



DEPARTMENT OF THE NAVY  
USS CANOPUS AS 34  
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From: Commanding Officer, USS CANOPUS (AS-34)  
To: Director of Naval History (OP-09BH), Washington Navy Yard, Washington DC  
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Subj: Command History of USS CANOPUS (AS-34), 1982; Report Symbol OPNAV 5750-1

Ref: (a) OPNAVINST 5750.12C

Encl: (1) Basic History  
(2) List of VIP's and other visitors  
(3) List of Ships and Submarines Tended

1. In accordance with reference (a), enclosures (1) through (3) are submitted as the Command History for USS CANOPUS (AS-34) for calendar year 1982.

  
C. C. HOLCOMB

## COMMAND ORGANIZATION

USS CANOPUS (AS-34) was under the operational control of Submarine Squadron EIGHTEEN, Captain John M. KERSH, USN, Squadron Commander. CANOPUS' Commanding Officer, Captain Hugo E. MARXER, USN, was relieved on 2 July 1982 by Captain Charles C. HOLCOMB, USN, and Executive Officer, Captain Gary Q. GEIST, USN, was relieved on 16 July 1982 by Commander John B. FIELD, USN. Additional key personnel changes which occurred during 1982 are as follows:

<u>BILLET</u>	<u>DATE</u>
Ship's Store Officer	February 1982
Administrative Assistant	March 1982
Legal Officer	March 1982
Assistant Chaplain	March 1982
Personnel Officer	May 1982
Disbursing Officer	May 1982
Subsat Officer	May 1982
Repair Officer	July 1982
Weapons Repair Officer	July 1982
Auxiliary Engineering Officer	July 1982
Assistant Repair Officer	July 1982
ROVSS Officer	July 1982
Dental Officer	July 1982
Dental Division Officer	July 1982
Outside Machinery Repair Officer	August 1982
Non-Nuclear Planning and Estimating Officer	September 1982
Safety Officer	October 1982
ERP Coordinator	November 1982

## 1982 CHRONOLOGY OF EVENTS

10-12 February	Nuclear Technical Proficiency Inspection
17-19 February	Navy Resale System and Support Office Assist Visit
8-12 March	Proficiency and Readiness Evaluation
26 March-2 April	Supply Management Inspection
19-23 April	Personnel Management Efficiency Inspection
19 April-7 May	Electro-Magnetic Interference/Waterfront Correction Action Plan
28 April	Mobile Technical Unit Two ADP Hardware Inspection
1-2 June	Shop Qualification Improvement Program
10-13 June	Underway, OPPE Preps
14-16 June	Radiological Controls Practices Evaluation Technical Assist
21-24 June	Medical Readiness Inspection
28 June-16 June	Navy Food Management Team Assist Visit
12-30 July	Shop Qualification Improvement Program
4-5 August	Navy Resale System and Support Office Assist Visit - Laundry
16-18 August	Underway, OPPE Preps
1-3 September	Personnel/Administrative Assist Team Visit
13-17 September	Navy Maintenance and Supply System Office Assist Visit
20-24 September	Underway, OPPE Preps
26-28 October	Radiological Controls Practices Evaluation
1-3 November	Fleet Accounting and Disbursing Center On-Site Audit
15-20 November	Operational Propulsion Plant Examination, Underway Local Ops
30 Nov-2 Dec	Tactical Weapons Capability Review

## NARRATIVE

1. USS CANOPUS remained moored and homeported at FBM Replenishment Site IV, Charleston, South Carolina.

2. Repair Department

a. During 1982, CANOPUS completed 24 submarine refits, 8 extended refits (ERP), 41 submarine voyage repairs, 2 fast attack selected refit availability upkeeps and provided services to 4 submarines performing post overhaul testing and 1 submarine preparing to enter the shipyard. The department conducted a total of 71 refit/voyage repair periods on 19 separate hulls. In addition CANOPUS provided services and repairs to various surface units including 6 refits for TWR 682, 3 refits for ARDM (2) and 8 refit periods on CANOPUS. Over 521,546 production manhours were directed to the maintenance effort. Each submarine refit consisted of hundreds of jobs ranging from naugahyde repairs to the repair and certification of subsafe systems. The Hull Repair Division laid miles of weld bead in the complete replating of an LCM dive boat hull and one of SITE IV's floating piers. In addition, a structural steel cover was manufactured to protect the pier shore power station. Numerous welding and brazing jobs were completed on tended units, including a 300KW MG set rotor replacement which required a bulkhead patch removal to facilitate the repair. The Machinery Repair Division produced countless machined parts including eyebolt yokes. In addition, shim repairs were conducted to over 50 major seawater ball valves. The Electrical Repair Division rewound numerous motors and assisted in the repair of motor generators that included a 300KW MG set bake case and rotor change out, and a 30/10KW stator in place rewind and dip varnish procedure. Numerous hull inserts were replaced and a vast number of manhours were expended in refurbishing SITE IV small boats. The Fleet Electronics Calibration Laboratory calibrated over 4,100 pieces of equipment. The Electronics Repair Division successfully completed 2 OE-158 SHIPALT installations and made 4 trips to Cape Canaveral for repairs to AN/BRA-15, and AN/BRA-9 antennas, along with 2 BRA-8 buoy replacements. In addition, more than 30 AN/BRA-8C buoy systems were certified. The Radiological Division received over 500 radioactive material transfers from tended units. It also conducted a complex nuclear propulsion plant resin discharge and 2 primary side steam generator inspections for which CANOPUS was commended by SUBLANT. Additionally, a complex secondary side steam generator repair never before accomplished by an IMA, was completed on an emergent basis. This division also performed 15 Portable Effluent Tank (PET) hookups and 6 Hot PET hookups to support tended unit testing. The Repair Services Division laid approximately 7,000 square feet of terrazo and 4,000 square feet of tile, produced an average of 300 castings per month and manufactured PET tank covers, gun covers and an awning for the change of command. Five 300KW rotors were removed for Bake Case refurbishment and a complete 300KW rotor replacement was accomplished. In addition, 30 other rotors were pulled for replacement or refurbishment. The divers performed arrival and departure swims on all units at SITE IV, completed certification of the LCM-6 Dive Boat, and performed emergency repairs to correct U/W leaks on both submarines and surface craft. The Planning and Estimating work center prepared over 1800 controlled work packages, accomplished 149 SHIPALTS and 242 Alterations & Improvements. Nuclear Repair accomplished 56 repair procedures on 9 separate hulls, repairing or replacing 29 nuclear valves, two steam generator eddy current inspections and one steam generator reference leg SHIPALT. The Quality Assurance Division reviewed 1,006 non-nuclear work procedures, and performed 9,243 visual/dimensional, liquid penetrant, magnetic partical, eddy current, ultrasonic and radiographic inspections. The Outside Machinery Repair Division repaired 2 low pressure vapor compressors, 1 main shaft seal, poppets and seats on several main steam engine and turbine generator throttles

and overhauled numerous high pressure air compressors. In addition, several main sea water pumps, TDU ball valves, main steam valves and hundreds of Subsafe and Level I valves were overhauled or replaced. The Print Shop prepared over 2 million impressions and the Photo Lab developed over 30,000 prints and slides.

b. Due to the level of sustained superior repair support this department was awarded the Battle Efficiency Repair "R" by COMSUBLANT for FY 1982.

### 3. Supply Department

a. The CANOPUS Supply Department processed over 144,000 requisitions, served over 900,000 meals, washed over 110,000 pounds of laundry, sold over \$620,000 in merchandise, and disbursed over \$20,000.00. Net and gross supply support effectiveness averaged 95 and 90 percent, respectively. The Stores Division continued an aggressive program to renovate storerooms and preserve conveyors and elevators. CANOPUS was selected as the test ship for a new bar coding system for stock material, and discussion and plans commenced with the David Taylor Naval Research Laboratory. When this system is fully implemented, it will greatly enhance ships' capability to verify and maintain storeroom stock validity. In the Food Service area, work commenced to renovate the Enlisted Dining Facility, CPO Mess Lounge, and Wardroom/Wardroom Lounge. The Sales and Services Division replaced many of its vending and game machines and expanded its merchandise line, which resulted in increased sales and greater contributions to the Welfare and Recreation Fund. The Disbursing Division initiated a Pay Deposited Quicker (PDQ) Program for automatic deposit of crew members' pay checks to the financial institution of their choice. CANOPUS was also chosen as the prototype ship for a new disbursing data entry system, the Uniform Microcomputer Disbursing System (UMIDS). This system was successfully implemented ahead of schedule and is now ready for introduction to the fleet. The Submarine Supply Assistance Team (SUBSAT) Division installed computer terminals for accessing the Ship's Parts Control Center (SPCC) weapons systems files, and local Naval Supply Center (NSC) and Polaris Material Office (PMOLANT) requisition status files. The Automatic Data Processing (ADP) Division installed a Xerox 7000 Copier to reduce Univac 1710 to Inforex 9000 System data entry. These equipment changes accelerated data through-put, this providing faster turn-around time and more responsive support to ADP customers. Overall, the Supply Department made significant improvements in material support and customer service during this calendar year.

### 4. Engineering Department

a. The Engineering Department, in addition to providing electrical power, low pressure (LP) air, potable water, pure water, and fire and flushing water to CANOPUS, provided the following services to 32 refits and extended refits, 41 voyage repairs, and 2 fast attack selected refit availability units: 17,244 gallons liquid nitrogen, 820 air charges, 206 sewage transfers, 84 waste oil transfers, 110,617 gallons diesel fuel (marine), and 1,100 gallons of 2190 lubricating oil. Major maintenance actions performed on the ship included installation of four (4), 300 KVAR capacitor banks adjacent to 01 level submarine along side (SAS) stations #1 and #2 to effectively increase the ship's power factor to about 95 percent. The installation of these capacitors saved CANOPUS about \$1,163,717.00 dollars and 951,750 gallons of diesel fuel (marine) in calendar year 1982 and 168 man-hours per day. In addition the Engineering Department replaced all THOF-400 shore power cables (19 cables on the shore power brow and 18 cables at the submarine along side stations) with THOF-500 cable, installed replacement ships service fire pumps, #2 and #3, replaced #2 and #3 ships service fire pump motors, installed Site II closed circuit television system, restored CANOPUS' oxygen charging capability by overhauling a

charging station and producers, installed high pressure air filters for re-certification of divers air system, re-bricked #2 boiler deck and front wall, installed two new low pressure air compressors and low pressure air dehydrators. Other major improvements made within the Engineering Department were: the successful completion of an Operational Propulsion Plant Examination conducted by CINCLANTFLT, and a significant upgrading of the electrical safety program. The CANOPUS Damage Control Team demonstrated their ability by placing first in the annual COMNAVBASE Charleston, SC Damage Control Olympics in which 19 ships participated.

## 5. Weapons Repair Department

a. During this period the Weapons Repair Department completed a significant number of complex evolutions involving interface with other departments and commands.

(1) The Department handled a total of 201 warshot and 90 exercise torpedoes while completing withdrawal of the MK37 Torpedo and all associated equipment from CANOPUS and Submarine Refit SITE IV. In addition, thirty torpedo tube inspections and four torpedo ejection pump alterations were accomplished on tended submarines. Limited capability of the Mobile Operational Submarine Simulator (MOSS) was received in the Department in 1982 and enabled CANOPUS to handle and store the MOSS launchers and units. To date, thirty MOSS units have been successfully handled. The Department has extended its training to both crews of all tended SSBN submarines to include ammunition transaction reporting and "A" cable installation. As a result of this training, errors noted in previous ammunition transaction reports and faulty "A" cable installations have been substantially reduced.

(2) The Department coordinated the firing for familiarization for over 1100 personnel on the .45 caliber pistol, M14 rifle, and the M870 riot shotgun. Over 300 personnel were qualified on the .45 caliber pistol on a class "B" range. Training lectures continued on a regular basis for appropriate personnel. Approximately 2,300 rounds of various pyrotechnics, 76,700 rounds of small arms ammunition, and 1488 rounds of 3"50 ammunition were transferred from the ship without mishap. All countermeasure devices were transferred to tended units without mishap or loss of accountability.

(3) In direct support of Mk 88 and Mk 113 Fire Control Systems, the Department completed Optical Alignment Checks and Bdaim Gradient Verifications and Adjustments on 14 tended units. Fourteen other units received Photo Electric Auto Collimator (PEAC) tactical alignments and 8 units required purging of the MK 52 periscope. Complete Fire Control System arrival checks were conducted on 23 units. Thirty-six MK 78 Displays and MK75 Attack Directors, which are normally refurbished by the manufacturer, were completely rebuilt in the Fire Control Shop and successfully tested aboard submarines. Over 2,000 Fire Control modules were tested and the Weapons System Inspection and Recertification Team completed tests and adjustments on 14 submarines. Buoy Submarine Transmitter/Countermeasures Submarine Acoustic (BST/CSA) work was extensive including 7 annual inspections and 65 quarterly inspections in addition to the normal corrective and preventive maintenance required. 57 CSA's and gas generators were installed. A total of 5,330 man-hours was expended in BST/CSA support.

(4) Maintenance of the Poseidon (C-3) and Trident (C-4) missiles and warheads continued to be extensive in 1982 as demonstrated by the completion of two C-3, and one C-4 Operational Tests. Fifty-one missiles were transferred to and from SSBN's while fifty others were transferred to and from the tender resupply ship. Forty missile receipt inspections were performed and 19 missile tests were completed satisfactorily. Maintenance on the warheads included processing inspection and the mating/demating of 166

tactical re-entry vehicles (REV). Additionally, corrective maintenance was performed on 8 tactical warheads. A total of 230 re-entry vehicles were transferred to and from the resupply ship. Support of three Poseidon Operational Tests included receiving and processing 60 inert REV's and mating 4 replacement missiles. The Stockpile Laboratory Test (SLT) and Limited Life Component Exchange (LLCE) programs were supported utilizing the H3520 transfer unit to replace 6 REV's. In support of the Stockpile Administration, 68 Operational Change Reports (OCR's) for CANOPUS and 49 for tended units were prepared, and caused to be transmitted. A total of 25 Unsatisfactory Reports (UR's) were generated to identify major and minor discrepancies within the nuclear weapons program.

(5) Navigation system repair support of 35 SSBN's and 2 SSN's continued to be at a high standard. A total of 595 submarines repair jobs were completed requiring 34,212 man-hours. The Navigation Repair Shop replaced 3 AN/BRN-3 transducers, performed Base Support Assembly (BSA) bolt torquing on 2 Ship's Inertial Navigation Systems (SINS) units, repaired and/or aligned 90 Multispeed Repeater Gear Train Assemblies (SGTA's), surveyed 89 AN/BQN-3 Sonar Modules under the Module Surveillance Program and reinstated the SINS Module Checkout Program. In addition, the Navigation Shop set up a test equipment pool for SSBN's, loaning 80 pieces of test equipment to various SSBN's. The division repaired, aligned, and refurbished a total of 48 IBM Selectric Typewriters from tended units, aligned and repaired 26 X-Y Plotters, and installed a new test system for X-Y Plotters which permits complete checkout of the X-Y Plotter servo motor and feedback loop.

(6) Quality assurance (QA) coverage of the Department was stepped up in 1982. Over 7,366 inspections of ordnance handling, fire control and navigation system repair, publications, supply, and all other phases of Weapons Department production were made. There were 1,453 publication changes issued and checked, 115 Special Projects Alteration (SPALT) kits inspected and issued. In support of safety requirements for weight handling equipment, a hydraulically operated weight test machine was installed in the newly-established Weight Shop. More than 1,200 weight test certifications were conducted and in 1982. Formal QA training was received from Fleet Analysis Center in accordance with Type Commander instructions and several inspectors were certified wire-wrap/solder inspectors by Fleet Analysis Center and Interstate Electronics Electronics Communication.

(7) The Weapons Repair Department continued to excel in all phases of ordnance handling, storage, security, and administration and received very high marks from inspection teams of the Tactical Weapons Capability and Explosive Safety Reviews, Nuclear Technical Proficiency Inspection, and the Quality Assurance Audit. In addition, the Department provided valuable support for other ship-wide inspections including the Proficiency and Readiness Examination, Operational Propulsion Plant Examination, Radiological Control Proficiency Examination, and Supply Management Inspection.

(8) The Department's retention levels continued to exceed CNO and SUBLANT goals. Fourteen of 23 eligible "first termers" and 13 of 15 eligible "third/fourth termers" decided to re-enlist.

## 6. Administrative Department

a. All functions within this department have been upgraded. The Personnel Office, with the installation of a Xerox 860 word processor, has developed a program which quickly and accurately identifies personnel assignment matters and has significantly upgraded the distribution function. The Educational Services Office administered Navy-

wide advancement in rate exams and provided crew members with Navy Correspondence Courses, and on and off-base PACE Course educational opportunities. The Legal Office was upgraded with the assignment of a JAG Corps Officer to provide more in-depth command advice on legal matters. The Training Office conducted drug abuse training for all E-6 and above personnel, initiated a chief petty officer and petty officer indoctrination program and coordinated the efforts of the Command Training Team. The Master-at-Arms force was augmented by the assignment of a Drug Detection Dog Team. The Career Counselor's Office continued to provide career and retention information to the crew. The effort in this area resulted in a strong endorsement from Commander Submarine Squadron EIGHTEEN for the CINCLANTFLT Golden Anchor Award and retention on the TYCOM Honor Roll for retention.

b. During 1982, command chaplains were responsible for over 600 personal interviews with new personnel reporting aboard CANOPUS and over 600 counselling cases. In addition, 117 Catholic masses and 55 Protestant services were conducted. Chaplains made 668 pastoral calls to the hospitals, brig and correctional custody unit. Daily religious educational classes totaled 245. Three significant command religious programs were inaugurated during 1982. Father Dan Egan from New York conducted a week of drug and alcohol seminars for the CANOPUS crew. The Chaplains began personal interviews/briefings with all newly arriving personnel. The purpose of these interviews is to strengthen pride in professionalism, explain the Command Religious Programs, reemphasize the Navy's drug abuse initiatives and promote positive attitudes about CANOPUS and the Navy. A Single Parents Program was commenced to provide support for personnel who experience unique problems resulting from single parenthood.

## 7. Operations Department

a. The Operations Department consists of the Communications, Electronics and Navigation Divisions. As a result of a coordinated effort by all members of the Operations Department, CANOPUS was awarded the SUBLANT FY 82 Communications Green "C" (AS-FBM) for communications excellence. Responsible for all standard navigation and external communications functions, the Operations Department performs repair and maintenance of all communications, radar and own ship's navigational equipment, maintains the communications guard for Commander Submarine Squadron EIGHTEEN, Naval Weapons Station, USS ALAMOGORDO and all assigned Site IV units, as well as administering the Site IV ARFCOS, CMS, intelligence library, repair and maintenance of all assigned SSBN cryptographic and teletype equipment, training in all modes of visual signaling and in CW communications and other special functions.

b. The Operations Department has consistently supported the mission of USS CANOPUS and provided reliable, professional support to the embarked staff and tended units as the Site IV guardship. In this capacity, USS CANOPUS handled an average of over 6000 messages per month, or 200 messages per day. More than 72,000 narrative and data messages were processed with a less than .5 percent error rate, an improvement of 100 percent over 1981. Up to 15 radio and landline circuits and broadcast channels are maintained.

c. The Electronics Division maintained over 220 individual pieces of CANOPUS electronic communications, radar and navigation equipment, and over a hundred pieces of cryptographic and teletype equipment, and provided all electronic repair and maintenance services for the SVC CRAYFISH (TWR-682). In addition to own ship's maintenance requirements, 45 SSBN's tended resulted in 45 crypto and teletype inspections with 360 pieces of crypto equipment and 315 pieces of teletype equipment being overhauled and/or repaired.



d. As communications center for COMSUBRON EIGHTEEN, the department was tasked with quality control monitoring of the submarine broadcasts, provided support to Commander Submarine Group SIX for installation of an HF radio circuit at his headquarters and provided installation and maintenance services for a secure full-duplex teletype circuit directly linking CINCLANTFLT and Charleston Air Force Base in support of the repositioning of the TACAMO Alert Aircraft at Charleston Air Force Base. Under CINCLANTFLT/COMSUBLANT tasking, USS CANOPUS provides direct input to the Applied Physics Laboratory of John Hopkins University for Fleet Ballistic Missile Communications Continuing Evaluation Program by monitoring and evaluating data from various transmitting platforms to test survivability and reliability of submarine communications. These platforms include the VLF/LF transmitter facilities of Cutler, Maine Airborne Command Post and the National Airborne Command Aircraft. The monitoring environment included both peacetime and hostile (jamming) operations. USS CANOPUS has been cited with several attaboys for the input provided.

e. During April/May under the Electromagnetic Interference/Waterfront Corrective Action Program (EMI/WCAP), USS CANOPUS was assessed by MOTU 10, Charleston, SC and was provided with the technical training and material to identify and correct sources of electromagnetic interference. Approximately 90 percent of all known EMI sources have been corrected.

f. USS CANOPUS maintains the Armed Forces Courier Service (AFRCOS), responsible for the redistribution of COMSEC material to tended units in which approximately 147 faultless CMS transactions 62 two-man control and 894 ARFCOS transactions were completed during the year. This CMS office functions as the area distribution center for SAS, CINCUSNAVEUR and SACEUR. All inspections required and conducted by NAVSECGRUACT, Charleston, were discrepancy free and favorably noted USS CANOPUS' obvious attention to detail.

g. In the interest of training, USS CANOPUS communications provides an ideal platform for the enhancement of fleet and reserve readiness. The goal is to be able to support any contingency, known or anticipated, that exists within the Fleet Ballistic Missile Submarine Force, as well as respond to all CINCLANTFLT communications requirements. The following has been accomplished during 1982:

(1) USS CANOPUS communications has provided training and PQS qualification to not less than 10 reserve components for WET, ACDUTRA and CADEX 82. Detachments include USS ORION (AS-18), USS HUNLEY (AS-31), COMSUBGRU SIX, USS SANTA BARBARA (AE-28), USS MOUNT BAKER (AE-34) and the Naval Weapons Station, Charleston, during CADEX 82.

(2) CANOPUS actively participates in COMSUBLANT exercise "Esteem Highly," which includes proficiency in CW, HF Orestes, Satellite Secure Voice and OFF-LINE encryption training of SSBN's and tender communications personnel. CANOPUS, because of demonstrated proficiency, has been tasked by other squadrons to participate in these exercises with their assigned units.

(3) CW training is conducted for arriving and inport units an average of 17 hours a week for communications personnel to maintain proficiency and for those who are just learning the Morse Code.

(4) Visual signaling training is conducted by Navigation Division personnel daily for all units berthed at Site IV. This consists of flashing light and is graded by COMSUBRON EIGHTEEN Operations personnel. Flaghoist and semaphore training are also available on request.

h. USS CANOPUS successfully completed four underway periods during 1982 which included:

10-13 June - Mobile training team assist visit.

16-18 August - Mobile training team assist visit and SSBN target services.

20-24 September - Mobile training team assist visit.

15-20 November - Operational Propulsion Plant Examination.

#### 8. Deck Department

a. In January, the Deck Department organized the Small Boat Repair Division.

b. To enhance the topside preservation effort and enhance the appearance of the ship, this department contracted for the laying of Polyurethane Deck Covering (PRC) on the Helo Deck, port and starboard main weatherdeck, port and starboard 01 levels and port and starboard 02 levels frame 38 to 66 1/2.

c. Deck Department also conducted innumerable mooring and unmooring evolutions for tended units and CANOPUS herself, all without incident.

#### 9. Dental Department

a. In the Dental Department, over 24,112 emergency and routine procedures were performed by department personnel. Included in these were 5,402 diagnostic and preventive procedures, 6,025 restorative procedures, 1,664 periodontal procedures, 539 oral surgery procedures and 160 prosthetic procedures. In addition to treating ship's company, COMSUBRON EIGHTEEN staff, and personnel of other ships in the area, the Dental Department assisted in 16 SSBN refits. During off-duty hours, department personnel participated in a Preventive Dentistry program for dependents.

#### 10. Medical Department

a. The Medical Department evaluated more than 5,700 patients seeking both routine and emergency care. In support of sick-call, the Pharmacy filled over 6,000 prescriptions and the laboratory performed 9,719 procedures. The Medical Department routinely monitors over 550 personnel in the hearing conservation program and conducted 840 audiograms. The Radiation Health Officer monitors more than 500 personnel in the Radiation Health Program. Additionally, the Medical Officer conducted 885 physical examinations, 270 pairs of prescription glasses were ordered and 1,934 x-rays were taken. The EMIT-ST drug screening urinalysis testing program was implemented in May 1982. A total of 1,145 test and controls were completed. The EMIT-ST porta-kit is also used in support of Submarine Squadron EIGHTEEN, Naval Weapons Station, ARDM-2 and other SUBLANT units. The Medical Department was involved in numerous inspections during the year, most noteworthy were the Medical Readiness Inspection (MRI) in which CANOPUS was considered the best tender SUBLANT had inspected and the OPPE in which COMSUBLANT specifically commented to the improvements made in the area of Hearing Conservation.

**LIST OF VIP AND VISITORS**

18 February  
3 April  
8 April  
28 April  
23 August  
3 September  
28 October  
5 November

JCS Delegation Visit  
VADM THUNMAN (OP-02) Visit  
Air War College Visit  
VADM WHITE Visit  
CINCLANTFLT Visit  
BGEN NICHOLSON Visit  
Mrs. HEGNER, Danish Minister of Defense Visit  
Under Secretary of Defense MARTIN Visit

## LIST OF SHIPS AND SUBMARINES TENDED

### **SURFACE UNITS TENDED**

USS ALAMOGORDO (ARDM-2)  
ERP BARGE (YRBM-4)  
USS CRAYFISH (TWR-682)  
USS CANOPUS (AS-34)  
USS HOLLAND (AS-32)

### **SUBMARINE UNITS TENDED**

USS JAMES MONROE (SSBN-622)  
USS WOODROW WILSON (SSBN-624)  
USS JAMES MADISON (SSBN-627)  
USS VON STEUBEN (SSBN-632)  
USS STONE WALL JACKSON (SSBN-634)  
USS BENJAMIN FRANKLIN (SSBN-640)  
USS SIMON BOLIVAR (SSBN-641)  
USS KAMEHAMEHA (SSBN-642)  
USS GEORGE BANCROFT (SSBN-643)  
USS LEWIS AND CLARK (SSBN-644)  
USS JAMES K. POLK (SSBN-645)  
USS GEORGE C. MARSHALL (SSBN-654)  
USS HENRY L. STIMSON (SSBN-655)  
USS GEORGE WASHINGTON CARVER (SSBN-656)  
USS FRANCIS SCOTT KEY (SSBN-657)  
USS MARIANO G. VALLEJO (SSBN-658)  
USS BLUEFISH (SSN-675)  
USS STURGEON (SSN-637)

### **SUBMARINE REFITS**

USS ALEXANDER HAMILTON (SSBN-617)  
USS JOHN ADAMS (SSBN-620)  
USS NATHAN HALE (SSBN-623)  
USS WOODROW WILSON (SSBN-624)  
USS TECUMSEH (SSBN-628)  
USS JAMES MADISON (SSBN-627)  
USS HENRY L. STIMSON (SSBN-655)  
USS FRANCIS SCOTT KEY (SSBN-657)  
USS MARIANO G. VALLEJO (SSBN-658)