QINETIQ

Hammerhead™ USV-T

Naval Target

The Hammerhead Unmanned Surface Vehicle-Target (USV-T) is a 5m, advanced composite surface-effect hull speedboat, powered by a 135 hp gas 3.0L Merc engine. The Hammerhead USV-T operates at speeds of 35 knots in Sea State (SS) 3 and speeds of >35 knots in SS2 and below. This is a significant performance increase over any other target system in this category.

The Hammerhead USV-T was specifically designed to simulate a Fast Inshore Attack Craft (FIAC) in a multi-vehicle swarm of up to 40 vehicles. It also excels in replicating Fast Attack Craft (FAC) naval threats.

The Hammerhead USV-T replicates high-speed naval tactics and a variety of operational guidance plans, including straight-on high-speed attacks, crossing patterns, zig-zag patterns, and other evasive manoeuvres. The system can be equipped with visual, radar, and laser signature enhancements to present a convincing likeness of a variety of naval threats.

Hammerhead is typically used by customers to represent threats to commercial shipping and naval vessels, and has been used to test the effectiveness and operational readiness of weapon systems, including:

- Surface-to-surface missiles: Harpoon, Exocet, RBS 15, Mistral /SM/Sea Sparrow type systems (various shore/ submarine launched missiles)
- Surface-to-air missiles (in surface-to-surface mode): NATO Sea Sparrow, Evolved Sea Sparrow, Standard SM 1, Standard SM 2 Block III A
- Air-to-surface missiles: RBS 15, AGM 65 Maverick, CRV 7, Harpoon, Kormoran, LIDAM
- Naval guns/cannon & close in weapon systems: Phalanx, 25-30 Bushmaster, 40mm Bofors, 57mm Bofors Mk III, 76mm Oto Melara SRGM, 100mm Creusot Loire, 4.5" Royal Ordnance, and 127mm Oto Melara/FMV Guns

QINETIQ

Specifications

Physical	
Hull length	5.2m (17ft)
Boat beam	1.4m (4.7 feet)
Target weight (dry)	900kg (1984lbs)
Engine	MerCruiser 3.0L
Engine performance	135 horsepower
Fuel capacity	161 litres (43 US gallons)
Outdrive	MerCruiser Alpha1

Performance	
Temparature	Operating: -10º to +40ºC (14º to +104ºF) Storage: -40ºC to +60ºC (-40 to +140ºF)
Maximum speed	35 knots in Sea State 3
Speed/endurance	12 hours @ 2400 RPM 10 knots 8 hours @ 3050 RPM 20 knots 5 hours @ 4100 RPM 30 knots
TM range	5 nm (subject to UTCS antenna height)
Control system	UTCS (STANAG 4856 compliant)

Optional payloads	
	Passive radar augmentation (20-500m^2, I-Band) Video TM Visual augmentation: smokes, flag, flares, strobes Doppler Radar MDI Active Radar Augmentation (RF-SAS System)

Key features
Proven speed of 35 knots in Sea State 3
Line-of-Sight or Over-the-Horizon control
High speed manoeuvring sea surface target
Designed to replicate a FIAC threat in swarms of up to 40 vehicles
Cost-effective 'Kill' target

Note: Due to continuous process improvements, specifications are subject to change without notice.

Collaborating with QinetiQ

At QinetiQ we bring organisations and people together to provide innovative solutions to real world problems, creating customer advantage.

Working with our partners and customers, we collaborate widely, working in partnership, listening hard and thinking through what customers need. Building trusted partnerships, we are helping customers anticipate and shape future requirements, adding value and future advantage.

www.QinetiQ.com

For further information please contact:

QinetiQ Target Systems
The Boulevard, Orbital Park
Ashford, Kent TN24 0GA
United Kingdom

+44 (0)1233 505600
qtsmarketing@qinetiq.com
www.targetsystems.QinetiQ.com

QinetiQ Target Systems
#3 – 1735 Brier Park Rd NW
Medicine Hat, AB T1C 1V5
Canada

+1 403 528 8782
contact@QinetiqQ.ca
www.targetsystems.QinetiQ.com

QinetiQ/17/03121