IHB File No. S3/1401/WG

CIRCULAR LETTER 55/2003 4 August 2003

IHO TIDAL COMMITTEE - FEEDBACK ON TRANSITION TO LAT / HAT

Reference: IHB CL 25/1997

Dear Hydrographer,

The IHO Tidal Committee (IHOTC) has an ongoing Agenda Item: "Feedback on migration activities to LAT/HAT". IHO Technical Resolution A 2.5 (see Reference) resolves that these datums should generally be used as Chart Datum and the reference datum for vertical clearances respectively. TR A2.5 is shown at Annex A.

In order to monitor the transition to the use of LAT / HAT as set out above for the support of the work of the IHOTC, Member States are requested to provide feedback by completing the questionnaire at Annex B and returning it to the IHB by 31 October 2003.

On behalf of the Directing Committee Yours sincerely,

(original signed)

Vice Admiral Alexandros MARATOS President

Annex A: IHO TR A2.5 Annex B: Feedback form on transition to LAT / HAT

A 2.5 DATUMS AND BENCH MARKS

- 1.- It is resolved that heights on shore shall be referred to mean sea level.
- 2.- It is resolved that mean sea level shall be retained as the datum above which heights of lights shall be given.
- 3.- a) It is resolved that the datum of tide predictions shall be the same as chart datum (datum for sounding reduction). It is further resolved that the Lowest Astronomical Tide (LAT) be adopted as chart datum where tides have an appreciable effect on the water level. Alternatively the differences between LAT and national chart datums may be specified on nautical documents. If low water levels in a specific area frequently deviate from LAT, chart datum may be adapted accordingly.
 - b) It is resolved that Highest Astronomical Tide (HAT) be adopted as the datum for vertical clearances where tides have an appreciable effect on the water level. Alternatively the differences between HAT and national datums for vertical clearances may be specified on nautical documents. If high water levels in a specific area frequently deviate from HAT, the datum for vertical clearances may be adapted accordingly.
- Note: LAT (HAT) is defined as the lowest (highest) tide level which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions. It is recommended that LAT and HAT be calculated either over a minimum period of 19 years using harmonic constants derived from a minimum of one year's observations or by other proven methods known to give reliable results. Tide levels should, if feasible, reflect the estimated error values obtained during the determination of these levels.
- 4.- It is resolved that chart datums (datums for sounding reduction), the datums of tide prediction and other tidal datums shall always be connected with the general land survey datum, and, in addition, with a prominent and permanent fixed mark in the neighbourhood.

IHO TIDAL COMMITTEE (IHOTC) FEEDBACK ON MIGRATION TO LAT / HAT

(to be returned to the IHB **by 31 October 2003** E-mail: <u>info@ihb.mc</u> - Fax: +377 93 10 81 40)

Member State:	
1.	Total number of charts published?
2.	Number of charts currently published that use LAT / HAT?
3.	Expected average number of charts to be converted to LAT / HAT annually?
4.	Number of charts NOT being converted to LAT / HAT in accordance with TR A2.5?
5.	Of those charts not being converted (Question 4) how many show the link to LAT / HAT?
6.	Do you / will you publish simultaneously charts using existing datums and LAT / HAT?
7.	If the answer to Question 6 is YES, how many charts will this affect?
8.	If the answer to Question 6 is YES, how will this be handled in published tide tables?
9.	Ideally a datum model should be given a precise name, including an epoch, as is common practice in Geodesy e.g. WGS 84. The use of LAT (2002) for example would avoid any possible future confusion. Would you support the inclusion of epochs in tidal datum models?

.....

Any other comments?

Name / Signature

<u>Date</u>: