

### 3. TRADE UNION/PROFESSIONAL ASSOCIATION RECOGNITION

Underwater Weapons Armourers are eligible for semi-skilled membership of the Amalgamated Union of Engineering Workers.

Since 1 January 1970, all ratings of the Torpedo Anti-Submarine specialisation are awarded a Part One City and Guilds Certificate in Nautical Craft Studies (Torpedo Anti-Submarine) on being advanced to Leading Seaman, and a Part Two Certificate on being advanced to Petty Officer.

## JOB DESCRIPTION

SEAMAN BRANCH  
TORPEDO ANTI-SUBMARINE SPECIALIST

NAME

HARDWICK R J

RATE

ABLE SEAMAN (UNDERWATER CONTROL, STARRED)



UNIT DATE STAMP  
COMMANDING OFFICER

6 MAR 1975

H.M.S. A 510

SIGNATURE

*G.C. Pell*

Name

Rank

COMMANDING OFFICER

## 1. RATES HELD

	Rate	From	To
Underwater Control, Starred		29 June 71	14 June 75
Underwater Control, 2nd Class			
Underwater Control, 1st Class			
Underwater Weapons, Starred			
Underwater Weapons, 2nd Class			
Underwater Weapons, 1st Class			
Underwater Weapons Armourer			
Torpedo Anti-Submarine Instructor			

## 2. SCOPE OF TRAINING AND EMPLOYMENT IN THE TORPEDO ANTI-SUBMARINE SPECIALIST QUALIFICATION

(in addition to qualifications as Seaman in accompanying Form S.1233T)

### *Underwater Control Duties*

Consist of the operation and control of underwater detection equipment with the following grades:

#### *Underwater Control, Starred*

Operates the individual display consoles of each type of sonar set fitted in surface ships and indicates to the controller the presence of a submerged object from aural or visual observation on the set.

#### *Underwater Control, Second Class*

Takes charge of the crew of 3 men of any sonar set fitted in HM Ships, carries out the drill procedures ordered for that set and indicates to the controller the presence, type, and relative movement of a submerged object from aural and/or visual observation on the set.

Carries out simple diagnostic processes enabling the maintainer to find faulty components in the event of breakdowns.

Carries out daily user checks on all Sonar equipment fitted in HM Ships to test its accuracy and efficiency.

#### *Underwater Control, First Class*

Takes charge of the Sonar control room of HM Ships and oversees the operation of several sets. His main duty is to bear the responsibility of classifying a submerged object.

If such an object is a submarine he feeds the information gained about its position, course, and speed to the Command in a logical, accurate and precise manner.

Knows when equipment is faulty and sends for maintenance help to remedy the breakdown.

Trains the Sonar control room's crew.

Ensures that daily user checks are carried out.

Applies the corrections for oceanographic readings to the Sonar set recorders during each 6 hour period.

Exercises his initiative to set in motion the procedure needed to regain a contact when it has been lost.

### *Definition: Sonar Set*

A device for detecting a submerged object by emitting a pulse of sound in the direction of that object and receiving the returning echo of the frequency reflected.

The direction of emission and the time from transmission to echo receipt can be measured, enabling the bearing and range of the object to be calculated.

There are three main types in use in surface ships, one short range and two medium range.

### *Underwater Weapons Duties*

Include the operation of anti-submarine weapons, demolitions; mining; mine-sweeping and the operation of minehunting sonar equipment. The following are the grades and specific duties of Underwater Weapons ratings:

#### *Underwater Weapons, Starred*

Carries out all the unskilled manual drills and duties required in the operation of UW weapons, ie handles and loads mortar ammunition. Assists in the recovery of practice torpedoes. Embarks and transports all types of sensitive underwater weapons.

Fits explosive charges under the direction of a superior.

Handles large diameter wires, rigs floats, and dan buoys and other heavy towed equipment associated with minesweeping.

Assists a superior in the preparation of mines before laying.

Operates minehunting sonar equipment.

#### *Underwater Weapons, Second Class*

Carries out all the skilled manual tasks required in the operation of UW weapons, ie switches on the mortar mounting electrical and hydraulic control gear; carries out daily user checks on the weapon to test its efficiency and readiness; recovers practice torpedoes; supervises the manual tasks associated with other sensitive underwater weapons.

Takes charge of the anti-submarine mortar crew of up to 4 men in first class anti-submarine frigates in the absence of a more senior rating.

Takes charge of the mortar ammunition supply room in action.

Fits and detonates charges used in demolition using either safety fuze or electrical means.

Takes charge of a minesweeper's sweep deck crew of up to 10 men handling heavy wires, rigging floats, dan buoys and other towed equipment associated with mine counter measures.

Prepares and lays mines.

Is the senior operator of minehunting sonar.

#### *Underwater Weapons, First Class*

Takes charge of the anti-submarine mortar crew of up to 17 men in first class anti-submarine frigates during action and practice drills and is responsible for its readiness for action in all conditions. Supervises daily user checks of the accuracy and mechanical and electrical efficiency of the mounting. Supervises the embarkation and transport of sensitive underwater weapons. Takes charge of demolition parties, and assesses the quantity of explosive charges to be used.

Trains the mortar's crew and demolitions team in a ship.

Supervises the maintenance and operation of the equipment on the sweep decks of a squadron of minesweepers.

#### *Underwater Weapons Armourer*

Carries out, under supervision, semi-skilled work as follows:

- a. The routine maintenance of anti-submarine weapons, including torpedoes and their discharge system.
- b. The operation of high-pressure air systems with pressures up to 4,000 lb per square inch.
- c. Simple fitting, including the interpretation of machine drawings and marking off, hand and power drilling and hacksawing; riveting and the use of taps and dies; chipping and filing, brazing and simple soldering.

This work is in addition to that previously described under 'Underwater Weapons'.

#### *Torpedo Anti-Submarine Instructor*

TAS Instructors are selected from the foregoing Underwater Control and Underwater Weapons 1st Class rates for their outstanding qualities of leadership, personality and instructional ability. They instruct all officers and ratings of the TAS branch in operation of all Sonar Sets; drills and procedures; Sonar control; the operation of all underwater weapons; ammunition recognition and handling and transport of all types of underwater weapons; explosive demolitions; torpedo recovery; mine preparation; the maintenance, rigging and use of wire minesweeping gear, dan buoys and towed acoustic equipment and mine hunting in either Shore Training Establishments or sea-going ships. They take charge of the TAS Division of up to 30 ratings in a sea-going ship under the policy guidance of a TAS Officer.

#### *Specialised Qualifications*

(Including training and experience in instructional, management and work study techniques. Experimental work and qualifications not otherwise recorded).