

Information Management – a shipmaster’s perspective

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As a ship’s master I have been employed by Enterprises Shipping and Trading since the turn of the century in bulk carriers with two interludes in different vessel types, one a 2200 TEU container ship and the other a handysize general purpose vessel. I am semi computer literate which means I am able to use a computer and produce simple automated spread sheets but am lost when it comes to repair and maintenance of a computer.

“Information management” can be defined as the skilful use of gathered facts (information) to achieve an objective. This implies that the right information is prepared and presented at the right time to the right person in a manner that is immediately understood and relevant to the situation at hand. The person preparing the information can be, and often is, the end user as well.

To manage information it is necessary assess its requirements according to its type. Information can be classed in various classes and subclasses i.e. information transmitted and received, information from instrument readouts and information in manuals, files and regulations. The treatment of the various classes of information is dependant on its source, location and destination.

The ship’s master is the focal point for incoming and outgoing information. He has direct contact with most of the interested parties and indirect contact via his Agents with the others. He has access to Email, Telephone, Facsimile and Telex in his office, in the navigating bridge or, more commonly, in both locations.

Incoming information either provides information and/or instructions or requests information. Examples are port requirements from agents, charterers voyage instructions and requests for information from the managers. Each message is dealt with according to its merits and stored for future reference.

In addition to management of incoming information there is the need to send out information to interested parties ashore such as Owners, Operators, Managers, Charterers, Agents, Port Authorities etc. This includes position reports (prepared by 2nd Mate), port documents (prepared by 3rd Mate) and cargo plans and loading (prepared Chief Mate). The Chief Mate as Security Officer also prepares the ISPS documentation.

In the navigation of the ship there are a variety of instruments at the bidding of the master and officer of the watch (OOW) providing position, speed, course steered and made good, depth of water, rate of turn etc. Additionally radar provides information on land and ships in the vicinity. The OOW monitors the communications equipment on the bridge which can cause a conflict, particularly in high traffic situations. In the majority of modern ships, there is direct control of the main engines although in practice this is only exercised in an emergency.

Very rarely is an integrated Bridge/navigation system found on bulk carriers. At best a GPS can be used to monitor cross track error and course over ground. All position are plotted on paper charts. Sometimes an unofficial chart plotting program is loaded on a computer on the bridge and connected to a GPS receiver. Although normal navigational practices are still being carried out the value of this equipment is incalculable and certainly improves the safety of the vessel.

The ship’s library consists of Flag State Notices and Regulations, IMO, ITU and Admiralty Publications, Port Guides, equipment manuals and last but not most certainly not least the Company’s QSEMS manuals. These all require to be cataloged and are frequently consulted by the ship’s staff. QSEMS Manuals are required reading by the entire ship’s crew.

The EST S.A.’s manuals are provided both as hard copy and also on a compact disc (CD) in portable document format (PDF). Some Port Guides also provide a CD with their books. Isle of Man Regulations and Merchant Shipping Notices are available in PDF and can be obtained on the

internet at the IOM Ship Registry Website. Adobe Acrobat Reader is freeware which is used to access PDF files which can, if required, be printed. Most equipment manuals on CD are in PDF and are packaged with Adobe Acrobat Reader. There are usually several copies found on board. Adobe has a search engine which makes searching for specific references easy.

At the heart of information management, and ISM, is a good filing system. Without this the access to information can take on monstrous and daunting proportions. There are a large number of filing systems and each one has its proponents and detractors. Enterprises where I am employed uses a paper based numerical system that encompasses around 50 Deck and 21 Engine files with alphabetical subdivisions, all detailed in the Operations Manual Standing Instructions. In addition there is forms list which details in a matrix by Company recipient departments the file number, form number, method of transmission and frequency of preparation. Certain checklists and forms are not transmitted but filed on board. The system is under continuous review and updating as circumstances warrant.

Presently in this company all documentation is paper based, with communications by email, facsimile and telex. The Information Revolution is beginning to make itself felt, albeit in a small way. Documents are being sent as Email attachments instead of facsimile transmissions. There are a number of computers on the vessels, generally stand alone, with document transfer by floppy disk or flash memory. Computer based training (CBT) is employed for crew training on the ships to supplement training drills.

The main obstacle in changing to a computer based system is the reliability of computers and peripherals. Usually there is very limited repair and maintenance knowledge available on board. Data security is dependent on regular backup which is improving with the availability of external hard disc drives (HDD) of 500 GB capacity. Crew computer literacy is also somewhat varied, from enthusiastic hacker to absolute novice. By far the highest risk factor is the amateur computer expert who, while trying to assist, clears the HDD or deletes the operating system, usually at the beginning of the voyage with 28 days to go.

For the future I would like to see integrated Bridge/Navigation systems as the norm for all ship's, provided they are not used to replace properly qualified and skilled navigating officers. For inventory handling, maintenance and QEMS I would like a central data base system with reliable ship/shore buffered access from the ship and good cross checks.