

NAVSEA Supervisor of Salvage and Diving (SEA00C) leads refloat and repair of USNS SGT MATEJ KOCAK (T-AK 3005)

20 February 2015

USNS KOCAK ran aground after departing US Navy Commander Fleet Activities Okinawa (CFAO) White Beach on 22 January. Military Sealift Command (MSC) requested SUPSALV assistance to refloat and recover the vessel. SUPSALV issued immediate tasking to its Western Pacific Salvage contractor, SMIT, to provide a Salvage Assessment team. The team deployed along with SUPSALV and SUPSALV's Naval Architect, Vince Jarecki, to Okinawa, Japan to assess the condition and develop salvage plans for the vessel. Unfortunately the Navy's only Seventh Fleet salvage ship with MDSU Company embarked was not able to support the operation as they would have required a 7 day transit to arrive in Okinawa.

After review of shipboard conditions and an underwater inspection of the hull, it was determined that if interior flooding could be contained, removal of fluids from the ship (both fuel oil and ballast water) would allow the vessel to refloat. These calculations were modeled by Mr. Jarecki using SUPSALV's Program of Ship Salvage Engineering (POSSE).

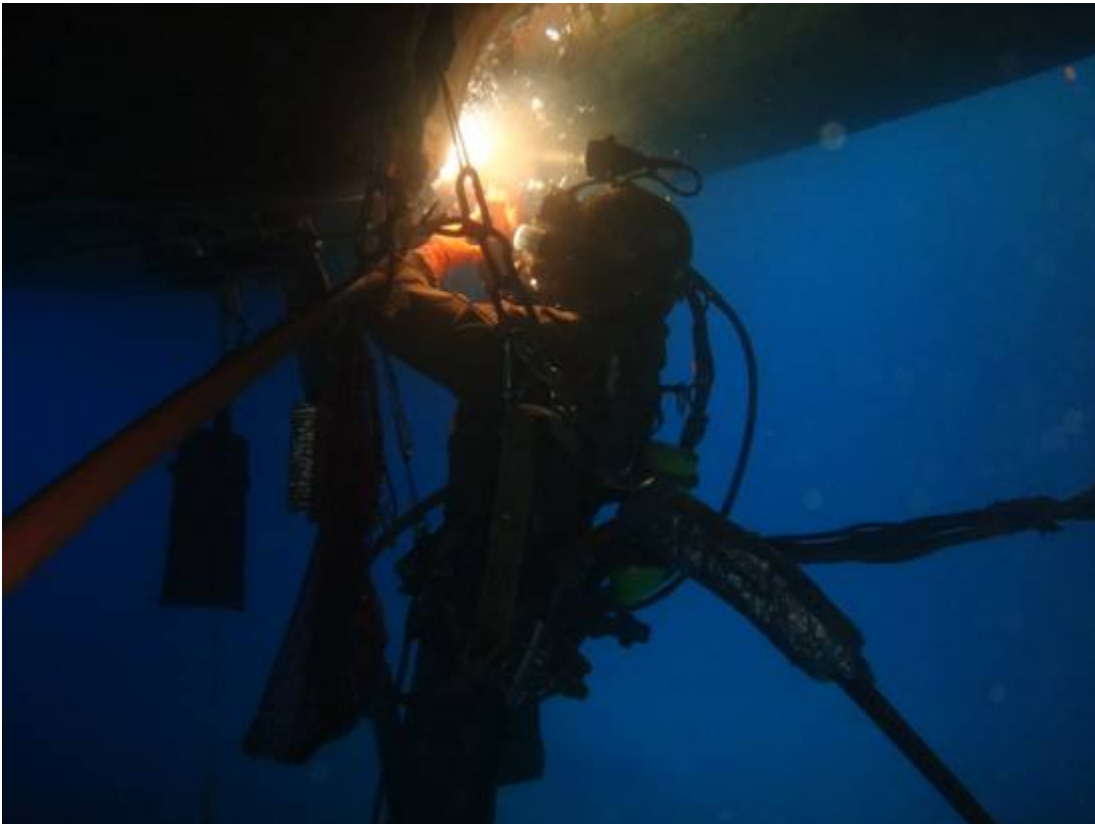


KOCAK's propeller in close proximity to Ufu Vishi Reef just outside White Beach Naval Facility, Okinawa, Japan.

Because seawater was leaking into 3 of the ship's cargo compartments the salvage team had to work around the clock to control the flooding. When it became apparent that additional damage control assets were needed, COM7THFLT asset USS BONHOMME RICHARD (LHD 6), which was in the area and offered a full damage control (DC) team with patching equipment, was tasked to support the operation. "Between KOCAK's crew, the SMIT team and their subcontractor, Nippon Salvage, and the BONHOMME RICHARD DC team, the flooding was quickly brought under control" said CAPT Gregg Baumann, NAVSEA Supervisor of Salvage and Diving. With the compartments nearly dry and supporting patching in place, the salvage team could prepare for the defueling and deballasting phases.

On February 2, MSC directed that a tanker, SNLC PAX, be brought alongside USNS KOCAK and over the course of the day 11,000 barrels of diesel oil was pumped from KOCAK to PAX. By 3 February deballasting began. The POSSE model, which had already accounted for the removal of the diesel fuel, indicated that the ship would refloat on the afternoon's high water if water was removed from the wing tanks, amidships tanks, and the forepeak tank. Midway through the day the ship reported they were unable to pump from the amidships tanks due to loss of suction. The SUPSALV Naval Architect continued to calculate and adjust the plan to ensure enough buoyancy would be generated. One concern was that the raising of the bow further would put the ship's propeller closer to the reef. But careful deballasting continued with the adjustments and at 1730 that afternoon, approximately 30 minutes before high tide, USNS KOCAK floated free from the reef and with help of tugs, spun around and steamed back to Naval Base White Beach under her own power.

SUPSALV offered their Underwater Ship Husbandry (UWSH) expertise to provide hull repair support to MSC. SUPSALV's UWSH teams consist of welder divers who routinely travel to remote ports to conduct emergency repairs on Naval Ships. MSC accepted the offer and on 4 February, the first of the repair specialist arrived to begin assessing the damage and consulting with the US Coast Guard and American Bureau of Shipping (ABS) inspectors to determine what was needed to allow the ship to steam to a shipyard for permanent repairs. A plan was agreed upon that restored port side shell plating integrity, arrested cracks on the starboard side, isolated ballast tanks, and renewed water tight boundaries in the cargo holds. The UWSH repairs were completed on 20 February having accomplished hull strengthening and compartment water tightness tasks. As a final measure, SUPSALV has arranged for a small team of salvors to ride the ship to its repair port as a precautionary measure.



Welder - Diver performing crack arresting on KOCAK at the pier

"This is an excellent example of a comprehensive Navy approach to taking care of one of their own", said Baumann. "The damage control efforts of the BONHOMME RICHARD DC team was instrumental

in bringing the hull flooding under control". SUPSALV's access to highly trained salvage crews, in this case SMIT and Nippon, and SUPSALV's inherent salvage, naval architecture, and underwater repair capabilities teamed together to save a major Military Sealift ship and its cargo and protect the pristine waters off the coast of Okinawa ,Japan.