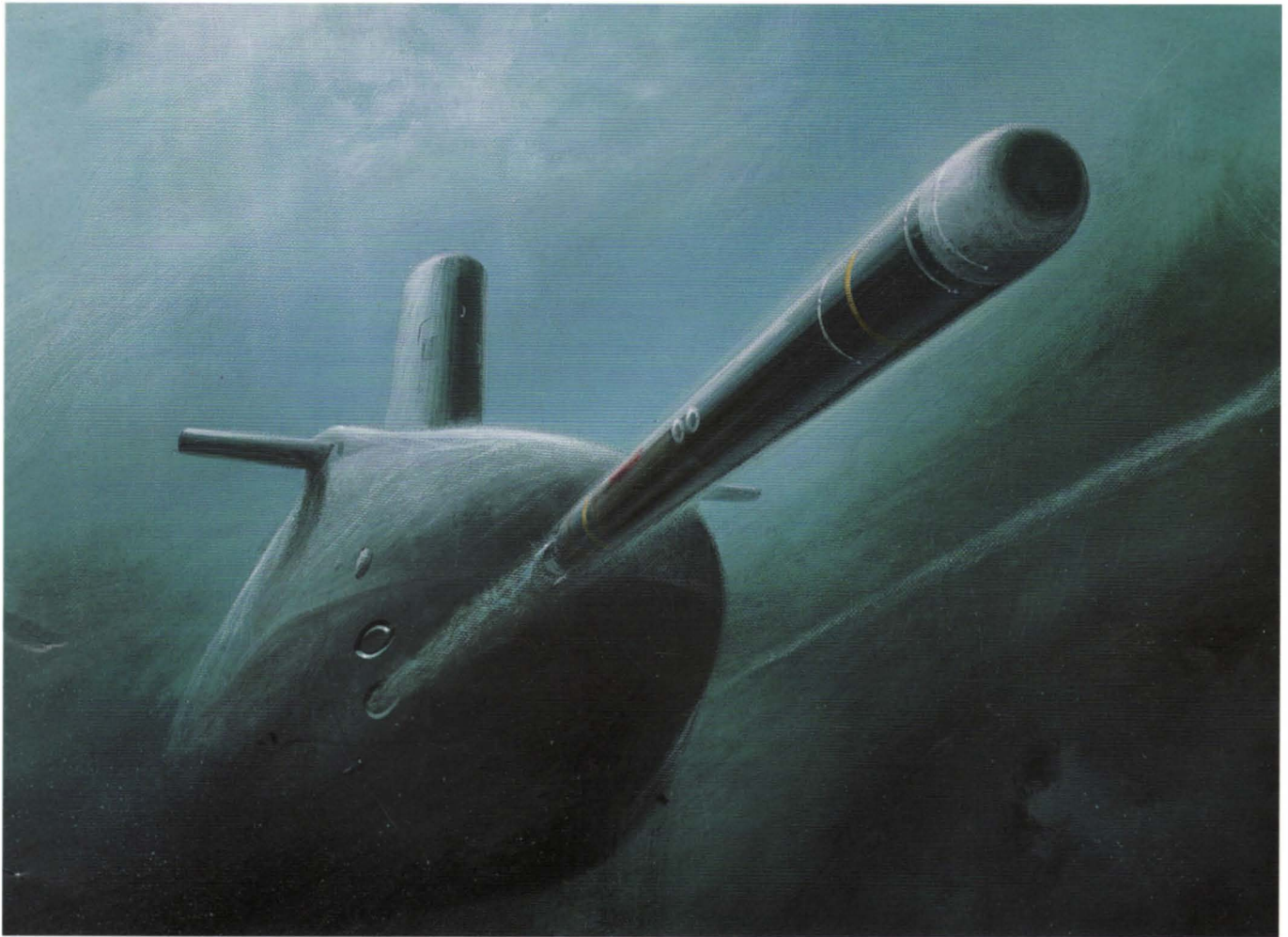


Spearfish

Advanced heavyweight Torpedo



- Very high speed
- Deep diving capability
- Wire Guided
- Long Range and endurance
- Very low noise signature
- Advanced computer controlled tactics
- High lethality warhead
- Effective against all surface and submarine targets

The Spearfish heavyweight torpedo is in service with the United Kingdom Ministry of Defence and will provide the primary armament for Royal Navy submarines for at least the next 30 years.

GEC-Marconi is the Prime Contractor for the Spearfish Programme. Operating through its Underwater Weapons Division, the Company is responsible for all aspects of manufacture, delivery and logistic support.



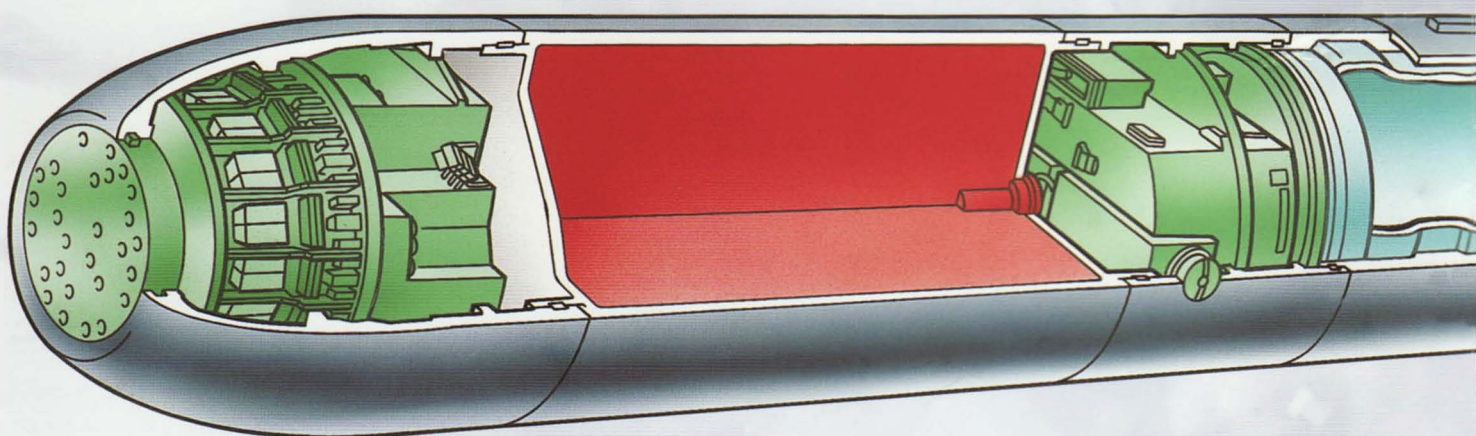
The Weapon

Spearfish is the world's most advanced heavyweight torpedo with unmatched dynamic and homing performance.

A high efficiency thermal engine and pump jet propulsor gives high speed and endurance with low radiated noise.

Spearfish uses a combination of active and passive homing techniques to acquire, identify and ultimately destroy its target.

The weapon operates autonomously, with a telemetry link to allow the submarine command to both monitor the weapon's status and to interact with the torpedo during an engagement.



Propulsion and Control

The Spearfish engine is a turbine burning high energy density liquid fuel and was chosen for its high efficiency and inherent low noise.

The engine drives a pump jet propulsor, chosen for its efficiency, control and low acoustic signature. It allows the weapon to achieve high levels of agility, as required by the homing computer system.

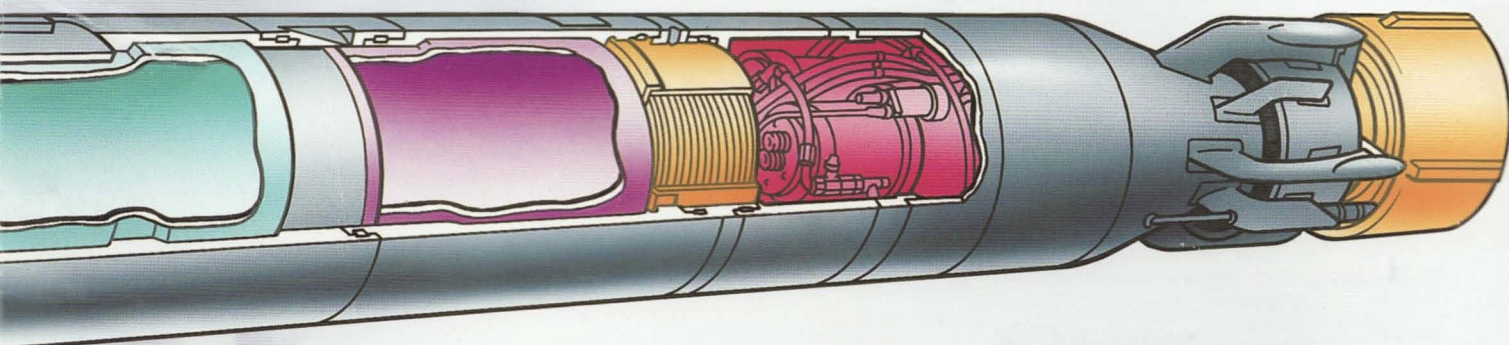
The weapon features variable speed, to optimise the approach and terminal phases of an attack, and can operate at depths beyond those of the most modern submarine.



Homing and Guidance

Spearfish features a high power homing and guidance system with multiple attack and re-attack modes. This enables the weapon to operate successfully in a wide variety of scenarios and against targets ranging from deep diving submarines to major surface ships.

The system is particularly resistant to any countermeasures or evasive manoeuvres that a target might employ. Should a target evade on the first attack the torpedo will re-attack as many times as necessary to successfully conclude the engagement.



Lethality

Spearfish carries a large, advanced warhead to maximise the lethality against both submarines and capital ships. Multiple fuzing modes ensure that the warhead is detonated at the most effective point, be it under a surface target or against the hull of a submarine.



Weapon System Management

Through its Underwater Weapons Division, GEC-Marconi has amassed extensive experience in consolidating the many elements that constitute a modern weapon system. This expertise is demonstrated by the successful integration of the Spearfish, Tigerfish and Sting Ray torpedoes into naval and airborne platforms of the Royal Navy and Royal Air Force. In addition, Tigerfish and Sting Ray have been integrated with a variety of platforms in service with foreign customers.



Simulation

GEC-Marconi has developed a suite of software and hardware simulators to support the Spearfish programme, including hybrid Real Time, Weapon System and Tactical Development simulators. GEC-Marconi's facilities represent one of the largest simulation complexes of its type and has helped the company to establish a unique knowledge base in underwater weapon systems development.



Product Support

GEC-Marconi is the centre of excellence for torpedo design and manufacture in the United Kingdom. To retain this pre-eminent position, the company has invested in large development, trials and manufacturing resources which allows GEC-Marconi to support its products anywhere in the world.



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