**INSTRUCTIONS TO COMPLETE HYDROGRAPHIC NOTE**

1. Mariners are requested to notify the Hydrographic Department, 11 Liaquat Barracks, Karachi on form PH 102, when new or suspected dangers to navigation are discovered, changes observed in aids to navigation, or corrections to publications seen to be necessary. The Mariner's Handbook (NP 100) Chapter 8 gives general instructions.

2. This form and its instructions have been designed to help both the sender and the recipient. It should be used, or followed closely, whenever appropriate.

3. When a **position** is defined by bearings (true or magnetic being specified), more than two should be used in order to provide a check. Distances observed by radar or other systems should be quoted. Latitude and longitude should only be used specifically to position the details when they have been fixed by astronomical observations or GPS and a full description of the method, equipment and datum (where applicable) used should be given.

4. A cutting from the largest scale chart is the best medium for forwarding details, the alterations and additions being shown thereon in red. When requested a new copy will be sent in replacement of a chart that has been used to forward information, or when extensive observations have involved defacement of the observer's chart. It is preferred to show the amendments on a tracing of the largest scale chart (rather than the chart itself) these should be in red as above, but adequate details from the chart must be traced in black ink to enable the amendments to be fitted correctly.

5. When **soundings** are obtained, the Mariner's Handbook (NP-100) should be consulted. The echo sounding trace should be marked with times, depths, etc, and forwarded with the report. It is important to state whether the echo sounder is set to register depths below the surface or below the keel; in the later case the vessel's draught should be given. Time and date should be given in order that corrections for the height of the tide may be made where necessary. The make, name and type of set should also be given.

6. **Modern** **echo-sounders** frequently record signals from echoes received back after one or more rotations of the stylus have been completed. Thus with a set whose maximum range is 500 m, a trace appearing at 50 m may in fact be from depths of 50 m, 550 m or even 1050 m. Soundings recorded beyond the set’s nominal range can usually be recognized by the following:

a. The trace being weaker than normal for the depth registered.

b. The trace appearing to pass through the transmission line.

c. The "feathery" nature of the trace.

7. Reports which cannot be confirmed or are lacking in certain details should not be withheld. Shortcomings should be stressed and any firm expectation of being able to check the information on a succeeding voyage should be mentioned.

8. **Reports of** **shoal soundings**, uncharted dangers and navigational aids out of order should, at the mariner's discretion, also be made by radio to the nearest coast radio station. The draught of modern tankers is such that any uncharted depth under 30 meters may be of sufficient importance to justify a radio message.

9. **Port information** should be forwarded on Form PH-102a together with Form PH-102. Form PH-102a lists the information required for Admiralty Sailing Directions and should be used as an aide memoir. Where there is insufficient space on the form an additional sheet should be used.

10. The completed form(s) of Hydrographic Notes can be posted, emailed or faxed to PN Hydrographic Department.

**Note:** *An acknowledgement of receipt will be sent and the information then used to the best advantage which may mean immediate action or inclusion in a revision in due course. When a Notice to Mariners is issued, the sender's ship or name is quoted as authority unless (as sometimes happens) the information is also received from other authorities. An explanation of the use made of contributions from all parts of the world would be too great a task and a further communication should only be expected when the information is of outstanding value or has unusual features.*