

The Role of the H & M Surveyor - how the benefits are determined

Upon appointment by H& M underwriters, the marine surveyor needs to immediately contact the casualty ship's agent, in order to determine the location where the damaged vessel is to be surveyed. He then arranges to board the vessel as soon as possible; in order to conduct the survey before any changes are made to that immediately following the casualty. Upon attendance onboard the insured vessel, the marine surveyor should see the master and make known his reason for attending on board. He will then examine the vessel's statutory and classification certificates and ascertain the circumstances leading up to the damage sustained by the vessel; obtaining copies of the log entries for the casualty, if this is possible. The survey of the damage is then conducted together with the appropriate officer, as directed by the master of the vessel.

I now list what the marine surveyor needs to do for the specific surveys of the 7 main casualties which usually result in claims against H&M underwriters.

Collisions

1. All the damage sustained in the collision incident needs to be recorded. Previous damage should also be recorded, as any repair to these items would be for shipowner's account.
2. Photographs of the damage should be taken to supplement the surveyor's description of the damage.
3. A 'without prejudice' survey should be carried out on the other vessel /s involved in the collision incident. Upon boarding the vessel/s, the marine surveyor must seek the permission of the Master/s to conduct the 'WP' survey/s. However, he should not try to obtain any information about the collision incident from the master/s or the ship officers. The 'WP' surveys should be carried out with the representatives of the particular vessel/s, who would indicate the particular damage arising from the collision incident. It is important to record the location and parameters of the damage, so that the surveyor would be in a position to verify the repairs and costs when the repair invoice is presented for his comment. This could be the only opportunity for the surveyor to sight the damage sustained by the other vessel/s involved in the collision incident. Thus the survey should be carefully carried out and photographs taken to appropriately supplement the damage surveyed. The marine surveyor should then follow- up with the repairs on the insured vessel; as recommended by the classification surveyor to reinstate her to pre-collision condition and determine the fair and reasonable cost to do so and comment whether drydocking is necessary to carry out the damage repairs; also the time taken, with a breakdown for drydock repairs and afloat repairs.
4. In some cases, the marine surveyor may be required to conduct a 'Speed & Angle of blow' survey, in order to assist the insured vessel's P& I Club and H&M Underwriters to establish the degree of liability of the vessels involved in the collision incident. This is for the purpose of settlement between the parties involved in the collision, after the vessel/s have been reinstated to operational condition.

Groundings

Groundings usually occur at remote locations and the marine surveyor should seek instructions from the H&M underwriters as to whether to attend at the grounding location or await the refloating of the vessel and transfer to the shipyard for repair. In some cases, the insured vessel's P&I Club would appoint a marine surveyor to oversee the refloating of the vessel; survey by the H&M surveyor at the grounding location is then not necessary. In some cases, it is in the H&M underwriters interests to instruct the marine surveyor to attend onboard the vessel at the grounding location; in order to ensure that the efforts to refloat the vessel are appropriate and following safe practices and that the refloating costs are being controlled. Not having a surveyor to oversee and safeguard the interests of all parties could be a disadvantage.

1. Upon attendance onboard the vessel, the surveyor needs to obtain as much information about the grounding incident and sight entries in the deck and engine room log books, as applicable; obtaining copies of the relevant pages, if it is possible
2. Upon drydocking of the vessel, a bottom survey should be carried out with the attending classification surveyor; to record all damage sustained in the grounding incident. Internal damage should be recorded by entering the tanks/compartments in way of the bottom damage, after the tanks/compartments have been certified as being safe for entry. The repair specifications, as recommended by the classification surveyor is then given to the repairers, specifying the measurements of the plating and internal structure to be cropped out and renewed. The positions of the grounding damage should be carefully recorded, especially if there is pre-grounding damage existing on the bottom hull and side hulls below the light waterline.
3. Photographs of the grounding damage should be taken both externally and internally, in order to supplement the surveyor's description of the grounding damage,.
4. After the grounding repairs have been completed and certified by the classification surveyor, the surveyor should review the repair invoice, in order to ascertain that the repair costs are fair and reasonable and consistent with the grounding damage. The surveyor should also be able to verify that the time spent by the vessel in drydock and lying afloat alongside the shipyard berth is consistent with the repair carried out to reinstate the vessel to pre-grounding condition. Any repairs to pre-grounding existing damage should be for shipowner's account.
5. Refloating damage which can be positively identified, should be recorded separately and the repair cost should be separated from the grounding damage repair cost.
6. During the final survey prior to the vessel being put back into operation, the H&M underwriters surveyor should verify with the classification surveyor that the vessel is free of any condition connected with the grounding incident and that the underwater hull and appendages have been reinstated to classed status. This is for the on-going H&M insurance coverage of the vessel.

Machinery & Equipment Damage

Machinery & Equipment damage surveys are the most complex of the H&M insurance surveys and require an experienced marine engineer surveyor, who is fully knowledgeable about machinery and equipment and their workings; as it is necessary to determine the cause of the damage that has been sustained in any one incident and the extent of the damage resulting thereby.

1. Upon attendance onboard the vessel, the surveyor needs to meet up with the chief engineer, in order to obtain information surrounding the machinery or equipment damage, before proceeding to inspect the damage and record what is visible. In most cases, it may be necessary to disassemble the machinery before the full extent of damage can be determined and several inspections may be necessary before the full scope of repairs is decided upon. At this stage, the classification surveyor should recommend the repair specification to meet classification requirements.
2. The engineer surveyor should conduct a careful inspection of the damaged components, in order to determine the cause of damage. Close up photographs of abrasion marks, wear marks, heat discolouration, melting and deformation should be taken and where necessary, accurate measurements of components made, in order to determine their actual condition prior to the damage incident. In some cases, samples of lubricating oil and/or coolant may have to be taken and sent for analysis. Sometimes, a fractured component may have to be inspected by a metallurgist, to determine the cause of failure. The attendance of a knowledgeable and experienced engineer surveyor is advantageous in achieving expeditious and satisfactory reinstatement of the vessel to fully operational condition.
3. Reinstatement of the machinery and/or equipment also requires close liaison with the owner's superintendent and classification surveyor; in order to ensure that there will be no recurrence of the damage incident. Careful inspection of the associated components should also be made and if they require replacement or repair, the owner's superintendent should be advised to take the necessary action.
4. When the repair invoice is issued, the surveyor should ensure that the charges are fair and reasonable and that the time taken to carry out the work is consistent with the damage sustained. The surveyor's verification and agreement of the reinstatement costs is an important factor in a claim process.

Fires

Fires onboard ships pose particular problems to surveyors, especially fires in machinery compartments, where seawater is used to extinguish the fire. The surveyor should be appointed as early as possible and should board the vessel as soon as it is safe to do so; in order to advise the owner's superintendent to commence cleaning and carrying out corrosion prevention of the machinery and equipment not directly affected by the fire, but by the seawater used in the fire extinguishing operations.

1. Upon attendance on-board the vessel, the surveyor should meet the master and officers to obtain a brief on the circumstances surrounding the fire occurrence and immediately inspect the fire affected section to determine what should be done as soon as possible to mitigate the damage. Photographs should be taken at this

juncture to record the aftermath of the fire and attention should be given as soon as possible to cleaning the seawater affected machinery and equipment and applying corrosion prevention chemicals to arrest the corrosion process. Failure to act quickly could result in the damage to components being aggravated to such extent that replacement may be necessary during the reinstatement of the vessel to pre-fire operational condition.

2. The cause of the fire, especially if it occurs in shipyard or in port should be determined; as H&M underwriters may be able to obtain recovery from other parties, if it can be positively proved that the fire was caused by them. Evidence depicting the cause of the fire should be carefully photographed for future reference. In some cases, fire experts could be called in to determine with some degree of certainty the cause of the fire.
3. Reinstatement of the vessel to pre-fire condition should be closely monitored by the surveyor; so that the approval of the fire repair accounts can be made by him when the vessel returns to operation.

Flooding of compartments

Flooding in machinery and equipment compartments, due to ingress of seawater through damaged or corroded hull plating or undetected leakage of sea water pipes can sometimes result in expensive repairs or replacements; especially with electrical equipment and cabling. Here again, in view of the corrosive nature of seawater, the corrosion prevention resources should be in place and ready for immediate use before the flooded compartment is de-watered.

1. The surveyor upon being briefed about the circumstances surrounding the flooding incident, should advise the owner's superintendent to obtain corrosion prevention facilities and put them in place before the compartment is de-watered. However, if the incident had occurred whilst the vessel was still at sea and the compartment had already been de-watered, then measures must be taken immediately to arrest any corrosion that has already taken place. Flooding has a devastating effect on the electrical systems and all electrical cabling, which has been submerged, although protected by conduits would require checking for insulation properties. Long lengths of cabling may sometimes have to be renewed, due to water seeping into the cable through the cable connections.
2. All affected machinery and equipment would then require careful checking and restoration to operational condition before they are tested; as incorrectly repaired and faulty components could have adverse consequences when the machinery and equipment are restarted after the repairs have been completed.
3. Photographs should be taken before dewatering of the compartment commences; in order to assist in the proper checking process before cleaning and reinstatement commences. In cases where the compartment has already been de-watered, watermarks could indicate the level of flooding in the compartment.
4. The surveyor would have to closely monitor the cleaning, corrosion prevention measures and reinstatement of the machinery and equipment to operating condition; with a view to approving the invoices for all the services rendered to reinstate the vessel to operational condition and to enable H&M underwriters to deal with the claim.

Heavy weather damage

Over the last 20 years or so, heavy weather damage claims against H&M underwriters have considerably lessened, as the significantly improved communications and navigation equipment installed on board oceangoing ships has enabled them to head away from a storm or take avoiding action by slowing down until the storm has passed.

1. The surveyor attending onboard a vessel which has sustained heavy weather damage, should sight the deck log entries, in order to determine the weather and sea conditions encountered by the vessel. The damage sustained during the period of heavy weather is then quickly inspected and photographed and discussion held with owner's superintendent, to decide on the list of repairs and supply of replacement parts/equipment that have to be carried out on an urgent basis; to enable the vessel to continue her voyage to destination port. Where repairs can be deferred to a convenient time, a separate list of the recommended repairs is made up, to be dealt with at a later date.
2. Prompt replacement of equipment/parts often calls for airfreighting them directly from manufacturers. When approving the reinstatement invoices, the surveyor should be able to comment on the increase in transportation costs brought about by the airfreighting all the equipment and parts from manufacturers; as this is done for the benefit of the vessel's owners and the extra cost should correctly be for their account.

Sinkings

I have left this to the last, as in most cases, where the vessel sinks in deep water and the cost of salvaging and reinstating her to pre-sinking condition exceeds the insured value of the vessel, underwriters would choose to appoint investigators with maritime and legal backgrounds; in order to determine the liability aspect without sighting the vessel. Where the owners choose to raise the vessel and reinstate her to operational condition, the surveyor should be appointed promptly and should be involved with the salvage operations, dewatering, cleaning, reinstatement of the machinery and equipment to operational condition and repair of the damage which had caused the sinking of the vessel.

1. The survey after the vessel is re-floated, cleaned and corrosion prevention measures carried out is a long process; comprising checking and replacing electrical cabling and equipment which is not economically repairable and thorough overhaul of all machinery and equipment. On completion of all reinstatement work, each item of machinery and equipment would have to be tested and made operational.
2. The salvage accounts, cleaning, corrosion prevention and reinstatement invoices should be scrutinised and approved by the surveyor to facilitate the claim settlement process.

In some cases, the salvage and reinstatement costs may well exceed the insured value of the vessel, but the owners of the vessel may choose this course of action because of the vessel is custom-built and they would have difficulty replacing the vessel quickly for their particular operation. In such cases, the vessel's owners would probably have to bear the additional costs.