**The Collision between Chinese bulk carrier FU SHAN HAI**
**and**
**Cypriot container vessel GDYNIA**
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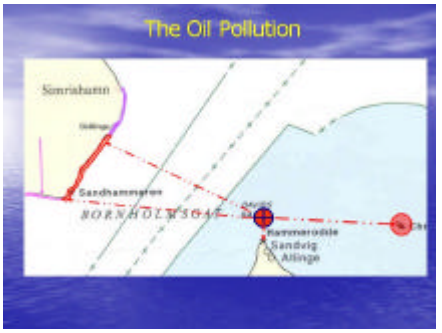
The Chinese bulk carrier FU SHAN HAI departed from Ventspils in Latvia on 30 May 2003 at 1620 hours local time on voyage to China.
FU SHAN HAI had loaded a cargo of 66.000 MT fertilizers in Ventspils. The draft of FU SHAN HAI at departure from Ventspils was 13.57 meters forward and 13.76 meters aft in water of density 1.0005.
The Cypriot container vessel GDYNIA departed from Gdynia in Poland on 30 may 2003 at 2325 hours local time on voyage to Hull in England. GDYNIA had been sailing between Gdynia and Hull since 14 April 2003. One roundtrip takes one week. The master had had three roundtrips on this route and second officer had had two roundtrips.




**The weather:**
Good visibility approximately 10 nm. Clear weather. Wind WSW 6 m/s.

**Ships Particulars:**

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|---|---|---|
| **Name of Ship:** | FU SHAN HAI | GDYNIA |
| **Home Port:** | Tianjin, China | Limassol, Cyprus |
| **Call sign:** | BOOE | P3SW8 |
| **IMO no.:** | 9056002 | 9213911 |
| **Type of ship:** | Bulk carrier | Container vessel |
| **Construction year:** | 1994 | 2000 |
| **Tonnage:** | 38.603 GT | 3.9930 GT |
| | 24.351 NT | 1.940 NT |
| | 69.973 deadweight | 5.183 deadweight |
| **Length/breadth/draft** | 225.00 m/ 32.20 m/ 13.60 m | 100.60 m/ 16.60 m/ 6.36 m |
| **Engine power:** | 8.466 Kw | 3.840 Kw |
| **Crew:** | 27 | 11 |

| | | |
|---|---|---|
| **Owner:** | COSCO Bulk Carrier Ltd.<br>China | Euroafrica Shipping Lines Co<br>Poland |
| **Classification Society :** | China Classification Society | Germanischer LIoyd<br>Class notation +100A5 |

**The Collision:**
FU SHAN HAI and GDYNNIA collided on Saturday 31 May at approximately 1218 hours approximately three nautical miles NNW of Hammer Odde on Bornholm, the water between Sweden and Denmark.

Nothing indicates that the collision was caused by technical defects in the navigational- or steering systems on board the two vessels. At the collision, the bow of GDYNIA hit FU SHAN HAI - at an angle of 110 – 120 degrees between the two vessels – on the port side with the consequence that FUU SHAN HAI got a comprehensive leakage.

After the collision soundings onboard confirms that there was damage to no. 1 and no. 2 port topside tanks, no.1 and no. 2 port double bottom tanks and hold no. 1 and 2. FU SHAN HAI stayed afloat but the bow kept sinking as the hours went by. After the collision, the master realised that the ship was in danger of sinking and transmitted a MAYDAY distress alert. The majority of the crew abandoned the vessel in port side lifeboat, while the master stayed on the bridge. Shortly after at 1330 hours, the master and the rest of the crew had abandoned the vessel in starboard side lifeboat.

The crewmembers were picked up and sailed to Bornholm by the Danish rescue vessel from Roenne, the pilot boat from Allinge and a Swedish rescue vessel, which all had arrived the collision together with other rescue vessels and rescue helicopters from Sweden and Denmark. The master, the chief officer and an engineer were transferred to the Danish inspection vessel HAVOERNEN so that they could assist at the subsequent work

At 2049 hours the same evening, FU SHAN HAI sank in position 5520,76N – 01445,27E at 68 meters water after the Swedish coast guard vessel KBV-048 had tried to tow FU SHAN HAI to a Place of Refuge appointed by HQ`s Admiral Danish Fleet.

The damage on GDYNIA was relatively limited. The stern of the vessel is strongly built and the hull has been designed such as to comply with the requirements for navigation in ice. The class notation “E1” correspond to ice class “IC” of the Finish / Swedish Ice Class Rules of 1985. GDYNIA tanks were found intact except for the forepeak tank. GDYNIA was damaged in the bow at the collision, but the vessel could by her own return to a shipyard in Gdynia in Poland for repair.

**The response operation:**
After FU SHAN HAI “MAYDAY” transmission the Danish response vessel METTE MILJOE with base in Copenhagen were alerted by HQ`s Admiral Danish Fleet and ordered to the collision position, which is Danish normal standard procedure when a collision and grounding take place inside the Danish EEZ. The Danish response vessel GUNNAR THORSON was alerted after the owner of FU SHAN HAI, COSCO Bulk Carrier CO. Ltd reported that the vessel was carrying 1.825 tons of oil products for her propulsion and machinery where 1.680 tons was reported as heavy fuel oil, situated in two topside tanks, two double bottom tanks and smaller tanks in the machine department together with 110 tons of light fuel oil and 35 tons lubricating oil. The two Danish response vessels departed Copenhagen at 1245 local time and arrived at the position at the 1 of June at 0300 hours.

800 meters of coastal booms situated at Bornholm were loaded on board two Danish Naval Home Guard cutters and placed around the wreck position of FU SHAN HAI in order to have any oil leakage from the wreck under control.

Sunday 1 June the wreck started to leak and a thin layer of oil started to reach the surface. Due to the fact that the oil was a thin layer around the wreck position, the oil was not recoverable. The oil became first recoverable in a distance of five nautical miles from the wreck position. Due to the actual current and wind direction the oil pollution started to drift to the Swedish coastline.

Monday 2 June the Danish response vessels GUNNAR SEIDENFADEN and MARIE MILJOE departed the Naval Base Korsoer for joining the response operation. At the same time a Command Station was established at the Police Station in Roenne, Bornholm in order to coordinate the response operation at shore and to cooperate with the response operation at sea. Due to the risk of pollution at Bornholm North- and the East coast together with the small islands – Chr. Island – and Ertholmene who all are appointed as Habitat and Ramsar Areas, it was decided to deploy 3.200 meters coastal booms to Bornholm from storage in Jutland and the Zeeland.

In the period of 1 – 5 June the wind direction became eastern and the oil pollution were drifting towards the Swedish coast. Due to an intensive and professional response operation with participating response vessels, 7 Swedish, 4 Danish and 2 German the pollution at the Swedish coastline became partly limited.

In the period 5 – 26 June the wind was mainly western and the oil pollution from the wreck were drifting towards the small islands east of Bornholm. Coastal booms were deployed and Ertholmene was covered by coastal booms. But due to an intensive and professional response operation at sea and at the coastline the damage to the coast at Bornholm and the small islands became limited.

The Danish response operation was terminated 26 June and the two Danish response vessels GUNNAR THORSON and MARIE MILJOE were released and the Command Station at Roenne Police Station was closed down.

## The submerged pumping operation:

In the period 12 June – 3 October Danish Salvage and Towing Company carried out a lightering operation from the wreck of FU SHAN HAI with use of following units:
Diving vessel CABLE ONE with ROLS and ROV, the crain SAMSON, towing vessel LOUISE DIVER and three oil barges
The Danish Salvage and Towing Company recovered 891 tons of heavy fuel from the wreck.

In the period 26 June – 23 September the Danish response vessels GUNNAR SEIDENFADEN and METTE MILJOE was stationed at Bornholm as standby response vessels during the lightering operation. From the period 23 September – 3 October the standby response vessels was reduced to only one METTE MILJOE.

**Participating response vessels, aircraft and organisations:**
**Sea**
Danish response vessels, 4 and 3 barges
Danish Naval Home Guard, 2 cutters
Danish Navigation and Hydrography Administration, 2 rescue boats
Swedish response vessels, 7 KBV
Germany response vessels, 2

**Air**
1 Danish Lynx helicopter
1 Danish aerial surveillance aircraft
1 Swedish aerial surveillance aircraft

**Land** (only Danish listed)
HQ`s Admiral Danish Fleet
Naval District Bornholm
Bornholm Emergency Management Agency
Danish Maritime Environment Agency
Roenne Police
Bornholm Municipality
Bornholm Fire Department
Bornholm Road Delivery Business

**Recovered Oil**

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| Danish response vessels | 248 tons |
| Swedish and German response vessels | 280 tons |
| Danish coast | 10 tons |
| Swedish coast | 78 tons |
| Lightering operation | 891 tons |
| | |
| Recovered in total | 1503 tons |

**Lessons Learned**

- Generally the operation in total is considered carried out satisfactory.
- Exchange of liason officer (Denmark and Sweden) is must in major accidents.
- There is a lack of emergency towing capacity in the Central Baltic.
- Helicopter situated close to the operation area is important and of great value