

Britain's nuclear deterrent

Britain has four nuclear-powered Vanguard-class submarines, of which one is always on a three-month patrol. Each submarine carries 16 Trident missiles, each with three 475 kiloton* thermonuclear warheads

UGM-133A Trident D5:

Submarine-launched solid-fuelled ballistic missile (SLBM), built by Lockheed Martin

Length: **13m**

Weight: **58,500kg**

Range: **12,000km**

Accuracy: **90m**

Unit cost: **\$53.6m (£41.3m)**

Third stage motor built by United Technologies

Reentry vehicle:

MIRV (Multiple Independently Targetable Re-entry Vehicle). Each MIRV is guided by MK 6 stellar-inertial navigation system with GPS updates

First and second stage motors built by Hercules/Thiokol. Use of NEPE-75 propellant and graphite/epoxy composites reduces weight and increases range

Missile compartment

16 missile tubes

Rolls-Royce reactor drives two steam turbines

Four Spearfish torpedo tubes

Crew: **160**

Submerged speed: **25 knots**

Length: **150m** (*Jumbo jet to scale*)

*Equivalent to 475,000 tons of TNT, Hiroshima bomb was 13-18kT

Sources: Federation of American Scientists, Sandia, 2015 Trident II DoD Budget

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