NEW HYDROGRAPHIC VESSEL — H.M.A.S. FLINDERS

by Captain J.H.S. Osborn, R.A.N.
Hydrographer, Royal Australian Navy

H.M.A.S. Flinders, the Royal Australian Navy’s new small hydrographic vessel, was launched at Williamstown Naval Dockyard, Victoria, on 29 July 1972 and following fitting out, was due to commission into active service in April 1973.

The ship has been designed by the Australian Shipbuilding Board to meet the requirements of the Hydrographer, Royal Australian Navy, and is the second vessel to be built in Australia specifically for hydrographic surveying.

Particulars of its hull design are as follows:

Length overall ............ 161 ft (49 m)
Length, water line ......... 150 ft (45.7 m)
Breadth, moulded .......... 33 ft (10.1 m)
Designed draught .......... 9 ft (2.7 m)

After replacing the ageing H.M.A.S. Paluma in 1973, Flinders will be deployed on full-time hydrographic duties in Australian waters.

All living and working spaces are fully air-conditioned to provide comfortable conditions during lengthy periods in remote tropical areas.

Her complement includes 4 officers and 35 ship’s company.

Propulsion is provided by two Paxman Ventura engines, bridge-controlled, driving variable pitch propellers. Designed continuous operating speed is 13.5 knots, with an overall range of 5000 miles. In addition, Flinders is fitted with hydraulic fin-type stabilisers and bulbous bow to improve sea-keeping qualities.

Ship’s electrical power is provided from $3 \times 155$ kW diesel generators.

Surveying operations will be controlled from a combined bridge-chartroom, 24 ft by 34 ft, fully enclosed, but permitting almost unrestricted vision over a 360° arc.

Bridge equipment includes:

- Atlas Deso echo sounder, 33 and 210 kHz;
- EDO AN/UQN 1 deep echo sounder, plus PDR;
- Simrad Navigational Search Sonar;
- Side scanning sonar;
- Decca Hi-Fix (Two-range or hyperbolic mode);
- Decca radar, type TM 829, with Alpine PRA;
Provision for a satellite navigation receiver;
Electronic desk calculator;
Two Arma Brown gyro compasses with all repeaters driven from either compass;
Fully automatic steering console;
Facsimile reception equipment.

*Flinders* will carry three lightweight aluminium utility boats powered by outboard motors. A new design 34 ft survey motor boat (6.5 tons) of aluminium construction, powered by twin 100 HP diesel engines and capable of 13.15 knots, will be carried in hydraulically operated, single wire fall davits, port side aft. The boat is designed to work either detached from the ship or in consort and contains limited accommodation facilities. It will be fitted with Atlas Deso echo sounder, Hi-Fix and HF tranceiver in addition to being able to operate a side scanning sonar.

The ship will carry a diving team as part of her complement, all diving equipment including air charging facilities being contained in a separate diving store.

*HMAS Flinders* will carry provisions for periods of up to 60 days and has the ability to distill her own fresh water up to 10 tons per day.