

ERIKA

The At-Sea Response

by **Joesph G. Small**

Head of Response Operations
Brigs Marine Environmental Services Ltd.

As the crew of the tanker ERIKA (figure 1) sailed from Dunkerque for Livorno, little did anyone realise that her name was to become linked to the one of the worst pollution incidents that Northern Europe has experienced. The events that followed her departure remain under investigation but some details are already known about her and her voyage.

The tanker was built by the Kasado Shipyard Company in 1975 and at just under 200m long she was capable of carrying 36,000 tonnes of liquid cargo and was, by all accounts, a normal tanker going about her everyday business. On this, her last voyage, she had loaded 31,000 tonnes of a Number 2 heavy fuel oil, the residue of the crude oil fraction process. Speculation about her structural condition will not be answered for some time, however it is apparent that as the ship sailed into severe weather, not uncommon for the location or the time of year, there a catastrophic loss of strength leading to the vessel breaking in two. The crew of 26 were saved but some 11,000 tonnes of cargo were immediately lost.

The French Government were prepared for incidents such as this and for the last 20 years have stationed salvage tugs in key areas around their coast. One such tug, the ABEILLE FLANDRES, was on station, close to the scene when the incident started. Her salvage crew managed to connect a towline to the stern section and slowly made their way offshore trying to put as much distance as possible between them and the rocky shoreline. The bow section (figure 2) floated vertically for a number of hours before sinking in 120 metres of water. The stern section (figure 3) followed a few hours later and today lie some 8 miles apart slowly leaking the remaining 20,000 tonnes of cargo.

As these events unfolded staff at a pollution response company in Aberdeen, Scotland were going about their everyday activities, a number of minor incidents had been dealt with during the course of the weekend and their vessels and aircraft were on normal operational readiness. The high winds and poor weather had delayed one of their vessels from sailing to assist in the salvage recovery operations of the MOD aircraft of Torness power station and had delayed the arrival in Immingham of their vessel the BRITISH SHIELD.

The BRITISH SHIELD (figure 4) was the latest addition to the Briggs fleet and had been purchased in 1998 to replace the FORTH EXPLORER. Originally constructed as a chemical tanker she had been re-fitted with cranes, workboats, pumps and skimmers capable of handling both oil and chemical incidents. Her owners, Briggs Marine Environmental Services Ltd had used the experience gained in over 30 years of pollution response to create a unique counter-pollution vessel.

The salvors of the ERIKA quickly requested the assistance of Briggs in their operation, both to attempt a transfer operation from the still-floating aft section and to combat the pollution threat. While Joe Small, Head of Response Operations, flew to the incident centre in Brest and commenced working with the salvors and the French authorities, staff in Briggs stockpiles around the country commenced pulling together the emergency equipment they would need over the coming weeks.

Workboats, skimmers, pumps, heating coils, hoses, fenders and a myriad of equipment were loaded onboard the BRITISH SHIELD and secured for the heavy weather and an addition four crewmen were embarked, increasing the crew numbers to sixteen.

The BRITISH SHIELD sailed from Immingham into the teeth of a severe gale, pausing only to take onboard two French liaison officers in Brest she arrived over the wreck site on Sunday 19th December. She joined an international task force consisting of government vessels from France, the Netherlands, Germany and Spain, under the overall control of Admiral Yves Naquet-Radiguet. Tactical command of the fleet was exercised by his staff from the underground bunker in Brest Naval Headquarters. Surveillance reports from spotter aircraft and helicopters were relayed to the French frigate COMMANDANT LE PINODAN who in turn tasked each ship individually.

A number of recovery techniques and equipment were employed, some fared better than others and some poorer than others (figure 5). In general at-sea recovery operations are always limited by the weather, both wind, sea and swell and the type and amount of oil. This operation was no different, after a week in the water the oil had grown by a further 50% and an emulsion of oil and water created. The viscosity had rocketed and a product resembling sticky toothpaste had to be recovered. The oil was scattered over a large sea area in patches of 100 metres in diameter to small globules. This coupled with the 3 metre atlantic swell, winds of anywhere between Force 5 and Severe Gale Force 9, and driving rain showers all concentrated the minds of those responding.

An extract from the ships log for one of the days gives an indication of the conditions and operations experienced;

Sunday 19th Wind : North East 5 gusting 6 Sea : moderate Swell : 2.5 metres

0800hrs Daybreak. In position, ready to deploy.

0830hrs Orders received from On-Scene Commander (OSC) transiting to slick area.

0952hrs In slick position marker buoy deployed. Sea Devil skimmer deployed over port bow using port forward crane. Conditions and amount of oil unsuitable to deploy boom.

1200hrs Moving to second slick area. Slicks ranging from 15 metres by 30 metres and 60 metres by 20 metres.

1344hrs Discharge hose breaking loose, suspend operation, recover equipment, repair.

1435hrs Resume recovery operations.

1800hrs Nightfall, equipment recovered and hosed down.

1900hrs Crew stood down

2000hrs On location standing-by.

On Christmas eve with winds now reaching Storm Force 10 the at-sea recovery operation was halted and the vessels instructed to proceed to St Nazaire. The BRITISH SHIELD was tasked with the cleaning operation all the vessels involved in the incident. John Dipple, Head of Marine Operations, now moved to St Nazaire to take charge of the operation, which involved cleaning every vessels tanks, equipment, decks and hulls. The Dutch vessel ARCA was required to return to Dutch waters to be on stand-by for any millennium related incidents and as such was accorded the highest priority.

Cleaning took place throughout the holiday period and was finally completed on Monday 1^o January. Seven vessels had been cleaned and 1100 tonnes of oil and water had been re-delivered ashore.

This amounts to some 10% of the oil lost, the remaining being driven ashore onto the French coastline and requiring a complex and sustained operation by many hundreds of people, it equates favorably with other recent recovery operations.

But while the legacy of the ERIKA's initial lose is being addressed, attention is being focused on the remaining oil contained within the two sunken sections. ROV surveys of the wreck sites indicate that both sections are generally intact but are leaking and given that up to 20,000 tonnes may be onboard remains a severe pollution threat.

TOTALFINA as charterers of the vessel have pledged to recover the oil from the wreck and have commenced a feasibility study into the techniques available. Briggs, as a member of a four-strong consortium comprising of Les Abeilles International, Smit-Tak and Frank Mohn AS, remain keenly interested recovering the remains of the cargo from the wreck sites.



