

USS DOLPHIN (AGSS 555)

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From:

Commanding Officer, USS DOLPHIN (AGSS-555)
Director of Navy History (OP-09BH), Washington, DC To:

COMMAND HISTORY OF USS DOLPHIN (AGSS 555) FOR CY92 Subj:

Ref: (a) OPNAVINST 5750.12E

Encl: (1) Command Composition and Organization

(2) Chronology (3) Narrative

(4) Commanding Officer's Biography

1. Per reference (a), enclosures (1) through (4) are forwarded for calendar year 1992.

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COMMAND COMPOSITION AND ORGANIZATION

The USS DOLPHIN (AGSS-555) is the Navy's deep-diving research and development submarine designed to test advanced submarine structures, sensors, weapons and machinery systems. Purely experimental in nature, DOLPHIN serves as a platform for scientific research at unprecedented depths for a fully operational and independent submarine. Utilizing its large payload (over 12 metric tons) and highly versatile instrumentation suite, many civilian, public service and military activities have employed DOLPHIN for testing numerous technologically advanced and complex systems.

DOLPHIN operates as a unit of the U.S. Submarine Force, U.S. Pacific Fleet, under Commander, Submarine Development Group 1. The Dolphin Advisory Group of Naval Sea Systems Command in Washington, D.C. directs long range project planning and scheduling. Technical project guidance and local operational support are provided by the Dolphin Project branch of Naval Command Control Ocean Surveillance Center, San Diego, California, where DOLPHIN is home ported.

CHRONOLOGY

- 07 JAN to 11 JAN: Acted as a target and recorded underwater transitions during an underway test of an advanced Active Sonar System.
- 17 FEB to 22 FEB: Deep Submergence Transponder and Interrogation System (DISTIS) system installation and dockside tests.
- 21 FEB to 29 FEB: Underway for DISTIS system operations. Conducted a total of 11 dives off the coast of Mexico. The test objectives were to: 1. Characterize the ocean as a sound channel and 2. Acquire a data base for future Sonar systems development.
- 02 MAR to 06 MAR: Inport maintenance period. Effected repairs to the Deep Submergence Obstacle Avoidance Sonar (DSOAS) system outboard cabling.
- 09 MAR to 13 MAR: Underway for dual operations. During the 1st half DOLPHIN conducted tests of the Portable Over-the-side Static Underwater Mount (POSSUM) system off the coast of San Clemente. DOLPHIN maneuvered in the vicinity of submerged transducer array acting as a target for a series of active Sonar transitions originating from the M/V DeStieger. The results of this project provided detailed echo structure and doppler wave forms used to validate and verify computer simulations of submarine models for advanced MK-48, MK-50 and 6.2 research and development. DOLPHIN then proceeded to the LaJolla operating area and conducted further test in cooperation with the M/V Sproul.
- 16 MAR to 21 MAR: Inport period to install and test modifications the ship's DSOAS system for operations conducted the following week. An underwater communication system was installed on board by Draper Laboratories to facilitate communications with a remotely operated vehicle.
- 23 MAR to 27 MAR: On 09 April 1992, members of the SONAR division received a "BRAVO ZULU" message from the Secretary of Defence for their participation in an feasibility experiment to test the effectiveness of using lasers to control an unmanned remotely controlled underwater vehicle. DOLPHIN was tasked to follow in the path of the vehicle while receiving and sending laser transmitted communications at various depths and ranges.
- On APRIL 1992: LCDR John E. Inman relieved LCDR Charles Ormson during Change of Command ceremonies at Naval Command Control Ocean Surveillance Center, San Diego to become DOLPHIN's 13th Commanding Officer.

CHRONOLOGY (cont)

21 APR to 22 APR: Underway for a two part exercise to test a new high resolution Radar system under development by Naval Ocean Systems Center. Dolphin submerged to periscope depth off the Point Loma coast while tests were conducted to determine the detectibility of submarine periscopes by radar.

04 MAY to 25 MAY: The ship underwent an IMA availability/upkeep with the USS MCKEE (AS-41). Significant repairs included: #1 Diesel Generator bearings, 400 Cycle Static Invertor and the installation of a BPS-15 Radar unit.

01 JUN to 05 JUN: Surface transit to Mare Island Naval Shipyard, Vallejo, CA for regular overhaul.

05 June 1992: Commenced overhaul.

20 JUL to 14 Aug: Scheduled upkeep.

20 AUG: Twenty six members of the DOLPHIN crew voluntarily conducted a day of maintenance on the World War II Submarine Pampanito (SS 383). The Submarine Veterans of WWII invited DOLPHIN to the Fisherman's Wharf in San Francisco to assist in providing repairs to many of the submarine's systems.

02 NOV to 20 NOV: Scheduled upkeep.

25 NOV to 29 NOV: Thanksgiving Holiday Stand down.

21 DEC to 04 JAN: Christmas Holiday stand down period.

NARRATIVE

- 1. During 1992, DOLPHIN's special project deployments have been broad-based and far reaching. DOLPHIN has been most successful in its role as dedicated platform for the development of scientific concepts and testing of advanced, "new generation" Sonar and Navigation suites.
- 2. Throughout the year, significant material upgrades and repairs have been accomplished during the on-going shipyard overhaul. These include: Hull painting, overhaul of #2 High Pressure Air Compressor, installation of a battery well expansion joint, sanitary tank repairs, propeller and propulsion shaft removal & refurbishment, a ship's force overhaul of #1 main engine, signal ejector system refurbishment, trim & drain, ventilation and air system overhaul, installation of new electrical hull fittings, skin cooler repairs, steering and diving plants refurbishment, preservation and recertification of all tanks & voids, hatch removal and alignment, overhaul of the ship's three motor-generators, replacement of all external hydrophones and cabling, and an operational test of the releasable lead ballast keel.
- 3. DOLPHIN was awarded the Fiscal Year 1992 Supply Excellence "E", the Communications "C" and Medical "M".