NAVWAR Provides Technical Expertise for Underwater Ice Study in Sweden



Electronics Technician 1st Class Robert Hart and Electronics Technician 1st Class Richard Goldberg assigned to Space and Naval Warfare Systems Command Reserve Program supported Naval Information Warfare Center Pacific engineers in coordination with the Swedish Defense Research Agency and the Swedish Coast Guard to explore how ice affects sound propagation and background noise in the underwater domain utilizing various sensors, magnetometers and a remotely operated vehicle. U.S. NAVY

SAN DIEGO –

Naval Information Warfare Systems Command (NAVWAR) joined the Swedish Defense
Research Agency and the Swedish Coast Guard in Lulea, Sweden, to test how ice
effects sound in the underwater domain March 11-23.

As part of
an ongoing program with Swedish authorities, personnel from the NAVWAR Reserve
Program (NWRP) and Naval Information Warfare Center Pacific (NIWC Pacific)
Unmanned Maritime Vehicle (UMV) Lab teamed to support the event.

NWRP
Sailors and NIWC Pacific engineers utilized various sensors, magnetometers and
a Seabotix vLBV, a remotely operated vehicle (ROV), to identify the potential
impact of ice on sound propagation and background noise underwater.

NWRP
Sailors operated the ROV to test acoustic transceivers and collect sonar and
video imagery of the conditions beneath the ice and to provide logistic mission
support with programming magnetometers.

“Sonar
and camera data from the ROV provided insight into the structure of the ice,”
said Tom Pastore, a NIWC Pacific engineer. “Simultaneous acoustic measurement
data between various fixed points will allow researchers to characterize the
impact of ice-covered waters as compared to an open surface. This is an
important addition to the scientific body of knowledge and leads us towards
better modeling capability in under-ice regions.”

The
collective team from NAVWAR and Sweden have a second trial scheduled for first
quarter of fiscal year 2020.

NWRP
Sailors leverage their education, corporate knowledge and military experience
and apply those skills to UMV and other technology testing events to address
potential challenges with respect to complex command, control, communications,
computer and intelligence systems.

“NAVWAR
Reservists provide manpower with diverse technical and operational skill sets,
enabling the sponsor to successfully complete the mission no

matter the challenges,”
said Thomas McDermott, NWRP UMV program manager.