

## A DISCUSSION PAPER ON THE MOVE OF THE RNARS, HQ STATION FROM MERCURY TO COLLINGWOOD

### AIM

To discuss the requirements for the dismantling of the HQ station at MERCURY, the refurbishment of station equipment and its re-establishment in COLLINGWOOD.

### BACKGROUND

An Amateur Radio Station was first established in HMS MERCURY in 1947 with the callsign G3BZU. During the period up to 1960 the club was very much a periodic activity in the establishment governed more by the presence of keen amateurs on the staff than a permanent home for the Radio Station. The latter being an almost annual movable activity. When the RNARS was formed the society subsumed The MERCURY AMATEUR RADIO CLUB having undertaken the provision of Radio Club activities for MERCURY personnel as well as the headquarters for a national "NAVAL" Radio Society. The membership of the RNARS expanded to include a large "INTERNATIONAL" membership of Commonwealth and NATO Navies and in 1968 under the direction of Captains R.C. MORGAN and B.H. KENT (The then Captains of the Signal School) the new P & RT Block in MERCURY was designed to include a "purpose build" Amateur Radio Club Room to enable all the activities undertaken by the RNARS to be in modern, safe and dry accommodation. The HQ "SHACK" was opened in 1974 and the Society had its first permanent residence. The RNARS is a recognised encroachment within HMS MERCURY licensed by the Flag Officer, Portsmouth. (FO PORTSMOUTH letter on Pack 590/5).

The Captain HMS COLLINGWOOD has allocated to the RNARS the west end of building 512 which was the old library and of approximately the same size as the MERCURY accommodation. It is a late 1940's type of building in good order with electricity laid on and a heating system available. The aim is to transfer the HQ station into an accommodation standard similar to that at MERCURY, and to allow the HQ station to be on the air from COLLINGWOOD by Aug 1993.

### ASSUMPTIONS

It is assumed that the HQ station is to be rehoused in as comfortable a situation as is now enjoyed in its present location. That all equipment needing replacing/refurbishment will be so treated and that the necessary accommodation improvements (carpets, painting, lighting, benches/radio bays, heating and telephone) plus reinstatement of masts, cable runs and aerial masts will be carried out in an organised and pre-arranged fashion.

## DISCUSSION

There are five proposed phases for the move.

1. Pre MERCURY move phase.
2. Pre COLLINGWOOD move phase.
3. The wholesale dismantling of the MERCURY HQ Station and effects.
4. The transportation to COLLINGWOOD.
5. The installation of all radio equipment into COLLINGWOOD.

### PHASE 1

The dismantling of the TH6 beam and a complete refurbishment of all hardware, some of which is already badly corroded. If found to be beyond economical repair the beam will need replacing by something of similar size. The mast supporting the TH6 will need to remain in place to support the trap dipole required for the monthly code runs and also for general HF communications prior to the move.

It is conceivable that during the pre-move phase the 30 ft Heathkit Tower and the VHF/UHF beams could be dismantled and made ready for the move to COLLINGWOOD. Every endeavour should be made to lift the mast off its ragbolts in the gymnasium roof with little or no damage to the mast footings. This will enable this mast to be resited in COLLINGWOOD during Phase 1. The V/UHF aeriels will need to be completely replaced. The VHF Colinear could be temporarily mounted by the TH6 tower and used for packet and general VHF operation prior to closure.

### PHASE 2

#### INTERIOR

Strip out old library fittings.  
Plans to be drawn up for the provision of a minimum of five operating positions (Bays). Annex B.

- |    |  |   |            |
|----|--|---|------------|
| A. | Main HF Bay (to include QRQ equipment) | ) |            |
| B. | Secondary HF Bay                       | ) | 22 ft 6"   |
| C. | Main VHF Bay                           | ) | available  |
| D. | Secondary VHF Bay                      | ) | Ex Mercury |
| E. | SWL Bay                                | ) |            |

An additional bench area for other activities (maintenance, coffee boat etc). This can be made up from the old MERCURY benches if new ones need to be constructed. It will be important to ensure that there are ample 13 amp sockets fitted in the area and all are professionally installed to a professional standard. There should also be a primary control for all electrical supply to the HQ station (independent of the main building supply).

Carpeting will need to be completed before bays are built and any other interior furniture is moved in (cupboards etc).

Means of "weatherwise" cable entry into the operating area for aerals and control cables will need to be established.

The heating system will need to be reactivated by COLLINGWOOD and tested to ensure correct functioning.

The provision of an internal COLLINGWOOD telephone should be sought to cover HASW - as a means of summoning assistance in case of an accident during the quiet hours. (Possibly pick up old telephone line ex library).

The latter two items were part of the encroachment in MERCURY.

### EXTERIOR

Remove all existing aerals from the old COLLINGWOOD Radio Society site. Tidy up the existing masts ready for the new aerial rig. Old COLLINGWOOD Club Room to be used as a store/workshop during the transition phase. All existing COLLINGWOOD equipment to be taken into safe custody.

The Heathkit Tower (ex MERCURY) to be erected in accordance with the final positioning diagram. The opportunity should be taken to install the V/UHF aerial and rotator at this time. Cables to be routed through to the Radio Room.

The 80 meter dipole, should be erected in accordance with the aerial diagram as soon as possible to allow for negligible delay in getting the QRQ run on the air from the new site.

Dig foundations and prepare site for the new Strumech Tower, install the fixing post for a tilt over version of the tower. It is recommended that this be done by contractors. As soon as it is in place and settled it is recommended that the main HF beam and rotator be installed and that the aerial is shown "On Parade"!! Cable runs to be established and run into the Radio Room.

The proposed aerial configuration is shown at Annex A, and other aerals should be rigged on an opportunity basis during the summer months of 1993.

### PHASE 3 (Sad Time)

### EXTERIOR

Assuming Heathkit Tower has already gone and the TH6 and V/UHF beams have been dismantled then:

Dismantle the trapped dipole, long wire (far end secured to Kelly Building) and the VHF Colinear aerial.

Clear the gymnasium roof of any RNARS "Gash".

Take down aluminium pole supporting the trapped dipole.

Unbolt 40 ft tower from gymnasium wall and lower to ground (crane needed) - work may be done within COMORG contract.

#### INTERIOR

Dismantle all radio equipment and place in proper boxes for transportation. Keep all cables.

Box up all books/magazines.

Prepare rally items for the move.

Dismantle bays equipment shelving and book shelves.

Transport all contents of MERCURY Radio Room to HMS COLLINGWOOD for re-installation.

Clear up all "Gash" and secure the room.

#### PHASE 4

Transport all contents of MERCURY Radio Room to COLLINGWOOD to complete the re-installation of the HQ station. Transport may have to be planned and paid for by the society.

#### PHASE 5

Before this phase can be started Phase 2 will need to be completed (ie all bays constructed, power supplies and aerial runs installed). The aim should be that the main HF bay is installed and available for the first QRQ run after the move (Aug 93).

The old COLLINGWOOD Radio Room is allocated as a store room for rally items and the heads used (and kept clean) by the RNARS. There are no heads in 512 !!

#### RECOMMENDATIONS

The committee are invited to:

- a. Accept this report.
- b. Authorise early actions to start the move to COLLINGWOOD.
- c. Liaise with COLLINGWOOD on the reactivation of the heating system and the installation of a telephone.

15th May, 1992

M.J. Matthews

Shack Manager



ANNEX A

The placing of aerial supports, with approximate distances between each, is shown overleaf. It is proposed that the following aerials be installed as follows:

VERSATOWER - TH6 beam (or replacement)

HEATHKIT TOWER(512 building) support for 2m and 70cm  
beams end support for HF  
Dipole (1).

HEATHKIT TOWER (14 building) end support for HF dipole \*1  
end support for trapped dipole \*2

WOODEN MAST end support for trapped dipole \*2

\* 1 80m dipole (132' centre fed 70 ohm twin cable)

\* 2 Trapped dipole (108' centre fed coax cable)

An addition 264' (Top Band) antenna could be erected between the two Heathkit towers via the wooden mast.



