## MCM Mission Package Completes Integration Testing of Unmanned Vehicles

SAN DIEGO — The Littoral Combat Ship (LCS) Mission Module Program successfully completed shipboard integration testing of two unmanned systems on board USS Independence (LCS 2) Jan. 14, Naval Sea Systems Command said in a Jan. 24 release.

The two systems — the Knifefish unmanned undersea vehicle (UUV) and Unmanned Influence Sweep System (UISS) — are part of the Mine Countermeasures Mission Package (MCM MP), which uses a system-of-systems approach to target specific portions of the water column and segments of the MCM detect-to-engage sequence.

During these integration events, both the Knifefish and UISS successfully verified the communications link between Independence and the unmanned systems as well as executed multiple launch and recovery evolutions from the ship. These test events mark a critical milestone for the LCS Mission Module Program, having now successfully tested each vehicle in the MCM MP (that is, an MH-60S helicopter, MQ-8B Fire Scout unmanned helicopter, UISS and Knifefish UUV) on board an Independence-variant LCS.

In addition to UISS and the Knifefish UUV completing integration tests, the program has certified all the aviation modules for the MCM MP for deployment on Independence-variant ships. These airborne MCM systems provide combatant commanders the ability to rapidly deploy systems that can detect near-surface mines as well as neutralizes mines in the water and on the bottom without requiring Sailors to sail into the minefield. Additionally, the Coastal Battlefield Reconnaissance and Analysis system, which is a vertical-

takeoff unmanned aerial vehicle payload, provides a muchneeded beach zone mine-detection capability in support of the amphibious assault mission.

These tests are a subset of a comprehensive test program that encompasses shore-based system testing to characterize individual systems prior to completing final integration on an LCS. The LCS Mission Module program office will continue to incrementally deliver MCM MP systems to the fleet in advance of the formal MCM MP initial operational test and evaluation events beginning in 2021.