



NEWS RELEASE

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Fact Sheet: RSN's Archer-Class Submarines

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The Archer-class submarines (ex-Royal Swedish Navy's Vaastergotland-class submarines) were designed and built by the Swedish company, Kockums AB, as single-hull, double compartment submarines optimised to reduce noise and magnetic signature. The two pressure-tight compartments also enhance safety and survivability of the crew.

The submarines were designed to operate in the shallow waters of the Baltic Sea and are therefore also optimised for operation in Singapore waters, which have similar depth profiles. Working closely with the Defence Science & Technology Agency (DSTA), the RSN adapted the Archer-class submarines to suit local operating conditions and also upgraded them to include advanced combat and sensor systems.

The Archer-class submarines are equipped with an Air Independent Propulsion (AIP) system, which enables the submarines to have longer submerged endurance and lower noise signature. This enhances the submarines' stealth capability. The advanced sonar system allows the submarines to detect contacts at a further distance, while the torpedo system has a better target acquisition capability, which allows the submarines to engage contacts at a further range.

The crew of the Archer-class submarines has undergone two key phases of training with the RSwN. The first is the Key Personnel Training Phase, where they mastered individual vocational skills. This was followed by the Team Training Phase, where they operated as a composite crew (comprising RSwN submariners) to do mission-oriented training. To further hone their skills, submarine rescue exercises, comprising both sea training and simulator sessions, were also conducted for the crew.

RSS Archer will be undergoing sea trials following its launch and is expected to return to Singapore in 2010.

SPECIFICATIONS

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|---------------------|---|
| Length | 60.5 metres |
| Beam | 6.1 metres |
| Draught | 5.6 metres |
| Displacement | 1,400 tonnes (surfaced) 1,500 tonnes (submerged) |
| Speed | 8 knots (surfaced) >15 knots (submerged) |
| Armament | 9 Torpedo Tubes |
| Systems | Active and Passive Sonars Command and Weapon Control System Radar and Electronic Warfare Surveillance Measures Integrated Navigation System Air Independent Propulsion System |
| Complement | 28 crew |

Related Resources:

Singapore Navy Launches Its First Archer-Class Submarine (MINDEF_20090616001.pdf)
Speech by Mr Teo Chee Hean, Deputy Prime Minister and Minister for Defence, at the Launch of RSS Archer in Sweden (MINDEF_20090616002.pdf)