

ROYAL OBSERVATORY, HONG KONG.

NOTICE TO MARINERS.

No. S. 101.

(Revised 1st April, 1938).

1. The following information is transmitted from the Royal Observatory, Hong Kong, via Cape d' Aguilar (VPS), Stonecutters (GYP, GZO), and Hong Kong (ZBW) at the times, and on the wavelengths specified.

No.	G.M.T.	H. K. St. Time.	Nature of Transmission.	Station and wavelength.
1	0018	0818	6 a.m. Synoptic in International Code containing reports from all land and ship stations available at 8 a.m.	VPS simultaneously on 600 and 36 metres.
2	0100	0900	Do. Do. at 8.30 a.m.	VPS on 36 metres (8333 Kc/s).
3	0155-0200	0955-1000	Time Signals at each second, the 28th, 29th, 54th to 59th being omitted for identification purposes.	VPS simultaneously on 600 and 36 metres.
4	0300	1100	Synoptic in International Code of 6 a.m. observations from land and ship stations. General inference and district forecast as below.	Simultaneously on GYP 2098 GZO6 35.84 and GZO7 26.48 metres.
5	0400	1200 (noon)	General inference from 6 a.m. observations and forecast for 5 districts :— A. Shanghai to Turnabout. B. Turnabout to Hong Kong. C. Hong Kong and neighbourhood. D. Hong Kong to Hainan Straits. E. North part of China Sea.  An aviation forecast for district C together with the latest "pilots".	VPS as for No. 1.
6	0500	1300	General inference from 6 a.m. observations and forecast for district C.	ZBW 355 m. telephony.
7	0830	1630	2 p.m. Synoptic in International Code containing reports from all land and ship stations available at 4 p.m.	VPS as for No. 1.

No.	G. M. T.	H. K. St. Time.	Nature of Transmission.	Station and wavelength.
8	1200	2000	Synoptic in International Code of 2 p.m. observations from land and ship stations. General inference and district forecast as below.	Simultaneously on <i>GYP</i> 2098 <i>GZO6</i> 35.84 and <i>GZO7</i> 26.48 metres.
9	1200	2000	General inference from 2 p.m. observations and forecasts, &c., as No. 5.	<i>VPS</i> as for No. 1.
10	1200	2000	General inference and forecast for district C from 2 p.m. observations.	<i>ZBW</i> on 355 m. telephony.
11	1255-1300	2055-2100	Time Signals as at 9.55 a.m.	<i>VPS</i> as for No. 1.

When available upper air data from land and ship stations will be included in the synoptic and will be in the following form :—

Pilots	IIIGG	HHddv <sub>5</sub> etc.
Ships Pilots	PQLLL	HHddv <sub>5</sub> etc.

where

III = Index number of station

GG = Greenwich Mean Time

HH = Height, in hectometres

dd = Direction of wind, in degrees from North, divided by 10 and increased by 50 when wind velocity is greater than 47 kilometres per hour.

v<sub>5</sub> = Velocity of wind as below

Code No.	dd = 01 to 36	dd = 51 to 86
0	0— 2 <i>k. p. h.</i>	48—52 <i>k. p. h.</i>
1	3— 7	53—57
2	8—12	58—62
3	13—17	63—67
4	18—22	68—72
5	23—27	73—77
6	28—32	78—82
7	33—37	83—87
8	38—42	88—92
9	43—47	93—97

P = Day of week

Q = Octant of Globe

LLL = Latitude, degrees and tenths

lll = Longitude, degrees (two figures) and tenths

2. In addition storm warnings will be broadcast by *VPS* on 600 metres and 36 metres, and by *ZBW* on 355 metres telephony upon receipt. They will be repeated as follows :—

*ZBW* (355 m. telephony). At the two subsequent hours.

*VPS* (600 m. and 36 m. telegraphy). At 18 minutes past each of the subsequent two hours.

When Hong Kong is threatened with cyclonic gales, extra warnings will be broadcast via ZBW on 355 metres telephony, usually at the 60th minute of any hour.

3. The Time Signals will be preceded by the following warning signals from VPS, 2 minutes before the emission of the Time Signal:—

CQ DE VPS HK TIME WAIT

and, during the 1300 G.M.T. emission, will be duplicated by 3 white lights (vertical) in the storm signal mast, the lights being extinguished each second according to the radio programme.

4. \* Shipmasters are earnestly requested to co-operate in order that the synoptics and forecasts may be as accurate as possible. Routine observations made at 6 a.m. and 2 p.m. H.K. Standard Time (2200 and 0600 G.M.T.) are specially requested, and when in the vicinity of a typhoon it is hoped that observations will be sent as often as is found convenient. In addition, invaluable assistance to aviation may be rendered by frequent communication of reports concerning visibility and state of the sky (*i.e.* type, amount and estimated height of cloud) during transit between Hong Kong and Shanghai, the Philippines, Hainan, Indo China, Siam and Malaya. Continuous watch is kept at Cape d' Aguilar (VPS) on 600 and on 36.23 metres from 6 a.m. to midnight. The information primarily required is:—

Ship's position (Latitude and Longitude to  $\frac{1}{10}$  of a degree)

Time of observation

Barometer reading (any unit)

Wind direction

Wind force

Weather

which may be sent in the form found most convenient, *e.g.* in plain language or by International Code. The following data may be added if available:—

Air temperature

Temperature of sea surface

State of sea

Direction of swell, and Visibility.

5. Any reports forwarded should be distinguished by a suitable combination of the letters *a*, *c*, *m*, *u*, signifying whether the barometer is an aneroid (*a*) or mercurial (*m*), and whether the reading is corrected (*c*) or uncorrected (*u*); thus "mc" would signify "mercurial, corrected". It is of great importance that readings of the ship's barometer made in Hong Kong should be forwarded by post or messenger whenever possible. The correction determined at the Royal Observatory from these readings will always be forwarded to the master upon request. A brief explanation of the International Code is appended. Extra copies of this notification may be obtained on written or personal application to the Director, Royal Observatory, who will at all times be pleased to give every possible information to any shipmaster or officer.

#### *International Meteorological Code.*

In the International Code figures are used in groups of five, the significance of the figures depending upon the group in which they occur and their position in the group. For the purpose of radio transmission in the Far East the necessary groups are as below.

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\* Masters of "A" and "B" selected ships are requested to assist, if possible, without detriment to the routine prescribed by international agreement.

*Land Stations.*

- Fig.*
- Group 1* 1st }  
 2nd } Index number of station or designating letters as per list.  
 3rd }  
 4th Barometric tendency—Table IX  
 5th Past weather—Table VII
- Group 2* 1st }  
 2nd } Direction of wind—Table III  
 3rd Force of wind—Table V  
 4th }  
 5th } Present weather—Table VI
- Group 3* 1st }  
 2nd } Barometer in millibars or inches—Table VIII  
 3rd Visibility—Table XII  
 4th }  
 5th } Temperature, whole degrees Fahrenheit.

*Ship Stations.*

- Fig.*
- Group 1* 1st Day of the week—Table I  
 2nd Octant of the Globe (unnecessary—use letter X)  
 3rd }  
 4th } Latitude in degrees and tenths  
 5th }
- Group 2* 1st }  
 2nd } Longitude in degrees and tenths—omit initial 1 if long. is 100° or  
 3rd } more.  
 4th }  
 5th } G. M. T.—prefixing 0 if below 10 hours.
- Group 3* As Group 2 for Land Stations.
- Group 4* As Group 3 for Land Stations.

“X” is to be used in place of the appropriate figure when the information is not available.

*Example.*

Land Station. 810XX 16302 05885  
 Hong Kong. Wind south, force 3. Cloudy. Bar. 29.68 inches.  
 Visibility very good. Temp. 85° F.

Ship Station. 3X185 14506 18550 20X45 mc.  
 Tuesday. Lat. 18.5° N. Long. 114.5° E. 2200 G.M.T. Wind E.  
 force 5. Drizzle. Bar. 30.12 inches. Temp. 45° F. Mercurial  
 corrected.

*List of Stations included in Synoptic.*

Code letters of station or Index No.	Name.	Lat. N.		Long. E.	
		°	'	°	'
Z1	Chemulpo (Zinsen) ... ..	37	26	126	37
734	Tientsin ... ..	39	09	117	09
739	Chefoo ... ..	37	33	121	30
649	Nagasaki ... ..	32	44	129	52
647	Oshima (Nasa) ... ..	28	23	129	30
769	Gutzlaff ... ..	30	48	122	10
772	Hankow ... ..	30	36	114	20
669	Bonin Island (Titizima) ... ..	27	05	142	11
645	Ishigakijima... ..	24	20	124	10
781	Changsha ... ..	28	12	112	47
803	Amoy ... ..	24	28	118	05
644	Taihoku... ..	25	02	121	31
643	Pescadores ... ..	23	32	119	33
812	Gap Rock ... ..	21	49	113	56
814	Pratas Island ... ..	20	40	116	47
621	Phulien ... ..	20	48	106	37
625	Tourane... ..	16	08	108	17
620	Cape St. James ... ..	10	20	107	05
850	Basco ... ..	20	28	121	59
864	Manila ... ..	14	35	120	58
890	Surigao ... ..	9	48	125	29
GN	Yuensan (Gensan) ... ..	39	11	127	26
744	Tsingtao ... ..	36	03	120	20
ST	Quelpart (Saisyu)... ..	33	20	126	30
648	Kagoshima ... ..	31	34	130	33
763	Nanking ... ..	32	07	118	47
770	Ichang ... ..	30	42	111	16
SN	Saipan ... ..	15	14	145	46
646	Naha ... ..	26	13	127	41
777	Kiukiang ... ..	29	44	116	08
801	Foochow (Sharp Peak) ... ..	26	03	119	39
640	Koshun ... ..	22	00	120	45
810	Hong Kong ... ..	22	18	114	10
984	Fort Bayard ... ..	21	05	110	30
638	Dong Hoi ... ..	17	33	106	37
639	Padaran... ..	11	21	109	02
852	Aparri ... ..	18	22	121	38
887	Iloilo ... ..	10	42	122	34
807	Canton ... ..	23	08	113	27
811	Macao ... ..	22	11	113	33
806	Swatow ... ..	13	20	116	43
874	Legaspi ... ..	13	09	123	45
873	Guam ... ..	13	24	144	38
893	Yap ... ..	9	29	138	08

Table I.

<i>Date of the Week.</i>	<i>Code Figure.</i>
Sunday ... ..	1
Monday ... ..	2
Tuesday ... ..	3
Wednesday ... ..	4
Thursday ... ..	5
Friday ... ..	6
Saturday ... ..	7

Table III.

<i>True Direction.</i>	<i>Code Figures.</i>	<i>True Direction.</i>	<i>Code Figures.</i>
Calm ... ..	00	S. by W. ... ..	17
N. by E. ... ..	01	S.S.W. ... ..	18
N.N.E. ... ..	02	S.W. by S. ... ..	19
N.E. by N. ... ..	03	S.W. ... ..	20
N.E. ... ..	04	S.W. by W. ... ..	21
N.E. by E. ... ..	05	W.S.W. ... ..	22
E.N.E. ... ..	06	W. by S. ... ..	23
E. by N. ... ..	07	W. ... ..	24
E. ... ..	08	W. by N. ... ..	25
E. by S. ... ..	09	W.N.W. ... ..	26
E.S.E. ... ..	10	N.W. by W. ... ..	27
S.E. by E. ... ..	11	N.W. ... ..	28
S.E. ... ..	12	N.W. by N. ... ..	29
S.E. by S. ... ..	13	N.N.W. ... ..	30
S.S.E. ... ..	14	N. by W. ... ..	31
S. by E. ... ..	15	N. ... ..	32
S. ... ..	16		

Table V.

<i>Beaufort Number.</i>	<i>Code Figure.</i>
Nought ... ..	0
One ... ..	1
Two ... ..	2
Three ... ..	3
Four ... ..	4
Five ... ..	5
Six ... ..	6
Seven ... ..	7
Eight ... ..	8
Nine ... ..	9
Ten ... ..	9 Gale.*
Eleven... ..	9 Storm.*
Twelve ... ..	9 Hurricane.*

\* These words to be written at end of weather message.

Table VI.—(PRESENT WEATHER).

	<i>Code Figures.</i>
Cloudless... ..	00
Partly cloudy ... ..	01
Cloudy ... ..	02
Overcast ... ..	03
Haze (but visibility greater than one mile)... ..	05
Distant Lightning ... ..	07
Mist... ..	08
Precipitation within sight ... ..	10
Thunder, without precipitation at the ship or station ... ..	11
Ugly threatening appearance of sky ... ..	13
Squally weather ... ..	14
Heavy squalls in last three hours ... ..	15
Waterspout seen in last three hours ... ..	16
Signs of a tropical storm forming ... ..	18
Signs that a tropical storm has formed ... ..	19
Precipitation (rain, drizzle, hail, snow or sleet) in last hour, but not at time of observation... ..	20
Dust or sand storm... ..	30
Fog ... ..	40
Moderate fog in last hour ... ..	41
Thick fog in last hour ... ..	42
Fog in patches... ..	49
Drizzle ... ..	50
Drizzle and fog ... ..	57
Slight or moderate drizzle and rain ... ..	58
Thick drizzle and rain ... ..	59
Rain... ..	60
Rain and fog ... ..	67
Slight or moderate rain and snow ... ..	68
Heavy rain and snow ... ..	69
Snow or sleet ... ..	70
Shower or Showers... ..	80
Showers of slight or moderate hail, or rain and hail ... ..	88
Showers of heavy hail, or rain and hail ... ..	89
Thunderstorm... ..	90

Preference should be given to 18 & 19 when they apply, otherwise to the largest number of this code which applies to the weather at the position of the ship at the time of observation.

Table VII.—(PAST WEATHER).

	<i>Code Figure</i>
Fair (clear or slightly clouded) ... ..	0
Variable sky ... ..	1
Mainly overcast ... ..	2
Fog or thick dust haze (visibility less than 5 cables) ... ..	3
Drizzle ... ..	4
Rain... ..	5
Snow or sleet ... ..	6
Showers ... ..	7
Sandstorm or duststorm ... ..	8
Thunderstorm... ..	9

Table VIII.

Mb.	Ins.	Code Figures.	Mb.	Ins.	Code Figures.	Mb.	Ins.	Code Figures.
925	27.32	25	970	28.65	70	1015	29.97	15
926	27.35	26	971	28.67	71	1016	30.00	16
927	27.38	27	972	28.70	72	1017	30.03	17
928	27.41	28	973	28.73	73	1018	30.06	18
929	27.44	29	974	28.76	74	1019	30.09	19
930	27.46	30	975	28.79	75	1020	30.12	20
931	27.49	31	976	28.82	76	1021	30.15	21
932	27.52	32	977	28.85	77	1022	30.18	22
933	27.55	33	978	28.88	78	1023	30.21	23
934	27.58	34	979	28.91	79	1024	30.24	24
935	27.61	35	980	28.94	80	1025	30.27	25
936	27.64	36	981	28.97	81	1026	30.30	26
937	27.67	37	982	29.00	82	1027	30.33	27
938	27.70	38	983	29.03	83	1028	30.36	28
939	27.73	39	984	29.06	84	1029	30.39	29
940	27.76	40	985	29.09	85	1030	30.42	30
941	27.79	41	986	29.12	86	1031	30.45	31
942	27.82	42	987	29.15	87	1032	30.48	32
943	27.85	43	988	29.18	88	1033	30.51	33
944	27.88	44	989	29.21	89	1034	30.53	34
945	27.91	45	990	29.24	90	1035	30.56	35
946	27.94	46	991	29.26	91	1036	30.59	36
947	27.97	47	992	29.29	92	1037	30.62	37
948	28.00	48	993	29.32	93	1038	30.65	38
949	28.03	49	994	29.35	94	1039	30.68	39
950	28.05	50	995	29.38	95	1040	30.71	40
951	28.08	51	996	29.41	96	1041	30.74	41
952	28.11	52	997	29.44	97	1042	30.77	42
953	28.14	53	998	29.47	98	1043	30.80	43
954	28.17	54	999	29.50	99	1044	30.83	44
955	28.20	55	1000	29.53	00	1045	30.86	45
956	28.23	56	1001	29.56	01	1046	30.89	46
957	28.26	57	1002	29.59	02	1047	30.92	47
958	28.29	58	1003	29.62	03	1048	30.95	48
959	28.32	59	1004	29.65	04	1049	30.98	49
960	28.35	60	1005	29.68	05	1050	31.01	50
961	28.38	61	1006	29.71	06	1051	31.04	51
962	28.41	62	1007	29.74	07	1052	31.07	52
963	28.44	63	1008	29.77	08	1053	31.10	53
964	28.47	64	1009	29.80	09	1054	31.13	54
965	28.50	65	1010	29.83	10			
966	28.53	66	1011	29.86	11			
967	28.56	67	1012	29.89	12			
968	28.59	68	1013	29.92	13			
969	28.62	69	1014	29.94	14			

It will be seen that the code figures may represent two values of barometric pressure, but this only takes place with a very high or a very low barometer, so that recipients of a message will be able to decide which value is intended.



Table IX.

	In 2 hours.	In 3 hours.	In 4 hours.	Code Figure.
Barometer <i>steady</i> —Has not risen or fallen more than	0.3 mb. (.01 in)	0.5 mb. (.01 in)	0.7 mb. (.02 in)	0
Barometer <i>rising slowly</i> —Has risen	0.7-1.0 mb. (.02-.03 in)	1.0-1.5 mb. (.03-.05 in)	1.3-2.0 mb. (.04-.06 in)	1
Barometer <i>rising</i> —Has risen	1.4-2.4 mb. (.05-.07 in)	2.0-3.5 mb. (.06-.10 in)	2.8-4.8 mb. (.08-.14 in)	2
Barometer <i>rising quickly</i> —Has risen	2.6-4.0 mb. (.08-.12 in)	4.0-6.0 mb. (.12-.18 in)	5.2-8.0 mb. (.15-.24 in)	3
Barometer <i>rising very rapidly</i> —Has risen	over 4.0 mb. ( „ .12 in)	over 6.0 mb. ( „ .18 in)	over 8.0 mb. ( „ .24 in)	4
Barometer <i>falling slowly</i> —Has fallen	0.7-1.0 mb. (.02-.03 in)	1.0-1.5 mb. (.03-.05 in)	1.3-2.0 mb. (.04-.06 in)	5
Barometer <i>falling</i> —Has fallen	1.4-2.4 mb. (.05-.07 in)	2.0-3.5 mb. (.06-.10 in)	2.8-4.8 mb. (.08-.14 in)	6
Barometer <i>falling quickly</i> —Has fallen	2.6-4.0 mb. (.08-.12 in)	4.0-6.0 mb. (.12-.18 in)	5.2-8.0 mb. (.15-.24 in)	7
Barometer <i>falling very rapidly</i> —Has fallen	over 4.0 mb. ( „ .12 in)	over 6.0 mb. ( „ .18 in)	over 8.0 mb. ( „ .24 in)	8

(The change in 3 hours should be given if possible).

Table XII.

	Code Figure.
Dense fog ... .. Objects visible at 27 yards ... ..	0
Thick fog ... .. Objects visible at 55 yards ... ..	1
Fog ... .. Objects visible at 1 cable ... ..	2
Moderate fog ... .. Objects visible at 2 cables ... ..	3
Mist or haze, or very poor visibility ... .. Objects visible at $\frac{1}{2}$ mile (nautical) ...	4
Poor visibility ... .. Objects visible at 1 mile (nautical) ...	5
Moderate visibility ... .. Objects visible at 2 miles (nautical) ...	6
Good visibility ... .. Objects visible at 5 miles (nautical) ...	7
Very good visibility ... .. Objects visible at 10 miles (nautical) ...	8
Excellent visibility ... .. Objects visible more than 30 miles (nautical)	9

(Further information concerning the code may be found in the "Marine Observer" for January, 1934, and subsequent issues, obtainable from the Meteorological Office, London).

C. W. JEFFRIES,  
Director.

1st April, 1938.

PUBLIC WORKS DEPARTMENT.

**No. S. 95.**—It is hereby notified that the following Sale of Crown Land by Public Auction, will be held at the Offices of the Public Works Department on Monday, the 11th day of April, 1938, at 3 p.m.

Full Particulars and Conditions may be obtained at this Office.

PARTICULARS OF THE LOT.

No. of Sale.	Registry No.	Locality.	Boundary Measurements.				Contents in sq. feet.	Annual Rent.	Upset Price.
			N.	S.	E.	W.			
			feet.	feet.	feet.	feet.	About	\$	\$
1	Kowloon Inland Lot No. 4004.	South of Kowloon Inland Lot No. 3354, Canton Road, Mong Kok Tsui.	As per sale plan.				6,713	124	10,070

R. M. HENDERSON,  
*Director of Public Works.*

25th March, 1938.