

HMS BRISTOL — IN A CLASS OF HER OWN

by Lieut F. M. Emmett

HMS *Bristol*, the first of the originally planned eight Type 82 destroyers, is due to arrive in Portsmouth on December 17.

With the phasing out of the aircraft carriers from the Royal Navy, *Bristol* will be the only type 82 to be built. Although smaller in physical size than the DLGs 01 to 08, HMS *Bristol* is almost 1,000 tons heavier than the previous class but has a reduced number of ship's company. The ship is powered by two steam turbines for normal steaming and is fitted with two Olympus gas turbines to provide additional boost for high speeds or for leaving harbour in emergencies. The four power units give the ship a maximum speed in excess of 30 knots. HMS *Bristol's* role after trials will be to provide command facilities and area defence for a task force.

At first sight the ship appears to be underarmed for her size until one realises that her fire power is comparable to a World War II cruiser but much more effective. The main armament is Seadart, the replacement missile for Seaslug, with supersonic speed, range and manoeuvrability to cope with any airborne threat. The Seadart can also be used effectively against surface targets.

The gun armament is the new 4.5 inch single barrel, automatic mounting, and the gun house remains unmanned throughout shoots.

The main ASW weapon is Ikara, the Australian designed radio controlled missile that delivers a homing torpedo to submarines detected by the ship's own sonars or those of her consorts. The conventional twin triple-barrelled mortar is also fitted.

The ship has a helicopter landing deck to take a Wasp helicopter but is not fitted with a hangar, consequently the ship will not carry her own helicopter.

The ship's sensors provide basic data required by the heart of the system, two Ferranti micro-

miniaturised computers. The ship's inertial navigational system (SINS) continuously informs the computers of the ship's geographical position, course and speed. These inputs enable the computers to provide an up to date visual presentation in picture and writing form. To achieve the quick reaction times required in modern warfare all the weapon systems are fully automatic.

Conventional plotting tables are not to be found on HMS *Bristol*, in fact the only use of the chinagraph pencil in the Ops Room will be to make up stateboards. Amongst many other things the computer provides the answers to relative velocity problems, and CPAs in micro seconds, it will also draw the screen sectors on the plot just as quickly if asked to.

The Communication Branch has not been forgotten and the MCO complex is the most modern to go into any warship. All the communication compartments lead off the MCO and the C & M desk is sited in the MCO. Communication ratings will not be seen travelling around the ship to check equipments in various offices. *Bristol* is the first ship to be fitted with ICS 2 to provide MF/HF communications; conventional 692s provide UHF communications.

The first commission of HMS *Bristol*, until the first refit in 1975, will be mainly taken up conducting trials on the computers and weapon systems and proving the system in preparation for the type 42 destroyers.

The staff consists of 30 Communicators; the large majority of whom will join the ship in Portsmouth on December 17.

The 'G' department is led by FCRS Bradley and RS Wheeler. The 'T' department is led by CCY Barrie.

I apologise that this first article from HMS *Bristol* has not been communications slanted, but hope that it has been of interest.