

MINE COUNTERMEASURE KIT HUNTERWATER™

Unmanned Kit for Search, Identification and Neutralization of Underwater Threats

L3Harris' Mine Countermeasure Kit (MCM Kit) is a lightweight and simple-to-use robotic set capable to perform the complete standoff minehunting operating cycle within a mine countermeasure.

AN AGILE SYSTEM

The MCM Kit is a new generation minesweeping system created to perform the complete standoff minehunting operating cycle through a lightweight and simple-to-use unmanned system. It allows performing MCM operations in total safety, thanks to its innovative precise acoustic localization (PAL). It can be easily installed on unmanned surface vehicles and naval vessels.

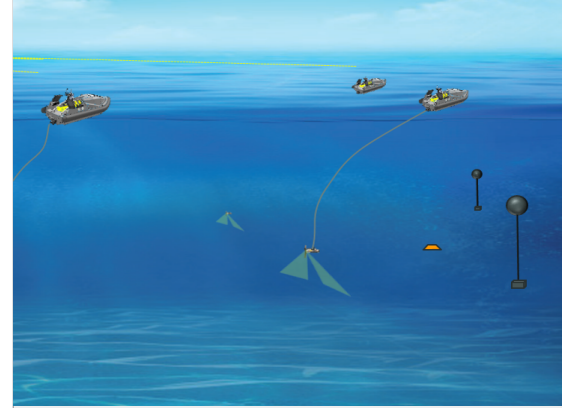
MAIN COMPONENTS

MCMK Hunterwater consists of two main components:

- > ROVSCAN: a hybrid remotely operated vehicle and sidescan sonar. It combines typical functions of a remotely operated vehicle with those of a sidescan sonar performing site survey, identification and acoustic localization of the threats. It also deploys multiple markers that allow the mine neutralization.
- > VGA: a disposable acoustic guided vehicle (VGA), compact and lightweight, featuring precise automatic target reacquisition and neutralization by means of the PAL. It is launched by the Hunterwater USV platform and performs the countermine mission.

ROVSCAN CHARACTERISTICS	
Dimensions:	Length: 2.3 m Width: 0.7 m
Mass	120 kgs
Max depth:	< 300 m
Propulsion:	2 vertical thrusters 2 longitudinal thrusters 1 transversal thrusters
Max speed:	6 kts
Sensors:	Sidescan sonar Multibeam imaging sonar Underwater laser pointer Ecosounder USBL Doppler log

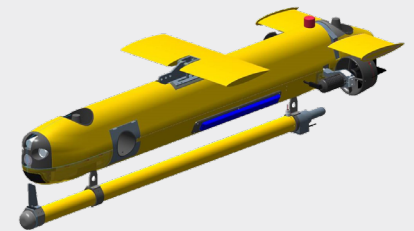
VGA CHARACTERISTICS	
Dimensions:	Length: 0.8 m Width: 0.4 m
Mass	20 kgs
Max depth::	300 m
Max speed:	6 kts



COMPACT AND EASILY DEPLOYABLE

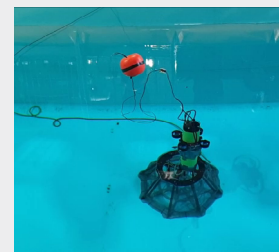
Featuring:

- > Search and identification of threats with one vehicle
- > Multi-target neutralization
- > Standoff minehunting



The ROVSCAN also features:

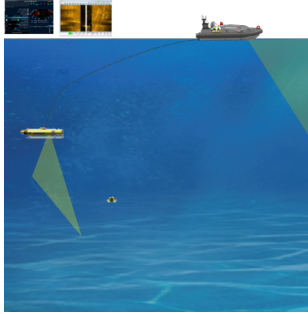
- > Base payload storage for four acoustic markers
- > Laser-pointers for target precise positioning
- > Multibeam imaging sonar and an HD camera



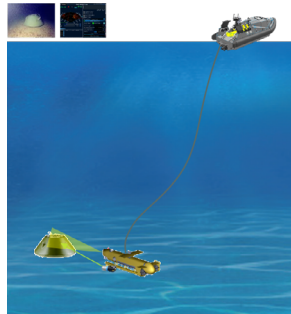
The VGA also features:

- > Camera with optical fiber wire
- > Sonar for precise target final achievement
- > Countermine by direct impact (small-shaped charge)

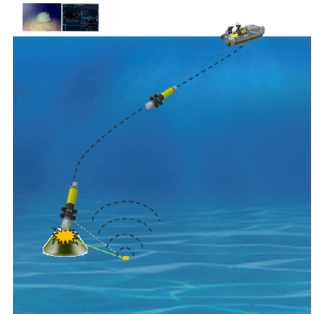
L3Harris.com



ROVSCAN: LOCALIZATION AND CLASSIFICATION



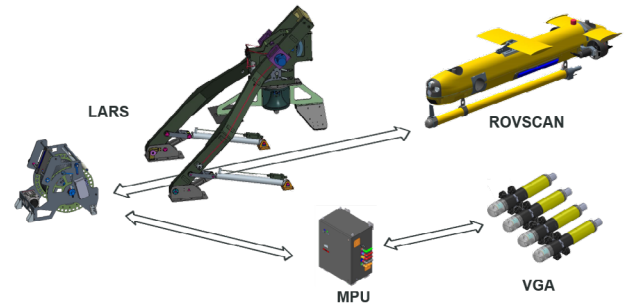
ROVSCAN: IDENTIFICATION AND PAL



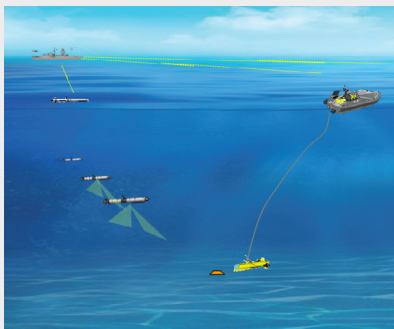
VGA: NEUTRALIZATION WITH PAL

MAIN BENEFITS

- > Single vehicle (ROVSCAN) to carry out man-in-the-loop diving operations
- > Capable of remote identification, with no need to position a vessel over the threat
- > Low-cost disposable VGA (mine-killer) for mine neutralization
- > Operational autonomy makes this suitable for long-distance operations (at least four neutralizations for each mission)
- > Overall reduced mass and dimensions allows for easy transportation and installation on any type of unmanned surface vehicle.



MCMK SYSTEM OVERVIEW



Mine Countermeasure Kit Hunterwater™

UNMANNED SOLUTION FOR FULL-CYCLE MINEHUNTING

This sheet has been reviewed in accordance with the International Traffic in Arms Regulations (ITAR), 22 CFR Part 120.11, and the Export Administration Regulations (EAR), 15 CFR 734(3)(b)(3), and may be released without export restrictions.

Patent pending WO/2019/116307

This document consists of general capabilities information that is not defined as controlled technical data under ITAR Part 120.10 or EAR Part 772.

Mine Countermeasure Kit Hunterwater™

© 2022 L3Harris Technologies, Inc. | 1/2022

Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice at L3Harris Technologies' discretion. Call for latest revision. All brand names and product names referenced are trademarks, registered trademarks, or trade names of their respective holders.

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



1025 W. NASA Boulevard
Melbourne, FL 32919
t +39 05141377 | f +39 0514137555
Calzoni.General@L3Harris.com