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FROM TEKRITE TO ARTEMIS: 50TH ANNIVERSARY WOMEN UNDERSEA MISSION

Abstract

50 years ago, Sylvia Earle led the first all-women undersea habitat crew: Tektite II (1970) Mission 6 at a depth of 15m in the U.S. Virgin Island's Great Lameshur Bay. The crew including Renate True, Anne Hartline, Anna Szmant, Peggy Ann Lucas and Sylvia Earle undertook research studies in decompression tables, saturation diving, human physiology and psychology in extreme environments, and the ecology of algae and coral reef fishes. In 2020, Sarah Jane Pell, Tierney Thys, Nicole Stott, Kristen Todd and Shawna Pandya plan to descend to Aquarius Reef Base for a 10-day 50th Anniversary all-women mission. Tektite III (2020) pairs new technology demonstrations with deep cultural engagement and environmental action with women spanning the globe. Contributing to new and ongoing research with today's state of the art technology from cooperative robotics to circadian lighting, ocean-aware wearable bio-fabrications, studying microclimates and micro-biomes, testing space analogue operating systems and reef generative systems, producing generative art (including a marine story quilt, and cinematic VR), continuing human health and ocean health science and hosting public conversations, together we imagine tomorrow's SeaSpace exploration. The goal of this campaign is to further redefine our relationship with the ocean: establishing partnerships in holistic earth-sensing with leaders who promote diversity and responsibility in exploration from a transdisciplinary decolonised lens, and setting forth recommendations for the next 50 years in future ocean and lunar exploration missions.