



SHEFFIELDS' PAST

The Sheffield Class Type 42 Destroyer

A year after the cruiser was sold, the order was placed for another HMS SHEFFIELD which was to be the name-ship of the Type 42 class of guided missile destroyers.

Her prime purpose was to provide

force air defence and they were armed with the Seadart Missile System as well as the 4.5 Mk 8 gun.

Launched by Her Majesty the Queen at Barrow on 10 June 1971 the second HMS SHEFFIELD was

commissioned on 28 February 1975. There then followed an extensive period of first-of-class trials and evaluations which included hot weather trials in the Caribbean and cold weather trials off Bear Island, north of Norway. During this trials period HMS SHEFFIELD fired four Sea Dart missiles on the Aberporth missile range in Cardigan Bay and destroyed the target with her first

single shot firing.

Following first-of-class trials SHEFFIELD was allocated to the 3rd Destroyer Squadron and served in North European waters until her first refit. This began in June 1979 at the end of a period of attachment to the NATO Standing Force Atlantic. The refit was completed in November 1980 and a year later after trials and work-up she





4th May 1982

deployed to the Indian Ocean as head of a Task Group to patrol the entrance to the Persian Gulf.

While returning from this patrol, and immediately following a short visit to Gibraltar, she took part in a First Flotilla exercise in the Gibraltar areas in March 1982. Shortly before she was due to leave for the United Kingdom, the Falkland Islands were invaded and the SHEFFIELD was allocated to the Task Force. She arrived in the total Exclusion Zone around the Falklands on 1 May and screened the carriers HERMES and

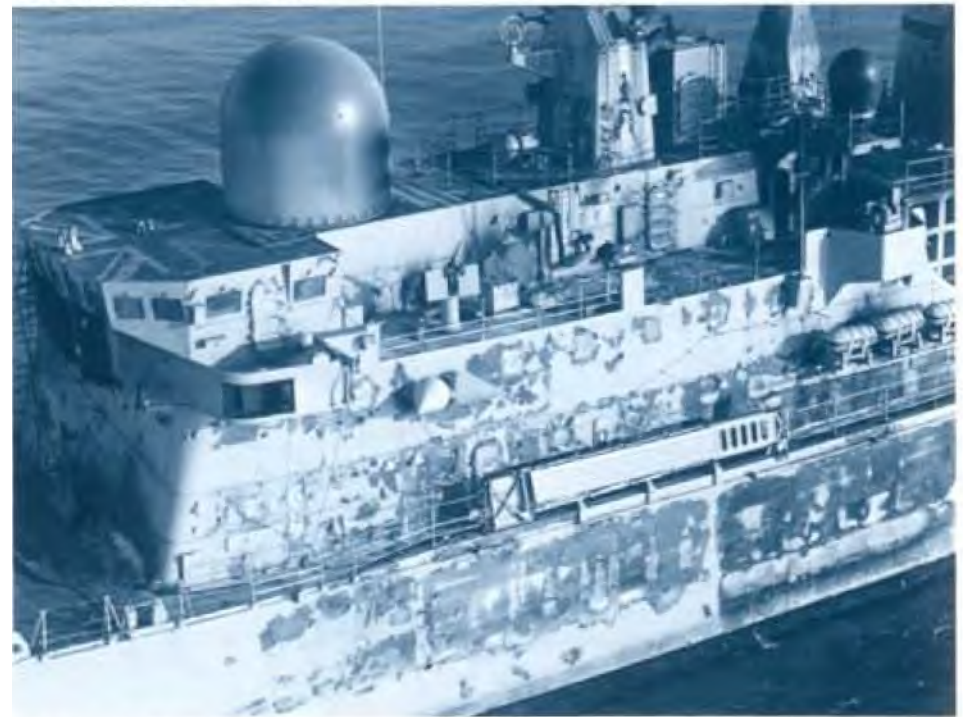
INVINCIBLE while their aircraft attacked the Port Stanley airfield on that day and 4 May.

During the afternoon of 4 May, the Task Force was attacked by land based Argentine Navy strike aircraft and the SHEFFIELD was hit by an Exocet air-to-surface missile which started uncontrollable fires, so that she had to be abandoned although she did not actually founder until 9 May.

Twenty officers and men were lost with their ship.



HMS Arrow lends assistance



The results of an Exocet hit



THE PRESENT SHEFFIELD

The Type 22 class frigate was originally designed as the successor to the well known Leander class frigate. The order for the first of class, HMS BROADSWORD, was placed on 8 February 1974 at a cost of £68.8 million and three others, BRILLIANT, BATTLEAXE and BRAZEN followed. These made up the Batch One of the class and have since become the Second Frigate Squadron. The next in line, HMS BOXER, was the first of the 'stretched' Batch Two Type 22s being an extra ten metres longer than her predecessors. BOXER was then followed by BEAVER, BRAVE, LONDON and now SHEFFIELD. These ships will form the First Frigate Squadron which will be complete when COVENTRY is delivered later this year.

HMS SHEFFIELD's primary role is anti submarine warfare. She is fitted with the most modern computer controlled active sonar and the very latest passive listening device, the towed array. These allow her to detect submarines at considerable distances and to control their destruction by torpedoes launched by the Ship Torpedo Weapon System (STWS) or from helicopters. She can operate 2 Lynx or one Sea King helicopter and is capable of operating the new EH 101 helicopter when it comes into service.

HMS SHEFFIELD is also capable of operations against surface vessels. Her Exocet missiles have a range of over 20 nautical miles, for self defence against missiles and aircraft, a new lightweight Seawolf Tracker system (Radar 911) is fitted with six barrel launchers forward and aft, two 30mm guns are also fitted.

To control her weapons as well as other sensor and decoy systems, HMS SHEFFIELD's Command Team must have an accurately presented picture of the situation on, above and below the surface of the sea in the vicinity of the ship. This capability is provided by the Royal Navy's latest Computer Assisted Command System (CACCS), a suite of interlinked computers capable of handling information on up to 500 contacts.

Information is of little use without good communications and SHEFFIELD has this in abundance. A close look at the foremast and mainmast will reveal a multitude of



Entering Portsmouth harbour for the first time

radio aerials. These serve the very latest in communication equipment fits, including a satellite communication terminal.

As well as the dedicated Seawolf Surveillance Radar Type 967M SHEFFIELD has two other main radars, the 1006 navigation radar and the 968 air and surface surveillance radar both mounted on the foremast.

HMS SHEFFIELD is propelled by two Rolls Royce gas turbine engines, each producing up to 20MW, together with two Rolls Royce Tyne gas turbine engines, each producing up to 4MW, for more economical cruising. These four engines can propel the ship at up to 30 knots

using two controllable pitch propellers. The ship has twin rudders and is steered from the Bridge either manually or by using an auto pilot system. To provide a more stable platform in rough weather the ship is also provided with four automatic fin stabilisers.



Electrical power is provided by four 1MW diesel generators, each large enough to supply a small town. Over 1425 miles of cables of different sizes tie the whole system together to make a sophisticated, powerful fighting unit.

The Ship's Company of 16 officers and 250 men will operate, maintain and live in the ship independent of base support for long periods. Fuel, weapons and stores can be supplied from Royal Fleet Auxiliary Support ships as required.

Living conditions onboard are good — the Junior Rates are accommodated in five messdecks which each have a recreation space. Each mess, and many working areas are served by the ships radio system and the ship has its own television system. The Petty Officers, Chief Petty Officers, Warrant Officers and Officers all have sizeable, comfortable messes and cabins ranging from six to single berth.

The Ship's Company are fed in two dining halls which provide a choice of two or three main dishes at the two main meals each day.

HMS SHEFFIELD is an excellent example of the much improved standards of operational effectiveness, sophistication and habitability now coming into the Royal Navy.

The 'Shiny Sheff'
Royal Naval ships have always enjoyed a special relationship with their affiliated towns and cities but without doubt the people of the

City of Sheffield are at the top of the league and have become famous throughout the Navy for their remarkable capacity to produce 'Shiny Sheffs'. This tradition started with the first HMS SHEFFIELD which, when she sailed from Vickers Walker yard in 1937 bound for World War II service, gleamed with stainless steel — a gift from the City of Sheffield. This quickly led to the ship being christened with the affectionate nickname 'The Shiny Sheff'. The second HMS SHEFFIELD also received donations of stainless steel and the term 'Shiny Sheff' quickly re-established itself and became part of our naval tradition — a tradition which the new HMS SHEFFIELD will be proud to continue.

Because of modern warship design we are unable to emulate the stainless steel guardrails and scuttles of the first HMS SHEFFIELD but we are very fortunate to have



such generous benefactors who have contributed a large number of functional and decorative items, that help turn our 'house' into a home and improve the quality of life at sea.

Many items have been individually made to naval specification and are a tribute to the skill and ingenuity of Sheffield's industry and commerce. We are all extremely grateful to those who have contributed so generously, with Mike Phinn of Wincro Metal Industries deserving particular thanks for voluntarily undertaking the co-ordination and 'gentle persuasion' that has resulted in the following gifts:—

Deck name plates —
Darwins Alloy Castings (Sheffield)
2 stainless steel ships bells
Edgar Allen Foundry (Sheffield)
Stainless steel deck plates
Wincro Metal Industries (Sheffield)
Portable name boards —
Darchem Ltd (Darlington)
Funnel badges —
Stocksbridge Engineering Steels (Sheffield)
Stainless steel ladders —
Racco Products Ltd (Sheffield)
Bell stand —
Falcaim Engineering
Stainless steel honours board
Woollen and Co (Sheffield)
Senior Ratings bar signs
Woollen and Co (Sheffield)
Falklands memorial plaque
Woollen and Co (Sheffield)
Ashtrays
Arthur Lee (Sheffield)
Telescope holders
Mr M A Phinn
(Wincro Metal Industries)

Wood carving (City Coat of Arms)
Mr R McWhirter
Laser galley knives —
Richardsons Ltd
Cutlery
Cutlers Company
Clasp knives
Joseph Elliott (James Dixon Group)
Ashtrays
Cooper Cobb (James Dixon Group)
Tankards
James Dixon Group
Cast stainless steel crests
Gabriel and Co (Birmingham)
Personnel whereabouts board
Engineering Industries Training Board/Wincro Metal Industries
Captain's seating board —
BSC Marketing (Sheffield)
Stainless steel cross
W G Sissons (Calver Mill, Sheffield)
Bar bells
Spartan of Sheffield
Silver salver
Sheffield Club
Captain's dining table
Lady Freeman of Sheffield
Wall clocks
H L Brown (Jewellers) Sheffield
JRDH clock
Bridon Fibres (Gateshead)
Gavel
Mr S Cooper
Teak wardroom fittings
SRS Joinery (High Wycombe)
Sliding door pelmets
W G Sissons
Various stainless steel fittings for bridge & Captain's cabin —
Moytel Engineering
POs Mess punchbowl and cups —
Lancelott
Stainless steel hatch clips —
Neepsend Ltd
Morse key protectors
Wincro Metal Industries

Visitors book

City Hall, Sheffield

Bible

Sheffield Cathedral

Inclinometers

Footprint Tools (Sheffield)

Stainless steel skirting

BSC (Stainless) Sheffield

A bell lyra (glockenspiel)

Mayfield (Mr & Mrs Rowntree)

Miscellaneous stainless fittings

Wincro Metal Industries

Catering containers

S J and E Fellows Ltd

(Wolverhampton)

Punchbowl and cups for wardroom

Parkin Silversmiths (Sheffield)

Brow steps

Faber Prest Ltd

(manufactured by Racco)

Flightdeck gate

—Faber Prest Ltd

(manufactured by Racco)

Ceremonial Lifebuoy stand

—Stainless Steel Fabricat

Association

Grab rails —

Metinox Ltd

Crystal decanters

—University of Sheffield



Various books for WOs and CPOs mess

— Mr C Thorpe

Wardroom decanter

Mr A C Emms

Watercolours

painted by Pauline Shearstone

donated by:

Sir Michael Carlisle (Lockwood,

Torday and Carlisle Ltd)

(4) Mr J Hugh Neill (James Neill

Holdings)

Mr Rafter. United Engineering Steel

(Stocksbridge)

Dr John Padley — University of

Sheffield

Davy McKee (Sheffield) Ltd

Mr R Gregory — Junior Chamber of

Commerce

Mr C J Woodward — Imperial

Tobacco Limited

John Smiths Brewery

Mr W N Adsetts

(Sheffield Insulating Company Ltd)

Mr and Mrs H Charlesworth (Dore

Villa)

Mr Kelly (Tek Management)

The Lord Mayor

The Sheffield Newspapers

William Cook and Sons (Parkway

Steel Foundry)

Richardsons (Sheffield)

Painting

Joe Scarborough





THE CAPTAIN & HIS TEAM

Born in Yorkshire and brought up in Cornwall, where his interest in the sea was kindled, Captain Tony MORTON joined the Navy at Britannia Royal Naval College, Dartmouth in 1960. At an early stage he decided to specialise in aviation and, after initial training as a Seaman Officer and a short appointment in a Malta based minesweeper, he started his flying training in 1963. After qualifying as a Buccaneer pilot and later as an Air Warfare Instructor he served in various carrier and shore based squadrons through the 1960's and 1970's. His active flying career culminated with command of a Buccaneer squadron embarked in the last HMS ARK ROYAL for her final commission.

Between flying appointments he returned to the surface Navy to command the minesweeper HMS WALKERTON and he attended Staff College in Canada. He also spent an interesting eighteen months as Brigade Aviation Officer at the Headquarters of 3 Commando Brigade Royal Marines.

His more recent appointments included one at the Central Tactics and Trials Organisation (RAF) and another as

Commander (Air) at the Royal Naval Air Station Culdrose. His last seagoing appointment was to the Anti-Submarine Frigate HMS YARMOUTH, which he commanded throughout the 1982 Falklands conflict and after which he was awarded the DSC.

In a career notable for its variety and interest he has recently returned from two and a half years as British Naval Attache in Paris and he joined HMS SHEFFIELD in May 1988. He is married, has two teenage sons and lives in South Devon

where his pastimes include sailing and gardening.



Captain A Morton DSC
Royal Navy — Commanding
Officer HMS Sheffield.

The Ship's first Captain (Captain N Barker) and his Officers.





The Weapon Engineering Department



The Operations Department





The Marine Engineering Department



The Supply Department





The Executive Department

The Executive Department, headed by the Executive Officer and First Lieutenant, has many diverse responsibilities. The Master at Arms is responsible for the day to day administration of the ships routines and for the discipline of the ship's company. He is assisted by the Leading Regulator who is also the ship's postman.

The Petty Officer Medical Assistant looks after our health, as an SEN and First Aid Instructor he trains the ship's First Aid Team, and nearly 20% of the ships company are First Aiders. He diagnoses our aches and pains, administers medicines and refers the really ill to Medical Officers ashore. The POMA is also the Health and Safety Inspector.

The Chief Boatswain's Mate (The "Buffer") is the ships seamanship expert. He looks after the upperdeck, boats and all seamanship

evolutions and makes sure that all maintenance of the upperdeck and rigging is carried out correctly. He trains all the ships company in how to conduct Replenishment at Sea (RAS) and is responsible to the Executive Officer for the outward appearance of the ship. He has a small section of sailors who help him.

The ships sporting life is taken care of by the Leading Physical Training Instructor (Clubs) who arranges keep fit sessions, fixes matches against other service and civilian teams and does his best to fight the flab!

The Routine Office Writer works long hours to put all our instructions on paper. He works in the Routine and Regulating Office with the MAA and LREG from where he issues Daily Orders, Temporary Memorandums and organises amendments to Ships Standing Orders.

The Executive Department



The Operations Department

The Operations Department is the largest in SHEFFIELD and comprises 8 Officers, 23 Senior Ratings and 71 Junior Ratings. Apart from the traditional responsibilities of seamanship, navigation and ship husbandry, the department also mans and operates all the ship's weapon systems and sensors. To achieve this task it is divided into 8 sub-specialisations:

RADAR — The collation of action information from the ship's own radars (968,1006) and also external information from data links (Link 11, 14) into a tactical picture using the CACS computer centre.

SONAR — The operation of various sonar sets for the detection of submarines either by active means (Sonar 2016) or passively using 2031 towed array, the latest in passive underwater technology. This is further enhanced by comprehensive built-in noise reduction measures, STWS 2 torpedo tubes are also fitted.

MISSILE — The above water weapon system which includes Exocet, Seawolf Mod 3, the new lightweight GWS 25 system, and also 30mm guns for close in defence.

COMMUNICATIONS — The transmission of signals worldwide,

message handling and tactical communications using ICS3, the SCOT satellite system, whilst still maintaining the traditional skills of visual signalling using flashing lights.

ELECTRONIC WARFARE — Interception and analysis of transmissions from other units using UAA1.

COMMUNICATION TECHNICIANS — Communications support of Electronic Warfare.

FLIGHT — The operation and maintenance of up to 2 embarked Lynx helicopters.

SEAMANSHIP — The control of specific seamanship evolutions such as Replenishment at Sea and also the day to day operation of the ship's boats, anchors and cables.



Action stations in the Ops Room