

## NOTICE TO MARINERS

## (No. 3 of 2012)

## SCOTLAND / ISLE OF MAN

## **GLAS PUBLIC DGPS TRANSMISSIONS**

Northern Lighthouse Board Edinburgh, 4 January 2012

DGPS is provided as a marine aid to navigation, giving all year round service with overlapping signal coverage up to 50 nautical miles around the coasts of the United Kingdom and Republic of Ireland. The signal provides the mariner using a suitable receiver with both real time integrity monitoring of GPS derived positions and the capability of fixing their positions to better than 5 metres (95% probability) in moving applications. Greater accuracy can be achieved in stationary applications.

All mariners are advised:

1. DGPS relies inherently on GPS, the operation and characteristics of which is under the control of the US Department of Defense. Users are cautioned that the signal availability and accuracy may be subject to change without warning.

2. The DGPS service is provided primarily for use in monitoring the integrity of GPS to enhance the safety of marine navigation. The provision of greater accuracy for marine navigation is a secondary feature.

3. Signal reception may become unreliable, under certain extreme environmental conditions, towards the limits of the geographical coverage.

4. All radio navigation systems are susceptible to interference (including jamming) and environmental effects, which can adversely affect their availability. The GLAs strongly advise that no single aid to navigation system should be used in isolation and that DGPS users should use all alternative means available to cross check the information received. Users should also ensure that they have a receiver which gives sufficient warning of the complete loss of the DGPS signal and reversion to GPS.

5. Various DGPS receiver types are available, some of which may not provide appropriate or timely warnings in respect of the system.

6. Reference should also be made to Volume 2 of the Admiralty List of Radio Signals. In particular, mariners' attention is drawn to the section dealing with horizontal datums on charts and satellite-derived position notes.