MANILA NORTH HARBOR

LAT 14° 36'N LONG 120° 57'E

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

January		February		March		April	
Time Ht.	Time Ht.	Time Ht.	Time Ht.	Time Ht. h. min. m.	Time Ht. h. min. m.	Time Ht.	Time Ht. h. min. m.
1 04 15 0.45 SUN 11 07 0.17 18 51 0.67	16 00 07 0.28 MON 03 46 0.32 09 04 0.14 17 45 0.62	1 03 39 -0.09 WED 18 54 0.77	16 03 04 -0.20 THU 18 19 0.95		01 31 -0.20 16 27 0.93	1 03 35 -0.20 SAT 18 32 0.71	16 02 54 -0.21 sun 18 48 0.93
2 02 30 0.21 MON 07 59 0.30 11 00 0.24 19 15 0.77	17 02 26 0.12 TUE 06 49 0.18 08 29 0.18 18 20 0.77	2 04 33 -0.19 THU 19 52 0.82	17 03 55 -0.29 FRI 19 27 1.06	2 03 15 -0.15 THU 18 03 0.71	, 02 42 -0.26 N 17 49 0.98	2 04 15 -0.22 SUN 19 51 0.71	17 03 30 -0.14 MON 09 57 0.37 12 07 0.35 20 11 0.85
3 03 51 0.04 TUE 19 44 0.85	18 03 22 -0.06 WED 19 03 0.92	3 05 15 -0.26 FRI 20 47 0.88	18 04 41 -0.36 SAT 20 31 1.15	3 04 15 -0.22 18 FRI 19 24 0.75 SA	3 03 34 -0.30 T 19 10 1.02	3 04 39 -0.20 MON 11 32 0.26 13 01 0.25 20 50 0.71	18 03 57 -0.05 TUE 09 52 0.47 14 33 0.26 21 21 0.75
4 04 39 -0.10 WED 20 18 0.92	19 04 06 -0.21 THU 19 49 1.07	4 05 54 -0.31 SAT 21 33 0.94	19 05 23 -0.37 SUN 21 28 1.18	4 04 57 -0.27 SAT 20 30 0.80 SUI	04 15 -0.30 N 20 23 1.04	4 04 55 -0.16 TUE 10 59 0.30 14 37 0.20 21 38 0.69	19 04 18 0.07 WED 10 01 0.60 16 05 0.14 22 22 0.63
5 05 19 -0.20 THU 20 57 0.97	20 04 50 -0.32 FRI 20 39 1.19	5 06 30 -0.33 SUN 22 15 0.98	20 06 01 -0.34 MON 12 18 0.13 13 28 0.13 22 20 1.15	5 05 30 -0.30 20 SUN 21 19 0.85 MOI	04 50 -0.25 N 10 59 0.24 13 01 0.21 21 24 1.00	5 05 02 -0.09 WED 10 54 0.39 15 47 0.13 22 23 0.63	20 04 30 0.18 THU 10 15 0.73 17 13 0.01 23 21 0.51
6 05 59 -0.26 FRI 21 38 1.02	21 05 36 -0.38 SAT 21 30 1.27	6 07 02 -0.33 MON 22 53 0.99	21 06 36 -0.27 TUE 12 21 0.17 14 56 0.12 23 08 1.05	6 05 55 -0.29 MON 12 17 0.13 13 17 0.12 21 59 0.86	05 19 -0.17 E 10 59 0.31 14 45 0.17 22 18 0.91	6 05 01 0.00 THU 11 00 0.49 16 50 0.05 23 10 0.55	21 04 30 0.26 FRI 10 33 0.83 18 12 -0.10
7 06 39 -0.30 SAT 22 20 1.05	22 06 23 -0.40 SUN 22 20 1.29	7 07 31 -0.31 TUE 13 14 0.05 14 16 0.05 23 29 0.95	22 07 06 -0.18 WED 12 37 0.25 16 19 0.12 23 55 0.90	7 06 15 -0.26 TUE 11 55 0.16 914 35 0.10 92 36 0.83	05 42 -0.07 11 10 0.41 16 12 0.10 23 08 0.77	7 04 52 0.10 FRI 11 12 0.60 17 50 -0.04	22 00 27 0.40 SAT 04 13 0.31 10 57 0.90 19 04 -0.17
8 07 22 -0.31 SUN 23 02 1.07	23 07 10 -0.38 MON 23 10 1.26	8 07 55 -0.26 WED 13 26 0.10 15 17 0.08	23 07 31 -0.07 THU 12 57 0.35 17 55 0.12	8 06 30 -0.19 WED 12 00 0.22 15 37 0.09 23 15 0.76	06 01 0.05 11 26 0.53 17 33 0.03 23 59 0.61	8 00 03 0.46 SAT 04 39 0.18 11 25 0.70 18 48 -0.12	23 11 27 0.94 SUN 19 55 -0.22
9 08 05 -0.32 MON 23 42 1.06	24 07 55 -0.32 TUE 23 59 1.16	9 00 05 0.86 THU 08 12 -0.19 13 49 0.17 16 20 0.12	24 00 42 0.72 FRI 07 48 0.04 13 21 0.46 19 26 0.08	9 06 38 -0.11 THU 12 15 0.30 16 44 0.08 23 56 0.65	06 13 0.15 11 14 0.63 18 46 -0.04	9 01 06 0.36 sun 04 32 0.23 11 41 0.80 19 49 -0.18	24 12 05 0.94 MON 20 48 -0.22
10 08 45 -0.30 TUE	25 08 33 -0.24 WED	10 00 42 0.75 FRI 08 20 -0.09 14 13 0.26 17 42 0.16	25 01 33 0.54 SAT 08 00 0.12 13 48 0.56 20 43 0.03	10 06 36 -0.01 FRI 12 33 0.40 18 02 0.05	0 00 55 0.46 T 06 19 0.22 12 12 0.71 19 49 -0.11	10 02 28 0.28 MON 04 24 0.25 12 03 0.89 20 55 -0.22	25 12 50 0.92 TUE 21 48 -0.21
11 00 21 1.01 WED 09 18 -0.27	26 00 46 1.00 THU 09 02 -0.14 15 31 0.27 18 12 0.24	11 01 21 0.60 SAT 08 09 0.01 14 36 0.37 19 47 0.17	26 02 29 0.37 sun 08 05 0.18 14 22 0.63 21 54 -0.01	11 00 42 0.53 SAT 06 21 0.09 12 51 0.50 19 23 0.01	0 02 03 0.33 0 06 15 0.26 12 45 0.76 20 48 -0.15	11 12 41 0.95 TUE 22 15 -0.23	26 13 41 0.89 WED 23 03 -0.18
12 00 57 0.93 THU 09 44 -0.21	27 01 31 0.82 FRI 09 21 -0.04 15 45 0.39 20 12 0.24	12 02 07 0.45 sun 07 42 0.09 14 59 0.48 21 49 0.13	27 03 56 0.23 MON 07 55 0.21 15 01 0.68 23 20 -0.04	12 01 37 0.40 SUN 06 06 0.16 13 07 0.60 20 40 -0.04	13 24 0.78 N 21 48 -0.15	12 13 36 1.00 WED 23 48 -0.24	27 14 33 0.86 THU
13 01 30 0.81 FRI 09 57 -0.12	28 02 17 0.61 SAT 09 30 0.06 16 04 0.50 21 49 0.20	13 03 09 0.29 MON 07 27 0.14 15 27 0.60 23 58 0.05	28 15 48 0.69 TUE	13 02 48 0.27 MON 05 59 0.19 13 30 0.70 22 03 -0.09	5 14 09 0.77 E 23 06 -0.14	13 14 46 1.02 THU	28 00 27 -0.16 FRI 15 26 0.82
14 02 03 0.66 SAT 09 55 -0.02 17 09 0.35 19 15 0.34	29 03 07 0.41 sun 09 33 0.14 16 32 0.60 23 41 0.14	14 05 07 0.16 TUE 07 01 0.14 (16 11 0.72		14 04 53 0.18 TUE 05 20 0.18 14 09 0.80 23 51 -0.13		14 01 07 -0.25 FRI 16 02 1.01	29 01 39 -0.15 SAT 16 20 0.76
15 02 40 0.50 sun 09 30 0.08 (17 20 0.48	30 04 36 0.23 MON 05 41 0.23 06 12 0.23 09 27 0.19 17 09 0.67 31 02 17 0.03	15 01 56 -0.07 WED 17 11 0.84		(01 01 -0.13 J 16 03 0.73	15 02 08 -0.24 SAT 17 21 0.98	30 02 30 -0.14 sun 17 21 0.69
	31 02 17 0.03 TUE 17 57 0.72			FR	02 34 -0.16 17 12 0.71		

TIME MERIDIAN 120 DEG. EAST. 0000 IS MIDNIGHT, 1200 IS NOON

HEIGHTS ARE IN METERS AND RECKONED FROM THE DATUM OF SOUNDINGS ON CHARTS OF THE LOCALITY WHICH IS MEAN LOWER LOW WATER