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| **Time/Date of Observation** | **Chart/ENC in use****(SEE NOTE 3a)** | **Latitude/Longitude of position read from Chart/ECDIS****(SEE NOTE 3b)** | **Latitude/Longitude of position read from GNSS Receiver (on WGS84)****(SEE NOTE 3c)** | **Additional Information/Remarks****(SEE NOTE 3d)** |
| **Number / ENC**  | **Edition Date & NM / ENC update status** |
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**NOTES:**

1. This form is designed to assist in the reporting of observed differences between WGS84 datum and the geodetic datum of British Admiralty Charts by mariners, including yachtsmen and should be submitted as an accompaniment to Form H.102 (full instructions for the rendering of data are on Form H.102). Where there is insufficient space on the form an additional sheet should be used.
2. **Objective of GNSS Data Collection**

The UK Hydrographic Office would appreciate the reporting of Global Navigation Satellite Systems (GNSS) positions, referenced to WGS84 datum, at identifiable locations or features on British Admiralty Charts. Such observations could be used to calculate positional shifts between WGS84 datum and the geodetic datum for those British Admiralty Charts which it has not yet been possible to compute the appropriate shifts. These would be incorporated in future new editions or new charts and promulgated by Preliminary Notices to Mariners in the interim.

It is unrealistic to expect that a series of reported WGS84 positions relating to a given chart will enable it to be referenced to that datum with the accuracy required for geodetic purposes. Nevertheless, this provides adequate accuracy for general navigation, considering the practical limits to the precision of 0.2mm (probably the best possible under ideal conditions – vessel alongside, good light, sharp dividers etc), this represents 10 metres on the ground at a chart scale of 1:50.000.

It is clear that users prefer to have **some** indication of the magnitude and direction of the positional shift, together with an assessment of its likely accuracy, rather than be informed that a definitive answer cannot be formulated. Consequently, where a WGS84 version has not yet been produced, many charts now carry approximate shifts relating WGS84 datum to the geodetic datum of the chart. Further observations may enable these values to be refined with greater confidence.

1. **Details required**

a. It is essential that the chart number, edition date and its correctional state (latest NM) are stated. For ENCs, please state the ENC name and latest update applied.

b. Position (to 2 decimal places of a minute) of observation point, using chart graticule or, if ungraduated, relative position by bearing/distance from prominent charted features (navigation lights, trig. points, church spires etc.).

c. Position (to 2 decimal places of a minute) of observation point, using GNSS Receiver. Confirm that GNSS positions are referenced to WGS84 datum.

d. Include GNSS receiver model and aerial type (if known). Also of interest: values of PDOP, HDOP or GDOP displayed (indications of theoretical quality of position fixing depending upon the distribution of satellites overhead) and any other comments.