



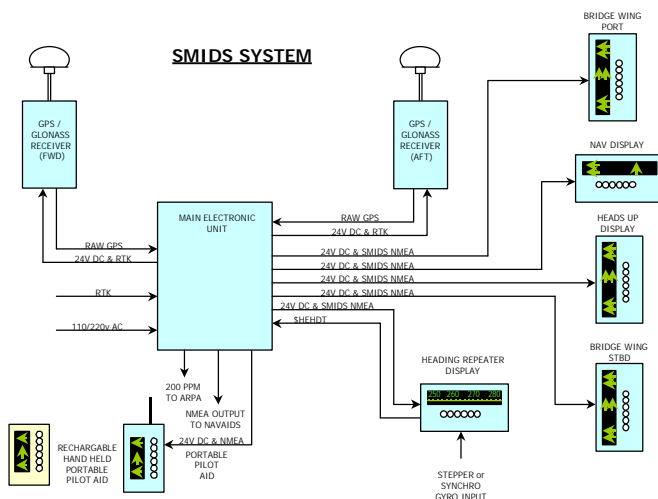
SHIPS MOVEMENT INFORMATION DISPLAY SYSTEM (SMIDS) KW919

INTRODUCTION

The SMIDS (Ships Movement Information Display System) measures speed over the ground at the bow and the stern of the vessel. The system replaces SONAR Doppler-docking systems with satellite technology giving speed resolution to 0.01 knot.

When using SMIDS as a replacement, existing cables can normally be reused. The system can also be installed without the need to dry-dock the vessel. SMIDS can be fitted whilst the ship is in transit thus avoiding operational down time.

Just a one satellite sensor system, is equivalent to a single transducer log, the **GEOLOG**.



KW992 NAVIGATOR'S DISPLAY.

- Bow and stern dual axis speeds
- Stern position, cog and sog
- Distance run in the direction of the bow
- Facility to reset distance and distance at last hour
- Satellites being tracked, and signal strengths

KW992 HEADS UP and BRIDGE WING DISPLAYS.

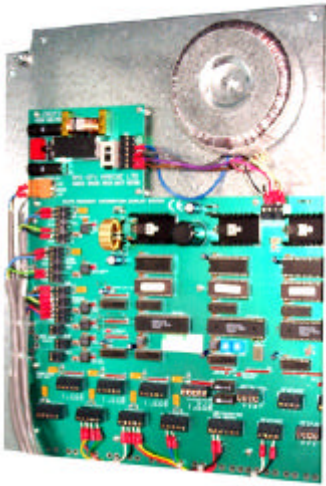
- Bow and stern dual axis speeds
- Ships heading from the ships gyro or the SMIDS
- Bow and stern satellite status

All displays are in a diecast box 260 x 160 x 90 mm and comes with trunnion or flush mount. To ease connection the bridge wing displays have a junction box and Buccaneer waterproof connector. Colour for all the displays "Duck Egg Green."

The units are not suitable for permanent mounting outside without special environmental precautions. For open bridge wings temporary deployment is best used. Otherwise, use the Portable Pilotage Aid.



SMIDS MAIN ELECTRONICS UNIT



Is the central junction box and DC power supply for all the displays. The MEU has three processors which;

1. Combine and distribute the data.
2. Operate 200 pulses per mile relays & output NMEA speed and heading by satellite.
3. Calculation of \$GPVbw bow and stern dual axis speed, includes \$HEHDT heading, \$GPGGA stern position, \$GPVTG cog and sog, \$PAMI proprietary data for PC and ECDIS display systems.

The SMIDS satellite receiver and antenna are installed at the bow and the stern. They send "raw data" to the MEU.

Each of the standard SMIDS display units makes its own calculation of speed from the raw data.

KW991 HEADING DISPLAY

Inputs ship's heading from stepper or synchro, and converts the information to NMEA \$HEHDT for distribution to the SMID system.

- Tape width +/- 15 degrees and +/- 12.5 degrees.
- Large digital numerals.
- Digital numerals with ROT indicator.
- Compass Comparator Alarm.
- Set-up screen.



OVERALL SPECIFICATION

ACCURACY

Based on that of the satellite receiver used, with sufficient satellites received, mean velocity better than +/- 0.02 knots.

SMIDS SATELLITE RECEIVERS

Enclosure 260 x 160 x 90 mm. BNC socket, with BNC to N socket adapter supplied. RG213 cable maximum length 35 metres. Screened miniature data cable overall length greater than 500 metres. Comes complete with antennae and associate fixings.



SMIDS and **GEOLOG** both conform to IMO rules A.824 (19) for speed and distance indicator and MSC.74 (74) (annex 1) for performance of combined GPS and GLONASS receiver equipment.



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