<u>The "Jewish Quartet" against the German Torpedo</u> Victor Magder * (translated to English by Bella Friedland)



The torpedo

At the end of 1943, a large number of Allied ships from the ports of England and Iceland sank due to attacks by German submarines. These were the ships from the supply convoys, going to the Soviet Union as part of the "lend lease" agreement.

In most cases, the torpedo missiles exploded not on the sides of the ships, as it happened before, but in the area of the propeller. Experts immediately realized that the Germans had a torpedo of a new type, which in some way was attracted to the working propellers of the ships. Efforts of the intelligence and hard work of the "torpedo catchers" of Soviet and Allied navies didn't yield results. They only managed to find out the code name of the torpedo - "T-5".



Delivery convoy routes according to the "lend lease" agreement

In January 1944, the first success came. The Soviet Navy submarine hunters sank a German submarine in The Gulf of Finland in the Baltic Sea.



Map of defense of the Gulf of Finland of the Baltic Sea from 1917

Since the damaged submarine sank to the bottom of a shallow sea, not far from the Baltic Sea naval base in the city of Kronstadt, it was decided to lift the submarine out of the water and tow it to the main port of the Soviet Navy in the Baltic Sea.





A view of the Baltic naval base in the city of Kronstadt

Upon arrival of the submarine at the farthest pier in the port of Kronstadt, torpedo experts started their research. They opened the torpedo cell and entered it, stepping over the bodies of German divers. The experts found two identical torpedo missiles of an unknown type.



Removing the bodies of German divers from the submarine.

Very carefully they transferred the torpedoes to the naval mine range on the island of Kotlin. There a group of senior Baltic Navy technicians tried to dismantle one of the missiles. The experts failed to open the torpedo. Four officers got killed in a huge explosion of 75 kilograms of tetryl, that was inside the torpedo. In the meantime, the allies learned about the torpedoes and turned to senior Soviet officials for information.

Due to the international importance of the need to understand the secrets of the torpedo missile, a special group of professional and prominent experts under the command of the Soviet Navy was quickly established.

They were: Engineer-Captain Valery Shachnovich, Polkovnik Osip Borisovich Bron, and Engineer-Captain Vladimir Mikhailovich Saulsky. All three were of Jewish origin.



A man, who did not belong to the navy, was chosen to be the head of the group.



Mikhail Borisovich Rosenstein

Mikhail Borisovich Rosenstein, director of a torpedo missiles factory located in Alma Ata, Kazakhstan, got full recognition from the professionals as the person, who can lead the complex operation of dismantling the torpedo and revealing its secrets. Rosenstein was Jewish, he had been developing and improving torpedo weapons for more than 8 years, functioning both as a factory director and as a key developer. The torpedo missile by the code, name "53-38", developed by him, was very popular among submarine commanders. The Soviets called it "Mishka's cigar," while Rosenstein himself earned the nickname "God of the Torpedo".

It was clear to the team of experts, that the torpedo had a complex system preventing its dismantling. Many scenarios were checked to find out the reason of the explosion of the torpedo during its examination: a strong impact, vibration, high pitched sound and even a strong bright light projection. Experts could not tell, why the technicians were killed in the explosion of the first torpedo, but Rosenstein's intuition and the team partners' vast experience helped solve the mystery. The torpedo exploded from exposure to strong light due to the use of photodiode light detectors. They set up a dark tent in the range and moved the torpedo there at night. There they worked with the faint light of oil lamps.

After the disassembly was completed, it turned out, that the assumption was correct, they found both a light detector and light carriers controlling the torpedo. Subsequently, the "Jewish Quartet" (as the group was nicknamed in the Navy Torpedo Command) succeeded. They discovered the main secret to the success of the German torpedo. Inside the torpedo they found a complex electromagnetic thunderbolt, activated with the help of an independent self-navigation system, responding to the noise of a ship's working propeller. It was the first time in naval history that this type of torpedo was used.

Later it turned out that the code name of this torpedo missile actually was T-5, and the name of the independent navigating system was "Amzel". This case proved once again, that the German inventors and developers in the field of naval mines, torpedoes and navigation systems surpassed the Soviet and the Allies' experts. German engineers were more advanced not only in this field, they were more advanced in developing ballistic missiles, cruise missiles, jets, and also special air intakes, which allowed German submarines to fill batteries without getting above the water's surface.

The information, revealed by Rosenstein's team, was also passed on to the allies, whose convoys suffered severe damage from the Germans' new torpedo missiles.

The description of the "Amzel" system was urgently transferred to London, and the internal system of the

T-5 Torpedo was presented to English experts, who arrived in Leningrad, so that they could design a system of counter-action against the German invention, in parallel with the similar activity in the Soviet Navy.

Mikhail Borisovich Rosenstein did not return to his previous job at Alma-Ata, Kazakhstan. He received the rank of Major and was appointed to a new position, founded especially for him, in the Mining and Torpedo Administration. He became a Senior Specialist on self-navigating Torpedo Missiles. Rosenstein worked around the clock, and after less than two months introduced the blueprints of a new device, which was able to turn the acoustic torpedo away from the runway of the ship, and blow it up with the help of electromagnetic impulses. Rosenstein's device, similar to those developed later in England, the United States, and Canada was the first of its kind.

When the allies learned of Rosenstein's success, they immediately asked the Soviet leadership for the blueprints and models of his new device.

Previously, the Soviet leadership never shared such information, or original technologies, especially in the

military field. In this case, however, it was the fate of convoys at stake.

The convoys were carrying weapons and ammunition, cars and planes, food and military uniforms to the Soviet ports of Murmansk and Vladivostok. These ships suffered the most from the German submarines armed with acoustic torpedo missiles, and therefore, Stalin shared the information with the Allied forces.

Rosenstein took an active part in a technical intelligence research of German engineering achievements in the field of naval mines and torpedoes. One day there came reliable information that the Germans, in addition to "Amzel", developed a vertical self-navigation system, which made their torpedo weapon effective not only against ships, but also against the Allies' submarines while moving underwater.

In the last year of the war there were many cases of fatal torpedo attacks against the submarines, and the losses registered for them increased significantly. Rosenstein believed, that the Germans were using this new type of torpedoes. He asked the superiors in the navy to send him to the front, and went out there with two headquarters officers. They advanced behind the front units of troops, and arrived in Vienna, the capital of Austria, when shells were still exploding in the streets of the city. According to the soviet intelligence, there in Vienna Minerva Radio company ran a factory producing the "Amzel" system. The plant was still being bombed, when Rosenstein and his officers found the underground bunker with the research laboratory. Rosenstein group forced the stunned German engineers to hand over all the documents for the "Gair" system – the torpedo vertical navigating system T-5.

When Rosenstein brought the documents of "Gair" system to the general headquarters, they were highly classified. The Allies did not receive any information, although the war continued for more than three months, and the Japanese navy had T-5 torpedo missiles in their arsenal.

After the war, Colonel Rosenstein remained the head of the Section for the Research and Development of Mines and Torpedoes, the leading section in the marine torpedo department. The ideas for new developments came mostly from Rosenstein. He was the only one in a green uniform of the land force among the officers of the navy wearing the black one. His superiors were in no hurry to grant "this Jew" the rank of a Navy Officer. More than that, although according to the procedure, the person at the head of a central section had to be ranked as Admiral (General in the Army), Rosenstein didn't get this rank.

The officer who replaced Rosenstein, after his retirement, received the rank immediately after his appointment to the position...

It is difficult to say today, how many ships, sailors and goods arrived safely at their destination due to Rosenstein's system. But the high decorations of the Allies that he received, including the title of Knight awarded by the King of England, prove that Rosenstein's involvement played a crucial role in the Allied victory in WWII!



Decoration of the Knight of the British Empire

*Based on the Russian-language article by Mark Steinberg