Stanislaw Dubois

Maritime Chemical Accident

1981, April 2

North Sea, off the Dutch island of Texel

Calcium carbide (Class 4) in drums; solid that produces the highly flammable gas **acetylene** on contact with water or moisture

Summary: In Gdynia/Gdansk, the Polish general cargo ship Stanislaw Dubois loaded 857 tons of calcium carbide in drums and 955 tons of caustic soda (solid sodium hydroxide) in bags. Then proceeding to Hamburg she loaded 5.4 tons of a flammable organic peroxide and 5.6 tons of an explosive. With this dangerous goods as well as other cargo she left for South East Asia, via Antwerp. On her way in the North Sea, she collided with the Sudanese ship Omdurman off the Dutch island of Texel. Stanislaw Dubois was struck in her port side creating a hole of 7 x 7 m, one meter above the bilge keel. The holds no. 2 and 3 became immediately flooded. The bulwark, hatch covers, main deck and mast house were also damaged. Tugs arrived and towed the ship towards Rotterdam with the intention to be repaired. The flooded hold contained 500 tons of calcium carbide and 400 tons of **cellulose**. The latter cargo had swollen up by the water. Thereby, it had pressed on the cargo of calcium carbide, which was contained in **drums** with removable heads. This caused drum heads to open and water could penetrate to the calcium carbide. As there was a risk of explosion, the ship was not allowed to enter neither any Dutch port, nor any other port in the EEC countries. On the other hand, the vessel's draught increased by the water flooding to 45 feet, which made it impossible to enter any port in Europe. After 7 days of negotiations, Dutch authorities ordered Stanislaw Dubois to be sunk. Salvage vessels kept her afloat through continuous pumping and lightered all her fuel oil. Finally, the Dutch Navy frigate Callenburgh escorted Stanislaw Dubois to a position 90 n.m. NW of the island of Texel. There she was sunk (scuttled) at a depth of 72 m on April 9, 1981.

Cause of Accident: Flooding of holds through a hole in the port side, which was created by a collision. The water penetrated to a cargo of calcium carbide, which caused an imminent risk of explosion. The water flooding of the ship, caused her draught to increase to such an extent that it was impossible for her to enter any port for repair.

Comments on Response: The drastic response option to sink the ship, was perhaps the only alternative in view of the low possibility to enter any harbour for repair.

Source of Information: Brief report prepared in 1991 by the Polish Ocean Lines, Gdynia, Poland.

(Abstracted April 1991 by Björn Looström, Swedish Coast Guard H.Q.)