

Multi-Influence Measurement Range

Multi-Influence Measurement Range

FEATURES

- Measurement of influence signatures for vessels
- Relocatable.
- Rapid deployment.
- Signatures automatically adjusted at magnetic field reference station to magnetic north.
- Automated GPS tracking (using bow and stern reference points).

L-3 Nautronix develops sophisticated solutions to measure and communicate data through water. It specialises in applications involving underwater test and evaluation and through water communications.

This Capability Statement describes the L-3 Nautronix Multi-Influence Measurement Range (MIMR). It is based on an application recently provided to one of our customers.

MIMR accurately and simultaneously measures and analyses the:

- acoustic (2 Hz to 96 kHz),
- magnetic (AC and DC),
- pressure,
- seismic,
- electric (Extremely Low Frequency Electromagnetic (ELFE)), and
- seismic

influence signatures of ships (including commercial shipping), submarines, and mine warfare equipment in littoral waters and ports.

The systems are provided in a relocatable configuration, enabling rapid deployment of the system equipment by land, sea or air.



MIMR SYSTEM DESCRIPTION

- Comprises three sensor modules
- Sensor modules feed signature information to a shore based facility via a range-to-shore cable system.
- The signature data is gathered at an interface module and conditioned and digitised before transmission.
- Tracking of cooperative vessels is achieved by a DGPS receiver on the vessels, with a radio link providing the tracking information to the Data Acquisition System (DAS).
- The Multi Influence Range Controller (MIRC), housed in the Range Operations and Transportation Container (ROTC), provides the capability for the control of all range functions, and the acquisition, monitoring, storage and processing (analysis, display and replay) of the gathered multi-influence signature data.



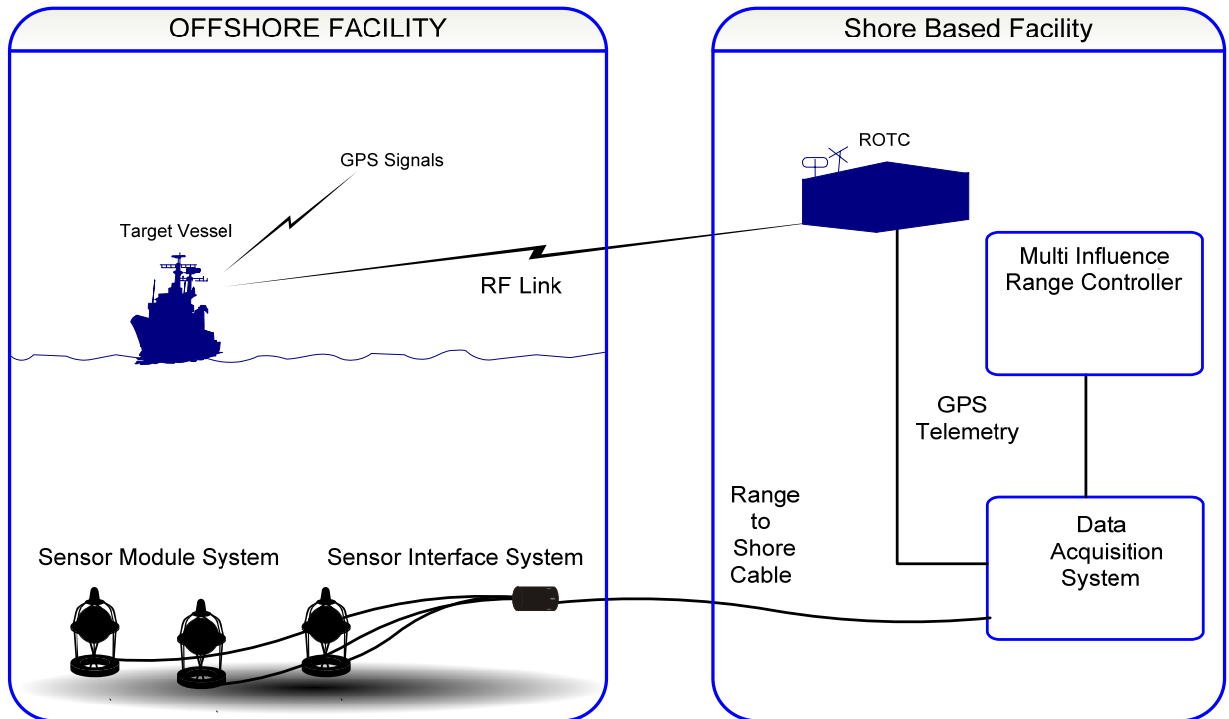
Example Sensor Module Assembly

APPLICATION OF THIS CAPABILITY

Our experience has taught us that these systems are unique to the customer's requirement and meeting these operational need requires research and development and deep understanding of the environment.



Example Range Operations and Transport Container (ROTC)



Conceptual View of a Multi-Influence Measurement Range

