

FOR IMMEDIATE RELEASE JUNE 9 2003

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**SPACE STATION ASTRONAUT LEADS CREW OF FOUR NASA
AQUANAUTS ON 14-DAY NOAA AQUARIUS UNDERSEA MISSION**

Key Largo, FL -- The June mission of NOAA's Aquarius Undersea Laboratory will include NASA astronaut Peggy Whitson, who lived and conducted research aboard the International Space Station for 190 days in 2002. Joining Whitson on the crew of this year's first NASA Extreme Environment Mission Operations program, designated NEEMO 5, from June 16-29, will be fellow astronauts Clayton Anderson and Garrett Reisman, and space station support scientist Emma Hwang. Training for the mission begins today and includes an intensive week-long dive schedule, safety and operations briefings, and emergency drills.

The NEEMO missions are a cooperative project of the National Oceanic and Atmospheric Administration (NOAA), NASA, and the National Undersea Research Center (NURC) at the University of North Carolina at Wilmington (UNCW). Two UNCW staff will lead operational support inside Aquarius, Ryan Snow and James Talacek, both of whom are experienced aquanauts with eight previous missions completed between them. Aquarius is owned by NOAA and managed by UNCW. The 14-meter-long (45 feet) by 3-meter-diameter (9 feet) underwater laboratory operates 4.5 kilometers (3 miles) off Tavernier, Florida, adjacent to deep coral reefs in the Florida Keys National Marine Sanctuary.

The crew will use the undersea habitat as practice for long-duration space habitation, living in a volume similar to the living module of the International Space Station, conducting scientific research on the human body and coral reefs, and building undersea structures to simulate space station assembly spacewalk activities. Dr. Steven Miller, NURC/UNCW Director, said, "The vast majority of Aquarius missions focus on pressing environmental science questions, but it's also exciting to see the underwater laboratory used to support objectives of national interest, such as the current NASA mission."

"NEEMO 5, our next-generation mission, goes beyond the bounds of a space analog experience and will attempt to answer several significant scientific questions about long duration isolation in extreme environments," said Bill Todd, NEEMO project manager at the Johnson Space Center (JSC). "We have ratcheted up the isolation factor, complexity and science objectives to a level that closely parallels a space mission experience. And the science we are performing may very well help answer several critical path questions on our road map for journeying to Mars and beyond."

Similar in size to the International Space Station's Zvezda Service Module, Aquarius provides life support systems that allow scientists to live and work in reasonably comfortable quarters. A 10-meter life support buoy is located on the surface above Aquarius that provides power, life support, and communication equipment to support the underwater laboratory. A shore-based mission control facility supports all Aquarius missions with 24-hour monitoring by NURC/UNCW staff. This mission also includes support by JSC's Exploration Planning and Operations Center (ExPOC) control room, simulating the interactions between astronauts and control rooms on space flights.

The unique design of Aquarius allows aquanauts to live and work on the seafloor for extended periods using a special technique called saturation diving. This dramatically increases the time divers can spend working in the ocean depths and provides more convenient, on-site access to science equipment, and computers - Aquarius even has Internet. The system has also proven to be extremely safe. In 15 years of operation no serious injuries have occurred. "This is mission number 72 for Aquarius, with nearly 400 aquanauts safely completing their projects," said Miller. Aquarius is typically used by marine scientists to study coral reefs and the coastal ocean. Project summaries of previous missions are available that include aquanaut biographies, expedition journals posted during the project, and pictures. Similar material is available for NEEMO 5: check the Aquarius website often for updates and to view the live web cameras: <http://www.uncw.edu/aquarius>.

In addition to its research capability, Aquarius also provides a platform for education and outreach activity, providing a window in the ocean for the public to learn about what science projects and why they are important. The NEEMO 5 crew will participate in six separate educational point-to-point video conferences and a web chat from the underwater habitat. The first event will be the web chat, a cooperative effort of JSC's Distance Learning Outpost (DLO) and NASA Ames Research Center's Quest project. The streaming video web chat is scheduled for June 19. For more information, visit: <http://quest.arc.nasa.gov/>

Students in Titonka, Iowa, Jersey City, New Jersey, Omaha, Nebraska, Nashville, Tennessee, Orlando, Florida, Charlotte, North Carolina, Seattle, Washington, and three National Guard Bureau locations will be able to see live television pictures and talk with the crewmembers via a DLO videoconferencing system on various dates throughout the mission. For more information about the Distance Learning Outpost and other JSC educational programs, visit: <http://education.jsc.nasa.gov/>

Media are invited to participate in a crew news conference at a time to be determined, Thursday, June 26. Media wishing to participate must contact the JSC newsroom no later than 4 p.m. June 24 for accreditation. Two-way question and answer capability will be available through telephone patches established at the Johnson Space Center. In addition, the NEEMO 5 crew is scheduled to share a ship-to-ship conversation with Commander Yuri Malenchenko and Science Officer Ed Lu on NASA Television at a time to be determined Wednesday, June 25.