

of these weather bulletins, and to the methods and times of transmissions. It is hoped that the messages will eventually all be made in an international code at fixed times, so arranged that a ship with only one wireless operator will be able to read them. A similar scheme for time-signals is being evolved.

COLLECTION OF WEATHER DATA FROM SHIPS.

4. Certain ships are being asked to supply data regularly three times a day whenever they are within a certain distance of any of some six or eight "observation points" in the north-eastern Atlantic.

5. In addition to the regular observations, which are taken at 0100, 0700, and 1300 Greenwich time and sent as soon as possible to Malin Head (GMH) or Valentia (GCK) coast stations, these ships may, on request from either of these coast stations, send special data messages at other times.

6. The procedure for a ship which intends to send a data message will be as follows: As soon as it has been decided to make the data message (i.e., normally at about 0100, 0700, or 1300) the ship makes to "all ships" (CQ) the word "weather,"* followed by a number which indicates the "observation point" (see para. 4 above), near which she is at the time.

* Application is being made to Berne to allot an international three-letter abbreviation to mean: "Am about to make weather data from observation point number . . ."

7. This warning message will not be answered by any ship or station; it is merely designed—

(a.) To inform all ships within range that a report is about to be made and that they should therefore avoid interfering.

(b.) To inform all other ships supplying weather data, which may be in the vicinity of the same observation point, that, one ship having decided to make a report, it is unnecessary for them to make one also.

8. About five or ten minutes after the ship has made the warning as above, she may be expected to transmit the data message itself. The normal or regular "data message" consists of four groups of five figures each; the special data message is of two groups of five figures each. All data messages bear the one word "weather"† as the address, and conclude with a "time of origin" of four figures. The message will be sent to Malin Head (GMH) or Valentia (GCK), according to the position of the "observation point."

† Application is being made to Berne to allot an international three-letter abbreviation to mean: "Following are normal (or special) weather data."

9. It should be noted that several of the observation points are so far out to sea that the coast stations, although provided with extra sensitive receiving gear, will be unable to read the messages unless all ships help by keeping quiet. In particular, ships working near Malin Head or Valentia should be on the watch for the coast station making "Go on" (K) or "Repeat" (UD) to a ship whose transmission they themselves cannot hear. It is hoped that ships will so co-operate in this matter that it will be unnecessary to arrange international "silent periods" to enable these long-range data messages to be read by the coast stations.

10. The coast stations, on receiving these data messages, will possibly have to forward them to London by wireless. They would use continuous wave for this purpose, and would therefore not be heard by ships not fitted with special receivers. Ships should therefore be prepared to find that Valentia or Malin Head could not attend to calls for a few minutes after receipt of one of these data messages.

11. The "special" data messages referred to in paragraph 5 above are only made when the Meteorological Office finds its information pointing to the existence of peculiar conditions in a certain area. In such cases the office directs Valentia or Malin Head to ask for reports. The shore station then sends to "any British ship supplying weather data"‡ the word "weather"¶ followed, if necessary, by the number of the observation point from which a special data message is desired. This word would not be answered by ships; but ships addressed, which were in the vicinity of any (or of the specified) observation point, would verify their position, make the warning signal to "All ships," take observations, and pass in the special data message as above described for the regular message.

‡ The call letters BVD are being given this signification.

¶ Application is being made to Berne to allot an international three-letter abbreviation to mean: "Please give special weather data (from observation point number . . .)"

ISSUE OF WEATHER BULLETINS TO SHIPS.

12. A wireless weather bulletin may contain both or either of the following:—

- (a.) A weather report, which is an official statement of existing weather conditions; and/or
- (b.) A weather forecast, which is an official opinion of probable future weather conditions.

13. The accompanying schedule of wireless weather bulletins is intended to provide, in a form suitable to give all infor-

mation required by the wireless operator, a complete and up-to-date list of all weather bulletins transmitted at fixed times by wireless stations throughout the world. The same information will be found in detail in the Sailing Directions and in the International List of Radio-telegraph Stations (the Berne List).

14. The times given in the third column of the schedule are expressed in the four-figure notation employed for signalling during the war. The term "G.M.T." here means the civil mean time of the meridian of Greenwich, with the day commencing at midnight and the hours reckoned from 00 to 23.

15. Operators are reminded that Article 45 of the International Service Regulations imposes the general obligation of not interfering with reception of weather bulletins by other ships.

16. Certain other stations not shown in the schedule supply weather bulletins on demand, generally at reduced charges. Particulars will be found in the Berne List.

Schedule of Wireless Weather Bulletins.

Wireless Station. (1)	Call Letters. (2)	Time (G.M.T.). (3)	Wave (Metres). (4)
AUSTRALASIA—			
Adelaide Radio ..	VIA	0900, 1030	600
Brisbane Radio ..	VIB	1230, 1300	600
Hobart Radio ..	VII	1200	600
Melbourne Radio ..	VIM	0930, 1100	600
Sydney Radio (Pennant Hills)	VIS	..	600
Awanui Radio ..	VLA	} No details	} No details.
Awarua Radio ..	VLB		
Wellington Radio ..	VLW		
Chatham Is. ..	VLC		
Macquarie Is. Radio ..	VIQ		
BRAZIL—			
Ilha do Governador ..	SOH	0000*	1800
CHINA—			
Shanghai-Zikawei ..	FFZ	0300*, 0900	600
FRANCE—			
Eiffel Tower ..	FL	0945†, 2330*	2500
FRENCH OCEANIA—			
Papeete, Ile Tahiti ..	FOP	1100, 2300	600
GERMANY—			
Norddeich ..	KAV	1200*, 2200	1650
GREAT BRITAIN—			
Poldhu† ..	MPD	0930, 2130	2700
Cleethorpes‡ ..	BYB	0500, 1700	3000
HAWAIIAN Is.—			
Pearl Harbour ..	NPM	{ 0230, 0630 } { 1830, 2230 }	? 600
HOLLAND—			
Scheveningen ..	PCH	1115, 2315	1800
INDIA—			
Calcutta Radio ..	VWC	0730*, 1910	2000
Karachi Radio ..	VWK	} 0730, 1910 {	2000
Rangoon Radio ..	VTR		1200
Bombay Radio ..	VMB	} 0740, 1920 {	2000
Madras Radio ..	VWM		2000
Port Blair ..	VTP		1200
JAPAN—			
Choshi ..	JCS	1200*	600
Dairenwan ..	JDA	1200	600
Fukukukaku ..	JKF	1130	600
MEXICO—			
Campeche ..	XAB	} 1837 *	} 600
Guayamas ..	XAH		
Mazatlan de Sinaloa ..	XAE		
Payo Obispo ..	XAC		
Vera Cruz ..	XAA		
SAMOA—			
Tutuila ..	NPU	{ 0330, 0730 } { 1930, 2330 }	600
SOUTH AFRICA—			
Capetown Radio ..	MNC	1115	600
Durban Radio ..	VND	1115	600
SPAIN—			
Madrid ..	EGG	1330	2000
UNITED STATES—			
Washington ..	NAA	0300*	2500
Key West ..	NAR	0300*	1500
S. Francisco ..	NPH	0600*	600 & 950
North Head ..	NPE	0600	600 & 950
S. Diego ..	NPL	0600	600 & 950

* Weather bulletin follows a time-signal. † Weather bulletin is followed by time-signal. ‡ Will be started shortly.

Note.—This notice will be subject to revision from time to time.