THE MARINE ENGINEERING DEPARTMENT



PROPULSION

The Ships propulsion power is transmitted through 2 controllable pitch propellers from one main and one cruise gas turbines fitted on each shaft. Control for each shaft is exercised by a single lever, through a sophisticated electronic control system, either from the Bridge or the Ship Control Centre. The flexible and robust propulsion plant enables the Ship to accelerate to top speed in about 2 minutes. CHATHAM can be stopped again inside 750 metres. At full speed almost 45000 shaft horse power is developed, about the equivalent of 4500 mini cars.



ELECTRICAL POWER GENERATION

Electrical power on board is generated by 4 large diesel driven alternators which together provide 4 megawatts enough power to light a small town. Controlled from a centralised power station, collocated with the Ship Control Centre, the Ship's main grid supplies a very large number of vital services through a number of sophisticated transformers and rectifiers. Services include: the Weapons Systems, hydraulics to power the ammunition lifts, capstans and winches; air conditioning systems; fire pumps and lighting throughout the Ship - not to mention the Bridge windscreen wipers, the all electric laundry, drying room and electric shaver sockets!



FIREFIGHTING AND DAMAGE CONTROL

Whether in peacetime or at war, the risks of damage through collision or a fire present a constant threat to the safety of the ship and it's Company. Though everyone onboard receives some basic training in firefighting and damage control, the Marine Engineering Department are the recognised experts and, as such, have responsibility for training the Ship's Company in both disciplines and for providing the means to combat fire, damage or flood. Coordination of emergencies of this kind is achieved within a compartment known as Headquarters One (HQ1).

COMMAND

The Captain is able to steer and manoeuvre the ship from an enclosed, air conditioned Bridge using a 'handle bar' type steering wheel and 2 levers which control the power of the engines and pitch of the propellers. This outwardly basic arrangement conceals the complex electronics necessary for these signals to be passed to the machinery plant aft, and some 5 decks beneath, through the Ship Control Centre.



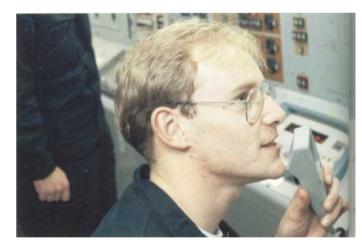
HOTEL SERVICES

Provision of domestic services is another essential task of the Marine Engineering Department. It operates and maintains the machinery and equipment that provides refrigeration, hot and cold fresh water (the Ship can make 96 tons a day), sanitation, compartment heating and ventilation. Other equipments which must be looked after to support the modern sailor at sea include washing up machines, laundry, coffee makers, toasters, cake mixers and ice cream machines!



SHIP CONTROL CENTRE

This control room on 2 Deck is the nerve centre of the Marine Engineering Department. It's brain is the Machinery Electrical Control console which incorporates a functionally distributed microprocessing system. This system enables the Marine Engineer Officer of the watch, a senior skilled technician, and his 4 young mechanics to monitor and control machinery using 100 dials and gauges, 400 alarms and indicator lights. In the unlikely event of a problem, hand control may be assumed in one of the main machinery spaces below.





MANPOWER

EFFICIENT, SAFE OPERATION AND MAINTENANCE is the business of the men of the Marine Engineering Department. Led by the Marine Engineer Officer, the team consists of: 22 senior skilled Technicians who provide the deep specialist, diagnostic advice and craftmanship necessary to achieve the task effectively.

31 Mechanics who undertake machinery operation and surveillance and routine servicing of equipments.

In addition, the Senior Technicians have the responsibility for the essential task of training their juniors in the complex systems and equipment fitted in HMS CHATHAM.



(REAR RIGHT)

CPO Stephen MCHALE is aged 36 and lives in Plymouth. He is married with one daughter and joined the Royal Navy in 1970. He is a Marine Engineering Officer of the Watch and Section Leader in the After Engine Room.

(REAR LEFT)

POMEM Martin THORN, aged 35, joined the Royal Navy in 1970. Currently President of the Petty Officer's Mess, PO THORN maintains the ships domestic services equipment and leads the electrical stores support team. He and his wife live in Romford, Essex.

(FRONT LEFT)

JMEM (M) Jason GALLOWAY, aged 17, lives in Hensworth, West Yorkshire and qualified as a mechanic at HMS SULTAN in June 1989. Still under training, he is a member of the Forward Engine Room Maintenance Team.

(FRONT RIGHT)

Warrant Officer Doug WATSON is the Main Propulsion Group Manager. A very experienced gas turbine technician and instructor, he also is the Divisional Officer for 31 Junior mechanics. Married with 3 sons, WO WATSON lives in Fareham, Hants.

MARINE ENGINEERING DEPARTMENT

CDR SCOTT LT CURNOW

SENIOR RATES WOMEA WATSON **CCMEA OUGHTON** CPOMEA MCHALE CPOMEA PERREN CPOMEA MCCREA **CPOMEA FIALHO CPOMEA FRANCIS CPOMEA SAVAGE CPOMEAH HODGSON** CPOMEM (M) HEANEY POMEM (M) MINOGUE POMEM (M) ABBOTT POMEM (L) THORN POMEM (L) ROBERTS POMEA GROVES POMEA DYMOND POMEA SPEAR POMEA GRANT POMEA KING POMEA BARKER-HAHLO POMEA HENWORTH POMEA WHALE

JUNIOR RATES LMEM (M) WARD LMEM (M) LYONS LMEM (M) TEMPLE LMEM (M) BRADDOCK LMEM (M) JEAVONS LMEM (M) SMITH LMEM (L) CORK LMEM (L) DYSON MEM (M) WARDLEY MEM (M) GALLOWAY MEM (M) SHORE MEM (M) BOWER MEM (M) CARROL MEM (M) NEWBY MEM (M) BARNETT MEM (M) LANGTON MEM (M) RIDGWAY MEM (M) EDWARDS MEM (M) SPRAGG MEM (M) REEVES MEM (M) FLETCHER MEM (M) HOLMES MEM (L) TOMS MEM (L) FOWLE MEM (L) HARRIS MEM (L) JENKINS MEM (L) WALTERS MEM (L) DICKENSON MEM (L) DOW

LMEA WILLIAMSON

LMEA MURRAY

LMEA POTTER

THE SUPPLY DEPARTMENT

The aim of the Supply Department is to enable HMS CHATHAM to carry out her full range of operational roles by providing the pay, food, Wardroom and secretarial services for her crew and the stores and spares for her equipment



THE CATERERS

Have the unenviable task of providing a varied, wholesome, nutritious and appealing diet for a shipload of expert consumers. The challenge of feeding each man on a budget of £1.46 per day is compounded by long periods at sea away from fresh produce. At sea, meals can become the focal point of the day, and the happiness of the Ship's Company can depend almost entirely on this small team.



THE COOKS

The job of translating the menu into about 750 attractive servings a day rests with the Cooks. They form 2 teams manning the Main and Wardroom galleys. Working in 3 watches, they peel about 1,500 potatoes every day and prepare 250lbs of meat for 3 multi-choice meals, as well as practising their deeper skills for the occasional dinner parties, receptions and even the Commissioning cake!



THE NAAFI CANTEEN

For many years, the Navy, Army and Air Force Institute has provided civilian support for the Armed Forces. Onboard, the Canteen Manager and his Assistant are an integral part of the Supply Department, working with the Caterer to supply many of the ingredients to create a varied menu; this is in addition to running the shop and offering a range of financial services for the Ship's Company.

THE STEWARDS

Have a busy and important role in the Ship. Trained to a high, civilian-recognised standard they provide a personal service for the Commanding Officer, house management and stewarding for the Wardroom and are the Ship's Service Fund experts. They have a particularly high profile during port visits, organising and running dinners and large receptions.



THE STORES ACCOUNTANTS

Have a vast and vital job providing the ship with everything from light-bulbs to computer screens and from cleaning rags to whole engines. Their 6 storerooms contain over 20,000 different types of item worth nearly £5 million. Using the Oasis 4 computer accounting system, they ensure that the ship is always carrying the optimum number of essential spares.



THE WRITERS

Look after the pay, cash, service records, correspondence and a large amount of administration. Theirs is a responsible job checking that the crew are correctly paid, that the taxpayers money is properly accounted for and that letters and reports leave the ship promptly and well presented.



All the above are directly involved in the ship's operations in various ways, either as part of the first aid teams, damage control parties or in any of the whole-ship evolutions like replenishments at sea.

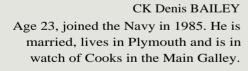
Although they do not work directly for the Supply Officer, it is perhaps most fitting to mention here our 2 Hong Kong based Laundrymen. They provide the ship with an excellent and indispensible service.



CPOSA Roger GAYTON Age 44, joined the Navy in 1965. He runs all the Stores and coordinates the whole Department's activities. He is married and lives in Plymouth.



LCK John CLARKE Age 32, joined the Navy in 1974. Runs a watch of cooks in the Main Galley. Married, he lives in Rosyth.





THE SUPPLY DEPARTMENT

LT CDR KEEFE S/LT RYAN

CATERERS

POCA HAMILTON LCK (CA) HANSON LCK (CA) WOODSIDE

COOKS

POCK MUSGRAVE
POCK PARKER
LCK CLARKE
LCK KNOWLES
LCK SIMPSON
CK BAILEY
CK BOUGIE
CK KING
CK SIMPSON
CK VARDY
CK WHITMARSH

STORES ACCOUNTANTS

CPOSA GAYTON LSA MOIR LSA HYAM SA HENDRICK SA JARMAN SA ROWE SA TELFER WRITERS POWTR WILLIAMS

WTR EVANS WTR GOODEN

STEWARDS

POSTD FIELDING
LSTD THOMPSON
LSTD WILLIAMS
LSTD KEMP
STD CLARKE
STD GILL
STD ORMESHER

NAAFI

MR FOULKES MR COGLEY

LAUNDRY

MR SUNG SUN CHING MR LIM SHU KEE



STANDING SEA FIRE PARTY

This small team is drawn from all departments and is led by the Chief Stoker. At sea, they are on immediate call from their workplaces, beds or wherever, to deal with any fire, flood or similar emergency anywhere in the ship.