SPERRY MARINE UK
Service Bulletin No. 31

Product: **Decca BridgeMaster E Series Radars**

Subject: **General Information 4**

1. Furuno GPS receivers and the BME not accepting "Nav" Speed Mode

The Furuno GPS Receivers defaults the 'Bearing Reference' to Magnetic. In this mode the VTG message contains a 'null' COG (Course Over Ground). If you connected the output to a PC and read the VTG message you will see something like this:

$GPVTG,,T,240,M,5.0,N,8.1,K

The data field after the VTG is the COG and in this case it is ,, which means empty and hence *invalid*.

The BME will only allow Nav Speed mode if the COG is valid.

To fix the problem, refer to the GPS's manual and change the 'Bearing Reference' from MAG to TRUE.

2. Koden Gyro Converter GR20A and BME not accepting Serial Heading

Although this device transmits Serial Heading, the transmission time period is around 600 ms. When using this device with a BME ATA or ARPA model, a 'Time Out' period is specified at 500 ms and in this case it will not work.

3. Robertson RGC50 Serial Gyro

The BME will not work with the above Serial Gyro unless a suitable buffer is fitted in line with the Serial Data. Refer to Service Bulletin No. 1 for details of a simple buffer.

4. Tuning a BME + TCU + S90 S BAND system

When tuning the above configuration, treat the BME just the same as a BMII. You set the fine tune control to mid position, set the coarse tune to minimum position and then adjust RV701 on the Tuning Converter PCB in the S Band Transceiver for best picture on the Display. Do not tune on the tuning indicator of the Display. Once 'best picture' is established, you can see if it can be improved by making small changes to the coarse tune.

For the TCU, ensure modification AXA1 has been carried out and ensure the switches and links have been set as per Service Bulletin No. 13.