



MINTACS is a world leading naval Mine Warfare Command Support System.

In service with a number of countries around the world including the Royal Australian Navy, UK Royal Navy, Royal New Zealand Navy, and the Royal Swedish Navy, still challenged by naval mines in the Baltic Sea from World War I and II.

The software provides the Mine Warfare Force Commander with the latest technology to conduct both mining and mine counter measures in today's complex maritime environment.

MINTACS provides a comprehensive suite of modules and applications to support the Naval Mine Warfare Command.

The key capabilities include:

- MINTACS HQ
- MINTACS MW Data Centre
- MINTACS Post Mission Analysis

MINTACS HQ

MINTACS HQ is central to the capability and is designed to support the operation commander wherever they may be located. This may be in their headquarters, or deployed to an operational command ship or land-based HQ.

MINTACS HQ is a comprehensive Tactical Command software suite which enables the Mine Warfare Force Commander and operations staff to plan missions, monitor tasking and conduct detailed assessment of mission progress from an individual asset or total force perspective.

MINTACS HQ integrates the core tools required to conduct MCM missions.

MINTACS MWDC

MINTACS MWDC is an extensive capability for the Mine Warfare Data Centre. The system provides the ability to manage a master database of all tactical and environmental data relevant to the Mine Warfare Command.

The Data Centre capability includes the storage and management of a comprehensive list of feature types in support of Naval Mine Warfare, including key features such as:

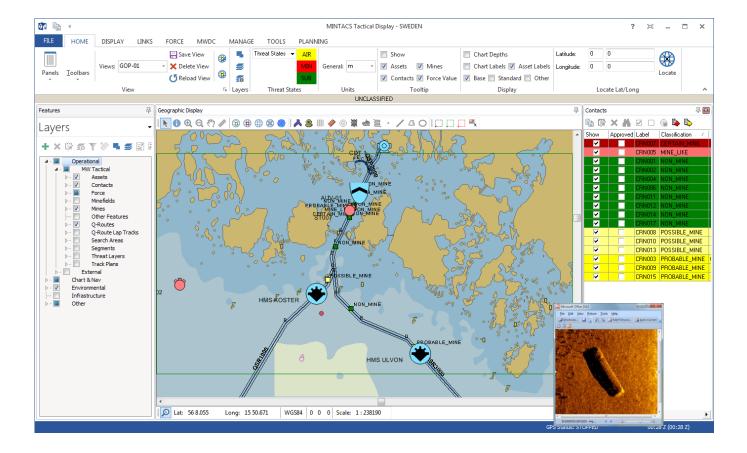
- Ambient Noise
- Bottom Types
- Burial Probability
- Clutter Density
- Contacts
- Danger Areas
- Sand Wave Area
- Sediment Area
- Tidal Information
- Vegetation
- Water Column, including SVP
- Wrecks

MINTACS PMA

MINTACS PMA (Post Mission Analysis) is the newest capability and incorporates leading edge Sonar Image Processing and assisted Mine Target Recognition. The capability is based on world leading research conducted by the Australian Defence Science and Technology Group.

The MINTACS PMA capability provides significant improvements in the time and accuracy of Post Mission Analysis of sonar imagery in the search for naval mines.

The ability to speed up the time taken for postprocessing of sonar images is critical to the effective use of Autonomous Underwater Vehicles.



Tactical Display

The Tactical Display presents a backdrop of hydrographic and environmental data vital to informed decision making. It also provides the developing tactical picture as the mine warfare operation proceeds.

The Tactical Display supports the use of S-57 and S-63 Electronic Nautical Charts along with Digital Nautical Charts and images in a variety of formats including: JPEG, GIF, TIFF and GeoTIFF.

Various military standard symbols are supported, including: MIL-STD-2525D and NATO APP-6, along with user customisable symbols.

Advanced algorithms are used to calculate mine clearance and threat. Inputs such as asset performance data can be selected from the database or entered directly into the tool.

The capability includes the Commanders Estimate Process, (also known as Military Appreciation or Planning Process) that provides the Mine Warfare Command with the ability to conduct Course of Action analysis for the optimum approach to a given situation.

The Tactical Display can import and export data from a wide variety of sources, including:

Standard Formats

- S-57 / S-63 / S-102
- AML 1.0, 2.1, 3.0
- ESRI Shapefiles
- JPEG, GIF, BMP, TIFF, GEOTIFF
- GPS / AIS (NMEA)
- KML/XML
- TXT / CSV

Custom Military Equipment

- BAE Systems NAUTIS
- Atlas Electronik IMCMS
- Bluefin Robotics Bluefin
- Hydroid REMUS
- Shark Marine Shark Navigator
- IHS Markit Jane's

Custom Military Software Systems

- USN MEDAL
- UK RSDB
- NATO MCM Expert
- GCCS
- TMSS

Schedule

The Schedule provides the ability to manage both operational and non-operation tasks of a Mine Warfare Command.

The Schedule supports the ability to view and optimise tasks and serials in either a Gantt, Calendar or Grid view, along with issuing tasking signals and reporting of progress.

Signals Manager

The Signals Manager provides the ability to send and receive military signals conforming to the standards in various countries.

The Signals Management capability includes both reading and writing of both NATO and non-NATO mine warfare signals.

Custom Solutions

The entire MINTACS system is customisable for use within mine warfare operations, and at maritime and joint forces headquarters.

The standalone variant is suitable for laptops or individual workstation computers. The network variant has been cleared for installation on large classified networks.

MINTACS can also be customised to suit the specific requirements of a customer, including an interface to the tactical data system of the mine warfare naval vessels.

MINTACS has recently been updated to support the use of Autonomous Underwater Vehicles (AUVs).



About SfS

Solutions from Silicon (SfS) is a specialised Defence software engineering company, that has developed the world's leading Naval Mine Warfare Command Support System.

SfS was established 25 years ago with a goal to create high quality custom software solutions for Defence customers.

Solutions from Silicon is an ISO 9001:2015 quality certified software engineering company based in Sydney, Australia, with a support office in the United Kingdom.



Solutions from Silicon Pty Ltd
Level 1
9 Help Street
Chatswood
New South Wales
Australia. 2067

+61 (0) 2 9495 9300