



AT THE TRAINING SITE - Crewmen on the Preserver attend the tow line as the ex-Hake awaits the beginning of SubSalvEx 71. PH1 Morris Carey



The conclusion of "SubSalvEx-71" in September marked the second time such an exercise was attempted as a training operation for Atlantic Fleet personnel using the ships and related equipment they would be required to employ in the event of an actual emergency.

A submarine, the former USS Hake (AGSS 256), was towed to the operation site just off Cape Charles City, Va., and sunk in 100 feet of water on August 9, as the exercise got underway.

The Atlantic Fleet Submarine Force began the exercise by conducting a simulated rescue operation on the sunken submarine. Then the salvage training portion of the exercise began with Atlantic Fleet Service Force personnel commencing their task of raising the submarine to the surface.

Commander Service Force, U.S. Atlantic Fleet is responsible to the Chief of Naval Operations for maintaining a cadre of personnel qualified in submarine salvage. The Hake was acquired for this purpose in 1968 and was used in "SubSalvEx-69," the first successful raising of a submarine since 1939, when the Squalus accidentally sank and was refloated.

SubSalvEx-71 was conducted in four sequential phases. First, the submarine was towed out to the Plantation Flats area about two and one half miles off the Eastern Shore and sunk in 100 feet of water. The following day, divers from the submarine rescue ship USS Sunbird (ASR 15) conducted a simulated rescue of trapped crewmen.

During the next five weeks crewmen and divers on the salvage ships USS Preserver (ARS-8) and USS Opportune (ARS 41), assisted by Harbor Clearance Unit Two aboard LCU 1490 (Landing Craft Utility), rigged the equipment necessary to raise the submarine. The fleet tugs USS Utina (ATF 163) and USS Mosopelea (ATF 158), provided logistic support for the exercise.

Prior to the first attempt at lifting the submarine, divers passed heavy wire and chain lifting slings beneath



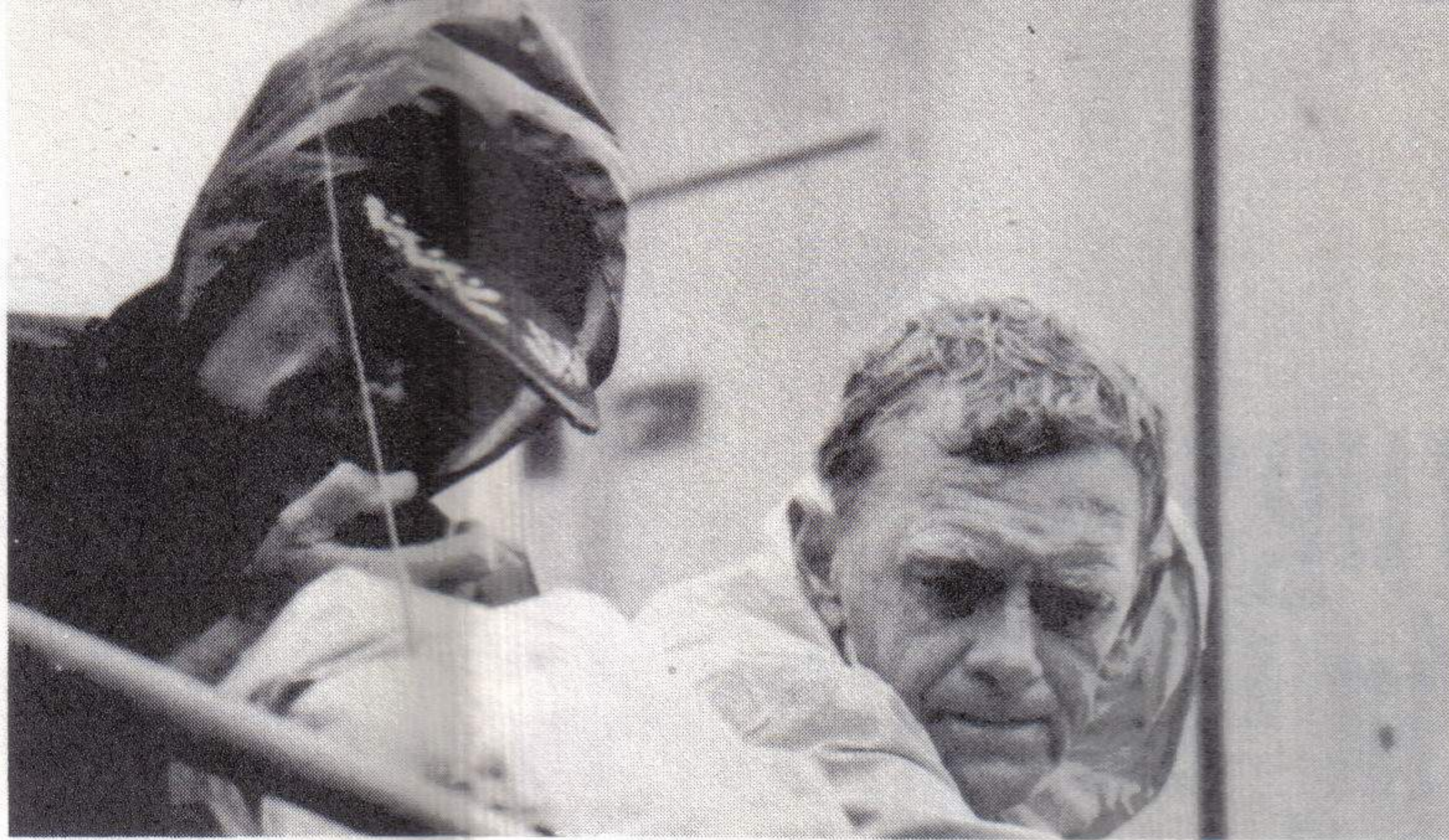
COMMANDER D. E. Commander D. C. Cr discuss the extent of flooding party.

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THE RELUCTANT LADY yields to her salvors. After five weeks of bad weather and bad luck, the algae- and barnacle-encrusted ship is readied for the trip home. Ens. C. Fenoughty



COMMANDER D. E. MINNICH (with microphone) and Lieutenant Commander D. C. Craft, commanding officer of the Opportune, discuss the extent of flooding on the submarine with the salvage boarding party.

Ens. John C. Preves

SubSalvEx-71: A Hard Fought Success

her hull. When these slings were in position under the bow and stern, two submarine salvage pontoons were attached at each end of the submarine, one above the other. The pontoons were then supposed to be blown dry using compressed air, providing enough buoyancy to lift the submarine. On the first attempt difficulty was encountered when excessive lift was applied to the forward end of the submarine forcing the bow to rise rapidly to the surface, allowing the forward lift pontoon to slide off the bow as the Hake began to settle, pulling the control pontoon back down. An attempt was then made to lift the Hake stern first, without the forward lift pontoon. This, too, was unsuccessful.

The next effort to raise the reluctant submarine wasn't made until after tropical storm Doria had passed through the lower Chesapeake Bay. Although strong tides and currents made re-rigging the submarine difficult, on September 12, the lifting gear was in place once again and the first lift for Hake was accomplished. The Hake was then towed into shallow water (70 feet) for re-rigging of the pontoons for the final lift and the de-watering process.

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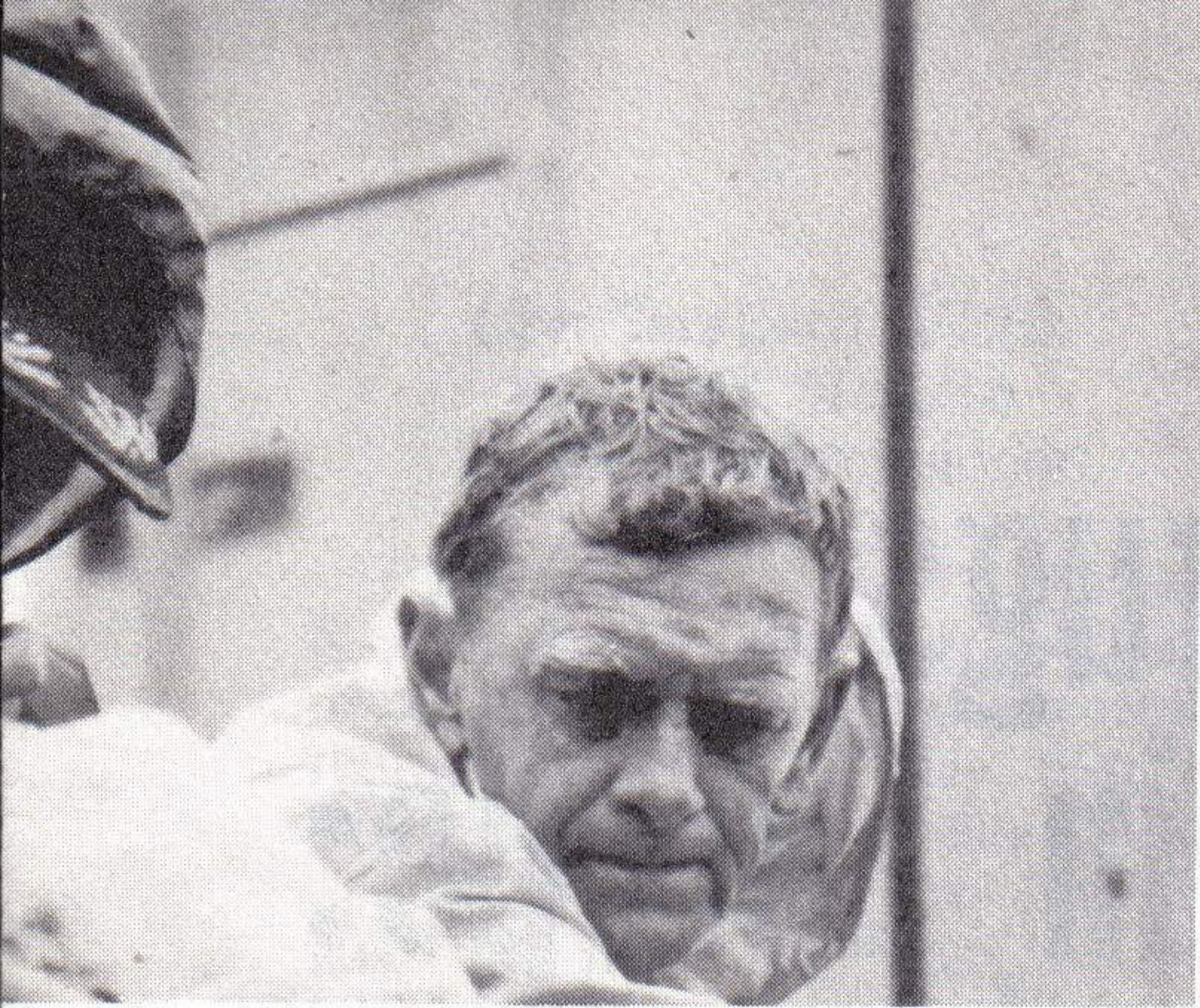
After five weeks of realistic training, the USS Opportune returned the aging World War II veteran to the Little Creek Naval Amphibious Base to await another training exercise.

This was only the second training exercise of this type ever conducted. Many improvements in submarine salvage procedures were used in SubSalvEx-71 and the ships' crewmen and divers received valuable training and experience in submarine salvage techniques.

Captain Carvel H. Blair, Commander Service Squadron Eight, until relieved upon his retirement by Captain J.L. Koons, had overall responsibility for the conduct of SubSalvEx-71. Captain Koons is the former Chief Staff Officer of Service Squadron Eight. His operations officer, Commander D.E. Minnich, as CTU 48.4.2, was the on-scene commander for all phases of the exercise except the rescue phase which was under the command of Lieutenant Commander Anthony C. Esau, commanding officer of the USS Sunbird.

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MINNICH (with microphone) and Lieutenant Commander Anthony C. Esau, commanding officer of the Opportune, discussing the submarine with the salvage board.
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SalvEx-71: A Hard Fought Success

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Commander Minnich cited the res-

cue and salvage crewmen for the excellent performance during the operation. In a message to all the participants in the exercise, he stated: "This is only the second time this exercise was attempted, both times by units of Service Squadron Eight, both times successfully and safely. This is a record that every man can take pride in, for this exercise tests not only the skills of the salvor, but his perseverance, adaptability and will to succeed."

The operation, originally scheduled to begin last April, was resched-

uled by Navy officials in cooperation with Eastern Shore residents and local sport fishermen to eliminate any possible effects it might have had on the annual run of the Black Drum game fish.

Once again, cooperation became a foundation for success. Cooperation between the Navy and the citizens of a community in the Tidewater area and cooperation between the participating units of Service Squadron Eight which enabled an important operation to come to a successful conclusion. **CSL**



CREWMEN ON THE PRESERVER lower the after-lift pontoon in preparation for the final lift.

THE LCU 1490, tied alongside the Preserver, pumps compressed air into the pontoons and the sunken submarine's ballast tanks.

