	.
10376	BARUTH	.	.	.	.	.	.	.	.	.	.	.	.	.	.
10635	KLEINER FELDBERG/TAUNUS	X	X	X	X	X	X	X	X	X	H00-24	.	.	.	.
10724	WEINBIET	.	.	X	X	X	X	X	.	.	H05-15	.	.	.	.
10818	KLIPPENECK	X	X	X	X	X	X	X	X	X	H00-24	.	.	.	.
10908	FELDBERG/SCHWARZWALD	X	X	X	X	X	X	X	X	X	H03-24	.	.	.	.
26406	LIEPAJA	X	X	X	X	X	X	X	X	X	.	.	.	.	.
26422	RIGA	X	X	X	X	X	X	X	X	X	.	R	.	R	.	
68026	SHAKAWE	X	X	X	X	X	X	X	X	.	.	.	.	.	.
68029	KASANE	X	X	X	X	X	X	X	X	.	.	P	.	P	.	
68038	SUA-PAN	X	X	X	X	X	X	X	X	.	.	.	.	.	.
68234	JWANENG	X	X	X	X	X	X	X	X	.	.	.	.	.	.
68328	TSABONG	X	X	X	X	X	X	X	X	.	.	RW	.	RW	.	
71907	INUJKUAK, QUE.	X	.	X	.	X	.	.	.	.	.	.	.	.	.

4. Automatic marine stations

4.1 Canada

Data from moored and drifting buoys are collected via geostationary and polar orbiting satellites respectively. Meteorological reports from moored buoys using FM 13-IX SHIP code are distributed on the GTS from the Direct Readout Station located in Vancouver, B.C. Reports from drifting buoys are received at the ARGOS Local User Terminals in Edmonton and Toronto and distributed on the GTS using the FM 18-IX 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. Automatic marine stations (continued)

4.1 Canada (continued)

4.1.1 Moored Buoys

• North-east Pacific Ocean:

WMO buoy Identifier	ARGOS Identifier	Position: 1 March 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
46004	07180	50°56'N	135°52'W	X	X	X	X	X	X	X	.
46145	08676	54°23'N	132°26'W	X	X	X	X	X	X	X	.
46146	07191	49°20'N	123°44'W	X	X	X	X	X	X	X	.
46181	07185	53°50'N	128°50'W	X	X	X	X	X	X	X	.
46183	07192	53°37'N	131°06'W	X	X	X	X	X	X	X	.
46184*	07182	53°56'N	138°48'W	X	X	X	X	X	X	X	.
46185	07187	52°25'N	129°48'W	X	X	X	X	X	X	X	.
46204	07195	51°23'N	128°45'W	X	X	X	X	X	X	X	.
46205	07196	54°10'N	134°20'W	X	X	X	X	X	X	X	.
46206	07193	48°50'N	126°00'W	X	X	X	X	X	X	X	.
46207	08677	50°52'N	129°55'W	X	X	X	X	X	X	X	.
46208	07194	52°30'N	132°42'W	X	X	X	X	X	X	X	.
46036*	05324	48°18'N	133°51'W	X	X	X	X	X	X	X	.
46131	08678	49°54'N	124°59'W	X	X	X	X	X	X	X	.

• North-west Atlantic Ocean:

WMO buoy Identifier	ARGOS Identifier	Position: 4 March 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
44131+	03479	46°03'N	60°42'W								
44137	05579	41°12'N	61°08'W	X	X	X	X	X	X	X	.
44138	05577	44°14'N	53°38'W	X	X	X	X	X	X	X	.
44139	03448	44°19'N	57°21'W	X	X	X	X	X	X	X	.
44140*	05576			.	.	X	X	X	X	X	.
44141	03449	42°04'N	56°09'W	X	X	X	X	X	X	X	.
44142	05578	42°28'N	64°15'W	.	X	X	X	X	X	X	.

• Great Lakes:

WMO buoy Identifier	ARGOS Identifier	Position: 4 March 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
45135#	N/A	44°42'N	75°32'W	X	X	X	X	X	X	X	.
45137#	N/A	45°20'N	80°02'W	X	X	X	X	X	X	X	.
45132#	N/A	42°06'N	83°07'W	X	X	X	X	X	X	X	.
45139+	N/A										
45136+	03477										
45138+	08249										
45141+	N/A										

* Buoy adrift

+ Removed from service for winter

Relocated for winter

4. Automatic marine stations (continued)

4.1 Canada (continued)

4.1.2 Drifting Buoys

- North-east Pacific Ocean:

WMO buoy Identifier	ARGOS Identifier	Position: 3 March 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
46631	12510	53°42'N	151°06'W	.	X	X	X	X	.	.	X
46633	12512	49°12'N	146°54'W	.	X	X	X	X	.	.	X
46642	12521	48°36'N	158°30'W	.	.	X	X	X	.	.	X
46656	07143	55°42'N	138°42'W	.	X	X	X	X	.	.	X
46657	07145	44°42'N	143°18'W	.	X	X	X	X	.	.	X
46658	06267	49°06'N	137°54'W	.	X	X	X	X	.	.	X
46659	06268	52°06'N	143°36'W	.	X	X	X	X	.	.	X
46662	01357	46°13'N	157°03'W	.	.	X	.	X	.	.	.
46682	07136	42°24'N	135°42'W	.	X	X	X	X	.	.	X
46684	07137	43°24'N	127°12'W	.	X	.	X	X	.	.	X
46687	07138	30°48'N	153°54'W	.	.	X	X	X	.	.	X
46699	07146	58°54'N	149°36'W	.	X	X	X	X	.	.	X
46704	07128	30°12'N	135°30'W	.	X	X	X	X	.	.	X
46706	07130	26°54'N	141°06'W	.	X	X	X	X	.	.	X
46708	07132	59°24'N	150°06'W	.	X	X	X	X	.	.	X

- Arctic Icepack:

WMO buoy Identifier	ARGOS Identifier	Position: 21 March 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
47532	05313	82°12'N	101°06'W	.	X	X	.	.	.	.	.
48526	05314	75°18'N	138°36'W	.	X	X	.	.	.	.	.
48567	01837	75°30'N	155°12'W	.	.	X	.	.	.	.	.
48568	07100	74°30'N	149°12'W	.	.	X	.	.	.	.	.

4.2 United States of America

List of U.S.A. Ocean Data Acquisition System (ODAS) included in the March 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. Automatic marine stations (continued)

4.2 United States of America (continued)

4.2.1 Moored Buoys

WMO buoy Identifier	ARGOS Identifier	Position: 18-25 March 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
32302		18.0 S	85.1 W	X	X	X		*	X	X	
41001**		34.9 N	73.0 W	X	X	X		X	X	X	
41002**		32.3 N	75.2 W	X	X	X		X	X	X	
41004		32.5 N	79.1 W	X	X	X		X	*	*	
41006**		29.3 N	77.4 W	X	X	X		X	X	X	
41009		28.5 N	80.2 W	X	X	X		X	X	X	
41010		28.9 N	78.5 W	X	X	X		X	X	X	
41016		24.6 N	76.5 W	X	X	X		X	X	X	
42001**		25.9 N	89.7 W	X	X	X		X	X	X	
42002**		25.9 N	93.6 W	X	X	X		X	X	X	
42003**		25.9 N	85.9 W	X	X	X		X	X	X	
42007		30.1 N	88.8 W	X	X	X		X	.	.	
42019		27.9 N	95.0 W	X	X	X		X	X	X	
42020		27.0 N	96.5 W	X	X	X		X	X	X	
42025		24.9 N	80.4 W	.	*	.		*	*	*	
44004**		38.5 N	70.7 W	X	X	X		X	X	X	
44005**		42.6 N	68.6 W	*	*	X		X	X	X	
44007**		43.5 N	70.1 W	X	X	X		X	X	X	
44008**		40.5 N	69.4 W	X	X	X		X	X	X	
44011**		41.1 N	66.6 W	X	X	X		X	X	X	
44013**		42.4 N	70.8 W	X	X	X		X	X	X	
44014		36.6 N	74.8 W	X	X	X		X	X	X	
44025		40.3 N	73.2 W	X	X	X		X	X	X	
45001**		48.0 N	87.8 W	X	X	X		X	X	X	
45002**		45.3 N	86.4 W	X	X	X		X	X	X	
45003**		45.3 N	82.7 W	X	X	X		X	X	X	
45004**		47.5 N	86.5 W	X	X	X		X	X	X	
45005**		41.7 N	82.4 W	X	X	X		X	X	X	
45006**		47.3 N	89.9 W	X	X	X		X	X	X	
45007**		42.7 N	87.1 W	X	X	X		X	X	X	
45008**		44.3 N	82.4 W	X	X	X		X	X	X	
46001**		56.3 N	148.2 W	X	X	X		X	X	X	
46002**		42.5 N	130.3 W	X	X	X		X	X	X	
46003**		51.9 N	155.9 W	*	*	*		*	*	*	
46005**		46.1 N	131.0 W	X	X	X		X	X	X	
46006**		40.9 N	137.5 W	X	X	X		X	X	X	
46012		37.4 N	122.7 W	X	X	X		X	X	X	
46013		38.2 N	123.3 W	X	X	X		X	X	X	
46014		39.2 N	124.0 W	*	*	*		*	*	*	
46022		40.7 N	124.5 W	X	X	X		X	X	X	

* Sensor/system failure

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

4.2.1 Moored Buoys (continued)

WMO buoy Identifier	ARGOS Identifier	Position: 18-25 March 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
46023		34.3 N	120.7 W	X	X	X		X	X	X	
46025		33.7 N	119.1 W	X	X	X		X	X	X	
46026**		37.7 N	122.7 W	X	X	X		X	X	X	
46027**		41.8 N	124.4 W	*	X	X		X	X	X	
46028		35.8 N	121.9 W	X	X	X		*	*	*	
46029**		46.2 N	124.2 W	*	*	*		*	*	*	
46030**		40.4 N	124.5 W	X	X	X		X	X	X	
46035		57.0 N	177.7 W	X	X	X		X	X	X	
46041		47.4 N	124.5 W	X	X	X		X	X	X	
46042		36.8 N	122.4 W	X	X	X		*	X	X	
46045		33.8 N	118.4 W	X	X	X		X	X	X	
46047		32.7 N	119.6 W	X	X	X		X	X	X	
46048		32.9 N	117.9 W	X	X	X		X	X	X	
46050		144.6 N	124.5 W	X	X	X		X	X	X	
46051		34.5 N	120.7 W	X	X	X		X	X	X	
51001**		23.4 N	162.3 W	X	X	X		X	X	X	
51002**		17.2 N	157.8 W	X	X	X		X	X	X	
51003**		19.3 N	160.8 W	X	X	X		X	X	X	
51004**		17.4 N	152.5 W	X	X	X		X	X	X	
51026		21.4 N	157.0 W	X	X	X		X	X	X	
52009		13.7 N	144.7 E	X	*	X		X	X	X	

4.2.2 Drifting Buoys

WMO buoy Identifier	ARGOS Identifier	Position: 24-25 March 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
16809	12314	40 °S	099 °E	.	X	*		X	.	.	.
16810	12309	59 °S	143 °E	.	X	*		X	.	.	.
17814	1968	48 °S	145 °E	.	X	X		X	.	.	.
17816	1992	42 °S	013 °W	.	X	X		X	.	.	.
17817	1986	38 °S	001 °E	.	X	X		X	.	.	.
17825	5129	35 °S	078 °E	.	X	X		X	.	.	.
33510	12308	20 °S	091 °E	.	X	X		X	.	.	.
33833	1974	35 °S	032 °W	.	X	X		X	.	.	.
33834	1979	34 °S	024 °W	.	X	X		X	.	.	.
33835	1987	59 °S	026 °W	.	X	X		X	.	.	.
33836	1988	55 °S	025 °W	.	X	X		X	.	.	.
33837	1991	49 °S	020 °W	.	X	X		X	.	.	.
53823	5131	08 °S	114 °E	.	*	X		*	.	.	.
53824	1989	14 °S	120 °E	.	X	X		X	.	.	.
54801	1973	33 °S	151 °W	.	X	X		X	.	.	.
54802	1993	35 °S	140 °W	.	X	X		X	.	.	.

* Sensor/system failure

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

4.2.2 Drifting Buoys

WMO buoy Identifier	ARGOS Identifier	Position: 24-25 March 1993		Observed or technical parameters							
		Latitude	Longitude	1	2	3	4	5	6	7	8
54803	1975	45 °S	151 °W	.	X	X	X	.	.	.	.
54804	1970	44 °S	143 °W	.	X	X	X	.	.	.	.
54805	1985	42 °S	153 °W	.	X	X	X	.	.	.	.
54838	8823	39 °S	114 °W	.	X	X	X	.	.	.	.
54843	5134	47 °S	084 °W	.	X	X	X	.	.	.	.
54846	1969	44 °S	149 °W	.	X	X	X	.	.	.	.
56801	5130	19 °S	052 °E	.	X	X	X	.	.	.	.
56802	5119	09 °S	104 °E	.	X	X	X	.	.	.	.
56803	1994	21 °S	085 °E	.	X	X	X	.	.	.	.
56835	12291	29 °S	059 °E	.	X	X	X	.	.	.	.
56837	5116	06 °S	107 °E	.	*	X	*	.	.	.	.
56839	5124	18 °S	051 °E	.	X	X	X	.	.	.	.
56840	12292	54 °S	172 °E	.	*	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		

4.3.2 Drifting Buoys

WMO buoy Identifier	ARGOS Identifier	Position: 18 March 1993		Observed or technical parameters								
		Latitude	Longitude	1	2	3	4	5	6	7	8	9
52571	02684	2°03 'N	173°16 'E	.	.	.	*	.	.	.	.	*
52575	17618	0°09 'S	166°40 'E	.	.	.	X	.	.	.	.	X
52576	17623	8°11 'N	157°26 'E	.	.	.	X	.	.	.	.	X
52577	17624	8°11 'N	157°28 'E	.	.	.	X	.	.	.	.	X
52578	17625	0°12 'N	156°22 'E	.	.	.	X	.	.	.	.	X
52579	17629	0°04 'N	162°55 'E	.	.	.	X	.	.	.	.	X
52580	17619	7°57 'N	159°11 'E	.	.	.	X	.	.	.	.	X
52582	17627	3°35 'S	162°18 'E	.	.	.	X	.	.	.	.	X
52583	17621	0°15 'S	158°40 'E	.	.	.	X	.	.	.	.	X
52584	17626	2°36 'N	144°44 'E	.	.	.	X	.	.	.	.	X
52585	17628	1°42 'S	161°28 'E	.	.	.	X	.	.	.	.	X
52586	02683	0°01 'N	157°02 'E	.	.	.	X	.	.	.	.	X
52587	02688	0°07 'N	131°02 'E	.	.	.	X	.	.	.	.	X
52588	02690	5°27 'N	154°17 'E	.	.	.	X	.	.	.	.	X
52589	17622	0°45 'N	153°02 'E	.	.	.	X	.	.	.	.	X
52884	15500	3°17 'S	157°38 'E	*	*	*	*	*	*	.	.	*

4.3.2 Drifting Buoys (continued)

WMO buoy Identifier	ARGOS Identifier	Position: 18 March 1993		Observed or technical parameters								
		Latitude	Longitude	1	2	3	4	5	6	7	8	9
52885	14414	3°27 'S	164°26 'E	*	.	*	.	*	.	.	.	*
52886	14415	3°54 'S	160°40 'E	X	.	X	.	*	.	.	.	*
52887	14416	2°55 'S	164°12 'E	X	.	X	.	X	.	.	.	*
52889	02678	10°52 'N	175°11 'W	.	.	.	.	X	.	.	.	X
52890	02679	12°58 'N	170°52 'W	.	.	.	.	X	.	.	.	X
52891	02676	1°39 'S	165°41 'E	.	.	.	.	X	.	.	.	X
52893	02680	4°19 'S	174°31 'E	.	.	.	.	X	.	.	.	*
62503	05834	43°44 'N	14°51 'W	.	.	X	X	X	.	.	.	X
62504	05825	39°49 'N	11°24 'W	.	.	*	*	*	.	.	.	.
62507	05794	45°23 'N	10°23 'W	.	.	X	X	X	.	.	.	.
62508	15499	29°04 'N	28°30 'W	*	.	*	.	*	.	.	.	*
62511	01354	46°06 'N	10°56 'W	.	.	X	.	X	.	.	.	.
62516	10107	49°18 'N	14°54 'W	.	.	X	X	X	.	.	.	.
62517	10108	47°39 'N	13°19 'W	X	.	X	X	X	.	.	.	.
62518	10113	46°00 'N	13°00 'W	X	.	X	X	X	.	.	.	.

* Sensor/system failure

5. ARGOS service

- **Encoding of DRIFTER reports originating from Argos Centres**

The implementation of the new Argos GTS Processing Chain has allowed the realization of many more of the potentialities of the DRIFTER code for including additional information. The following note, provided by the technical co-ordinator of the Drifting Buoy Co-operation Panel, specifies one such potentiality which has now been implemented. If this new feature is not recognized by data handling and decoding software in receiving centres it may result in serious loss of data.

Encoding of Section 4 of FM 18-Ext. DRIFTER reports in bulletins originating from the Argos Centres (SSVXii KARS and SSVXii LFPW, plus also SSVX02 and SSVX08 KWBC):

(Fields not used are not listed, refer to the WMO Manual on Codes (WMO-No. 306) for details and formal description)

444 20Q// H/// 8VVVV 8VVVV 8VVVV 90ZZZ

If section is not coded or groups 20Q// H/// are not included it means that the time of location differs from the time of observation by less than 30 minutes.

If this difference is between 30 minutes and 09.30 hours then Q is coded "1" and H represents the absolute value of this difference rounded to a number of hours.

If this difference is between 09.30 hours and 48 hours then Q is coded "1" and H is coded "/". Hence the sequence 201// //// appears in the reports.

If this difference is larger than 48 hours, then the report is not distributed on the GTS.

Groups 8VVVV are optional and are used to encode housekeeping parameter data when requested by the owner of the buoy.

Group 90ZZZ is used to encode the depth of the drogue in meters when a drogue is installed.

- **New processing system for GTS data within ARGOS**

A new system for processing GTS data is planned for implementation at the Argos Global Processing Centres of Toulouse, France, and Landover, USA. Development was co-sponsored by CLS, Service Argos, and the WMO/IOC Drifting Buoy Cooperation Panel. It will replace the previous GTS processing system, and will allow more flexibility in deformatting and reformatting Argos platform data according to WMO regulations. Implementation date is the 15 February 1993.

Among the new features we can list:

- Compatibility with the previous system,
- No sensor order requirement for encoding sensor information in the Argos message,
- More binary deformatting options for encoding sensor information in the Argos message (e.g. binary, two's complement, BCD),
- Quality control of the "Platform-Satellite-Ground Station-Processing Center" transmission link using checksums,
- More flexibility in retrieving the time of observation in case it is encoded in the Argos message,
- Principal Investigators can now retrieve the raw data while processed data are distributed on GTS,
- Data can be distributed on GTS using one or more of the following WMO codes: DRIFTER, BATHY, TESAC, SYNOP, SHIP, or HYDRA.

Due to improved flexibility, "drogue" and "location age" information will now be encoded in the DRIFTER being produced.

It is expected from such a system an increase in both the quantity and the quality of Argos platform data distributed on GTS from the Argos Global Processing Centres.

For more information, please contact the Technical Coordinator of the Drifting Buoy Cooperation Panel, Mr. Etienne Charpentier, 1801 McCormick Drive, Suite 10, Landover MD 20785; Telephone: (301) 9254054, Fax: (301) 925 89 95.

5.1 ARGOS monthly status report

Date of statistics computation : 2 March 1993

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

Drifting buoys	:	1046
Moored buoys	:	269
Balloons	:	51
Ships	:	25
Boats	:	80
Animals	:	187
Fixed Stations	:	487
Miscellaneous	:	62
Total :		2207

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	:	99
Fixed Stations	:	6
Marine Stations	:	4
Moored buoys	:	1

Transmission to NWS Washington:

Drifting buoys	:	475
Fixed Stations	:	4
High Speed	:	5
Moored buoys	:	21

- 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/N
Australia	52621	02937	D	101	29	Y
	55512	00416	D	76	0	Y
	55513	00421	D	78	24	Y
	55515	00415	D	128	23	Y
	55516	00417	D	118	2	Y
	56504	08036	D	135	42	Y
	56506	04875	D	102	42	Y
	56507	04876	D	155	48	Y
	56509	02938	D	174	51	Y
	56510	02939	D	205	63	Y
	FHZI*	08743				
	GYSA*	09189				
	9VWM*	09191				
	S6FK*	09193				
	VJDP*	09198				
	GYSE*	09199				
Canada	21551	01333	D	141	50	Y
	21553	01332	D	131	43	Y
	42606	07183	D	0	323	Y
	44137	05579	D	0	321	Y
	44138	05577	D	0	345	Y
	44139	03448	D	0	333	Y
	44140	05576	D	0	1	Y
	44141	03449	D	0	333	Y
	44142	05578	D	0	299	Y
	44645	01104	D	34	59	Y
	44646	01106	D	26	54	Y
	44647	11255	D	28	48	Y

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
Canada (continued)	44649	11257		0	1	Y
	44682	00967	D	133	23	YY
	44683	00968	D	116	17	YY
	44684	00970	D	94	26	YY
	44685	00974	D	56	38	Y
	44686	04757	D	132	23	YY
	46004	07180		0	0	YY
	46036	05324	D	0	334	YY
	46145	07193	D	0	420	Y
	46181	08676	D	0	325	YY
	46184	07182	D	0	225	YY
	46204	07197	D	0	351	Y
	46205	07196	D	0	410	Y
	46207	07187	D	0	350	YY
	46208	07186	D	0	383	YY
	46648	01188		0	2	YY
	46651	01318	D	120	44	Y
	48529	11252	D	0	162	YY
	48550	11251	D	0	397	Y
Finland	71091	05895	D	301	126	Y
France	52580	17619	D	82	10	Y
	62503	05834	D	163	91	YY
	62504	05825	D	194	75	YY
	62507	05794	D	168	82	YY
	62516	10107	D	172	40	Y
	62517	10108	D	185	113	YY
	62518	10113	D	168	92	YY
	ELEH4*	08747				
	ELIL9*	04719				
	ELIL8*	04705				
	FGPT*	04704				
	FNCM*	04721				
	FNCZ*	08744				
	FNDK*	08748				
	FNGB*	04733				
	FNGS*	04707				
	FNQC*	04710				
	FNZP*	04715				
	FNZQ*	04711				
	FPYO*	04729				
	HPEW*	04703				
	ZDR6*	04714				
	3BBA*	04713				

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
Germany	63662	09360	D	343	163	Y
	63663	09372	D	441	185	YY
	71042	03317		0	413	YY
	71524	03315		0	335	YY
	71551	09357	D	287	76	Y
	71552	09358	D	250	68	YY
	71553	09359	D	248	71	YY
	71554	09366	D	206	84	Y
	71555	09367		0	1	YY
	71556	09368	D	224	80	YY
	71557	09369	D	239	69	Y
	63903	15910	D	163	84	Y
	63904	15919	D	136	62	YY
	63905	15888	D	117	71	YY
	63906	15906	D	96	86	Y
Italy	63907	15917	D	165	76	Y
	63908	15923	D	4	37	YY
	64629	15902	D	145	41	YY
	64631	15904	D	157	65	Y
	64634	15912	D	94	45	Y
	64635	15915	D	73	37	YY
	64637	15890	D	140	58	YY
	64638	15893	D	142	50	Y
	64639	15895	D	57	28	Y
	64640	15896	D	130	58	YY
	64641	15897	D	84	35	YY
	64642	15899	D	129	67	Y
	64645	15909	D	61	41	Y
	64648	15914	D	51	49	YY
	64651	15920	D	85	43	YY
	64652	15921	D	68	38	Y
Norway	64901	08330	D	0	18	Y
	64905	08633	D	151	49	YY
	64908	08639	D	192	63	YY
	64923	15926	D	142	72	Y
	64924	02458	D	48	55	Y
	64925	02459	D	105	34	YY
	64926	02460	D	17	48	YY
	64927	02461	D	52	63	Y
	64928	02462	D	22	27	Y
	17001	01591	D	120	124	Y
	25561	01556	D	449	221	YY
	26531	01791	D	478	266	YY
	26532	01790	D	439	202	Y
	44766	03675	D	318	125	Y
	63006	09400	D	370	367	YY
	65591	06666	D	302	159	YY
	71003	09498	D	294	134	Y
	71004	09499	D	337	91	Y

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
New Zealand	55580	06439	D	129	35	Y
	55583	07179	D	150	47	Y
	55585	07177	D	114	35	Y
	55586	07176	D	102	36	Y
	55587	08584	D	127	44	Y
	55588	08585	D	132	60	Y
	55589	08586	D	112	33	Y
	22605	11011	D	24	14	Y
	22606	11012	D	0	0	Y
	22607	11013	D	41	14	Y
Republic of Korea	17521	00953	D	128	31	Y
	17541	03522	D	137	41	Y
	17543	03519	D	181	46	Y
	17544	03523	D	204	62	Y
	17545	03524	D	153	59	Y
	17546	03518	D	3	57	Y
	17547	03521	D	129	48	Y
	17548	03520	D	123	43	Y
	17549	00945	D	126	45	Y
	17550	00946	D	97	25	Y
South Africa**	17551	00954	D	136	37	Y
	17552	00947	D	52	29	Y
	33021	09222	D	256	64	Y
	33022	03513	D	251	64	Y
	25562	01639	D	343	288	Y
	44762	01253	D	83	235	Y
	44764	01254	D	171	78	Y
	44765	01255	D	76	100	Y
	44767	04036	D	0	15	Y
	44768	06288	D	360	26	Y
United Kingdom	44769	01249	D	0	320	Y
	44770	06287	D	348	119	Y
	44772	02960	D	0	300	Y
	62601	08336	D	188	15	Y
	62602	03909	D	176	24	Y
	62605	03907	D	0	0	Y
	62606	03916	D	136	40	Y
	62694	02958	D	0	228	Y
	62713	01363	D	160	40	Y
	62714	01364	D	178	29	Y
	62805	06285	D	72	171	Y
	64043	06270	D	370	119	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

5.1 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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
United States of America	12502	15342	D	82	116	Y
	13003	06865	D	182	84	Y
	13004	06869	D	190	86	Y
	13005	06873	D	167	88	Y
	13902	14456	D	46	21	Y
	13903	01763	D	58	27	Y
	13904	14445	D	48	36	Y
	13905	14447	D	57	22	Y
	13906	05919	D	49	31	Y
	13907	14461	D	54	37	Y
	13908	14462	D	0	0	Y
	13909	08598	D	19	51	Y
	13910	14464	D	61	29	Y
	13911	14448	D	54	23	Y
	13912	14439	D	55	30	Y
	13913	14450	D	53	30	Y
	13914	14452	D	56	25	Y
	13915	14453	D	56	28	Y
	13917	02072	D	48	26	Y
	13919	14442	D	56	27	Y
	13920	14443	D	47	45	Y
	13922	02005	D	58	24	Y
	13923	02006	D	49	38	Y
	13924	14436	D	59	20	Y
	13925	14438	D	63	21	Y
	13926	02070	D	50	29	Y
	13927	02073	D	0	11	Y
	16233	16233	D	14	2	Y
	16807	05133	D	0	297	Y
	16809	12314	D	53	50	Y
	16810	12309	D	246	97	Y
	17809	05125	D	45	90	Y
	17812	01981	D	7	94	Y
	17814	01968	D	151	87	Y
	17815	01965	D	158	104	Y
	17825	05129	D	68	74	Y
	21431	02875	D	36	29	Y
	21432	14974	D	23	29	Y
	21433	15588	D	52	38	Y
	21434	15591	D	40	47	Y
	21436	00509	D	33	29	Y
	21438	02873	D	28	9	Y
	21439	02878	D	13	11	Y
	21440	02883	D	17	17	Y
	21525	16332	D	0	51	Y
	21526	01535	D	164	174	Y
	21528	01536	D	0	3	Y
	21572	01151	D	145	122	Y
	21573	04648	D	196	140	Y
	21577	06816	D	0	0	Y
	21901	15537	D	65	56	Y
	21902	15536	D	37	35	Y

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
United States of America (continued)	21904	14981	D	72	37	Y
	21907	00502		0	13	YY
	21908	15572	D	69	26	Y
	21909	16191	D	35	39	YY
	21910	16192	D	68	41	Y
	21911	16194	D	38	62	YY
	21912	16213	D	51	56	YY
	21913	16214	D	81	40	Y
	21914	14972	D	42	45	Y
	21915	15574	D	40	64	YY
	21916	00515		0	13	NY
	21917	16193	D	0	26	Y
	21918	16210	D	88	50	Y
	21919	16212	D	67	55	YY
	21920	15583	D	53	49	YY
	21921	15584	D	39	52	Y
	21922	15586	D	49	36	Y
	21923	14980	D	14	48	YY
	21924	15585	D	51	56	YY
	21925	02399	D	65	47	Y
	21926	15587	D	43	38	Y
	21927	16209	D	82	45	YY
	21928	16257	D	44	53	Y
	21929	01780	D	35	20	Y
	21930	02396	D	31	43	Y
	22901	00524	D	12	5	YY
	22902	00508	D	33	27	YY
	22904	00531	D	41	28	Y
	22905	00519	D	9	25	Y
	32512	11920	D	1	10	YY
	32513	11917	D	20	18	YY
	32514	11948	D	20	21	Y
	32515	15648	D	33	16	Y
	32516	11927	D	70	44	YY
	32517	15093	D	43	20	Y
	32518	15091	D	31	13	YY
	32519	11952	D	8	26	Y
	32520	15649	D	37	22	YY
	32521	15651	D	0	0	YY
	32522	15598	D	33	26	Y
	32524	15695	D	29	23	YY
	32525	11953	D	1	25	YY
	32526	15696	D	31	16	YY
	32527	02398	D	32	8	Y
	32529	15028	D	42	14	Y
	32531	15011	D	7	13	YY
	32533	15017	D	34	23	Y
	32534	15018	D	38	14	Y
	32535	15025	D	35	16	Y
	32536	15026	D	27	26	YY
	32537	03225	D	29	2	YY
	32538	15602	D	34	25	Y

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
United States of America (continued)	32539	02884	D	28	18	Y
	32540	11904	D	18	18	Y
	32541	15595	D	37	19	Y
	32542	15596	D	33	12	Y
	32543	03567	D	28	3	Y
	32544	11908	D	7	25	YY
	32545	15679	D	41	15	YY
	32546	02885	D	29	22	Y
	32547	15597	D	37	11	Y
	32548	15599	D	37	20	YY
	32549	11163	D	22	17	YY
	32550	04200	D	36	4	Y
	32551	15600	D	42	10	Y
	32552	11195	D	31	18	Y
	32553	15603	D	34	11	Y
	32554	04201	D	21	7	Y
	32555	15625	D	40	12	Y
	32556	11934	D	13	15	YY
	32557	15626	D	39	18	YY
	32558	09276	D	40	13	Y
	32559	15627	D	33	26	Y
	32560	03252	D	31	4	YY
	32901	03565	D	27	6	YY
	32902	15045	D	35	16	Y
	32903	15050	D	41	15	Y
	32904	15128	D	35	7	YY
	32905	15684	D	39	17	YY
	32906	15685	D	36	22	Y
	32907	04203	D	59	14	Y
	32908	15687	D	6	29	YY
	32909	04204	D	26	8	YY
	32910	15540	D	37	23	Y
	32911	15541	D	36	12	Y
	32912	15542	D	37	20	YY
	32913	15546	D	30	17	YY
	32914	03568	D	36	13	Y
	32915	15048	D	38	8	Y
	32916	15545	D	38	25	YY
	33510	12308	D	107	53	YY
	33831	01967	D	125	59	Y
	34901	15123	D	37	0	Y
	34902	15125	D	29	5	YY
	41502	16307	D	82	171	YY
	41503	16344	D	115	90	Y
	41505	16342	D	0	48	Y
	41506	15344	D	200	82	YY
	41520	15345	D	104	102	YY
	41522	01125	D	201	72	Y
	41523	01128	D	178	71	Y
	41524	15348	D	165	92	YY
	41525	15349	D	125	74	YY
	41901	12326	D	32	32	Y

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
United States of America (continued)	41902	08594	D	40	36	Y
	41903	08596	D	12	34	Y
	41904	08599	D	54	31	Y
	41906	12333	D	47	38	Y
	41907	12329	D	56	44	Y
	41908	12339	D	53	23	Y
	41909	02007	D	0	0	Y
	41910	12324	D	55	29	Y
	41911	12325	D	50	36	Y
	41912	02008	DD	64	22	Y
	41913	12330	DD	51	38	Y
	41914	12334	D	49	20	Y
	41915	12328	D	37	45	Y
	41916	12327	D	49	32	Y
	41917	12337	D	57	35	Y
	41918	12338	D	44	41	Y
	41919	01861	D	51	37	Y
	41920	01863	D	58	28	Y
	41921	03045	DD	49	31	Y
	41922	00468	D	21	6	Y
	42026	00937	D	49	75	Y
	42027	00930	DD	112	101	Y
	42028	00932	DD	131	91	Y
	42029	00934	D	111	103	Y
	42030	00931	D	125	97	Y
	42031	00936	DD	128	107	Y
	42032	00933	DD	123	105	Y
	42033	00935	D	121	101	Y
	42501	02447	D	0	0	Y
	43503	15656	DD	29	17	Y
	43504	11198	DD	18	17	Y
	43505	15657	D	37	34	Y
	43508	15008	D	46	21	Y
	44508	02579	DD	252	126	Y
	44514	04646	D	39	165	Y
	44903	12323	D	0	15	Y
	44905	12335	D	51	21	Y
	44906	12332	D	23	45	Y
	44907	01866	D	61	32	Y
	44908	01867	D	59	31	Y
	46508	01146	D	182	174	Y
	46509	04649	D	184	157	Y
	46510	16360	D	4	16	Y
	46512	16363	D	215	138	Y
	46513	16364	D	183	136	Y
	46514	16365	D	130	154	Y
	46515	16375	D	138	98	Y
	46533	15619	D	42	37	Y
	46535	02009	D	50	40	Y
	46536	15609	D	28	43	Y
	46537	15612	D	42	22	Y
	46538	15579	D	56	46	Y

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
United States of America (continued)	46539	15622	D	68	42	Y
	46540	15577	D	49	47	YY
	46541	15643	D	36	41	YY
	46545	15589	D	81	40	YY
	46547	15070		0	8	Y
	46548	15580	D	67	61	YY
	46549	15076	D	46	16	YY
	46550	01135	D	42	25	YY
	46901	15655	D	29	43	YY
	46903	15566	D	53	41	YY
	46904	15573	D	73	39	YY
	46905	15581		0	19	N
	46906	15582	D	44	31	Y
	46907	15578	D	60	43	YY
	46908	02889	D	45	46	YY
	46909	01766	D	99	46	Y
	46910	15605		0	7	Y
	46911	17232	D	48	54	YY
	46912	17233	D	62	46	YY
	47601	12823	D	333	154	Y
	48520	12801	D	209	126	Y
	48555	12806	D	93	38	YY
	48557	12808	D	34	9	YY
	48558	12821	D	298	126	Y
	48559	12822	D	331	161	Y
	48562	12826	D	361	126	YY
	48564	12828	D	351	136	YY
	48565	12829	D	344	125	Y
	51025	12878		0	229	Y
	51501	16366	D	109	45	YY
	51503	16326	D	96	38	YY
	51506	16367	D	99	47	Y
	51507	16368	D	14	111	Y
	51508	16369	D	107	57	YY
	51509	16370	D	114	49	YY
	51511	03376	D	34	27	Y
	51512	15089	D	35	17	Y
	51514	02433	D	17	8	YY
	51515	14432	D	43	1	YY
	51516	11949	D	29	14	Y
	51518	15077	D	51	39	YY
	51519	02437	D	2	20	YY
	51520	03117	D	17	10	YY
	51801	14433	D	51	24	Y
	51802	02434	D	27	2	Y
	51803	03049	D	49	31	YY
	51804	14434	D	61	21	YY
	51806	03378	D	24	13	Y
	51807	03379	D	26	10	Y
	51808	02435	D	29	0	YY
	51809	14435	D	44	13	YY
	51810	11956	D	34	16	Y

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
United States of America (continued)	51811	15653	D	35	32	Y
	51812	15654	D	43	21	YY
	51814	11946	D	22	14	YY
	51815	03222	D	24	3	YY
	51816	01762	D	26	11	YY
	51817	15617	D	28	38	YY
	51818	03467	D	23	4	YY
	51819	01784	D	17	47	YY
	51820	03468	D	27	2	YY
	51821	11690	D	37	17	YY
	51822	03570	D	26	2	YY
	51823	03223	D	20	8	YY
	51824	02436	D	12	8	YY
	51826	03119	D	20	2	YY
	51827	03572	D	25	5	YY
	51828	15015	D	0	2	Y
	51829	01772	D	33	27	YY
	51830	15088	D	42	25	YY
	51831	02074	D	44	33	YY
	51832	11955	D	22	22	Y
	51834	11957	D	28	10	Y
	51835	09271	D	33	16	YY
	51836	09270	D	43	38	YY
	51838	03170	D	24	4	YY
	51839	03173	D	62	10	YY
	51840	15090	D	39	27	YY
	51841	11950	D	28	13	YY
	51843	03375	D	22	15	YY
	51844	11681	D	30	23	YY
	51846	11692	D	144	134	YY
	51847	15027	D	33	12	YY
	51848	15009	D	35	18	YY
	51849	03466	D	19	6	YY
	51851	03569	D	15	15	YY
	51856	15082	D	37	9	YY
	51861	15099	D	33	19	YY
	51862	11670	D	50	38	YY
	51865	15638	D	40	41	YY
	51866	15644	D	41	53	YY
	51867	15645	D	43	36	Y
	51869	11674	D	33	21	Y
	51870	11679	D	0	0	NY
	51871	15646	D	34	11	YY
	51872	11696	D	41	43	YY
	51878	15072	D	40	30	YY
	51880	15078	D	0	0	YY
	51881	15080	D	11	15	YY
	51883	15083	D	14	9	N
	51885	15086	D	57	44	YY
	51901	15658	D	39	21	YY
	51902	15671	D	42	16	YY
	51903	15672	D	33	13	YY

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
United States of America (continued)	51905	15674	D	30	21	Y
	52506	15031	D	31	12	YY
	52507	15037	D	7	16	N
	52507	15394	D	9	1	Y
	52508	15104	D	36	3	Y
	52509	01761	D	0	0	YY
	52510	11939	D	24	15	YY
	52511	16199	D	31	11	Y
	52512	15023	D	40	11	Y
	52515	16228	D	13	3	YY
	52517	15390	D	29	21	YY
	52518	15114	D	32	3	Y
	52522	01143	D	111	38	Y
	52523	01144	D	111	45	YY
	52524	01145	D	108	45	YY
	52616	15021	D	33	17	Y
	52801	15035	D	32	22	YY
	52802	15552	D	33	18	YY
	52803	15029	D	41	31	YY
	52804	16202	D	28	19	Y
	52805	15012	D	33	21	Y
	52806	16229	D	9	1	YY
	52807	16232	D	9	1	YY
	52808	15666	D	36	17	Y
	52809	15016	D	0	8	Y
	52810	15701	D	45	36	YY
	52811	16206	D	31	14	YY
	52812	15126	D	38	2	Y
	52813	15103	D	37	17	Y
	52814	15659	D	33	22	YY
	52815	15660	D	37	17	YY
	52816	15550	D	0	18	Y
	52817	15553	D	29	21	Y
	52818	15670	D	34	23	YY
	52826	15668	D	0	48	YY
	52827	16200	D	37	19	Y
	52828	15669	D	32	22	Y
	52829	01208	D	37	44	YY
	52830	16196	D	31	13	YY
	52831	16204	D	31	10	Y
	52832	15554	D	0	0	N
	52833	01215	D	100	45	YY
	52834	16195	D	34	20	YY
	52835	15548	D	38	23	Y
	52836	15549	D	38	19	Y
	52837	16198	D	38	16	YY
	52838	15556	D	31	24	YY
	52839	16203	D	31	16	Y
	52840	03046	D	39	13	Y
	52841	16205	D	35	9	YY
	52842	16253	D	33	16	YY
	52843	15558	D	32	18	Y

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
United States of America (continued)	52844	15559	D	40	11	Y
	52845	15561	D	31	13	YY
	52846	15391	D	32	20	YY
	52847	15392	D	29	23	YY
	52848	15560	D	37	16	Y
	52849	16211	D	27	24	YY
	52850	16234	D	11	3	YY
	52851	16238	D	29	17	YY
	52852	16239	D	33	19	Y
	52854	16235	D	8	4	YY
	52855	16237	D	12	3	YY
	52856	16241	D	15	1	Y
	52857	16242	D	8	8	Y
	52858	16243	D	12	2	YY
	52859	16244	D	13	1	YY
	52860	16245	D	14	1	Y
	52861	16246	D	15	2	Y
	52862	16247	D	12	2	YY
	52863	16248	D	13	3	YY
	52864	16249	D	12	4	Y
	52865	16250	D	11	3	Y
	52872	11890	D	12	22	YY
	52896	01028	D	0	1	YY
	53803	00517	D	38	12	Y
	53823	05131	D	88	43	Y
	54801	01973	D	102	67	YY
	54802	01993	D	112	65	YY
	54803	01975	D	142	72	YY
	54804	01970	D	141	70	Y
	54805	01985	D	135	77	YY
	54838	08823	D	135	56	YY
	54843	05134	D	164	65	Y
	54846	01969	D	12	191	Y
	54901	15049	D	33	25	YY
	54902	15115	D	39	1	YY
	54903	15118	D	38	3	YY
	54904	15020	D	35	16	Y
	54905	15024	D	42	23	YY
	54906	15539	D	39	24	YY
	54907	15044	D	39	12	Y
	54908	15129	D	42	1	YY
	54909	15120	D	44	3	YY
	54910	15033	D	36	22	YY
	54911	15036	D	38	17	Y
	54912	15101	D	36	5	Y
	54913	15112	D	35	5	YY
	54914	15119	D	35	3	YY
	54915	15678	D	40	22	Y
	54916	15630	D	35	14	Y
	54917	15631	D	34	26	YY
	54918	15632	D	34	16	YY
	54919	15634	D	37	17	Y

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	NBMESS Total No. of messages distributed on GTS	REJECTED Total No. of messages rejected by QC procedures and not distributed on GTS	EXIST Y/N
United States of America (continued)	54921	15675	D	39	19	Y
	54922	15682	D	43	17	YY
	54923	15683	D	41	25	Y
	54924	15693	D	37	16	YY
	54925	15694	D	35	26	Y
	54926	15676	D	36	25	YY
	54927	15538	D	34	18	YY
	54928	15692	D	41	21	Y
	54929	15681	D	42	19	Y
	54930	15690	D	40	30	YY
	54931	15543	D	32	25	YY
	54932	15547	D	40	18	Y
	54933	15544	D	43	14	Y
	54934	15680	D	0	4	YY
	55601	01123	D	172	88	YY
	55901	15557	D	29	16	Y
	56801	05130	D	105	48	Y
	56802	05119	D	109	42	YY
	56803	01994	D	114	40	YY
	56835	12291	D	119	49	Y
	56836	12293	D	91	63	Y
	56837	05116	D	78	34	YY
	56838	12294	D	1	33	YY
	56839	05124	D	107	45	Y
	56840	12292	D	220	105	Y
	61521	15320	D	50	32	YY
	61526	06810	D	0	0	YY
	61529	06811	D	0	0	Y
	61538	16374	D	119	127	Y
	61539	16343	D	0	4	YY
	61540	16379	D	166	91	YY
	62426	02078	D	94	71	Y
	62427	02079	D	72	67	Y
	62428	02401	D	57	32	YY
	62429	02892	D	62	27	YY
	62430	02002	D	94	53	YY
	62673	01131	D	154	229	Y
	62674	01132	D	186	195	YY
	62675	01129	D	138	240	YY
	62901	15569	D	55	33	Y
	62903	15571	D	49	28	Y
	62904	01862	D	83	61	YY
	62905	01864	D	0	0	YY
	62906	08590	D	48	55	Y
	62907	08591	D	30	39	Y
	62908	01868	D	70	24	YY
	62909	01869	D	53	51	YY
	62910	01865	D	56	28	Y
	64429	01860	D	107	80	Y
	91251	12873	D	0	165	YY
	91353	12872	D	0	154	YY
	KOSP2	12891	D	0	151	Y
	TOTAL:		DRIFTER=	42450		

- ATLAS BUOYS

WMO Identifier	ARGOS Identifier
32315	06461
32316	11117
32317	11118
32318	12522
32319	06371
32320	11121
32321	11120
32322	11119
43001	11116
51006	04597
51007	06369
51008	04596
51009	00989
51010	04591
51011	00995
51014	04595
51015	01114
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	06375
51308	00990
51309	00792
51310	00790
52001	15813
52002	06476

- ATLAS BUOYS (continued)

WMO Identifier	ARGOS Identifier
52003	15815
52004	12528
52006	06519
52007	00773
52008	06472
52010	06798
52011	12524
52012	12525
52301	00776
52302	00777
52303	00772
52304	00775
52305	00771
52306	00770
52307	00774
52308	06521

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

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

7. Wind Profiler Demonstration Network (WPDN)

- **Notification from USA:**

Transmission on the GTS of US wind profiler data in the BUFR edition 2 format will begin at 2100 UTC on 6 April 1993. The format of the message content of Wind Profiler Demonstration Network (WPDN) data is described in Section 1. It is based on the Binary Universal Form for Data Representation (BUFR) code.

The data will be sent under the WMO communication headers IUPT01 KBOU, IUPT02 KBOU, IUPT03 KBOU and IUPT04 KBOU. In Section 2, the sites to be transmitted under each WMO communication header are listed.

In Section 3, the block and station number of the sites are listed.

Section 1

Hourly Data Message Content and Format BUFR Edition 2 12 March 1993

Figure 1 shows the high level structure of BUFR. Figure 2 shows the structure of the BUFR Edition 2 Data Section. The data from one Profiler for one hour is 458 (8 bit) bytes long. Including the number of bytes (174) in the other sections and the 4 bytes always leading the Data Section, a message from one Profiler would be 636 bytes long; from two, 1094; from N, 178 + 458N. However, N never exceeds 8 since the message length is limited to 4096 bytes. Data from 9 to 16 profilers are contained in 2 messages; from 17 to 24 in 3; and from 25 to 32 in 4.

The WPDN profilers acquire data over 2 height ranges or modes, each with 36 range gates 250 meters apart. Peak transmitted power, pulse repetition frequency, and pulse length differ in each mode. The low mode covers from 0.5 to 9.25 km above the radar. The high mode covers from 7.5 to 16.25 km. For the purposes of NWS data handling, economy of message size is important, so wind data from the high mode is reported only at the system resolution (half the pulse length) of 1 kilometer for 7 levels from 10.25 to 16.25 kilometers. If low mode wind data is not available at any level in the overlap region of 7.5 to 9.25 km, high mode data is substituted at that level and so indicated in the data section.

Profiler data transmitted in the Hourly Data Message consist of the following information.

- Site and radar data (24 bytes):
 - The location of the observation in space and time
 - The current surface meteorological observation
 - First range gate offset and submode information
- The height increment (250 meters) between the lowest 36 levels (2 bytes).
- At each of 36 levels (360 bytes):
 - mode information
 - a data quality code for u and v combined;
 - the u and v consensus number;
 - the u (eastward) and v (northward) components;
 - the wind speed standard deviation;
 - the w consensus number;
 - the power under the spectral peak of the vertical beam as representative of the three beams;
 - the w (upward) wind component; and
 - the vertical wind component standard deviation.
- The height increment (1000 meters) between the highest 8 levels (2 bytes).
- At each of 7 levels, the same data as given for the lower 36 levels (70 bytes).

Table 1 is the format of data from one Profiler in the BUFR Edition 2 Data Section transmitted from the Hub in Boulder. The user of the information in this table should recognize that:

- The two columns in Table 1 labelled "Number of Bits" and "Units of LSB" are included for convenience only. BUFR documentation is the authoritative source of information about entries in the column labelled "BUFR Data Descriptor".

- The term "consensus number" refers to the number of 6-minute samples (0 to 10) used to form the hourly average.
- The term "spectral peak power" refers to the amplitude or zeroth moment of the vertical beam Doppler velocity spectrum (Dvs).
- "Wind speed standard deviation" is reported instead of the standard deviation of the u and v wind components because the WPDN profiler beams are not, in general, oriented north and east in spite of the common terminology "north beam" and "east beam". Wind speed standard deviation W_s is determined as follows:

$$\begin{aligned}
 W_V &= \text{2nd moment (half-width) of the vertical beam Dvs} \\
 W_E &= \text{2nd moment (half-width) of the east (E) beam Dvs} \\
 W_N &= \text{2nd moment (half-width) of the north (N) beam Dvs} \\
 @ &= \text{angle between the vertical beam and the E or N beam} \\
 W_s &= [(W_E^2 + W_N^2 + 2 \cos^2 @ W_V^2)]^{0.5} \csc @
 \end{aligned}$$

- As a reasonable approximation, the u and v component standard deviations are equal and either equals $w_s/2^{0.5}$
- The "w standard deviation" reported is W_V defined above.

Table 2 specifies the extensions required to BUFR Edition 2 to accomodate the data in Table 1. (In BUFR terminology, bit 1 is the most significant bit; e.g. an 8 bit byte with only bit 7 set to 1 evaluates as 2.)

- In Flag Table 0 25 034, "NOAA Wind Profiler Quality Control Test Results", tests A and B currently refer to the "time-height median check" and the "vertical shear check" applied to hourly wind averages to test for temporal and vertical data continuity. In the future, both checks may be superceded by a single test implementing a new algorithm with better performance. [In either case, a datum (wind vector) failing a test is flagged and never changed or replaced.]
- Thus, in the code table, the current meaning of bits 1 and/or 2 set to 1 is clear: the median and/or shear check were/was performed and failed. To make a seamless transition for National Weather Service application programs if and when a single test is implemented, its results will be duplicated as bits 1 and 2. Bit 3 is used to indicate that the test results were inconclusive because insufficient data was available from which to draw a sound conclusion of pass or fail. The usual situation in which this bit would be set with the current test pair is during the first hour or two following a prolonged data outage: the median check cannot be performed because of absent past data. If and when a single test replaces the current pair, bit 3 will be set to 1 whenever the a sound pass/fail conclusion cannot be obtained.
- With this scheme, the interpretation of the 4 bits in the Flag Table will not change if the tests change: 0000 indicates a wind passing all tests; 1000 or 0100, the failure of one of two tests; 1100, the failure of all tests; 0010, inconclusive test results; and 1111, the flags are missing (no tests were performed).

Figure 1
BUFR Sections

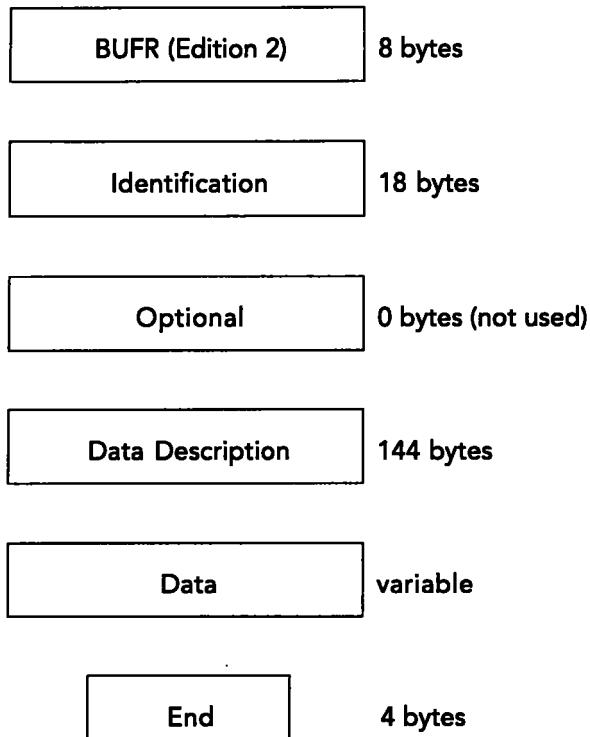
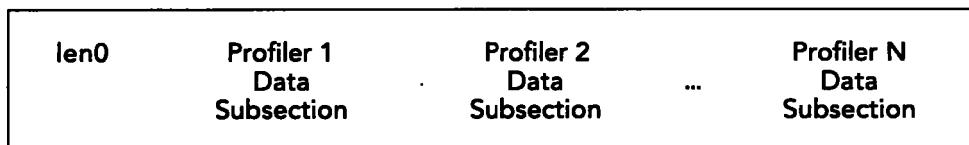


Figure 2
BUFR Edition 2 Data Section

Byte	44	99	1
No.: 12345	66.	22	e
.....23	01	n	



len = length of Data Section = 4 + 458*N bytes

See Table 1 for Data Subsection structure and contents

Table 1

Datum	Number of Bits	Units of LSB		BUFR Data Descriptor
WMO block number	7			0 01 001
WMO station number	10			0 01 002
Latitude	15	0.01	deg	0 05 002
Longitude	16	0.01	deg	0 06 002
Height above sea level	15	1	meter	0 07 001
Observation time				
- year	12	1	year	0 04 001
- month	4	1	month	0 04 002
- day	6	1	day	0 04 003
- hour	5	1	hr	0 04 004
- minute	6	1	min	0 04 005
Averaging time signif. ¹⁾	5	1	min	0 08 021
Averaging time period	12	1	min	0 04 025
Wind speed ²⁾	12	0.1	m/s	0 11 002
Wind direction ²⁾	9	1	deg	0 11 001
Pressure reduced to MSL	14	10	Pa	0 10 051
Temperature ²⁾	12	0.1	°K	0 12 001
Rainfall rate ²⁾	12	10 ⁻⁴	kg/m ² /s	0 13 014
Relative humidity ²⁾	7	1	%	0 13 003
First range gate offset ³⁾	11	1	m	2 01 127
				0 07 005
				2 01 000
Submode information	2			0 25 033
h height increment	16	1	m	2 01 132
				0 07 005
				2 01 000
At 36 levels:				1 19 036
Mode information	2			0 25 032
u,v quality code	4			0 25 034
u,v consensus number	4			2 01 116
				0 08 022
				2 01 000
u	13	0.1	m/s	0 11 003
v	13	0.1	m/s	0 11 004

¹⁾ Datum will always be 2, indicating time averaged data²⁾ At surface by virtue of preceding height above sea level definition.³⁾ Datum will always be 250 (meters) to ensure that the first wind data level is 500 meters when the BUFR rules for decoding replication operators are obeyed

Table 1 (continued)

Datum	Number of Bits	Units of LSB	BUFR Data Descriptor
wind speed std. dev.	11	0.1 m/s	2 01 127 0 11 050 2 01 000
w consensus number	4		2 01 116 0 08 022 2 01 000
spectral peak power	8	1 dB	2 01 129 2 06 008 0 21 192 2 01 000
w	13	0.01 m/s	0 11 006
w standard deviation	8	0.1 m/s	0 11 051
h height increment	16	1 m	2 01 132 0 07 005 2 01 000
At 7 levels:			
Mode information	2		0 25 032
u,v quality code	4		0 25 034
u,v consensus number	4		2 01 116 0 08 022 2 01 000
u	13	0.1 m/s	0 11 003
v	13	0.1 m/s	0 11 004
wind speed std. dev.	11	0.1 m/s	2 01 127 0 11 050 2 01 000
w consensus number	4		2 01 116 0 08 022 2 01 000
spectral peak power	8	1 dB	2 01 129 2 06 008 0 21 192 2 01 000
w	13	0.01 m/s	0 11 006
w standard deviation	8	0.1 m/s	0 11 051
Total	3664 bits = 458 bytes		

Table 2Extensions Required to BUFR (Edition 2) Table B

F	X	Y	Element Name	Units	Scale	Ref Value	Data Width (Bits)
0	11	051	Standard deviation vert. wind component	m/s	1	0	8
0	21	192	Doppler spectrum 0th moment (amplitude)	dB	0	0	7
0	25	032	Wind Profiler mode information	code table	0	0	2
0	25	033	NOAA wind Profiler submode information	code table	0	0	2
0	25	034	NOAA wind Profiler quality control test results	flag table	0	0	4

Code Table 0 25 032
Wind Profiler Mode Information

Value	Meaning
0	Reserved
1	Data from low mode
2	Data from high mode
3	Missing

Code Table 0 25 033
NOAA Wind Profiler Submode Information

Value	Meaning
0	wind Profiler operating in submode A
1	wind Profiler operating in submode B
2	reserved
3	missing

Flag Table 0 25 034
NOAA Wind Profiler Quality Control Test Results

Bit	Meaning (1=true, 0=false)
1	test A performed and failed
2	test B performed and failed
3	test results inconclusive
4	reserved
All = 1	missing

Section 2**WPDN SITES GROUPING IN BUFR EDITION 2 MESSAGES****Effective 6 April 1993**

(WMO header)	
IUPT01 KBOU	1. McCook, NE 2. Lathrop, MO 3. Tucumcari, NM 4. Haskell, OK 5. Winnfield, LA 6. Vandenburg, CA (Implemented by late April 1993)
IUPT02 KBOU	1. Platteville, CO 2. Neligh, NE 3. Blue River, WI 4. Haviland, KS 5. Hillsboro, KS 6. Bloomfield, MO 7. DeQueen, AR 8. Jayton, TX
IUPT03 KBOU	1. Medicine Bow, WY 2. Wood Lake, NM 3. Fairbury, NE 4. Granada, CO 5. Lamont, OK 6. Purcell, OK 7. White Sands, NM 8. Conway, MO
IUPT04 KBOU	1. Merriman, NE 2. Slater, IA 3. Winchester, IL 4. Aztec, NM 5. Vici, OK 6. Neodesha, KS 7. Palestine, TX 8. Okolona, MS

Section 3

WIND PROFILER DEMONSTRATION NETWORK SITES
GEOGRAPHIC POSITION, ELEVATION, AND U.S. IDENTIFIER

18 March 1993

WMO Index Number	Name	Latitude	Longitude	Elevation (Meters)	U.S. Local Identifier (SHEF)
74341	Wood Lake, MN	44 40N	95 27W	319	WDLM5
357	Blue River, WI	43 13N	90 32W	226	BLRW3
431	Medicine Bow, WY	41 54N	106 11W	1997	MBWW4
433	McCook, NE	40 05N	100 39W	800	RWDN1
437	Merriman, NE	42 54N	101 42W	991	MRRN1
440	Fairbury, NE	40 06N	97 20W	433	FBYN1
445	Neligh, NE	42 12N	97 48W	524	NLGN1
449	Slater, IA	41 54N	93 42W	315	SLAI4
530	Granada, CO	37 46N	102 11W	1155	GDAC2
533	Platteville, CO	40 11N	104 43W	1524	PLTC2
541	Haviland, KS	37 39N	99 05W	648	HVLK1
542	Neodesha, KS	37 22N	95 38W	255	NDSK1
546	Hillsboro, KS	38 19N	97 18W	447	HBRK1
550	Conway, MO	37 31N	92 42W	390	CNWM7
551	Lathrop, MO	39 35N	94 11W	297	LTHM7
556	Winchester, IL	39 39N	90 29W	170	WNCI2
604	Vandenberg AFB, CA	34 47N	120 32W	170	VBGC1
629	White Sands, NM	32 24N	106 20W	1224	WSMN5
630	Aztec, NM	36 50N	107 54W	1902	AZCN5
640	Vici, OK	36 04N	99 13W	648	VCIO2
647	Lamont, OK	36 41N	97 28W	306	LMN02
648	Haskell, OK	35 48N	95 47W	212	HKLO2
649	Purcell, OK	34 59N	97 31W	331	PRCO2
662	Bloomfield, MO	36 53N	89 58W	130	BLMM7
731	Tucumcari, NM	35 05N	103 37W	1241	TCUN5
735	Jayton, TX	33 01N	100 59W	707	JTNT2
750	Palestine, TX	31 47N	95 43W	119	PATT2
752	DeQueen, AR	34 07N	94 17W	195	DQUA4
753	Winnfield, LA	31 54N	92 47W	93	WNFL1
769	Okolona, MS	34 05N	88 52W	125	OKOM6

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 letter 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 monthly letter.

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 TTAAii CCCC	Implementation of observing programme								Alternate observing station	Remarks
		00	03	06	09	12	15	18	21		

1. SYNOP**2. TEMP****3. PILOT**

**Explanatory notes for
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 (Iiiii) 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 letter, as appropriate.

ANNEX III - Global Telecommunication System

Date: March 1993

A. GTS regulatory or guidance material

3. Amendments to the Manual on the Global Telecommunication System

- ***Allocation of data designators T₁T₂A₁A₂ii in abbreviated headings of meteorological messages***

Effective immediately the Commission for Basic Systems, at its tenth session, agreed that data type designators T₁T₂=WC and WV be allocated for SIGMET messages on tropical cyclones and volcanic ash, respectively, with a view to meeting requirements from ICAO.

C. Information on the operation of the GTS

2. Transmission schedules (Publication No. 9, Volume C, Chapter II)

2.3 *Changes in schedules/technical specifications*

- ***Notification from Japan***

II-iii TOKYO (JMJ) radio-facsimile broadcast effective 4.2.93 changes.

ANNEX IV- Codes

Date: March 1993

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 B - Binary Codes

Modify entries in Code Table 0 02 011 as follows:

FM 94-IX Ext. BUFR

0 02 011

Radiosonde type

Code figure	
43	AIR IS-4A-1680 (USA)
44	AIR IS-4A-1680 X (USA)
45	RS MSS (USA)
46	AIR IS-4A-403 (USA)
47	MEISEI RS2-91 (Japan)
48-59	Reserved for allocation of radiosondes

VOLUME I — INTERNATIONAL CODES

Part A - Alphanumeric Codes

Modify entries in Code Table 3685 as follows:

3685

Code figure	
45	RS MSS
46	AIR IS-4A-403
47	MEISEI RS2-91
48-59	Reserved for allocation of radiosondes

A new entry in Code Table 1085 has been approved by the President of CBS

Code figure	
32	Echosonde, ES89P
33-34	Unassigned

ANNEX V - Marine Meteorological Services (MMS) and related oceanographic activities

Date: March 1993

C. Information on the operation of Marine Meteorological Services

1. Broadcasts for shipping and other marine activities (Publication No. 9, Volume D, Part A)

1.3 Changes in schedules/technical specifications

- Notification from Japan***

Aii-II TOKYO (JMJ) radio-facsimile broadcast effective 4.2.93 changes.