Putting the record straight

Ship operators are required to comply with MARPOL 73/78. However, as the US Government is not a party to Annex IV of the convention, the US Coast Guard Codes of Federal Regulation (CFRs) regarding the discharge of sewage kick in*.

Shipowners and shipmanagers with vessels currently trading on the US coast, or planning to, are becoming acutely aware of the punitive sentences being meted out by the US courts for acts of pollution or perceived acts of pollution. The latter are those acts of pollution reported to have taken place in US waters, but where no hard evidence exists to support the allegations other than anonymous reports made to the USCG inspectors prior to vessel examinations. These are allegations, which are sometimes made anonymously by disgruntled crew members, or former employees.

It is these alleged acts of pollution, not supported by hard evidence, which can cause vessel operators to have to expend a great deal of time and effort assembling written records to provide the USCG and the US courts with evidence illustrating that an offence has not been committed. But, if that evidence, when presented to a court, is considered unsatisfactory and the court finds against the vessel operator the end result is the imposition of a probation order effective for between three and five years during which time the operator is subject to an environmental compliance policy that applies to all vessels owned and managed in the fleet.

Furthermore, senior sea staff may be sentenced to a term of imprisonment for the alleged offences and senior managers and superintendents may be arrested if they attend a vessel in US waters after an accusation of pollution has been made by the USCG. The total cost in fines imposed by the US courts in the last eight years was $140 mill.

Consider the requirements of Tanker Management Self Assessment (TMSA). This is the first initiative in self-assessment of which the underlying requirement is to be able to demonstrate that the stated level of operation is being achieved. This requires ship board records to illustrate that management systems and procedures are being followed and good practices are what people deliver as operational behaviour.

Underlying all of this is the matter of human behaviour. The issue under scrutiny is the ability to consistently demonstrate that the organisation, no matter who is in command from day-to-day, delivers a consistent implementation of best practice in any operational area. This is the reason legislators focus on records; they need evidence that can be relied on to show that the crew of a vessel consistently delivers the best practice possible.

An example of one of the many records and documents that must be maintained on a vessel is the oil record book for the engine room. MARPOL Annex I, Regulation 20 requires every oil tanker of 150 gt and above and all vessels of 400 gt, other than tankers, be provided with an oil record book, part I (machinery spaces). Hand written entries are made relating to the movement of oil, disposal of oil residues and discharge of bilge water within the machinery spaces. A typical entry will consist of the

Mike Newbury

date when an event took place, a code to show the type of discharge/movement and what action was taken such as bilge holding tank discharged to sea via oily water separator.

On board the majority of vessels, regardless of type, an extensive number of hand written records are maintained which, are then manually converted into an electronic format via a computer keyboard. The data or information recorded in electronic format, although accurate and valid for ship board use, may not be acceptable when presented in a court. The prime reason for this being that the information was not recorded 'at the time' and therefore it may not be considered a true record of events.

The implementation of simple to use hand-held digital storage and recording devices, which hold electronic templates of the various documents used for record keeping would provide a facility for on-the-spot storage of data. The 'docking' of such a device at a computer would automatically transfer the data to the various software packages thus alleviating the need for time consuming manual data entry and the records would be tamper proof; thus alleviating the problem of being fined for making alterations to an original record. Hence records are fact not fiction.

So, where do you find such tools? Datatrac Limited is one of the foremost providers of maritime digital data collection tools, capable of capturing engine room logs, bridge logs and ISM check lists. The data necessary to report on these is collected using a personal digital assistant (PDA) adapted to read electronic tags or, with an ePen and Smart Paper, capture handwriting, which is converted to a screen display, so 'What you write is what you see'.

The system replaces the need to manually key data into a computer, making keystrokes a redundant activity. Some examples of applications are the UK's Royal Fleet Auxiliary for the management/maintenance of hydraulic hoses - 90 hoses inspected and recorded in 60 minutes - an immense improvement on keying into a computer. Behaviour based safety adapted by Chevron and Northern Marine Management is managed by Datatrac. Using an ePen, all data is automatically captured; 68% reduction in lost time incidents over two years was achieved with this system, the company claimed.

This article was written by Mike Newbury of Ivor Lloyd Marine Consultancy and former fleet manager of Novoship (UK) and senior surveyor with Lloyd's Register's TID.