Warship Developments:

What Happened to RFS Moskva?

Doug Thomas

In my last column I mentioned the loss of *Alligator*-class Landing Ship Tank (LST) *Orsk* from the Russian Black Sea Fleet. At the time of my previous column, there was doubt as to the cause (it was also unknown how Ukraine would fare if it had attacked a Russian surface combatant), but it is now generally agreed that it was due to an attack by Ukrainian forces.

It is now known outside Russia that Russian Federation Ship (RFS) Moskva, the Black Sea Fleet guided-missile cruiser and flagship, was hit by two Ukrainian sea-skimming R-360 Neptune anti-ship missiles late on 13 April. They were fired from a mobile launcher on the shore near Odessa, about 65 nautical miles from Moskva's position. The official Russian explanation was the kind of disinformation that we have become used to in recent months. Russian sources have rarely indicated that Ukrainian forces were responsible. The official Russian version is that it was an accident and that casualties were minimal. Russian sources claim that "a fire of unknown origin detonated the ship's stored ammunition and the resulting explosions left the Moskva with structural damage.... [T]he warship then sank amid rough seas as it was being towed to a nearby port."1

This large and impressive missile cruiser, the first of a class of three such ships, was 40 years old, and overdue for a major refit to update its weapons and sensors to deal with the modern anti-ship sea-skimming missile threat. To complicate matters for Russia, apparently there were many young conscripts among the ship's complement of about 500. Their ability to contribute to the fighting effectiveness and damage control readiness of the ship would have been limited. Russian authorities state that there was only one confirmed fatality and 27 missing sailors, however actual losses are rumoured to be in the order of 50 per cent.² It appears that *Moskva* was a 'paper tiger' – impressive to look at but well-beyond her best-before date!

Shortly after *Moskva* was sunk, a number of retired Indian naval officers commented on the loss. The Indian Navy has had a close relationship with the Soviet/Russian Navy for many years, and has purchased an aircraft carrier, destroyers, frigates and submarines from Russia as well as equipping indigenously-built warships with Russian weapons and electronics. Many individuals had also served in Russian ships while undergoing training, and attended command and technical training courses in that country. One of the commentators toured through *Moskva* during a 2010 port visit to Kochi, India. He noted



A Ukrainian Neptune antiship cruise missile is test fired at an undisclosed location in this April 2019 photo.

that even then the equipment was badly outdated, and that there was very little fire-fighting or damage control equipment in evidence.³

According to these commentators, *Moskva* may have been a potent naval platform until about 10 years ago, but in 2022 it was unfit for modern naval warfare. The ship was designed to counter threats to Soviet vessels or aircraft from US Navy or NATO naval forces during the Cold War, and was considered among the best of its type at that time. Unfortunately, time does not stand still.

From this incident we can state that there are a number of elements that go into successfully surviving an attack by sea-skimming missiles:

- Intelligence. Is there a threat? Apparently, the Russians did not believe that Ukraine had operational R-360 Neptune missiles. It is understood that this was its first firing from a land-based mobile launcher.
- Defence in depth. Moskva was the best-equipped Anti-Air Warfare Ship in the Black Sea, with a long-range missile capability designed to counter manned aircraft or large missiles. The ship had been employed up to this time in taking possession of Snake Island, firing large SS-N-12 missiles at land targets in Ukraine and conducting radar



The Russian Slava-class cruiser RFS Moskva is seen in this 2009 photo in Sevastopol.

surveillance of the skies over the conflict area between Odessa and the Crimean Peninsula. On paper, *Moskva* had excellent self-defence capabilities however they went unused. Western intelligence reports determined that there were no countermeasures employed against these sea-skimming missiles – no missile firings from the ship's areaair or point-defence missiles, no jamming of missile homing radar, no chaff fired to confuse the incoming missiles, and no engagement of missiles with the ship's many ADMG-630 rapid-fire



A close-up of the long-range SA-N-6 surface-to-air missile cells on RFS **Varyag**, sister ship to **Moskva**, during a port visit to Vancouver, BC, in November 2012. The seeming failure of **Moskva** to employ any of its anti-air defence systems throws into question the efficacy of the defence suites of other Russian warships.

- guns (analogous to the Western Vulcan-Phalanx systems). It would appear that the Neptunes were never detected, or, even worse, all of the systems were unserviceable or unmanned!
- Training in anti-ship missile defence. A modern warship's primary threat, especially in coastal operations such as in the Black Sea, is from anti-ship missiles. There was no excuse for not knowing that the R-360 missile might be used and conducting training to counter it. It was inexcusable to do nothing to counter the attack. It appears that incompetence and lack of training led to the loss of this fine ship and likely hundreds of lives.

Conclusions

What can we learn from the sinking of *Moskva*? Even if we ignore the source of the fire (i.e., whether it was an accident or a missile strike), there were problems with fire-fighting/damage control on the ship and, if the Russian government account is true, the ship clearly had problems with ammunition storage – i.e., ammunition that is safely stored on a ship will not spontaneously explode. This reflects badly on the professionalism of the Russian Navy.

This incident is somewhat reminiscent of the loss of the Argentine cruiser *General Belgrano* in 1982 during the Falklands War. This impressive-looking gun-armed cruiser, a veteran of the US Pacific Fleet in World War II, was over 40 years old and also had many young trainees embarked. It was unable to withstand anti-ship torpedoes fired from a modern British nuclear-powered submarine. It may have been a good basic training platform for the Argentine Navy, but it was no longer an effective warship. This may have also been the case with *Moskva*.

Notes

- As cited by Brad Lendon, "Moskva Sinking: What Really Happened to the Pride of Russia's Fleet?" CNN, 15 April 2022.
- Tayfun Ozberk, "Analysis: Chain of Negligence Caused the Loss of the Moskva Cruiser," Naval News, 17 April 2022.
- "Indian Naval Officers Reveal Truth about the Loss of Moskva," The Indo-Canadian Voice, 17 April 2022.