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Kursk torpedoes were unsafe

Cheap torpedo solutions could have detonated Kursk.

Igor Kudrik, 2000.08.18 14:47

Nuclear powered submarine Kursk was refitted in 1998 at Sevmash shipyard in Severodvinsk to carry upgraded torpedoes. Representatives of the Russian Navy were against the torpedoes of new design but the industry managed to lobby the upgrade through.

Russian official military newspaper Krasnaya Zvezda, or Red Star, wrote Thursday that the new torpedoes were difficult to store and dangerous to handle. The reason why the Navy was forced to accept it was that the production of **the new torpedoes was cheaper**.

The older type torpedoes Oscar-II was equipped with used batteries containing silver for propulsion system. The torpedoes were launched from the submarine using high-pressure air.

The propulsion of the new torpedoes used liquid fuel. The torpedoes were launched with a help of a trigger that produces gas shooting the torpedo out. The use of liquid fuel for propulsion of missiles was abandoned in 80-s and replaced with solid fuel. One of the reasons was the fact the liquid fuel was too explosive.

Oscar-II cruise missile nuclear powered submarine, Kursk, sank on August 12 in the Barents Sea off the eastern of the Kola Peninsula. Kursk is equipped with two PWR reactors. The submarine can carry 24 nuclear tipped cruise missiles, 6 torpedo tubes in the bow part, total 24 weapons including tube-launched missiles.

Explosion scenario

When presenting its first scenario of the accident, Bellona experts excluded the possibility of torpedo explosion, believing that a navigation error made the submarine hit the ground and triggered explosion in the high-pressure air tanks, placed between the inner and outer hulls of the submarine.

With the new data regarding torpedoes available, Bellona experts can conclude that explosion of torpedoes in the torpedo section of the submarine is very well possible either during launch of a torpedo or when the submarine hit seabed as a result of navigation error.

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The latest information from Norwegian seismological station Norsar, says that at the moment of the accident two explosions were detected. The most powerful explosion documented at 07.30.42 GMT had the strength of 3,5 on Richter's scale, corresponding to 1-2 tons of TNT detonated underwater. The first explosion was less powerful and equalled 100 kilos TNT. The period between these two explosions was 2 minutes and 15 seconds.

The explosions of such power could very well be a detonation of torpedoes. **The collision could not have resulted in such a powerful explosion should the Kursk have had torpedoes with safe propultion.**

The damage resulting from the detonation could lead to an immediate flooding of four first compartments of the submarine – the information confirmed by the Russian Navy officials - leading to a death of 2/3 of the 118 crewmembers on board.

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