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Press Release

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Marine Mammals join AUVs in NURC experiment

The CATHARSIS2 sea trial, scheduled for 5-20 October 2009 in the waters near Elba Island, Italy, will investigate novel object detection technologies. Scientists will deploy autonomous underwater vehicles (AUVs) equipped with advanced sensors to detect and locate dummy mines (with no explosives) that are used in this exercise. The results will help scientists determine the performance of the new technologies and the best strategy in the use of AUVs to detect objects under water.

The Centre's scientific team will be joined by a team of marine mammals and their trainers from the United States Navy, the MK5 Marine Mammal system. The five sea lions and personnel from the Space and Naval Warfare Systems Center Pacific are being flown from their home base in California to the Italian Air Force base in Pisa, and will travel to Elba Island to join the NURC team. The sea lions are trained to recover a variety of objects, including dummy mines, by attaching a recovery line to the object, as well as carrying a video camera to determine the type of object and how it is laying on the bottom.

Scientist-in-charge of the sea trial Dr. Hans Groen said that this is the first time that the MK5 system is being used in a NURC sea trial, and that it will provide a good opportunity to ground truth the location and placement of the objects by obtaining video of each of the objects, as well as expediting their recovery at the end of the experiment. "As part of its mission, the NURC brings together different technologies and methods, both new and existing, from NATO member nations for review and comparison," said Dr. Francois-Regis Martin-Lauzer, Director of the Centre. "The results of such evaluation will offer options for other Nations to consider in their plans to secure the maritime environment, and will add to the understanding of how different systems can work together during joint exercises and operations," he continued.

Upon completion of the sea trial on 20 October, the sea lions and their human team mates will travel to La Spezia to participate in a harbour security demonstration for local military and civilian authorities.

The media will have the opportunity to observe the preparations for the CATHARSIS2 sea trial on Elba Island on 8th October, and/or to see what the MK5 can do for harbour security at the NURC in La Spezia. Invitations are being issued to media representatives. Interested parties should email pao@nurc.nato.in or call 0187-527 362.

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