

DRS RQ-15 *Neptune*

The *Neptune* was developed by DRS Technologies as a Maritime UAV (MUAV), which is specially suited for operations over water. The first flight occurred in January 2002, and in March that year the first production contract was awarded by the U.S. Navy. In early 2007, the UAV was officially designated as **RQ-15A**.



Photo: DRS Technologies

RQ-15A

The RQ-15A is a mini-UAV powered by a small piston engine. It is transported in three easy to assemble parts in a container (183 x 76 x 51 cm³, 72" x 30" x 20"), which can be transformed into the pneumatic zero-length launcher. The UAV design is optimized for water landings, using a high-mounted engine and payload bays protected from water intrusion. Over land, the *Neptune* can be recovered with a conventional landing or by parachute. The UAV is equipped with a GPS waypoint navigation system for autonomous operation, and a two-way UHF datalink for remote control and sensor data transmission. The datalink is also optimized for over-water operations, having provisions to cope with multiple signal paths caused by water reflections. The operator uses a computer terminal for mission planning, in-flight mission update, sensor management and real-time data observation. The payload is either a color camera or a thermal imaging device.



Photo: DRS Technologies

RQ-15A

The *Neptune* UAV is used by U.S. Navy Special Forces in systems consisting of three air vehicles each. As of late 2005, at least 15 out of a planned total of 27 production UAVs had been delivered to the Navy.

Specifications

Note: Data given by several sources show slight variations. Figures given below may therefore be inaccurate!

Data for **RQ-15A**:

Length	1.8 m (6 ft)
Wingspan	2.1 m (7 ft)
Weight	36 kg (80 lb)
Speed	max: 156 km/h (84 knots); loiter: 111 km/h (60 knots)
Ceiling	2440 m (8000 ft)
Range	75 km (40 nm)
Endurance	4 h
Propulsion	2-stroke piston engine; 11 kW (15 hp)