

Salvors help keep ports clear and open

Mark Hoddinott, general manager, International Salvage Union (ISU)

Introduction

It should go without saying that shipping is the lifeblood of world trade. And while many economies face grave difficulties and the shipping sector struggles with over-capacity and poor rates, seaborne trade must, and does, continue. The infrastructure supporting shipping on approach to, and in, port is well established and well understood: the network of increasingly sophisticated – and ever larger – ports, the dominance of containerisation, pilotage, modern navigation systems, dredging and so on. But one vital sector is perhaps less well recognised. It is marine salvage.

The ISU is the global trade association representing the mutual interests of marine salvors. It has 60 members including the large international players, regional operators and small firms. Between them, members of the ISU conduct over 250 salvage operations each year and dozens of wreck removals. Over 75 percent of marine casualties occur in or around the approaches to port, and if not properly and rapidly dealt with, represent the potential to cause a major hazard to other vessels; port infrastructure and the serious economic consequences of interruption to normal flows of cargo and port operations. Even the loss of one berth for a comparatively short period can have a significant impact.

Debunking the myths

There are many myths about marine salvors, not least that they are treasure seekers hoping for the spoils from lost cargoes or that they prey on vessels in distress. Nothing could be further from the truth. The fundamental objectives of marine salvors are to save life and property, in that order, and while doing so to protect the environment. Indeed, marine salvors have a legal, as well as moral, obligation to prevent and minimise damage to the environment while undertaking salvage and wreck removal

operations. Marine salvage is a highly sophisticated industry which combines the highest standards of seamanship – often in very difficult conditions with, among others, the disciplines of naval architecture, complicated engineering, heavy lifting and pollution control.

It is an industry which operates within a formal legal framework governed by the 1989 IMO Salvage Convention and a sophisticated and long-established legal context using proven and trusted forms of contract. Salvors' work benefits seafarers, coastal states, shipowners and their insurers, both property and liability.

Some coastal states employ emergency towing vessels which are on standby to intervene in threatening situations but their coverage is far from universal and, in most cases, it is only the commercial salvors that stand between a casualty and a catastrophe.

Quick response vital

Rapid intervention in an emerging casualty situation is acknowledged to be the key to a successful salvage operation. One of the most commonly used salvage contracts is the Lloyd's Open Form (LOF). Its great benefit is that it allows for that rapid intervention. It is a simple pro-forma contract which enables the salvor to go to work on the casualty without having to negotiate the fees 'upfront'. It is based on the fundamental principle of salvage: 'no cure, no pay'. If the services provided are not successful there is no reward. If the job is successfully completed the salvor and the ship owner and insurers agree a fair rate for the job based, amongst other criteria, on the value of the ship and its cargo. If no agreement can be reached the contract allows for arbitration under a process managed by Lloyd's of London. It is a well regarded system that has been in operation for more than 100 years. The latest edition of LOF was published in 2011.

If a casualty is beyond economic recovery it may become



The Deneb salvage operation (courtesy of Svitzer Salvage).

the subject of a wreck removal operation. These are often conducted under Baltic and International Maritime Council (BIMCO) contracts such as Wreckfixed – a fixed price for the job; Wreckhire – a daily rate contract, and Wreckstage – staged payments according to progress. It is usually a matter for the owner and insurers to determine the wreck removal arrangements in close cooperation with the shore based authorities.

Salvors in action

There are numerous examples of cases where the work of marine salvors has helped to keep a port operational or quickly to bring it back into full service after an incident. In March 2007, for example, the car carrier, Repubblica di Genova, at 42,567 gross tonnes, slowly capsized at her berth at Antwerp. But it was not until August that an ISU member was able to parbuckle her: pull the vessel upright and begin the process of refloating and repair. Of course the affected berths were out of action for the entire period and the work of the salvor in removing the vessel was vital to the port's interests.

Another more recent episode was in late 2011 when the cellular container feeder vessel, Deneb, developed a list to starboard while moored alongside the APM Terminal at Algeciras, Spain. The casualty eventually settled on the seabed on her starboard side, partially blocking the quayside. An ISU member was again mobilized and decided to combine parbuckling with regaining buoyancy. Two 600 tonne shore based cranes were assembled on the quayside while preparatory work began on the vessel (see Figure 1). The first stage was removal of loose containers that had fallen to the seabed causing difficulties for the divers. Once cleared, the deck containers still connected to the ship underwater could be removed. Hold containers were

removed next, a challenge due to the attitude of the vessel. Pumping out the engine room and number one hold provided enough buoyancy and, with the assistance of the cranes, the vessel was re-floated and removed to bring the port back into full operation.

The challenges posed by nature

Natural disasters have been a regular cause of interruption to port operations. Recent major earthquakes in Chile and Haiti resulted in vessels sinking in port and causing significant disruption. In one of the more unusual operations, North and South American ISU members worked jointly to re-float the MV Laurel, a 26,800 deadweight tonnage bulk carrier, which had been in a dry dock at Talcahuano, Chile in February when the 8.8 magnitude earthquake struck. The quake generated two tsunamis which lifted the laurel up and out of the dock, thrusting it forward onto the pier bulkhead. The ship's engine and steering rooms, as well as its number five cargo hold, flooded. The salvors patched the hull; removed the vessel's propeller and debris which was lying in the bottom of the dry-dock hindering the refloating; discharged the remaining heavy fuel oil and shifted some ballast to obtain the correct trim. The team fabricated a custom built 17 tonne jacking plate on site and placed it under the bow, along with four, 14 meter rubber air bags to serve as jacks when inflated.

With several hundred tonnes of ground reaction on the bow, the Laurel's bow was lifted off the dry dock wall and the vessel was gently eased back into the water with the ISU members' powerful tugs. The Laurel, the dry dock and a 380 tonne caisson door, which was precariously positioned beneath the casualty's bow, suffered no damage. It was a great example of the ingenuity and determination of the salvor.



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Japan operation.

Japan disaster

Following the Japanese Tsunami of March 2011, Japanese ISU members undertook numerous port clearance operations ranging from a nine tonne fishing vessel to a cape-size bulker which was stranded in the port of Kashima – which involved discharging its 31,500 tonnes cargo of iron ore. A number of the casualties were driven far inland – some were several kilometers up river and the quantity of rubble precluded using land transportation. It was uneconomical and left owners no choice but to cut up these casualties in situ.

Japanese ISU members also salvaged many vessels that were within the reach and capabilities of sheerlegs and crane barges (see Figure 2). Some were a total loss but others were able to go back into service. One ISU member also used 300 tonne pullers to pull a bulker which was under construction from the land to the sea. Operations to remove oil from casualties were also extensive.

Protecting the environment

Indeed, pollution prevention is a key role of the salvor. Shore-based authorities increasingly have a ‘zero tolerance’ attitude to any pollution and a requirement of many operations is to safely remove all fuel oil before undertaking the salvage job. ISU collects data on the pollution prevention efforts by its members and each year an average of more than one million tonnes of potential pollutants are salvaged. Not all of that was at imminent risk of going into the sea but it gives a good indication of the potential risk that was averted.

The increasing size of casualties and the problems they may present to port operations is a growing concern for salvors. The next generation of container ships with 18,000 twenty-foot equivalent unit capacity present huge challenges. Recent highly visible container ship casualties like the MSC Napoli off the UK coast and the Rena offshore New Zealand, presented real difficulty and yet were comparatively small. Giant cruise ships are a concern, too. The ongoing work to remove the Costa Concordia will be the largest operation of its kind, for example. And the new Very Large Ore Carriers (VLOC) of 400,000 tonnes deadweight have already experienced issues: the Vale Beijing suffered structural damage while loading at Brazil. An ISU member had to intervene and tow the massive vessel away from the jetty and escort her to safety in order to keep the ore export terminal open.

Despite the challenges, salvors are ready to intervene at short notice regardless of the conditions, to save life and property, to prevent pollution and to play their part in keeping ports open and operational. They also keep commerce flowing, supporting economic growth and prosperity.

ABOUT THE AUTHOR



Mark Hoddinott

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British-born, Mark is a Master Mariner who commenced his seagoing career with P&O in 1967. He served on a variety of ships including passenger, container, oil tanker, bulk carrier, reefer, short-sea ferry and deep sea tugs, up to and including the rank of Master. In 1982 he joined the UK-based company, United Towing Limited, as Salvage Master and spent the next 10 years leading salvage operations on a worldwide basis. As a result of the acquisition by the Australian company, Howard Smith Industries, Mark progressed to Salvage Manager in 1992, and following the further acquisition by Adsteam Marine in 2001 he became a member of the UK senior management team with responsibilities for all business projects and salvage.

Mark also served as a Director of the Humberside Offshore Training Association from 1988 to 2007.

Mark served as Managing Director Europe for the American company Titan Salvage from 2007-2012 during which time he also led expansion of the company's activities in Singapore and Australia. He also represented Titan Salvage on the International Salvage Union's LOF Sub Committee and BIMCO Wreck Contracts Review Committee.

Earlier this year he left Titan Salvage to take up his current position as General Manager of the International Salvage Union based in London.

ABOUT THE ORGANISATION

The International Salvage Union (ISU) is an association representing the interests of around 60 marine salvage companies worldwide. In addition, the ISU has over 50 Affiliated and Associate Members including marine property and liability insurers, law firms, shipowners, shipmanagers and others.

One of the ISU's primary objectives is to promote a wider understanding of the salvage industry's contribution to environmental protection and saving of property. The ISU plays an active role in encouraging inter-industry debate concerning the issues influencing environmental and salvage services.

ENQUIRIES

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