

Archerfish

Single-shot mine disposal system



A trusted partner

Our torpedoes solutions offer unparalleled performance, assuring critical operational advantage and mission capability through life.

The Archerfish single shot mine disposal system provides significant time and logistical advantages over current remotely operated vehicle (ROV) mine disposal systems.

Archerfish contains a directed energy warhead. Its twin propulsors allow operation in either a transit mode, for rapidly moving from launch platform to target, or hover mode, during identification and destruction of the target.

Archerfish was selected by the US Navy for its Airborne Mine Neutralisation System (AMNS) programme in 2003 and selected as its common neutraliser in 2007.

Archerfish has been developed by BAE Systems, drawing from its expertise and extensive technology base in torpedoes, naval mines and minehunting.

BAE Systems also designs and supplies modern programmable mines, using the latest plastic bonded explosive (PXB) insensitive munitions technology, developed by EURENCO.



Simple compact installation, compatible with Mine Counter Measures (MCM) platforms

ARCHERFISH DEVELOPMENT

ARCHERFISH

Single shot mine disposal system

- Launched and operated from surface ships, helicopters and unmanned underwater vehicles (UUVs)
- Mine clearance time reduced by a factor of 4
- Low unit cost for the weapon.
- Highly effective against ground mines and moored mines
- Existing magazines accommodate more disposal weapons improving time on station
- Reduced through-life costs
- Insensitive munition warhead
- Electronic scanning sonar
- Stand-alone system can be fitted to small craft
- Available as an inert reusable training and inspection variant.

THE ARCHERFISH OPERATIONAL CONCEPT

- MCM platform identifies a contact as a probable mine.
- Archerfish is deployed via a launching cradle, which then manages the fibre optic link throughout the mission.
- Under command guidance Archerfish is automatically navigated to the target area using an Acoustic Positioning System (APS).
- Using either auto height or auto depth Archerfish approaches the target area, relocating the contact with either vehicle sonar or camera.
- Following target identification, accurate placement of the Archerfish vehicle enables a mine to be control detonated using the Archerfish directed energy warhead.
- Targets identified as non-mine are normally also destroyed to remove mine-like contacts from the operational environment.

COUNTERING THE MINE THREAT

Archerfish receives commands via a fibre optic telemetry and communication link dispensed from the rear of the vehicle. As the target is approached and speed is reduced the hover mode is engaged allowing the vehicle to manoeuvre around the mine.

Excellent manoeuvring characteristics enable Archerfish to traverse the target to obtain pictures and sonar images from a variety of angles.

Archerfish approaches the target under command guidance. In the final stages of the approach, the Archerfish sonar and video also acquire the target and transmit more detailed information to the operator via the fibre optic link.

The complete Archerfish weapon system has been designed to place the directed energy warhead with great accuracy. To achieve maximum effectiveness, the warhead and its vehicle have been developed together as an integrated package.



Production rounds



Archerfish engages shallow and deepwater mine targets (middle and right image)



FOR MORE INFORMATION CONTACT:

BAE Systems Maritime Services
Victory Point
Lyon Way, Frimley, Camberley
Surrey, GU16 7EX, United Kingdom
Telephone +44 (0) 1276 603000
Fax +44 (0) 1276 603001
email maritime.services@baesystems.com
www.baesystems.com/maritimeservices

Copyright © BAE Systems 2011. All rights reserved.

This publication is issued to provide outline information only which (unless agreed by BAE Systems in writing) may not be used, applied or reproduced for any purpose, or form part of any order or contract or be regarded as a representation relating to the products or services concerned. BAE Systems reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service.

12.11.BC190607.01.v04