

NAVAL COMMUNICATION REQUIREMENTS

Introduction

The prime requirement for Naval Communications is that of 24 hour per day availability. This must not be confused with 24 hours per day reliability of individual equipment. The next point to establish is, who requires to be "on" this 24 hour per day communication system. To do this it is necessary to take a brief look at the administrative chain of command in the Royal Navy. It will be seen that, like all the other services, the ultimate control of the Navy is political.

Prime Minister

Minister of Defence

Ministry of Defence with all its departments and outstations, down to Heads of Department level

Commanders-in-Chief
and their Staffs

Task Force Commanders
and their Staffs

C.Os. of units

British and Allied
Merchant Ships

C.Os. of sub-units, e.g. aircraft

Individuals of units or sub-units

It is the responsibility of the Director of Naval Signals, a department of the Ministry of Defence, to formulate what are known as "Staff Targets". These lay down the estimates of what will be required in the future and reflect the political decisions made by the Government of the day as controlled by Parliament. "Staff Targets" are translated by the Equipment Divisions of the Ministry of Defence (M.O.D. Navy), e.g. A.S.W.E., into "Staff Requirements". These represent a realistic aim in terms of equipment, men and money, which can be obtained, taking the overall position into account. Providing that Government policy does not change, these "Staff Requirements" are translated into equipment or hardware and most of this becomes W.E. responsibility to maintain. It is the W.E. task to maintain the 24 hour availability using the equipment provided by the Staff Requirement. The Staff Requirement also provides the requisite amount of spare equipment.

The equipment actually fitted is recorded in the "Radio Acquaint" and actual deliveries recorded in the "Allocation Lists".

The various forms of communications available are very numerous and most types are found in the Naval Service.

Although the radio element of the W.E. branch is not responsible for maintaining much of it, it is of value to start on the non-radio communications within a ship. These range from auto-telephones, sound powered phones and various loudspeaking systems, to modern all-embracing systems such as "C.C.S." and "SINBAD". These systems may be integrated to a degree with the external communications of the ship. Collectively they form the last link in the chain of command, in that they provide communication down to the individual level. A growing use of extended teleprinter circuits will be found although these in general will be on external circuits.

A similar system is provided on shore for the M.O.D. but here the G.P.O. plays a major part in the final distribution.

When considering the exchange of information at the individual level, the growing use of data links for sending information between computers must be considered. More and more ships and shore stations will be equipped with computers and it is obvious that information must be passed from computer to computer and to the command as quickly as possible.

Another field of communication that must be considered is that of the interception and jamming of unfriendly communications and radar. The information gained from such interception will be fed into the computer system and distributed around the Fleet.

Positional information may also be derived from radio signals and this gives rise to a whole range of direction finding and navigational radio equipment.

When boarding parties are used a range of portable equipment must be provided.

All these facilities must be provided with the limited money made available.