

INTERNATIONAL SAFETY PANEL
SAFETY BRIEFING PAMPHLET SERIES #14

**THE ROLE OF THE INDEPENDENT
MARINE SURVEYOR IN
ASSISTING CLAIMS HANDLING**

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THE ROLE OF THE INDEPENDENT MARINE SURVEYOR IN ASSISTING CLAIMS HANDLING

1. Introduction

- 1.1 What is a marine surveyor? - There is no simple answer; the term means different things to different people. Some surveyors count, others inspect, many gauge or measure and yet others deal with major casualties. A surveyor is usually somebody who has no direct connection with the incident who may be asked to represent one of the affected or involved parties.
- 1.2 Generally, surveyors will act on instructions and do whatever is asked of them, within their sphere of competence. At the time of appointing a surveyor, there may be very little information available regarding the nature and extent of the incident. The claims handler's instructions may, therefore, be very brief, if not non-existent. Surveyors are, amongst other things, their clients' eyes and ears on site. Therefore, it is very important that surveyors keep their clients fully informed of an incident as it unfolds, so that the original instructions can be reviewed and amended as required.
- 1.3 For the sake of simplicity, the term "Marine Surveyor" or "Surveyor" will be used in this booklet. This booklet deals with those surveyors and companies that operate, generally in private practice, without ties to a parent company or organisation and are in a position to accept instructions from any party on a first come – first served basis.
- 1.4 When carrying out a survey marine surveyors may be concerned at any one time with one or more of the following aspects: ships, ships' equipment, cargo, personal injury, pollution, navigation, safety of port and/or berth, port structures, etc.
- 1.5 The watchwords for any marine surveyor are **Nature, Cause and Extent.**

2 Definitions

2.1 Independent marine surveyor

- 2.1.1 It is not easy to define an independent Marine Surveyor because there is no industry standard meaning of the term. Some survey companies offer an independent service, whilst at the same time being themselves part of a larger organisation. For example, a number of shipping agencies (often themselves subsidiaries of larger companies) also operate or sponsor a survey company. Thus, because of commercial ties, the survey company may not be able to accept instruction from a particular client for fear of a "conflict of interest".
- 2.1.2 Surveyors offering "independent surveys" should not have any commercial interest in the events requiring scrutiny. This does not mean that the surveyor is an Independent. To be truly independent surveyors should be in a position to accept instructions from any party, subject to their confidence in receiving the payment for services rendered.
- 2.1.3 To operate as a marine surveyor requires no formal professional qualifications or standards. However, many marine surveyors are qualified master mariners or marine engineers. The Nautical Institute runs a correspondence course, primarily for seafarers wishing to come ashore as a

nautical surveyor, which helps applicants prepare themselves for entry into the business. The Nautical Institute “Code of Ethics for the Nautical Professions” embodies a set of principles to which all surveyors should follow.

- 2.1.4 No single surveyor can look to advise on all the types of incidents that may be encountered. Therefore, anyone looking to appoint an independent marine surveyor should ensure that his or her qualifications and experience are relevant to the incident in question. Surprisingly, prospective clients do not always do this.

2.2 **Bill of Lading**

A receipt for the goods issued to the shipper by the master, or an agent, on behalf of the carrier and which has three important functions:

- it is a document of title to the goods;
- it contains evidence of the terms of the contract of carriage;
- it contains evidence of the apparent order, condition, quantity or weight of the goods at time of shipment.

2.3 **Claims handling**

Claims handling is a phrase that covers a wide variety of roles, it can be defined broadly as being the process of initiation, investigation and verification of claims submitted by owners, charterers or cargo interests in connection with a maritime voyage. Only a few shipowners’ offices handle claims directly. Often claims brokers, adjusters, underwriters or Protection & Indemnity (P&I) Clubs carry out claims handling.

2.4 **Deductible**

The proportion of the insured value for which the insurer is not liable.

2.5 **Estoppel**

A rule of evidence whereby a person is precluded from denying the truth of a statement he has previously asserted.

2.6 **General average**

The cost of a sacrifice made, or expense incurred, when a ship and her cargo are threatened by a common danger. Where this sacrifice or expense succeeds in saving the ship and the cargo it is shared amongst the various parties that have an interest in the voyage.

2.7 **Indemnification**

In the context of P&I claims, the rule that claims must first be paid before the Club reimburses the member (pay to be paid).

2.8 **Mate’s receipt**

A receipt given and signed by the Chief Officer for goods actually received on board the ship and describing the apparent order and condition of the goods. This receipt can be the source of information used to assist in compiling a bill of lading.

2.9 **Running-down clause**

A clause in a contract whereby a hull underwriters' liability for collision claims is limited to three-quarters of the insured liability, subject to a maximum of three-quarters of the insured value of the ship.

2.10 **Terms of Entry**

The conditions and limits under which a P&I Club insure the ship owner for liabilities that arise out of the operation of the ship.

3 The Role of the Surveyor

- 3.1 The successful handling of a claim can depend upon rapid and appropriate response to the incident or casualty. Delay may well mean that preventive measures are not taken in time, and vital evidence is lost or contaminated.
- 3.2 A glance at the risks covered by P&I Clubs will show that a wide variety of skills and expertise is required in order to offer advice, and no single surveyor can possibly hope to advise claims handlers on all of these risks. Surveying may only be a part of the duties undertaken. Broadly speaking the surveyor will be guided by the watchwords, **nature – cause – extent** when dealing with any problem.
- 3.3 When surveyors are appointed to a job there are many “non-professional” factors that may affect their performance and output. The ability to be able to get to an incident unaided is important; visas may be required, travel arrangements must be made, and at the destination surveyors are often left to their own devices to reach the point at which the survey is to be conducted. Communication and language may be a problem, as might be the effects of local laws. In short, success is to a great extent a function of experience.
- 3.4 It is important for all surveyors and specialists to recognise the limits of their expertise, especially within the context of a particular incident. Typically, a marine surveyor may be called to a ship where there has been damage to an organic cargo. Sometimes the cause of the damage may be obvious, such as water ingress through leaking hatch covers, but often the cause of damage will not be apparent. In such cases it may be necessary to recommend to the Principal that specialist expertise be contracted. This may take the form of biochemists, metallurgists, mineral experts or specialists from other disciplines. The generalist and specialist must work together and each must be aware of their own limitations in order to ensure that the client is best served.
- 3.5 There is a long tradition amongst surveyors serving certain types of clients that they should be prepared to travel anywhere, often at short notice. Surveyors visit locations all over the world and rarely encounter serious difficulties in performing the task they are sent out to do.
- 3.6 One reason that United Kingdom based surveyors work world-wide is because London is a major arbitration centre. If arbitration ensues, it is then convenient if the surveyor is readily available to advise legal representatives firsthand on technical aspects during the preparation of a case, and if necessary appear as an expert witness at the arbitration.

- 3.7 A perennial question is whether local surveyors or somebody from elsewhere better serves the client. Realistically each case must be judged on its own merits. The person requiring the services of a surveyor should consider a number of factors before making a decision. These include:
- the nature of the problem;
 - the experience of local surveyors;
 - the integrity of local surveyors;
 - independence;
 - overall cost;
 - the politics of the incident;
 - where the claim will be dealt with.
- 3.8 It should be remembered that local surveyors might have as one of their considerations the need to “keep in” with local shipping interests. There can be no fixed rules as to when a surveyor from elsewhere should be sent to a particular location. The costs and benefits of using surveyors from outside the area should be carefully considered.
- 3.9 A survey should always be approached with no preconceived ideas or prejudices. Surveyors should avoid reaching conclusions before having investigated, analysed and evaluated all the available evidence. If there are insufficient facts available to form an opinion, the surveyor should not speculate. All facts or opinions expressed should be able to be substantiated.
- 3.10 Surveyors have to protect the interests of their client, whilst making an impartial assessment. A survey needs to establish all of the facts irrespective of whether or not they are in their client’s interest. If surveyors produce an unbalanced report, the claim handler will not be able to make a reasoned judgement. If marine surveyors are not to compromise their integrity, their work must be judged to be impartial and factually correct and any opinions and conclusions expressed must have been arrived at in a fair and balanced manner.

4 Survey Reports

- 4.1 On completion of the survey, a report has to be prepared. The claim handler needs the report to be accurate so that a complete assessment of liability can be undertaken.
- 4.2 When preparing a survey report, surveyors should bear in mind that it may be read by someone who has a different mother tongue, or that it may be read by someone who is not similarly qualified. The use of jargon and unusual technical terms is best avoided. If unusual technical terms have to be used they should be explained. Similarly, it should not be assumed that the reader would be familiar with any abbreviations used. Surveyors should also bear in mind that what might be obvious to someone who has undertaken a survey, may not be equally obvious to the reader of the report. Reports should be complete and clear so that they can be readily understood.
- 4.3 The use of photographs, as a means of illustrating points in support of the written report, can be extremely valuable. However, their value can be

reduced if they are included as part of the report without detailed explanation. This should be a short sentence placed immediately under the photograph. Well-captioned photographs with the important aspects identified can help to shorten the length of the written report by allowing the reader to see and appreciate what has happened.

- 4.4 A photographic record may not give a full picture as it may be limited by many factors, for example: the skills of the photographer, the available light; and safe access.
- 4.5 It has been said that “the camera cannot not lie” but, particularly with digital cameras, images can be edited and manipulated. Therefore, additional care is required when assessing photographs.

5 The Claim

- 5.1 The marine claims market relates to the ship owner, his ship and the need for the carriage of goods over water. When a ship is contracted to carry goods from one port to another there is an obligations upon that ship to deliver the goods at the destination in the same condition as when loaded. By international agreement there are a number of accepted perils that may be claimed by the carrier that may allow release from liability for the damage to goods in transit. These exceptions apart, the carrier is liable for any damage or short delivery that occurs whilst the goods are in his custody.
- 5.2 The condition of the goods when loaded should appear on the bill of lading. Bills of lading are negotiable documents that often pass to third parties, which may not have been involved in negotiating the original contract of carriage. Goods are sometimes sold during transit and the purchaser, who then becomes the holder of the bill of lading, relies on the terms contained in the bill of lading as evidence of their condition when shipped. When a “clean” bill of lading is issued the receiver has a right to expect an out-turn in accordance with the nature, quality and quantity described on the bill of lading. Unless a carrier can show an acceptable cause, he is prohibited from pleading that the goods were not as described in the bill of lading when loaded onto the ship. (Rule of E stoppel).
- 5.3 Estoppel is a device intended to ensure that the statement made concerning the nature and condition of the goods in the bill of lading cannot be varied later and therefore any liability for the difference lies with the carrier. In practice, ships’ masters rarely sign bills of lading but in many instances issue mate’s receipts. It is customary to authorise port agents to sign bills of lading “in accordance with mate’s receipt”. From the ship’s point of view it is important to ensure that the mate’s receipts properly reflect the condition and quantity of the cargo loaded and that the agent is properly informed.
- 5.4 Marine claims do not just relate to the carriage of cargo but, as can be seen from the summary of cover given by P&I clubs, they are wide ranging.

6 The Claims Process

- 6.1 When a receiver of cargo believes his goods have suffered damage as a result of the voyage, he submits a claim to the owners’, either directly or by way of agents. The owner should immediately inform his liability underwriters. In most instances the owner’s P&I Club will be involved. Depending upon the “terms of entry” and size of “deductible” the owner may

choose to handle the claim himself; or may submit the claim to the Club for further action.

- 6.2 Once the details of a claim have been submitted the claims executive dealing with the matter will initiate a response that will be in keeping with the size and type of claim. The first priority is to confirm the terms of entry for a particular owner, thus making sure he is covered for the claim in question. The next step is to verify the facts surrounding the claim. This may be quite simple and just require reading of documents. However, the process may be extremely complicated, requiring thorough investigation of the facts. The surveyor is likely to become involved at this stage. Having verified the information supplied, so far as possible, the claims handler will then determine liability. This may be a very straightforward process where common sense will prevail but where points of law may be at issue, it may prove necessary to dispute the claim either through arbitration or court action.
- 6.3 After receiving a survey report the claim handler will normally approach the claimant, either directly or through lawyers, with a view to reaching an acceptable solution. Negotiated settlements are preferred. The claims handler will, therefore, determine the quantity or value of any claim as a priority.
- 6.4 If a negotiated settlement cannot be reached the claims handler will need to consider the cost of pursuing an action for recovery from another party against the likelihood of successful recovery.
- 6.5 The cost of any action can easily escalate and, if not properly controlled, may exceed the cost of the damage for which recompense is sought.

7 The Role of P&I (Protection and Indemnity) Clubs

- 7.1 In order to understand the role of the marine surveyor, it is necessary to understand the role of P&I Clubs.
- 7.2 **Role and Constitution.**
- P&I Clubs are non-profit making associations of shipowners. An owner contributes money to a central 'pool' according to the number of gross tons of his ships covered by the Club. Claims are reimbursed from the central 'pool' of money. If at the end of a policy year there is money left in the 'pool', owners receive a refund. Alternatively, if claims exceed the amount of money in the 'pool', owners are asked to pay more to meet the costs. In practice most Clubs are not run by the shipowners, but are managed by private, or public, organisations that are paid a management fee. A Board of Directors, made up of senior executives from member shipping companies decides policy. The managing agents carry out policy implementation and routine claims handling.
- 7.3 **Risks Covered.**
- The various risks covered by each P&I Club are included in its Rule Book. These are amended from time to time, such changes usually originating from significant developments in laws affecting owners and their operations.

7.4 The risks covered may include:

- Personal injury to, or loss of life of, crew, passengers or stevedores.
- Crew repatriation expenses, other than on termination of contract or by mutual consent.
- Owners liabilities arising from illness of crew (statutory or by agreement).
- Diversion expenses incurred in landing stowaways, refugees, sick seamen, etc.
- Owners' collision liability; one fourth Running Down clause and others not recoverable under the hull policy.
- Owners' liability for shortage or damage to cargo carried in an entered ship.
- Loss of or damage to the personal effects of seamen and others.
- Shipwreck unemployment indemnity.
- Stowaways and refugees.
- Life salvage (salvage services performed in saving lives at sea).
- Loss of or damage to property.
- Liability under towage contracts.
- Wreck liabilities.
- Quarantine expenses.
- Cargo's proportion of general average, special charges or salvage which ordinarily an owner might be entitled to claim from cargo or other interests, but which is not legally recoverable solely as the result of a breach of the contract of affreightment.
- Fines.
- Inquiry expenses.
- "Omnibus" Rule (expenses incidental to ship owning).
- Pollution.

7.4 **Claims Handling.**

Under the Rules, an owner who is involved in a claim and seeks indemnity from his Club must inform the Club of the incident as soon as possible. The Club reserves the right to 'control' the claim and to appoint surveyors, lawyers and other experts as necessary.

7.6 In major incidents where local authorities may retain control of a casualty in their area, Clubs will try to maintain control over the resulting claims. Clubs endeavour to maintain close liaison with local authorities, and an authority may encourage a Club to become involved in the sort of incident which may be a 'once in a lifetime' event for the authority, but which may well be quite commonplace to the Club. The Clubs' experience and expertise in such events can save time and keep costs to a minimum.

7.7 Whilst a Club will generally assist wherever possible, its first duty is to its Members. Should money be spent unreasonably, the Club will take such

steps as may be required to protect their Members' position. In most claims, a Club will require an owner to settle a claim first, and then apply afterwards to the Club for reimbursement. However, in very large claims Clubs occasionally advance the funds to an owner, particularly when by not doing so could lead to financial embarrassment or other difficulties for the ship owners.

8 Specific involvement with Hazardous Substances and Dangerous Cargoes

- 8.1 Hazardous substances and dangerous cargoes have probably been carried on board ships for as long as there has been a shipping industry. However, the potential for such substances to cause major incidents and/or pollution has never been so high.
- 8.2 A marine surveying company's management has overall responsibility for the safety of its employees, particularly for those who go on board ships in situations where there is a threat from hazardous materials. Experienced surveyors should be aware of the potential dangers that they may face and be able to take appropriate steps to minimise any risk. Even so, in the past few years a number of experienced surveyors have died as a result of the effects of dangerous goods.
- 8.3 In this section we examine the surveyor's role when dealing with dangerous goods.

A Dangerous Goods

- 8.4 When considering dangerous cargoes we need to define what is meant. Many cargoes can be hazardous (e.g. logs can deplete the oxygen level in a ship's hold), without the cargo itself having dangerous properties. The IMDG Code classifies hazardous substances as those that can cause harm to individuals in the transport claim, property or the environment if allowed to escape from packaging or come into contact with an incompatible substance.
- 8.5 Practical considerations prohibit the listing of all dangerous goods by name in the International Maritime Dangerous Goods (IMDG) Code. There are some five million dangerous substances, materials and articles produced world-wide and some 50,000 are shipped commercially. Based upon the United Nations system for classification for transport, the IMDG Code uses more than 3,000 United Nations numbers for the purpose of identification, about 200 of which are for "generic" or "Not Otherwise Specified (N.O.S.)" substances, and these are the UN numbers most commonly used. For all dangerous goods shipped as "generic" or "N.O.S." the actual chemical name should also be given. Trade names must not be used as a means of identifying dangerous goods.
- 8.6 Surveyors become involved with dangerous goods in a number of ways. In a preventative role, clients often ask surveyors for advice on the handling, carriage or stowage of specific commodities. Experience gained in dealing with dangerous goods give surveyors an opportunity to advise clients of potential pitfalls. Safety of life is always a priority and any advice offered is based on that principle.
- 8.7 The surveyor's primary role is often in connection with an incident where something has gone wrong. If cargo has been dropped or damaged by

external contact the precautions required and likely remedy may be obvious. However, two of the most common causes of incidents involving dangerous goods are poor stowage and poor packaging.

- 8.8 Even commodities, which under normal transport conditions would be considered harmless, can become harmful under certain conditions. For example milk powder and wool after immersion in salt water in a ship's hold have been found to give off Hydrogen Sulphide. Bacteria generating Hydrogen Sulphide presented the principal hazard associated with the wool in this case. This toxic flammable, gas was produced by anaerobic Sulphur reducing bacteria present in the water. Wool contains Sulphur atoms and as the bacteria broke them down in the process of putrefaction, Hydrogen Sulphide was produced. The concentrations of the Hydrogen Sulphide in air around the hold, where containers immersed in salt water were being recovered, were found to be lethal. The mil powder, which was stowed in the same hold as the wool, was a nutrient source for anaerobic Sulphur reducing bacteria. Sulphur reducing bacteria capable of decomposing wool comprise various species but notably clostridia, which are a group of very unpleasant organisms associated with diseases such as botulism, tetanus and gas gangrene. The surveyors working the vicinity of the hold had to wear suitable protective clothing and breathing apparatus.

B Minor Incidents

- 8.9 Many incidents within cargo transport units (CTU's) involving dangerous goods are relatively minor: leaking drums, broken glass and such like. When such a problem is identified the offending CTU is moved to a designated remote area where specialists, often the local fire brigade, can conduct any decontamination or de-stuffing operation. The surveyor usually attends to monitor the action taken, check the stowage or simply to assess the loss.
- 8.10 Before attending the scene it is essential that the surveyor finds out as much as possible about the goods involved. This may involve referring to publication or contacting the manufacturers to ascertain the properties of the commodity. The essential priority is safety of life. Whilst the fire brigade, police, coastguard and other experts are trained and aware of the risks involved, many others working in or near the site are not. Their safety must be borne in mind at all times.
- 8.11 In most major ports it is usual to find a well-rehearsed contingency plan. However, there are still ports where emergency plans and response is lacking. In such locations it is usual for the local marine surveyor to be consulted. For example, in one port, a surveyor was asked what should be done with six containers found "smoking". The first and perhaps obvious answer was to stay upwind! Initially the contents were not known. It was necessary to research the units' background to determine what substances were in the containers. Advice was then given to remove the containers to a remote area in the port (actually at the end of the breakwater where the prevailing wind would take the fumes away from the port and locality). The boxes remained there for six weeks, three weeks for the fumes to cease, after which the doors were opened very carefully, followed by a further three weeks to allow full air circulation.

C Major Incidents

8.12 The role of a marine surveyor in dealing with dangerous goods in a major casualty is outlined in the following two cases:

8.12.1 The “ARIADNE”

The “ARIADNE” was a 24,000 MT-dead-weight general-purpose container ship on a voyage from Europe to East Africa with out 665 containers on board. In 1985 whilst manoeuvring in the port of Mogadishu, Somalia, the ship suffered a grounding and subsequently she became a constructive total loss. The ship grounded very close to the shore adjacent to a densely populated area. The foreshore was used by the local population for all manner of things, from laundry to lavatory! In the cargo there are some 62 different IMDG dangerous substances, including:

Description	Quantity	Weight (t)	IMDG Class	Hazard
Tetra Ethyl Lead	273 Drums	119	6	Toxic
Sodium Pentachlorophenate	250 Bags	7	6	Toxic
Trichloroethylene	42 Drums	14	6	Toxic
Malathion	20 Drums	5	6	Toxic
DDT	560 Bags	14	6	Toxic
Methyl Ethyl Ketone	62 Drums	11	3	Flammable
Isobutanol	32 Drums	6	3	Flammable
Acetone	37 Drums	7	3	Flammable
Dipentene	42 Drums	9	3	Flammable
Toluene	189 Drums	40	3	Flammable
Isopropyl Alcohol	273 Drums	13	3	Flammable
Hexane	800 Drums	115	3	Flammable
Xylene	188 Drums	22	3	Flammable
Paint	352 Drums	10	3	Flammable
Ethyl Alcohol	30 Drums	6	3	Flammable
Aerosols	9099 Cartons	94	2	Compressed Gas
Hydrogen Peroxide	269 Drums	18	5	Oxidising Agent
Hydrazine Hydrate	50	11	8	Corrosive

	Drums			
Caustic Soda	1440 Bags	36	8	Corrosive
Sodium Sulphide	299	49	8	Corrosive
	Drums			
Batteries	22	10	8	Corrosive
	Pallets			
Acetic Acid	285	10	8	Corrosive
	Drums			
Nitric Acid	238	10	8	Corrosive
	Drums			
Ferro Silicon	100	157	4	Dangerous when wet
	Pallets			

Quite naturally, the incident caused considerable concern, particularly as the ship started breaking up and drums were being washed ashore. The European Commission and the United States Coast Guard were asked to help, and they mobilised experts to assist and advise the Somali Government.

Marine surveyors were despatched from London soon after the casualty. Little was it realised at the outset that the job was to last for 9 months!

On arrival in Mogadishu the surveyors found a highly charged situation. Everybody was concerned about the potential threat to the city. Apart from having to deal with the political situation, the surveyors had to assess the ship's condition and advise on possible solutions.

The first priority was to establish precisely what was on board and its location. This proved surprisingly difficult, the ship was loaded on a general cargo "liner" voyage with hundreds of bills of lading. Apart from locating the dangerous goods, it was necessary to enlist expert assistance from various sources to examine the properties of individual substances and draw up contingency plans. Specialist chemists examined the individual chemicals, identified their properties and advised on precautions to be taken whilst handling them. The shippers of the Tetra Ethyl Lead sent out a team to advise on handling their product.

One of the greatest unknowns was what would happen if two incompatible substances mixed. A fire on board produced a cloud of noxious fumes that resulted in part of the town's population having to be evacuated.

All this preparation proved invaluable when, during discharge, a second chemical fire broke out in the vicinity of no. 5 hold. It was known there was a container in the vicinity that contained a substance that would give off Phosgene gas in a fire. whilst the surveyor on site dealt with their immediate task of controlling the fire fighting operation, the London team was quickly able to check the stowage of the offending container and advise that it was probably stowed below the water level. For a few hours there was considerable tension.

The very remoteness of the location meant that mobilisation time of salvage equipment was unusually prolonged. This in itself created problems, because there was a period of relative inactivity at the ship. Unavoidably this gave the mistaken impression to the authorities that nothing was being done.

Once the cargo removal started each container was carefully monitored; those with dangerous goods that remained intact were stored in the port area. Containers found to be damaged were placed on board a 20,000 ton barge, where the goods could be handled safely and any salvable material sorted for on-shipment. As can be imagined, the surveyor had his hands full and for about one month, two surveyors were required to cope with the workload.

Some hazardous substances were known to have leaked into the sea and an order was issued to remove any contaminated material from the seabed. At the same time it was necessary to get rid of some chemicals and pieces of ship. To do this, a disused hulk, which had been lying in Mombassa, was bought and towed to Mogadishu. It was then loaded with about 1000 tones of mud and scrap before being towed out and sunk over 200 miles offshore. The 20,000 ton barge was also used when it was necessary to dump non-salvable goods. The provisions of the London Dumping Convention were strictly adhered to.

The trickiest operation was the removal of the Tetra Ethyl Lead. The containers holding the drums of Tetra Ethyl Lead were stowed at the bottom of no. 5 hold, which had suffered most as the ship broke up. An enclosed reception area was constructed on the barge; damage to leading drums were then placed in this enclosure where a team wearing special protective clothing and breathing apparatus, examined and sorted the drums. Damaged drums were either decanted or placed in overpack salvage drums. The surveyor had to monitor the operation and account for any missing cargo. Divers had seen some free Tetra Ethyl Lead on the seabed but some six months after the removal, no trace of the Tetra Ethyl Lead could be found in seabed samples.

In the end all the cargo was removed and either dumped safely, sold as salvage or on-shipped. There were no injuries as a result of handling the goods and although a very costly operation, it was successful.

8.12.2 The "CASON"

In 1987 the "CASON" had loaded mixed general cargo in North Europe for China. The cargo included containers carrying Sodium, drums of Aniline oil and several other IMDG cargoes. During the early part of the voyage a Sodium fire started; efforts by the crew failed to control the fire. The weather was bad at the time and when the ship was abandoned, 23 crewmembers died.

The Spanish Government, faced with the potential of widespread chemical pollution and a very hostile local population, asked for assistance from the European Community strike team. As part of the team, marine surveyors attended the scene for over three months. Salvors were contracted to remove the oil and hazardous substances from the ship. However, for nearly eight weeks no work could take place at the ship, because of continuing bad weather.

That is not to say there was nothing to do! There were a large number of drums washed ashore on beaches to the North and South of the casualty. The local authorities had the task of removing the drums from the foreshore. A reception facility was set up on a barge moored nearby in Corcubion Bay. Drums recovered were taken out to the barge. One of the main problems at

that stage was to identify the contents. Many drums had been badly dented with markings removed. Once loaded onto the barge, the drums were hosed down in the reception area and, if damaged, then transferred into overpack salvage drums to await storage and eventual disposal.

Originally, at the ship, it had been hoped to use cranes to lift off the cargo. By the time the operation started, much of the ship had been destroyed and divers found it virtually impossible to work in the flooded holds. Spider grabs were tried with some success, but the problem remained one of access. In order to speed things up a decision was taken to use a 400 ton "wreck" grab to tear open the ship.

The main concern was the Aniline oil, which just happened to be in the most inaccessible hold – the deep tanks, with their limited access.

Again a reception facility was used, in this case the ballast tanks of the floating sheerlegs. All the drums were recovered and contents disposed of.

An unusual hazard was created during the operation – some of the other cargo, acrylic fibre, blocked the cooling water intakes of the attending craft causing serious difficulties to the operation.

The marine surveyor's role in this operation was one of liaison and monitoring. Sufficient chemical expertise was available within the strike team to allow detailed analysis to take place. The surveyor liaised with the various Spanish authorities, the salvage contractors and the European Commission in Brussels. The remoteness of the wreck site and bad weather proved to have more influence on the operation than the nature of the goods involved.

- 8.13 Marine surveyors come into close proximity with many hazardous substances during the course of their work. Incidents vary, from minor leakage to major contamination. Invariably the surveyor will work alongside specialists and rely on their advice, particularly with regard to safety of life. The surveyor's role can vary greatly, depending upon the interests he represents and, in a casualty situation, he is likely to come under considerable pressure. Often dealing with the hazardous goods is the easy part of the job!

9 CONCLUSION

- 9.1 Principals who have an interest in an incident involving damage to a ship and/or cargo instruct independent marine surveyors. Appointed surveyors should not have a commercial interest in the outcome of an incident, they should be independent and competent to deal with the problem under consideration.
- 9.2 Adequate instructions should be issued advising what is expected from a survey. Without prompting, surveyors can be expected to establish the nature, cause and extent of damage to property. Such information must be accurately reflected in a concisely written report that can be used by the claim handler to assess liability and financial exposure. A principal can expect a surveyor to protect his interest so far as circumstances allow but a survey report must not be misleading. Surveyors must always bear in mind that their reports may end up being scrutinised in court or arbitration proceedings; the presentation of misleading information will not serve clients' interests and will damage surveyors' credibility.