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# RSIS COMMENTARIES

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No. 85/2011 dated 24 May 2011

## **Indonesia's Anti-ship Missiles: New Development in Naval Capabilities**

By Koh Swee Lean Collin

### **Synopsis**

*The recent Indonesian Navy test-launch of the supersonic Yakhont anti-ship missile marked yet another naval capability breakthrough in Southeast Asia. The Yakhont missile could potentially intensify the ongoing regional naval arms competition.*

### **Commentary**

ON 20 APRIL 2011, the Indonesian Navy (Tentera Nasional Indonesia – Angkatan Laut or TNI-AL) frigate KRI Oswald Siahaan test-fired a Russian-made Yakhont supersonic anti-ship missile during a naval exercise in the Indian Ocean. According to TNI-AL, the missile took about six minutes to travel 250 kilometres to score a direct hit on the target. This test-launch marks yet another significant capability breakthrough amongst Southeast Asian navies. It comes against the backdrop of unresolved maritime disputes and ongoing regional naval arms competition.

### **A destabilising naval weapon?**

According to David Mussington and John Sislin in a Jane's Intelligence Review report in 1995, weapons which could be considered destabilising in nature possess all or some of the following six characteristics: result in decreased warning time; give one country 'breakthrough capabilities'; lead to a broadening of target sets; permit no effective countermeasures; give one side better information concerning another's military preparations; and create hostility. Based on some of these criteria, the Yakhont could be deemed destabilising for the following reasons.

Firstly, the Yakhont could travel at sea-skimming altitude (5-15 metres above surface) at 2.5 times the speed of sound thus reducing warning time for the target vessel, especially those ill-equipped for long-range early warning. It is true that Southeast Asian navies are increasingly better equipped with modern sensors to provide early warning of an impending missile launch and for tracking subsonic sea-skimming missiles. Yet the Yakhont's unique flight profile could imply that even more sophisticated detection capabilities have to be acquired by regional navies.

Secondly, even though Vietnam had reportedly inducted the Yakhont into service, it exists in the land-based 'Bastion' coastal-defence variant and thus strictly defensive. However, when mounted onto a warship which is essentially a highly-mobile platform, the Yakhont's range could be extended beyond the defensive perimeters of one's coastal confines. Prior to the introduction of the ship-launched Yakhont, anti-ship missiles – such as the

Western-made Exocet and Harpoon as well as Russian-built Styx and Switchblade – carried aboard Southeast Asian warships are characterised by subsonic speeds and possess ranges not more than 200 kilometres at most.

By contrast, the Yakhont has a maximum range of 300 kilometres when flying at high altitude, and maximum speed of Mach 2.5. The only non-Southeast Asian countries in the wider Western-Pacific with equivalent capabilities are China whose Russian-built Sovremennyy destroyers are armed with the Sunburn missile, and Taiwan which has recently deployed the Hsiung Feng III aboard its warships..

Thirdly, the Yakhont's flight profile also permits no effective countermeasures for most Southeast Asian navies. Only the navies of Malaysia, Singapore and Thailand possess modern shipboard anti-missile missile (AMM) capabilities. Malaysia possesses two frigates armed with the Seawolf AMM and four corvettes with the Aspide, while Singapore has six frigates armed with the Aster AMM and six corvettes with the Barak-1. Thailand has two frigates equipped with the Sea Sparrow system and two corvettes with the Aspide.

The other Southeast Asian navies are deemed poorly-equipped for air defences. Most surface warships in the region are armed with only guns and surface-to-air missiles effective only against slower-moving targets at short range but not high-performance aircraft and missiles.

### **What next for Southeast Asia?**

The entry of TNI-AL's Yakhont missile came after the recent regional submarine scramble, and introduction of breakthrough capabilities. The Malaysians introduced the first underwater-launched anti-ship missile aboard its new Scorpene submarines while Singapore inducted a pair of ex-Swedish Vastergotland boats with air-independent propulsion for prolonged submerged endurance. In any case, these acquisitions arguably sparked off reciprocal responses from other Southeast Asian navies.

The Yakhont, with its superior capabilities over existing anti-ship missiles arming Southeast Asian surface warships, represented yet another regional naval breakthrough which could not be ignored. This is especially so when no regional navies are adequately equipped against such weaponry if a naval skirmish ever breaks out in the volatile region plagued with longstanding interstate maritime disputes. The Indonesian-Malaysian naval standoff in the disputed Ambalat region in 2009 highlighted the danger of such eventualities.

Possible reactions from neighbouring Southeast Asian navies towards the Yakhont could take certain forms, especially now that regional countries are recovering from the global economic recession and reinstating their naval modernisation programmes. One, it could spark off the acquisition of equivalent capabilities, which might not be that difficult in today's global arms market. While the current anti-ship missile market is still dominated by subsonic systems, a few supersonic examples do exist for sale, such as the Russian Klub-series or Sunburn, and the Indian-Russian BrahMos. India reportedly earlier on shelved the export of BrahMos (based on the Yakhont) to Indonesia out of security concerns but Jakarta managed to circumvent this by directly procuring the Russian 'originals'.

A second reaction is the acquisition of capabilities, such as the Barak, Seawolf and Aster AMM systems, to neutralise such supersonic threats. Acquiring such countermeasures might be considered less provocative since these are essentially defensive. A third reaction is that better-endowed navies might acquire both equivalent anti-ship armaments and AMM systems as a safety measure.

### **Mitigating the 'Yakhont Effect'**

Whichever form it takes, the action-reaction process that could stem from the Yakhont missile would add onto the current intensity of regional naval arms competition. The Yakhont could potentially upset the Southeast Asian naval balance of power even though the Indonesians had reportedly acquired only a small consignment of this missile for limited deployment aboard TNI-AL's frigates.

The region may need to institute naval confidence-building measures such as mechanisms to prevent or mitigate naval incidents. But perhaps it is time for Southeast Asian countries to think about naval arms control to enhance transparency and help ensure that naval arms acquisitions in the region do not spiral out of control.

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