



INS Arighat

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Recently, India commissioned its second [nuclear-powered ballistic missile submarine \(SSBN\)](#), INS Arighat (S-3) built under the Advanced Technology Vessel (ATV) project.

- INS Arighat will now join its forerunner, [INS Arihant](#), which became fully operational in 2018, to strengthen the country's '[nuclear triad](#)'- the capability to fire nuclear weapons from the land, air and sea.
 - INS Arighat, despite matching INS Arihant in size and displacement, can carry more [K-15 missiles](#).
 - **Power:** 83 MW [pressurised light-water reactors](#), developed with Russian assistance.
 - **Arighat** has four large vertical launch system (VLS) tubes that carry the [Sagarika SLBMs \(K-15\)](#) - a hybrid propulsion, two-stage, solid-propellant missile with a range of more than 700 km
- **Future developments:** Third submarine INS Aridhaman, a 7,000 tonne vessel, capable of carrying [K-4 missiles](#) with a range of 3,500 km will be commissioned next year.
- **SSBN** stands for "Ship, Submersible, Ballistic, Nuclear" and refers to a type of submarine that carries nuclear-tipped ballistic missiles.
 - SSBNs are crucial for deterrence because they are difficult to detect and can escape a surprise first strike by an enemy to launch retaliatory strikes.

Read More: [INS Vagir](#), [INS Karanj](#), [Defence Research and Development Organisation \(DRDO\)](#)

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