

**Summary History of  
Naval Reserve Unit NWS 106  
Naval Air Facility, Washington, DC  
1974-2009**

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STENNIS SPACE CENTER, Miss. – A number of actions occurred in the early 1970s dealing with meteorology and oceanography as a Naval Reserve activity. It's important to recall that the question of the role of the military reserves in augmenting the active-duty forces was a high priority issue in the Department of Defense (DOD) during this period when discontinuing the use of the military draft was being discussed and passed in 1975.

One of the early actions was the change of designator in 1971 from Aeronautical Engineering Duty (Meteorology – 1535) to Special Duty (Geophysics – Meteorology – 1815). In 1977, the designator for Meteorology (181X) and Oceanography (182X) was changed to a single designator for Geophysics (1805). This was done to ensure the maximum utilization of the Navy's limited number of specialists in the environmental sciences.

During a two-week Active Duty for Training (ACDUTRA) at the Naval Weather Service Headquarters, Washington Navy Yard, Washington, DC, in March 1972, the Director of the Naval Weather Service requested that LCDR John A. Leese provide recommendations for possible reorganizing Aerographer's Mates and Meteorology Officers of the Naval Reserve. Up to this time Aerographer's Mates and Meteorology Officers were a Division in Reserve Air Wing Staff (AWS) units.

LCDR Leese was an 1815 drilling reservist of an AWS unit at Naval Air Facility (NAF) Washington, DC. This assignment resulted in a 21 page report entitled ... "NAWESR – A Plan for Navy Weather Service Reserves" dated 10 March 1972. The pros and cons of four different organization alternatives were analyzed.

The recommended configuration was a separate Navy Weather Service Reserve Unit, on the same line as the Naval Air Reserve Division reporting directly to the CO of the Naval Air Station, NAF, or Naval Air Reserve Training Unit. This configuration was organized at NAF Washington, DC, 01OCT74 as Naval Weather Service (NWS) 106 which consisted of five officers and 18 enlisted personnel. CDR Leese was the first CO beginning 01OCT74 and serving to 28FEB77.

Discussions with Captain Stanford C. Balmforth, CO of Fleet Weather Facility (FWF) Suitland, MD, during the winter of 1975-76, indicated his interest in hosting the NWS 106 for a two week ACDUTRA during the spring of 1976. The CO NWS 106 and the CO FWF Suitland agreed to use this period of ACDUTRA as a test of the concept of a Naval Weather Reserve unit performing 14 days ACDUTRA with its active duty counterpart at its mobilization (MOB) site. Personnel from both the NWS 106 and FWF Suitland worked diligently in the three months prior to the ACDUTRA to set up the training program and integration of Naval Weather Service Reserve personnel as part of the operational watch schedule. This included obtaining top secret security clearances for selected personnel to enable them to work in all areas of the FWF Suitland. A total of 6 officers and 12 enlisted personnel participated in the ACDUTRA during the period 2-15 May 1976 – the first of its kind.

A Reserve Weather Officers Seminar was held from 16-27 August 1976 at the Naval Weather Service Facility, Glenview, Illinois. This was done as part of its role for the central coordination and technical direction of the Naval Weather Service Reserve units.

It's also important to note that in the 1970s and early 1980s remotely sensed environmental data from satellites were not as ubiquitous as it is today. Two separate environmental satellite systems were in place: two polar orbiting Defense Meteorological Satellite Program (DMSP) satellites and NOAA's two Geosynchronous Operational Environmental Satellites (GOES) and two polar orbiting Television Infrared Operational Satellites (TIROS- [series]). The DOD did not opt to downlink NOAA's environmental satellite data using DMSP receivers. If the DMSP satellites failed, which they did on occasion, military users would be "in the blind" so-to-speak – especially ships at sea. That has changed, and DOD sites downlink virtually everything available today.

During this early timeframe, only NOAA's National Environmental Satellite Service (NESS) had the entire digital data sets of both its systems. From these data VIS, IR, and water vapor images were distributed to users including other derived products. However, the digital data could be retrieved by environmental scientists for product development and applications research which is what was being done at NESS and, to a limited extent, elsewhere (National Weather Service, Naval Oceanographic Office, and Fleet Numerical Meteorology and Oceanography Center). The enormous digital data sets required exact earth registration, large storage capacity (and fast) computers, as well as animation devices for product development and operational applications. Initially these were black and white images using film or facsimile.

By 1979, NWS 166 - later that year Naval Polar Oceanography Center Suitland (NPOCS) 0166 - had significantly increased its officer and enlisted billet structure, as well as drilling reserves filling those billets. A significant number of those assigned were highly trained and educated meteorologists, oceanographers, physicists, physical scientists, and other technicians in the physical science fields. Many were working for NOAA's Satellite, Ocean, and Weather services, including research labs, universities, and/or contract personnel in support of the DOD. Several held masters and doctorate degrees. The NWS 166 CO was CDR Marshall P. Waters III, who recognized the importance and need of remotely sensed data use in meteorology and oceanography application for the Navy and Naval Reserve. As a civilian working in the Office of Research and Applications of NESS, he initiated the idea having NPOCS 0166 develop a two week ACDUTRA environmental remote sensing training course - "Satellite Applications in Meteorology and Oceanography" - for Navy and Naval Reserve meteorology and oceanography officers and Aerographer's Mates. In 1980, course approval was granted by CO NAF Washington, Naval Oceanography Command Facility, Bay St. Louis, MS, (course sponsor) and Chief of the Naval Reserve, New Orleans, LA. The course provided environmental satellite data interpretation for meteorological and oceanographic applications to prepare personnel to support the operational needs of the Naval Warfare Community.

The course instructors were NPOCS 0166 staff augmented by other civilian personnel trained in the use of environmental satellite data applications in meteorology and oceanography within NOAA, as well as research labs and universities. It was an ACDUTRA for NPOCS 0166 support personnel and reserve course participants and local travel for civilians. In May 1981, the first course was conducted at the Unit's MOB site - NPOC, Federal Building 4, Suitland, MD. At the time there was no other training course of its type available in the Navy or Naval Reserve with a syllabus that included, satellite operations, environmental sensor capabilities, VIS/IR and water vapor image interpretation, and their applications to include; oceanic wind speed and direction, wave height, wave direction, sea surface temperature fields, ice analysis, and sea surface gradient analysis showing thermal boundaries, to name a few.

NPOCS 0166 conducted the satellite training course at NPOC, Suitland, MD, for four successive years (1981-84) then transitioned to the U. S. Naval Academy (USNA), Annapolis, MD (1985-86). Also in 1986, NPOCS 0166 now the Naval Oceanography Reserve Activity (NORA) 0166 took the training course "on the road" to FWF San Diego, CA, and FWF Jacksonville, FL, tailoring the course content to meet the operational requirements of these facilities. The course filled the need within the Navy for this type training and was very successful. More than half the allotted seats in the course were taken by active duty personnel - officer and enlisted. A total of almost 200 received this training. At this point, he was recalled to active duty to develop an "Oceanography from Space" course in the Oceanography Department at the USNA. The Commander of the Naval Oceanography Command then contracted with the National Environmental Satellite, Data and Information Service (NESDIS - formally NESS), Office of Applications, Camp Springs, MD, to ensure that the training continued.

Starting with NWS 106 on 01OCT74, then NWS 166 on 01MAR77, then NPOCS 0166 on 01FEB80, later NORA 0166 on 01JAN84, and finally Naval Meteorology and Oceanography Reserve Activity (NMORA) 0166 on 01OCT03, the unit's officer and enlisted personnel consistently provided the Naval Reserve and active Navy's meteorology and oceanography community with excellent environmental support services to enhance the Naval Warfare Community. Whether this was by way of the satellite training courses (arguably, the genesis of what continues today at USNA, Naval Postgraduate School, and elsewhere) or by augmentation ACDUTRAs providing environmental support during Fleet/NATO Exercises, NATO/Navy Ice Exercises, Naval Control of Shipping Exercises, or recall to active duty to support DESERT SHIELD/DESERT STORM, Military Sea Command, DOD's Joint Chiefs of Staff, and Naval Operations Intelligence Command, Unit personnel responded. In addition, Unit personnel provided support for special assignment requests, projects to mitigate operational requirement's objectives, annual on the job training at MOB sites, or special ACDUTRAs. Since 1979, Unit personnel provided instructors and other training support to Naval Oceanography Command Detachment New Orleans, LA, with their training courses. Frequently, individual unit personnel were requested by name due to their respective background, experience, or previous performance record.

Over the years, the Unit brought credit to itself, the Naval Reserve, and the Navy as a consequence of the dedication, initiative, enthusiasm, talent, and performance of its personnel.

Naval Reservists assigned to the Unit enhanced both their Naval Reserve and civilian careers by their participation and service in this Unit. Many rose from E-3 to E-7/8/9, advanced from enlisted to commissioned officer, and were promoted from junior to senior officer. Two enlisted persons received a Direct Commission as restricted line officers advancing to become the unit's CO. No unit in the Naval Reserve's NMORA structure - that started 01OCT74 as NWS 106 - provided a wider range of technical services and expertise to the Navy and Naval Reserve than it did over the years. The Unit was, as is said... "In the right place, at the right time" had the right mix of personnel that served with distinction.

Unit Commanding Officers were as follows:

CDR John Leese 1974-1977  
CDR Robert Brower 1977-1979  
CAPT Marshall Waters 1979-1986  
CAPT Curtis Collins 1986-1987  
CAPT Jaap Boosman 1987-1989  
CAPT James Smith 1989-1991  
CDR Daniel Merdes 1991-1993

CDR Mark Schultz 1993-1995  
CDR Wilson Fong 1995-1997  
CAPT Ronald Johnson 1997-1999  
LCDR Wayne Esterbrook 1999-2001  
CDR Adam Cogan 2001-2003  
CDR Mike Kalafsky 2003-2005  
CDR Joe Miller 2005-2007  
CDR Andy Ulak 2007-2009

Submitted by AG1 Alan Baker, USNR (Ret)