COMMAND HISTORY

1986

Commander, Naval Oceanography Command
NSTL, MS 39529-5000

PREFACE

This is a history of the Headquarters of the Commander, Naval Oceanography Command. It does not purport to be a history of the Naval Oceanography Command or claimancy. For this the reader must consult the histories of the various shore/field activities which make up the Command.

In compiling this history we followed the guidance provided in the directive requiring its preparation and submission that existing documents be used wherever possible. To this end, we felt that Naval Oceanography Command News, the Command's monthly newspaper, was a very valuable source of historical information in that it chronicles major events, technological developments, and procedural changes. It also provides insight into the management of the Command through the monthly messages from the Commander to those in his charge and in the goals and objectives he set for the organization. An abbreviated index to News is contained in Appendix II. This index identifies items of historical significance as they relate to actions, decisions, or policies of the Commander as carried out by his staff.

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HISTORICAL BACKGROUND

The Naval Oceanography Command was established on 1 October 1978. It is a second echelon command reporting directly to the Chief of Naval Operations. The Command was formed by consolidating two second echelon commands both of which had been established in 1967. These were the Oceanographer of the Navy and the Commander, Naval Weather Service Command. The Oceanographer commanded the Naval Oceanographic Office at Suitland, Maryland. In 1976 the Office was moved to Bay St. Louis, Mississippi. The shore/field activities under the Commander, Naval Weather Service Command included the Fleet Numerical Weather Central at Monterey, California; weather centrals at Norfolk, Virginia, Pearl Harbor, Hawaii, Guam, and Rota, Spain; weather facilities at Jacksonville and Pensacola, Florida, Glenview, Illinois, San Diego and Alameda, California, and Yokosuka, Japan. In addition, there were approximately 50 Naval Weather Service Environmental Detachments located principally at naval air stations. The detachments reported to the various weather facilities.

An interim headquarters organization called Director, Naval Oceanography and Meteorology existed from February 1976 until the establishment of the Naval Oceanography Command. The interim organization was a third echelon headquarters under the Oceanographer of the Navy. The Director commanded the Naval Weather Service assets described above. The Director's staff was made up of those personnel formerly attached to the Naval Weather Service Command headquarters which was disestablished in February 1976. During the period July to September 1976, the headquarters was moved from Washington, DC, to the National Space Technology Laboratories (NSTL) near Bay St. Louis, Mississippi.

The position of Commander, Naval Oceanography Command was established as a flag billet (O-7) for a Special Duty Only (Geophysics) officer (designator 1800). A flag officer billet remained on the staff of the Chief of Naval Operations as the head of the Naval Oceanography Division (OP-952). It should be pointed out that the old-Commander, Naval Weather Service Command (which became Director, Naval Oceanography and Meteorology under the claimancy of the Oceanographer) was assigned a flag billet. In fact, its antecedent position, the Director, Naval Weather Service, had been a flag billet since 1965. A flag officer only briefly occupied the position from April to September 1971 with the selection of Captain William J. Kotsch who served as Commander, Naval Weather Service Command from July 1970 to September 1971 when he transferred to the Office of the Joint Chiefs of Staff. To date he is the only 1800-designated officer to be selected for flag rank.

In 1979 the Naval Oceanography Command was realigned and many of the field activities retitled. The words "weather" and "service" were deleted from activity titles and replaced by the word "oceanography." The highly centralized organization which had characterized the former Weather Service Command gave way to a regional structure with centers at Norfolk, Virginia (Eastern); Pearl Harbor, Hawaii (Western); and Suitland, Maryland (Polar). Field activities within these geographic areas reported through a regional commander. Exceptions to these were the Fleet Numerical Oceanography Center (formerly Fleet Numerical Weather Central) and the Naval Oceanographic Office and its network of representatives which was left unchanged. Facilities which had Command-wide functional responsibilities in the Weather Service, Alameda (meteorological and oceanographic equipment management), Glenview (Reserve program management), and Pensacola (onboard training management) were redesignated as detachments and their functional responsibilities assigned to the Naval Oceanographic Office. Management of detachments at Reserve and training air stations was also transferred to the Naval Oceanographic Office. This proved unwieldly and the functions, largely weather related, alien to the Naval Oceanographic Office mission. In October 1981, a Naval Oceanography Command Facility was established as a third echelon command at NSTL to manage all three functions as well as the detachments. This action also included the establishment of facilities at Keflavik, Iceland; Bermuda; and Cubi Point in the Republic of the Philippines. These were fourth echelon commands reporting to the respective regional commander.

OPNAV INSTRUCTION 5450.165B

From: Chief of Naval Operations
To: All Ships and Stations (less Marine Corps field addressees not having Navy Personnel attached)

Subj: Commander, Naval Oceanography Command, mission and functions of

A) Ref: (a) OPNAVNOTE 5450 Ser 09B2E3/314103 of 18 Oct 1982 (MAR 83) (NOTAL)

R) Encl: (1) Functions of the Commander, Naval Oceanography Command

R) 1. Purpose. To promulgate the functions to be performed by the Commander, Naval Oceanography Command in support of the mission promulgated by reference (a).

2. Cancellation. OPNAV Instruction 5450.165A.

A) 3. Mission. Responsible for the command and management of assigned Oceanographic (includes disciplines of Oceanography, Meteorology, Mapping, Charting and Geodesy) activities and efforts under the Naval Oceanography Program and for providing technical guidance in such matters throughout the Department of the Navy, and shall perform such other tasks and functions as may be directed by competent authority.

4. Status and Command Relations. The Naval Oceanography Command is a shore activity in an active status under the Commander, Naval Oceanography Command and under the command of the Chief of Naval Operations. The Commander, Naval Oceanography Command, is subject to the area coordination authority of the Chief of Naval Education and Training. (R

5. Action. In the accomplishment of the assigned mission, the Commander, Naval Oceanography Command shall ensure performance of the functions set forth in enclosure (1). The Commander, Naval Oceanography Command and the Chief of Naval Education and Training are requested to advise the Chief of Naval Operations of any recommended modifications to the mission and functions of the Naval Oceanography Command. (R

LEE BAGGETT, JR.
Director, Naval Warfare

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Functions of the Commander, Naval Oceanography Command

Functions:

1. Commands the Naval Oceanography Command.

2. Provides oceanographic information and prediction services for the Department of Defense.

3. Provides Mapping, Charting and Geodesy (MC&G) services to Navy commands and to the Defense Mapping Agency.

4. Provides meteorological information and support services throughout the Navy.

5. Represents the Department of the Navy in defense, national and international operational matters, based on existing Navy, Defense and/or national policy, involving oceanography, MC&G and meteorology.

6. Determines Command financial, manpower and training resources needed to meet CNO validated Oceanographic requirements.

7. Prepares and defends budget and related submissions to higher authority.

8. Recommends military construction projects as required for the Command.

9. Executes the budget as a major claimant and ensures that strict financial accountability is maintained.

10. Based on validated requirements and established policies, prepares plans for submission to the CNO for providing oceanographic, MC&G and meteorological support throughout the Navy.

11. Acts as the central point of contact within Navy to collect, consolidate, rank in priority and submit to the CNO for validation oceanographic and meteorological requirements including recommendations for research and development (R&D).

12. Collects, consolidates and submits MC&G requirements and R&D recommendations, from commands not reporting through the Unified or Specified Commanders, for CNO and DMA validation.

Enclosure (1)

13. Assists the CNO in coordinating with other commands to ensure that platform and weapons systems design, development and tactical evaluation and employment are optimized relative to the effects of oceanographic and meteorological parameters.

14. Provides technical guidance to other commands concerning oceanography, MC&G and meteorology including requirements for personnel, equipment and facilities.

15. Develops plans for and conducts systematic technical assessment of the Naval Oceanography Command's methods and products to ensure utility and scientific validity.

16. Monitors oceanographic, MC&G and meteorological R&D projects scheduled to transition from developmental to operational status and manages their integration into command operations; and recommends to the Resource Sponsor those changes in R&D projects necessary to ensure efficient integration into command operations.

17. Develops five-year oceanographic program recommendations for submission to CNO.

18. Manages the meteorological, MC&G and oceanographic equipment program and validates meteorological, MC&G and oceanographic equipment allowances.

19 Maintains an oceanographic management information system responsive to both the operational and R&D commands and activities.

20. Serves as an advisor to the Designator Advisor for the Restricted Line (Geophysics), Limited Duty Officer (Oceanography/Meteorology), and Warrant Aerographer categories; and as Technical Advisor for the Aerographers Mate rating; and as an advisor to the Subspecialty Primary Consultant for the Geophysics (XX47), Meteorology (XX48) and Tactical Environmental Support (XX49) subspecialties.

21. Develops plans and programs for management and utilization of meteorological and oceanographic units of the Naval Reserve.

22. Directs the Command Inspection Program and monitors deficiencies of subordinate activities in accordance with appropriate directives.

23. Provides security management of Navy compartmented programs within the command.

24. Provides the Department of Navy interface coordination with DOD and intragovernment agencies on operational environmental satellite matters and serves as an advisor to CNO on these matters.

25. Exercises, in coordination with appropriate operational commanders, technical control of assigned platforms to include mission specifications, employment schedules and assignment of technical and scientific personnel and equipment.

26. Serves as an effective instrument of the U.S. Foreign Policy by initiating and continuing action programs which promote positive relations between the command foreign nationals, and which assist individual Naval personnel and their families to work effectively, live with dignity and satisfaction, and function as representatives of the Navy and of the United States while overseas.

5450.165B

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350

IN REPLY REFER TO
3140
Ser 952C/4U339710
08 NOV 1984

From: Chief of Naval Operations
To: Commander, Naval Oceanography Command

Subj: MODIFICATION TO ASSIGNED FUNCTIONS

Ref: (a) OPNAVINST 5450.165B

1. Effectively immediately, add the following to the functions assigned in reference (a):

"Provides audiovisual (AV) management for the Command and maintains AV production capabilities to support other assigned functions."

2. The above statement will be incorporated in the next change to reference (a).

J.R. SEESHOLTZ
By direction

Copy to:
OP-007D

Commander, Naval Oceanography Command
Biography

JAMES E. KOEHR
CAPTAIN, U.S. NAVY

Captain James E. Koehr was born in St. Louis, Missouri, on 29 November 1937. He attended St. Louis U. High School and received a Bachelor of Science Degree from St. Louis University in 1959. After attending Officer Candidate School at Newport, Rhode Island, he was commissioned an Ensign in November 1959.

After initial training at Aviation Ground Officers School and the Pacific Fleet Air Intelligence Training Center, he was assigned to Commander, Carrier Division 7 in the Western Pacific as an Air Intelligence Officer. From 1962 to 1964 he was a student at the Naval Postgraduate School, Monterey, California, where he was awarded a Master of Science Degree in Air-Ocean Environment. In 1964 he was assigned to the Fleet Weather Facility, Argentia, Newfoundland, as Arctic sea-ice forecaster and weather forecaster.

Lieutenant Koehr reported to the Fleet Weather Central, Norfolk, Virginia, in 1967, where he served as Forecast Duty Officer and Oceanographic Operations Officer. In 1969 Lieutenant Commander Koehr became Officer in Charge of Naval Weather Service Environmental Detachment, Patuxent River, Maryland, with additional duty as Staff Meteorologist to Commander, Naval Air Test Center. During this tour, in January 1971, he was the Flight Meteorologist for the successful world record (heavy turboprop class) distance flight of a P3C aircraft from NAS Atsugi, Japan, to NAS/NATC Patuxent River, Maryland.

After serving as the Commanding Officer, Oceanographic Unit TWO conducting hydrographic surveys in the North Atlantic, Lieutenant Commander Koehr reported to the Center for Naval Analyses, attached to the Operations Study Group in the Office of the Chief of Naval Operations. In this assignment he functioned as operations research analyst and resident oceanographer on a number of Naval Warfare studies.

Commander Koehr was assigned to the Defense Mapping Agency Hydrographic Center, Suitland, Maryland, in 1975 as the Plans and Requirements Officer. He subsequently became Program Integration Officer. Following his tour he graduated from the Industrial College of the Armed Forces, Fort McNair, Washington, D.C.

From 1979 to 1982, Captain Koehr was the Plans, Programs and Operations Officer for the Oceanographer of the Navy/Director Naval Oceanography Division in the Office of the Chief of Naval Operations. He next served as the Commanding Officer of the Naval Eastern Oceanography Center, Norfolk, Virginia, from 1982 to 1984 and most recently as the Deputy Director, Naval Oceanography Division in the Office of the Chief of Naval Operations (OP-952). He has been Commander, Naval Oceanography Command since December 1984.

Captain Koehr wears the Defense Meritorious Service Medal, Navy Meritorious Service Medal with two gold stars in lieu of second and third awards, Navy Commendation Medal, Navy Meritorious Unit Commendation Ribbon, National Defense Service Medal, and Vietnam Service Medal.

Captain Koehr is married to the former Erma Louise Bulgarelli of Pershing, Iowa. They have four sons—James, Ensign John J., Ensign Bernard E., and Brian, a student at the University of Notre Dame.

CAPT J. E. KOEHR

TRAVAL HISTORY

7-10 January 1986, Monterey, CA
Reason: Attend Curricular Review

20-25 January 1986, Washington DC
Reason: NMPC Orders concerning Oceanography

17-26 February 1986, Tokyo, Yokosuka, Pearl Harbor and San Diego
Reason: Attend 1986 Tropical Cyclone Conference and other Oceanography Matters

14-19 April 1986, Cambridge, MA, Newport, RI and Brunswick, ME
Reason: Ocean Prediction Workshop

27-28 April 1986, Washington DC
Reason: Brief CNO (OP-05B)

7-12 May 1986, New Orleans, Norfolk, Corpus Christi, San Diego
Reason: Brief on pending FY87 CNOC Shore Establishment Realignment

29-30 May 1986, Pearl Harbor, HI
Reason: Attend NWOC Change of Command

10-13 June 1986, Monterey, CA
Reason: Attend NODDES/SPADS meeting and FNOC dedication of new building

10-11 July 1986, Washington DC
Reason: Oceanography matters

14 July 1986, Pensacola, FL
Reason: Visit NOCD Pensacola, call on CNET and address Naval Weather Service Association

24-26 July 1986, Monterey, CA
Reason: Attend FNOC Change of Command

27-30 July 1986, Washington DC
Reason: Attend board meeting

3-4 September 1986, Washington DC
Reason: Oceanography Matters

15-16 September 1986, Washington DC
Reason: NAVOBSY Change of Command

23-26 September 1986, Washington DC
Reason: Attend Oceans '86 Conference

20-23 October 1986, Washington DC
Reason: Attend ONR 40th Anniversary

8-11 December 1986, Willow Grove, PA, South Weymouth, MA, and Brunswick, ME
Reason: Command liaison

16-18 December 1986, Washington DC
Reason: Brief CNO (OP-006)

6-9 January 1987, Homestead AFB, FL
Reason: Attend 41st Annual Interdepartmental Hurricane Conference

20-25 January 1987, Washington DC
Reason: Attend Military Sealift Command meeting

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1986

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OPERATIONS

1986

1. General

a. 1 Feb 86 - U.S. Naval Oceanographic and Meteorological Support System Manual (NAVOCEANCOMINST 3140.1H) revised.

b. 1 Mar 86 - NAVOCEANCOM Command and Control (C^2) Support Mid-Range Plan promulgated.

c. Jun 86 - COMNAVOCEANCOM conducted the System Readiness Test on the first version of the Tactical Environmental Support System (TESS 1.0) on USS RANGER (CV-61) during RIMPAC 86 in June 1986. TESS 1.0 was successfully introduced into the Fleet and installed in five aircraft carriers in 1986, with installations continuing.

d. 1 Oct 86 - Sub-Regional Forecast Concept implemented. Amplifying discussion provided under Special Topics.

e. Nov 86 - Concurrent with the implementation of the Navy standard passive acoustic prediction model, RAYMODE, on the computer systems at Fleet Numerical Oceanography Center, NAVOCEANCOM's primary computer processing facility, COMNAVOCEANCOM directed a major policy change affecting acoustic products. In the interest of communications discipline, steps were taken to reduce the length of acoustic prediction messages by limiting the number of source-receiver-depth combinations which could be requested by fleet units.

f. During 1986, COMNAVOCEANCOM developed a program utilizing the Fleets' Navy standard desk-top tactical-support computer (HP-9020A) and the Fleet Mission Program Library to deliver digital oceanographic and meteorological data to afloat platforms. The feasibility test concluded in early 1987 was a complete success.

g. COMNAVOCEANCOM developed a coordinated response to CINCPACFLT OCEN requirement 86-03, Command Center Environmental Support System. The COMNAVOCEANCOM response was expanded to include input from CINCLANTFLT and CINCUSNAVEUR.

2. Special Topics

a. As a result of manpower reductions affecting the NAVOCEANCOM claimancy, COMNAVOCEANCOM was forced to explore ways to maintain services in the face of the reduced manpower. Primary attention was focused on the activities providing aviation weather services at Naval Air activities within the

continental United States. The solution was implemented on 1 October 1986 as the Sub-Regional Forecast Plan. By this plan, activities serving airfields that do not conduct flight operations twenty-four hours a day were reduced in manpower. During peak airfield operating hours, such activities will be manned by both forecasters and observers. Outside of peak hours, however, they will be manned only by observers. Forecast services during hours of reduced manning will be provided by a fully manned, regional activity that serves two or more sub-regional units. This plan requires dedicated communication lines connecting regional and sub-regional activities and it requires familiarizing regional forecasters with the configuration, hazards and local geography of distant airfields. Although this plan means face-to-face weather briefings will no longer be continuously available to pilots at all airfields, it was determined that it offers the best means of providing the services essential to flight safety, while achieving the manpower reductions without actually closing any activities. With its implementation, command relationships were reassigned and the following regional to sub-regional organization was adopted:

Regional Forecast Activity	Sub-Regional Activities
NAVOCEANCOMFAC Brunswick ME	NAVOCEANCOMDETs South Weymouth MA, Newport RI, Lakehurst NJ, Willow Grove PA
NAVOCEANCOMFAC Jacksonville FL	NAVOCEANCOMDETs Key West FL, Mayport FL, Charleston SC, Kings Bay GA
NAVOCEANCOMFAC San Diego CA	NAVOCEANCOMDETs Long Beach CA, El Centro CA, Miramar CA
NAVOCEANCOMDET Moffett Field CA	NAVOCEANCOMDETs Fallon NV, Lemoore CA, Crows Landing CA
NAVOCEANCOMDET Pensacola FL	NAVOCEANCOMDETs Whiting Field FL, New Orleans LA, Meridian MS, Memphis TN
NAVOCEANCOMDET Corpus Christi TX	NAVOCEANCOMDETs Chase Field TX, Dallas TX, Kingsville TX

b. During 1986, COMNAVOCEANCOM developed preliminary plans to upgrade environmental support to 18 Antisubmarine Warfare Operations Centers (ASWOCs) worldwide during the next decade. Command programs to achieve requisite state-of-the-art equipment resources progressed satisfactorily, but initial plans to man two facilities at these locations - one serving existing customers from present facilities and the other serving the upgraded ASWOCs from collocated spaces - proved unsupportable

within manpower projections. Other issues involved the funding of military construction for collocated spaces, the siting of new equipment, the timing of new ASWOC construction vis-a-vis equipment installation schedules, NAVOCEANCOM funding of collocated spaces, personnel and equipment security requirements, upgraded communications requirements, and increased training requirements. At year's end, COMNAVOCEANCOM settled on a policy of considering each individual site on its own merits. At some sites full collocation with the ASWOC was planned while at others, COMNAVOCEANCOM intent was to support the ASWOC from existing facilities. At year's end an agreement had not been reached with the ASWOC community.

c. Installed the Naval Environmental Satellite Network (NESN) on a system-wide basis from NAVOCEANCOMCEN's Rota to Guam to handle Defense Meteorological Satellite Program (DMSP) type data. System will be fully crypto-covered in the future.

d. Completed an upgrade of the Special Intelligence Communications (SPINTCOMM) facilities at FLENUMOCEANCEN.

e. Completed an upgrade of the Alaska Meteorological Data System (ALMEDS) area from 75 to 1200 baud. Commenced installation work in the European Meteorological Data System (EURMEDS) area and completed planning for the Pacific Meteorological Data System (PACMEDS) upgrade.

f. Installed the first secure phone capability for the Headquarters component of NAVOCEANCOM. Ordered secure Data Communications service for the same activity.

g. Installed a new Emergency Generator at NAVEASTOCEANCEN.

h. Procured at least one Uninterruptible Power System (UPS) for all major NAVOCEANCOM commands. The exception was FLENUMOCEANCEN which will receive two major units. NAVOCEANO will receive additional units later.

i. Gained initial access to the Department of Defense (DOD) Satellite System when a Demand Assigned Multiple Access (DAMA) slot to a 300 baud channel was assigned by CNO in support of the Tactical Environmental Support System (TESS).

j. Installed a communications laboratory for TESS 2.0 within NAVOCEANO at NSTL, MS.

k. Instituted a new communications profile reporting system on a quarterly basis to keep affected commands advised on rates of expenditure and status of remaining funds.

l. Commenced automating the recurring communications reports and records to gain maximum efficiency from COMNAVOCEANCOM staff

personnel resources.

m. Conducted a claimancy-wide telecommunications vulnerability study to determine the degree of security existing within our communications support systems.

n. Completed the installation of communications support facilities for the sub-regional forecast briefing network throughout CONUS.

o. Designed and obtained CNO approval for a state-of-the-art communications suite of equipment for each of our NAVOCEANO controlled survey ships.

p. Implemented the concept of providing tailored communications support for specific afloat units engaged in independent operations in select geographical areas. This concept utilized existing communications assets dedicated to the Variable Frequency Communications Terminations (VFCT) between COMNAVTELCOM stations ashore and certain major combatants at sea.

q. Requirements processed from Fleet Commands for oceanographic and meteorological support.

	New requirements received, and submitted to CNO (OP-006).	Number recommended for validation.	Validated requirements completed and closed out.
1986	15	10 (67%)	17

PROGRAM INTEGRATION

1. GENERAL

a. Managed and directed the TESS 2.0 program. Oversaw the System Readiness Test (SRT) for TESS 1.0 on the USS RANGER. Directed the installation of four operational and three training TESS 1.0 units. Established the SRT for TESS 2.0 in June 87.

b. Updated Volume 1 of the Oceanographic Equipment Plan (OEP).

c. Directed and managed the preparation of Volume 2 of the OEP to include all COMNAVOCEANCOM oceanographic equipment.

d. Promulgated the Satellite Data Utilization Plan which addresses present, planned, and future satellite sensors and satellite data processing capabilities.

e. Directed and managed the Typhoon Information Processing System (TIPS) program designed to automate typhoon prediction at the Joint Typhoon Warning Center.

f. Directed and managed the Digital Image Processing System (DIPS) program which is designed to provide high resolution ice mapping and characterization from remotely sensed data available to the Navy/NOAA Joint Ice Center, Suitland, MD.

g. Commenced preliminary planning for the exploitation of the DMA MK 90 Digital Data Bases programmed for IOC in the early to mid 1990s. COMNAVOCEANCOM plans to incorporate MK 90 features into the NAVOCEANO Integrated Data Base Management System.

h. Dedicated the world's largest oceanographic research library.

i. Directed and managed COMNAVOCEANCOM Large Scale Computer Plan for the acquisition and use of Class VII supercomputers to produce highly resolved, accurate oceanographic parameters to support the fleet.

j. Promulgated the COMNAVOCEANCOM Acoustic Support Plan to provide tactical indices in easily-interpreted graphical presentations.

k. Military construction projects:

(1) P-004 NAVOCEANO NSTL, MS. 69,645 sq. ft. NAVOCEANO Operations Center/Maury Library. Operationally occupied May 86.

(2) P-002 FLENUMOCEANCEN Monterey, CA. 52,780 sq. ft. Meteorological Building. Operationally occupied June 86.

(3) P-144 NAVOCEANCOMFAC Jacksonville, FL.
3,979 sq. ft. Operations Building Addition.
Awarded construction contract August 86.

(4) P-024 NAVOBSY Washington, DC.
Emergency power for NAVOBSY Master Clock.
Advertised for bids November 86.

COMMAND FINANCIAL PROGRAM
OPERATION AND MAINTENANCE, NAVY;

Activity Group: Environmental/Prediction Support
Budget Activity: III - Intelligence and Communications

I. Description of Operations Financed.

Environmental/Prediction support is provided for programs under Strategic Systems, Tactical and Surveillance, Navigation and Charting, and Command and Control. This support requires the collection and processing of ocean environmental data and the provision of specific products to satisfy: (a) Chief of Naval Operations (CNO) and Defense Mapping Agency (DMA) requirements; (b) CNO, fleet and Systems Command requirements for Naval air, surface and sub-surface (SSN) operations; (c) DMA requirements for Unified and Specified Command nautical chart deficiencies; and to provide general meteorological and oceanographic services to the Navy.

Environmental surveys are conducted from 12 ships operated by the Military Sealift Command and 3 aircraft operated by Oceanographic Development Squadron EIGHT.

A. Operations in Support of Strategic Systems Details are classified.

B. Operations in Support of Tactical and Surveillance Systems Oceanographic and geophysical data which influence the performance of active and passive sensor and weapon systems are collected over broad areas to: (1) assist in placement and installation of acoustic arrays and cables for the underwater surveillance network, (2) optimize the Anti-Submarine Warfare (ASW) sea control mission (including offensive and defensive mining and mine countermeasures); and (3) identify the effects that discontinuity areas (fronts and eddies) have on fixed and mobile ASW systems in regards to ASW/USW tactics. Products include computer assisted ASW prediction products, Planning Guides, Area Environmental Assessment, Mine Warfare Pilots and inputs to Fleet tactical manuals and sonar operating doctrine.

C. Operations in Support of Navigation and Charting

(1) Hydrography. Hydrographic data are collected in nearshore areas to support the production of coastal, combat, approach, harbor and special purpose nautical charts in satisfaction of DMA requirements. The data are principally collected from two (385 ft.) coastal survey ships. Additional data are collected through commercial contracting, national and international cooperative surveys (National Ocean Survey, United Kingdom Navy Hydrographic Department and the Hydrographic Survey Assistance Program (HY-SAP)). (2) Magnetics. A Specially configured aircraft is used to measure the earth's magnetic field. The collected magnetic data

is the primary input for development of the United States World Magnetic Model and is incorporated by DMA onto world charts.

D. Operations in Support of Command and Control This activity group encompasses resources for the operation of 66 Naval Oceanography Command Activities. It also provides for centralized technical direction of meteorological and oceanographic prediction functions on naval ships, fleet staffs and Unified staffs including: forecasts and prediction of environmental effects on shipboard weapon sensor systems; optimum track ship routing; surface and sub-surface ice forecasting support for polar areas; Naval Environmental Display Station (NEDS) for automated Environmental and Weather Network; the Satellite Data Processing and Display System (SPADS); Navy Oceanographic Data Distribution and Expansion System (NODDES); and the Primary Environmental Processing System Upgrade (PEPSU).

II. Financial Summary (Dollars in Thousands).

	FY85
Strategic Systems	62,720
Tactical & Surveillance	59,461
Navigation and Charting	30,367
Command and Control	14,323
Maintenance of Real Property	629
Other Base Operating Support	15,370
	182,870

COMNAVOCEANCOM PUBLIC AFFAIRS PROGRAM

I FY86 Accomplishments

A Exhibits (excluding local area events)

1. Navy League Sea-Air-Space Symposium
   Washington, DC

2. MTS MDS Seminar New Orleans, LA

3. Oceans 86 Washington, DC

4. Pan American Institute of Geography and History
   Rio de Janerio, Brazil

5. NSTL Visitors Center, NSTL, MS, visited by 90,000 persons annually. Ongoing.

6. Museum of Science and Industry Chicago, IL
   The entire Navy exhibit is being redone. COMNAVOCEANCOM is working on this project. Approximately 4 million people visit the Museum each year.

B Audiovisual Productions

1. In-house productions completed in the past year: (videotape)

   a. "Characteristics and Tactical Use of Ocean Fronts"

   b. "SXBT and SVP Trace Interpretation" (Classified)

   c. "Calculation of Figure of Merit" (Classified)

   d. "COMNAVOCEANCOM Command Brief"

   e. "Coping with Stress Associated with TDY - Preparing for Departure"

   f. "Coping with Stress Associated with TDY - Preparing for Return"

2. Contract productions completed in the past year: (videotape)

   a. "Patrol Aircraft Computer Assisted Search" - (VPCAS) seven part series

      (1) VPCAS - Introduction

(2) VPCAS - Status Board

(3) VPCAS - Acoustic Information and Search History Information

(4) VPCAS - Detention Information

(5) VPCAS - Target Motion Information

(6) VPCAS - Probability Maps

(7) VPCAS - Search Planning Aids

3. Commercial off-the-shelf productions located and acquired to fulfill claimancy requirements.

a. "The Uninvited Guest"

b. "The Spies Among Us"

c. "The Iacocca Tapes"

d. "How to Improve Your Memory"

e. "Understanding and Managing Stress"

f. "Listen and Be Listened To"

g. "Managing Conflict"

h. "How to be an Effective Supervisor"

i. "4691 Color Graphics Copier - Disassembly"

j. "4691 Ink System Maintenance"

k. "Going International I - Bridging the Culture Gap"

l. "Going International II - Managing the Overseas Assignment"

C. Community Relations

1. Child Safety Fair

2. Special Olympics

3. Building/Library Dedications (NAVOCEANO, FLENUMOCEANCEN)

4. Local speaking engagements

5. Local area exhibit appearances (8).

D. Internal Relations

1. Naval Oceanography Command News and Naval Oceanographic Office Bulletin. Ongoing effort.

2. Arranged for "Navy News This Week" segment on NAVEASTOCEANCEN

3. "Navy News This Week" made available, under COMNAVOCEANCOM sponsorship, to all Navy at NSTL and to NAVAIDS. Ongoing effort.

4. COMNAVOCEANCOM originated, edited and/or revised 64 military awards. Ongoing effort.

E. Other Public Affairs Functions

1. Processed 49 scientific and technical papers for public release clearance.

2. Responded to 128 written inquiries from commercial firms, schools, the White House, Congress, or other government agencies.

3. Prepared 5 articles/features for local media.

4. Prepared article for publication in Marine Geodesy.

5. Prepared speeches and presentations for Commander and Deputy Commander.

6. Provided information to CHINFO as requested.

7. Carried out major claimant audiovisual management functions assigned in OPNAVINST 5290.1. This requires just over one man-year.

F. In the past two years information and/or audiovisual material requested by and provided to film or TV producers, universities, other government agencies, publishers, for use in their projects. These include:

1. Walt Disney (for Living Seas Pavilion at EPCOT)

2. BBC

3. WQED

4. WETA

5. WGBH

6. Public Broadcasting System

7. ASAHI Television

8. NIPPON Television

9. University of Illinois

10. Naval Academy

11. Naval War College

12. Chief of Naval Research

13. Navy Internal Relations Activity

14. NASA

15. Peter Gimbel (ANDREA DOREA Salvage)

16. Sea Technology

17. John Doremus and Co. (for Delta Airlines)

18. Guice and Guice Advertising Agency

19. U.S. Naval Institute (for Proceedings)

DEPARTMENT OF THE NAVY

COMMANDER

NAVAL OCEANOGRAPHY COMMAND

NSTL MS 39529-5000

3140
Ser 4/850

03 DEC 1986

From: Commander, Naval Oceanography Command
To: Chief of Naval Operations (OP-006)

Subj: SUBMISSION FOR FEDERAL PLAN FOR METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH, FISCAL YEAR 1988

Ref: (a) CNO ltr Ser 006D/6U449063 of 22 Oct 86

Encl: (1) U.S. Navy Budgetary Data for FY 1988 Federal Plan (Resource and Program Narratives and Tables 1 through 3, 5 and 6)

1. Reference (a) requested that we complete the appropriate (operational) sections of the tables and related resource and program narratives.

2. Enclosure (1) is provided in accordance with the Planning Guidance provided by reference (a). Table 4 is negative because it pertains to research programs rather than "operational".

J. E. KOERR

DRAFTER: Robinson
FIST: CH DATE 1 Dec 86
TEXT NO: 4850 R/S — White

RESOURCE NARRATIVE FOR FY88 FEDERAL PLAN FOR MET SERVICES AND SUPPORTING RESEARCH:

a. Observations:

Most funding under this functional category is applied toward the Navy share for procurement of a microwave imager for the Defense Meteorological Satellite Program (DMSP), a joint USN/USAF project. This special sensor is tailored for operation aboard a new DMSP spacecraft which will fulfill Navy data requirements for surface wind speed, precipitation intensity and identification of Arctic environmental parameters of tactical interest. Approximately $10M of FY87 dollars targeted toward this sensor were deleted, resulting in the large ($19.9M) requirement in FY88. Additional items increased under this category include an upgraded tactical user's terminal to replace aging and unsupportable equipment used with DMSP data, and the procurement of two additional lightning detection and tracking systems (LDATS) to upgrade our capability to observe and track lightning at shore facilities. Category decreases are a reduced number of planned upper air soundings by meteorological rockets and a slight decrease in planned contractor engineering support.

b. Analysis and Forecasts:

The Satellite Processing Center Upgrade (SPCU) at Fleet Numerical Oceanography Center (FLENUMOCEANCEN) will upgrade our ability to assimilate and analyze the vast amounts of oceanographic data which will be available with the launch of the Navy Remote Ocean Sensing System (NROSS) - new equipment and software will be required to support this major program. Additionally, COMNAVOCEANCOM plans to procure upgrades for the Primary Environmental Processing System Upgrade and Expansion (PEPSUE) Information Systems (ISs) at FLENUMOCEANCEN to provide improved and timelier support to operational fleet units. A capability is also included for the Joint Typhoon Warning Center (JTWC) at Naval Oceanography Command Center, Guam to automate the procedures for predicting the formation and forecasted track of tropical cyclones in the Pacific and Indian Oceans - this system will be called the Typhoon Information Processing System (TIPS). By FY88, the Tactical Environmental Support System (TESS), a system which provides afloat oceanographers ready access to environmental data upon which to base tactical forecasts, will be installed at approximately 60 sites. Funding for TESS in FY87 had included installation and training costs, equipment upgrades and interface costs not reflected in FY88. Upgraded data processing capabilities for the NEDN Oceanographic Data

Distribution System/Satellite Processing and Display System (NODDES/SPADS) are also included in this category as are funds for contractor support of climatological studies.

c. Communications:

The Consolidated Communication System (CCS) Replacement at FLENUMOCEANCEN will upgrade obsolete, logistically unsupportable data communications hardware used to transmit environmental data and tailored tactical products to shore activities. CCS interfaces to several networks and ties FLENUMOCEANCEN to data sources worldwide, including USAF and NOAA. Satellite display devices/receivers are part of the Aviation Support Display System (ASDS) which will be installed at CONUS oceanography detachments and serve as stand-alone interfaces to provide a downlink capability for GOES-TAF satellite data and also distribute data to customers such as aviation squadrons, thereby greatly improving the dissemination ability within NAVOCEANCOM.

d. Dissemination to Users:

The principal item under this category is an upgrade to the capability to provide satellite imagery and data to both ashore and afloat units. Six AN/SMQ-11 sets will be purchased in addition to those previously planned. Other category items include funding the ASDS system mentioned in the previous category to interface with external circuits and sources of environmental data, and meteorological and oceanographic sensors and equipment to replace antiquated and unsupportable versions in use within NAVOCEANCOM.

e. General Agency Support:

Items listed under this category involve upgrading existing meteorological equipment - overhauls, rework and reinstallation, and providing training to Navy personnel concerning the observing and tactical useage of data. End strength increases in officer personnel are reflected as is an anticipated military pay raise in FY88. Military construction increases are to provide space for additional environmental equipment - observational and communications - expected in the next few years.

FEDERAL PLAN FOR METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH

TABLE 1. PROGRAM CHANGES, FY 87

Date: NOV 1986

XX Operational ____ Supporting Research AGENCY NAVY

TYPE/TITLE OF CHANGE SERVICE AND FUNCTION NEW OR ONGOING LINE ITEM/PROGRAM ELEM.	REQUIREMENT	DESCRIPTION OF CHANGE	COSTS ($K)
1. General PE 35111	Realign FY 1987 costs to reflect updated cost.	A net decrease of -$20,799 applies to the revised program in the following areas:	
		a. A decrease of ten officers and eighteen enlisted with an increase of seven civilians involved in meteorological support.	-563K
		b. Decrease in funds for procurement of Microwave Imagers for DMSP.	-9,904K
		c. Decrease in MILCON P004 at Fleet Numerical Oceanographer Center.	-3,000K
		d. Decrease cost associated with MET rockets.	-145K
		e. Decrease in the Mini-Sondes System.	-195K
		f. Decrease in Positions and Tracking Systems and associated production engineering.	-61K
		g. Decrease in cost associated with Satellite Processing Center (SPC) Upgrade.	-238K
		h. Decrease to Primary Environmental Processing System (PEPS).	-3,606K

FEDERAL PLAN FOR METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH

TABLE 1. PROGRAM CHANGES, FY 87

Date: NOV 1986

XX Operational ___ Supporting Research AGENCY NAVY

TYPE/TITLE OF CHANGE SERVICE AND FUNCTION NEW OR ONGOING LINE ITEM/PROGRAM ELEM.	REQUIREMENT	DESCRIPTION OF CHANGE	COSTS ($K)
1. General (Cont'd) PE 35111		i. Decrease to O&M,N Tactical Environmental Support System (TESS).	-2,075K
		j. Operation and Maintenance cost of automated data processing equipment and system software required for meteorology analysis, forecast and dissemination.	-200K
		k. SROE and MET associated equipment overhauls and leases.	-448K
		l. Decrease in NODDES/SPADS and NEDS procurement.	-529K
		m. Increase in Navy agency leased communications costs.	+165K

TABLE 1. PROGRAM CHANGES, FY 88

Date: NOV 1986

XX Operational ___ Supporting Research AGENCY NAVY

TYPE/TITLE OF CHANGE SERVICE AND FUNCTION NEW OR ONGOING LINE ITEM/PROGRAM ELEM.	REQUIREMENT	DESCRIPTION OF CHANGE	COSTS ($K)
1. Observations PE 35111N	Provide Equipment		+22,092K
		Procurement of Production Engineering	-5K
		Procurement of DMSP Microwave Imagers	+19,938K
		Procurement of MET Rockets	-172K
		Procurement of LDATS	+169K
		Procurement of MET Sensors	+2,162K
2. Analysis & Forecasts PE 35111N	Provide Equipment		-350K
		Satellite Processing Center (SPC) Upgrade	+2,941K
		Procurement of NODDES/SPADS	+76K
		Procurement of PEPSR/PEPSUE	+15K
		Procurement of TESS	-4,006K
	Climatology Studies		
		Contract Studies	+74K
		Typhoon Information Processing System (TIPS)	+550K
3. Communications PE 35111N	Provide Equipment		+2,600K
		Procure Consolidated Communications System (CCS) Replacement for Environmental/Weather Networks	+2,279K
		Procure Synthetic Aperture Radar	-200K
		Procure Satellite Display/Receivers	+521K

FEDERAL PLAN FOR METEOROLOGICAL SERVICES AND SUPPORTING RESEARCH

TABLE 1. PROGRAM CHANGES, FY 88

Date: NOV 1986

XX Operational ___ Supporting Research AGENCY NAVY

TYPE/TITLE OF CHANGE SERVICE AND FUNCTION NEW OR ONGOING LINE ITEM/PROGRAM ELEM.	REQUIREMENT	DESCRIPTION OF CHANGE	COSTS ($K)
4. Dissemination to Users PE 35111N	Provide Equipment		+6,540K
		Procure Satellite Display System	+682K
		Procure Sensors/MET Equipment	+99K
		Procure AN/SMQ-11 Satellite Receiver/ Recorder	+5,759K
5. General Agency Support PE 35111N			+3,731K
	Environmental Training	Inflation supplies/aids, etc.	+200K
	Personnel Costs	E/S increase in officer plus military payraise	+190K
	Provide Facility	MILCON	+1,440K
	Provide Equipment	MET Equipment Installation, Rework and Overhaul	+1,901K

ACRONYMS

The following is a list of acronyms used to identify Naval Oceanography Command organizations. The short titles in the center column, although not official, were used on occasion for the sake of brevity in some documents.

COMNAVOCEANCOM	CNOC	Commander, Naval Oceanography Command
FLENUMOCEANCEN	FNOC	Fleet Numerical Oceanography Center
NAVEASTOCEANCEN	NEOC	Naval Eastern Oceanography Center
NAVPOLAROCEANCEN	NPOC	Naval Polar Oceanography Center
NAVWESTOCEANCEN	NWOC	Naval Western Oceanography Center
NAVOCEANCOMCEN	NOCC	Naval Oceanography Command Center
NAVOCEANCOMFAC	NOCF	Naval Oceanography Command Facility