



NEWS

naval meteorology and oceanography

July 2, 2013

Commander's Corner

We Must Eliminate Sexual Assault Now

By Rear Adm. Brian Brown

By the time this column goes to press, you will have participated in the Navy-wide Sexual Assault Prevention and Response (SAPR) stand down as part of our ongoing dialog and call to action on this issue. On the headquarters staff, the training provoked new ideas and spurred much discussion about tackling this critical issue in our Navy. I hope other commands have experienced a similar beneficial dialogue. Tackling this issue head-on not only raises the collective awareness, but I believe it will hone our skills at spotting issues before they become significant problems and aid all of us in finding the moral courage to intervene as a bystander. As our Chief of Naval Operations has stated, we need to get to the left of this kill chain.

Sexual assault is wrong...period. It is a crime...period. It can tear apart our command and irreparably harm our mission effectiveness and readiness. Each of us must commit today, and every day, to eliminating it – and the behaviors that can lead to it – from our ranks.

I've spoken before about covenant leadership – the idea that leaders make commitments to subordinates, and in turn, subordinates make commitments to the leaders. I've recently released my policy statement on SAPR, wherein I outlined the promises I make to you and what I need from you in return.

As Commander, I will ensure that sexist behaviors, sexual harassment and sexual assault will not be tolerated, condoned or ignored. I will treat any victims' reports with the utmost seriousness and sensitivity and ensure their privacy is protected. I will continue to foster a command climate in which offenders know they will be held accountable and bystanders will be motivated to intervene. I demand the same from all my subordinate commanding officers, they owe you nothing less.

In return, I need you to treat each other with dignity, trust and respect at all times. You must acknowledge that sexual assault is a crime, understand the Continuum of Harm, and not tolerate any level of misconduct. Above all, you must have the courage to intervene.

We all need to get comfortable talking about issues that put ourselves or our total force shipmates at risk. In mentoring one another, we need to address the difficult and sometimes intrusive topics of sexuality, and personal behaviors with alcohol and relationships. I believe the recent stand-down aids in this effort, but this



needs to be a continuing dialogue. I ask that you continue to keep the prevention of sexual assault on the forefront with active discussion in all forums – civilians and military, seniors and subordinates.

I'm intent on removing any barriers to creating a command free of sexual assault and its associated behaviors. If you have any ideas for how to further this goal, please share them with your chain of command. If you prefer to remain anonymous, we have set up an online SAPR suggestion box at <http://goo.gl/cjMsP>.

It continues to be my honor to serve alongside the men and women of Naval Oceanography; you make me proud every day. Keep your focus on the mission and your shipmates!

From the Deputy/Technical Director

Battle Space on Demand (BonD), Tier 1 and the Modeling Roadmap: Making Models Exciting!

By Dr. William H. Burnett, Dave McCarren, Tom Dunn and Kevin LaCroix

Last month's Deputy/Technical Director's article built the base of the Battlespace on Demand (BOND) Pyramid by describing the data and observing layer of the Tier 0 roadmap. This article extends the pyramid to the Tier 1 layer, described by the Tier 1 Roadmap. It is important to remember that these roadmaps are starting points for the enterprise to coalesce on a common path forward by bringing input from the operational side of the enterprise, the research and development (R&D) community and our supporting IT and communications infrastructure.



Tier 1 is the easiest of BonD Tiers to describe. The Tier 1 layer is how our METOC professionals leverage the data from Tier 0 and use numerical ocean and atmospheric models to determine what the wave height will be five days from now in the Western Pacific, if flight operations at the naval air station will be interrupted by thunderstorms next Tuesday, or how currents will affect the ASW exercise off the coast of Hawaii next week. Tier 1 encompasses a huge variety of models based on the physical parameters being forecast and the scale and length of time the forecast is needed. Needless to say, all these models need copious amounts of high-performance computing (HPC) power to provide answers in a reasonable time.

The OT staff is often asked, in relation to the numerical models, "What is good enough?" We challenge that question by asking; "Do you take everything the weatherman on TV says literally? Is he or she right 100 percent of the time?" Obviously chaos theory and practical limitations prevent us from being 100 percent correct all the time, but what steps can we take to get us closer to "correct?" The Naval Meteorology and Oceanography Command (NMOC) modeling roadmap integrates the plans to enhance our operational effectiveness with ongoing and future R&D and with developments of our ongoing federal partnerships to find an appropriate pathway forward for the Naval Meteorology and Oceanography Enterprise.

One of the "constants" in the military is that change will happen. One initiative that has far reaching consequences for our Tier 1 model operations is the demonstration and future operationalization of Enterprise Operational Modeling (EOM). Remember how all our models need large amounts of high performance computing (HPC) assets to meet operational timelines? One of the most successful arrangements in NMOC is our partnership with the High Performance Computing and Modernization Office (HPCMO). The HPCMO has long maintained the Defense Shared Resource Center (DSRC) at the Naval Oceanographic Office (NAVO). This resource has been providing HPC resources that keep pace with international computing growth, moving from giga- to tera- to eventually peta-FLOP capability, and we have been leveraging 15 percent of this tremendous resource for decades. EOM adds Fleet Numerical Meteorology and Oceanography Center (FNMOC) to the number of NMOC users of this capability. This represents a major change in the mission

capability of FNMOC, which now has the “computing room” to grow the global atmospheric models’ capabilities.

Speaking of the capability of the models, did you know that with our Naval Research Laboratories partners’ efforts, we have replaced our two mainstay global models this year? The Navy Global Environmental Model (NAVEM) and the Hybrid Co-ordinate Ocean Model (HYCOM). Both are cutting edge technology and will provide enhanced capabilities to the fleet in the years to come. NMOC will work with our R&D partners to ensure they remain up-to-date and tuned as the science improves. In the modeling world, higher resolution generally relates to better skill and also directly to need for more powerful computers. Since the global atmosphere and ocean models provide the conditions for much of the rest of our modeling suite, improvements in skill of these cascades to improved skill in other scales and domains. As the Tier 1 team looks to the future, we see advances in coupled modeling to provide improved numerical weather and ocean prediction. Coupling models exchange energy between different types of forecast models like ice and wave models coupled to ocean models for improved arctic forecasts. These couplings also position us to work closely with other agencies running numerical models

Partnerships are in place to leverage federal agency efforts in operations and R&D into our enterprise and connect our efforts into theirs. The National Unified Operational Prediction Capability (NUOPC) brings the National Oceanic and Atmospheric Administration (NOAA), Navy and Air Force together for a National Unified Ensemble for global models, with the National Center for Environmental Prediction (NCEP) and Navy contributing individual ensembles run on their operational systems and combined into a multi-model ensemble and with the Air Force providing post processing capability to the combined effort. This system provides forecasts out to 16 days and is showing significant skill out to 10 days or more with additional upgrades planned in 2014. More importantly, NUOPC provided valuable experience in working with our national weather partners on implementing a national capability. The future of numerical weather prediction could well lie with the Earth System Prediction Capability, ESPC. ESPC expands the number of agencies involved in improving Tier 1 capabilities and focuses on coupled models to bridge the gap in weather forecasts from NOWCASTS to inter-seasonal and inter-annual and even out to the decadal scale. This new R&D effort is being led by OPNAV N2/N6E and the Office of Naval Research (ONR) to provide new advances for better forecasts.

Tier 1 is moving forward, improving our atmospheric and oceanographic forecast performance for the fleet. Next time, we will focus on the BonD Tier 2 & 3 product and decision aid production and distribution.

Operations

Navy Oceanographers Release Global Drifter Buoys as Part of Pacific Partnership 2013

By Mass Communication Specialist Seaman Samantha J. Webb

PACIFIC OCEAN (NNS) – Navy oceanographers released 10 global drifter buoys belonging to the University of California, San Diego Scripps Institution of Oceanography from the amphibious dock landing ship *USS Pearl Harbor* (LSD 52), May 28, during Pacific Partnership 2013.

The buoys measure ocean currents up to 15 meters in depth, sea surface temperatures and atmospheric pressure. All are important elements in creating an observation network, allowing for more accurate weather forecasts.

“The mission of Pacific Partnership is disaster relief preparedness,” said Lt.j.g. Jeffrey S. Grabon, Pacific Partnership Mobile Environment Team division officer. “Most of the disasters that are going on in this region are from typhoons and tsunamis, so if we have observations that we can use to help forecast typhoons, that benefits the area.”

DECISION SUPERIORITY through BATTLESPACE ON DEMAND

The buoys were deployed at specific coordinates while *USS Pearl Harbor* transited the Pacific Ocean to Samoa, the first mission port of Pacific Partnership.

Both Scripps and the Navy seek to benefit from the buoy drop and subsequent data to be collected.

The global drifter buoys provide real-time data in support of both civilian and DoD activities. That data can be used to improve forecasts, which can benefit the effectiveness of activities like search and rescue missions and disaster response operations.

"I think it is absolutely crucial we have the ability to engage with the U.S. Navy and work in a synergistic way to collect useful data and create deployment opportunities in regions that are hard to access with commercial and scientific vessels" said Luca Centurioni, scientist, Scripps physical oceanography research division. "We really welcome the opportunity to work together with the U.S. Navy 3rd Fleet. "

Grabon said that much of the ongoing research has the potential to impact the Navy.

"Because the Navy is a sea-going, war-fighting force, the better the universities understand the ocean, the better the Navy will understand it," said Grabon.

Pacific Partnership is about bringing people together. The collaboration of the University of California, San Diego Scripps Institute of Oceanography and the United States Navy demonstrates a cooperative approach to both disaster preparedness and prevention by working to understand the many variables that contribute to the long history of natural disasters that have earned the whole region the moniker, "The Pacific Ring of Fire."



Lt. j.g. Jeffrey Grabon launches a global drifter buoy into the Pacific Ocean from *USS Pearl Harbor* (LSD 52) while underway for Pacific Partnership 2013. The buoy, belonging to the UCSD Scripps Institution of Oceanography, is used to measure ocean currents up to 15 meters in depth, sea surface temperatures, and atmospheric pressure. (U.S. Navy photo by Mass Communication Specialist 1st Class Lowell Whitman/Released)



NOMWC Participates in IMCMCEX 2013

NOMWC Sailors of the Second UUV Platoon conduct UUV operations during the International Mine Countermeasures Exercise 2013 (IMCMEX2013). A combined NOMWC/NAVO Data Fusion Cell participated in the exercise. The platoon conducted UUV Search, Classify, and Map (SCM) Missions and Reacquire and Identify (R/I) Missions to hunt for mine shapes. The platoon also collaborated alongside the Japanese UUV unit and shared UMCM expertise from May 12 through May 23 in the U.S. 5th Fleet AOR. The exercise included more than 40 countries on a global scale to exercise mine countermeasure (MCM) operations from various platforms. Air MCM (AMCM), Surface MCM (SMCM), and Underwater MCM (UMCM) executed vital tactics, techniques, and procedures in an effort to maintain freedom of the seas and strengthen international MCM ties.

Items of Interest

FWC Norfolk Sailors Participate in 25th Annual Clean the Bay Day

Sailors from Fleet Weather Center (FWC) Norfolk dedicated off duty hours on June 1 to remove trash near the Owl Creek Marina in Virginia Beach.

Around 20 members and their families volunteered to assist the Chesapeake Bay Foundation (CBF) during the 25th Annual Clean the Bay Day. The event, sponsored by CBF, brings in thousands of volunteers to clean shorelines from the Hampton Roads area to northern Virginia, including the Eastern Shore. On average, the event enlists more than 6,500 volunteers who remove more than 250,000 pounds of trash on the first Saturday of June each year.

FWC sailors this year collected over 1,300 pounds of trash from the Owl Creek area. Items collected included plastic bottles and bags, paper, various metal objects and debris from the shoreline and waterway.

“Volunteers make a program such as the CBF's Clean the Bay Day such a major success for 25 years and running,” said Aerographers Mate First Class Craig Hawkins, one of the coordinators for the event. “Sailors who gave up three hours of their Saturday to collect garbage can rest assured that their efforts will be seen for years to come along our local waterways.”

For more information about Clean the Bay Day 2014 and more ideas on how you can help throughout the year, visit: <http://www.cbf.org/CLEAN>

NOMWC Lending a Hand in the Aftermath of Devastation



Sailors at work, from left to right: AGAN Ian Olney, AGAA John Miller, AGAN Gianna Conroy, Lauren Roberts, AG3 Elizabeth Tran. Not pictured: AG1 Brandon Husted, AG2 Brad Chambers, AGAN Jason Moore

local farms.

Six Sailors from Naval Oceanography Mine Warfare Center (NOMWC) and one from Naval Oceanography Anti-Submarine Warfare Command (NOAC) took advantage of the extended Memorial Day weekend to make the 11-hour drive and lend a hand in the disaster relief effort in Oklahoma. An EF5 tornado touched down in Moore, Okla., on May 20, creating a swath of destruction 17 miles long and just over a mile wide. It claimed 24 lives and injured more than 350 people.

On May 25, the team of Sailors began work removing heavy debris from the streets and staging it for FEMA to remove later. They also cleared six partially demolished homes. The next day they helped clear fallen trees from

“Even though it was incredibly hard work, it was 100 times more rewarding to work with others and to truly help out the homeowners,” said Aerographer’s Mate Airman Jason Moore.

FWC-N Participates in the First Annual Memorial Day Murph Event

By Aerographer's Mate First Class Carlos J Gonzalez

The spirit of Memorial Day was alive and well at Fleet Weather Center, Norfolk as over 40 sailors and family members participated in FWC's First Annual Memorial Day Murph. The command remembered and paid their respects to Lt. Michael Murphy (SEAL), the first person to be awarded the U.S. military's highest decoration, the Medal of Honor, during the war in Afghanistan.



Fleet Weather Center, Norfolk VA participates in the first annual Memorial Day Murph at Breezy Point Park on 31MAY2013. U.S. Navy photo by AG1 Alvin Tatum

One of Murphy's favorite pre-deployment workouts was a mile run, 100 pull-ups, 200 push-ups, 300 squats, topped off with another mile run while wearing a weighted vest, which he referred to as "Body Armor." Today, in honor of Lt. Murphy, this workout is now known as a "Murph."

Since the event was extremely demanding, members were given the option to run the event solo or team up in groups to complete the required tasks.

The event, held at Breezy Point Park, started with an introduction of Murph. After a brief summary of the events that occurred on June 28, 2005, Lt. Michael P. Murphy's official citation was read.

All teams successfully completed the event at Breezy Point Park, which is sure to be a yearly tradition.

Retired AG Senior Chief Lockwood Dies

Ralph "Josh" Douglas Lockwood, a retired Senior Chief Aerographer's Mate, died at his home in Oak Harbor, Wash., on June 18, 2013. He was 75.

Lockwood, a native of Onawa, Iowa who grew up in northern California, joined the Navy in 1956. He retired after 28 years, retiring in 1983. He served in Vietnam and flew into typhoons over the Pacific.

After retiring from active duty, he continued his career in weather with the civil service, supporting the military. He retired a second time, after 20 years, as a lead flight forecaster at Naval Air Station Whidbey Island.

Follow the link to view the full obituary and to leave condolences to the family.

<http://obits.dignitymemorial.com/dignity-memorial/obituary.aspx?n=Ralph-Lockwood&lc=6736&pid=165452504&mid=5576281>

Midway Celebration at Stennis



Aerographer's Mate First Class Lisa Sherry of the Naval Oceanography Anti-submarine Warfare Center at Stennis sings the national anthem to start the Battle of Midway celebration at Stennis Space Center on June 7 as Dr. Bill Burnett, Naval Meteorology and Oceanography Command Deputy and Technical Director, stands at attention. The ceremony was held at the Naval Oceanographic Office. (U.S. Navy photo by Becky Eckhoff)

Visitors

NAVO Hosts Hydrography Conference

The Naval Oceanographic Office hosted the annual combined US-UK Executive Steering Group –Ocean Survey Program meeting. The meeting included topics on hydrography, bathymetry, mine warfare and ocean policy.



Vice Adm. Michael Rogers Visits



Cmdr. Ron Shaw (right), Fleet Survey Team commanding officer, briefs Vice Adm. Michael Rogers (center), Cyber Command and 10th Fleet commander, on Fleet Survey Team capabilities as Rear Adm. Brian Brown (left), commander of the Naval Meteorology and Oceanography Command, looks on. Rogers toured Naval Oceanography assets at Stennis Space Center on June 13. (U.S. Navy photo by Becky Eckhoff)

Mine Warfare ASW Commander at Stennis

Rear Adm. Brian Brown (left), commander of the Naval Meteorology and Oceanography Command, and Jerry Townsend (center) of the Naval Oceanographic Office (NAVO) explain the value of a Slocum Glider in mine warfare operations to Rear Adm. Robert Hennegan (right), commander of the Naval Mine and Anti-submarine Warfare Command. Hennegan visited Naval Oceanography assets at Stennis Space Center, including NAVO, on June 14. (U.S. Navy photo by George Lammons)



Personnel

E-8 AG Selections Released

Eight aerographer's mates were selected for promotion to senior chief in FY 14: Chief Aerographer's Mate David Armes, Chief Aerographer's Mate Stephen Daniel, Chief Aerographer's Mate Hisham Dee, Chief Aerographer's Mate Jose Fuentes, Chief Aerographer's Mate Michael Garza, Chief Aerographer's Mate Chad Goff, Chief Aerographer's Mate James Hatch, and Chief Aerographer's Mate Patricia Kelly.

Command Spotlight: NOSWC

Naval Oceanography Special Warfare Center, San Diego (NOSWC), located on Coronado Naval Amphibious Base in California, characterizes the environment in order to provide tailored METOC information and

recommendations to optimize route planning, platform selection, gear load-out, execution time line, sensor employment/placement, and actions at the objective in support of Naval Special Warfare (NSW) mission planning and execution.

Composed of 100 percent sea duty deployable and screened billets, NOSWC has embedded expeditionary forecasters supporting SEAL Teams, Special Boat Teams, and SEAL Delivery Teams. NOSWC has five geographically dispersed detachments and components located in Virginia Beach, Stennis Space Center, Miss., San Diego, and Pearl Harbor. Most NOSWC personnel deploy with multi-mission (UAS Operations, Technical Special Reconnaissance (TSR), etc.) duties that are defined by SEAL leadership, but all are expeditionary forecaster qualified prior to deployment. NSW is a dynamically fluid organization in terms of operational commitments (mission set and locations), training, and capabilities, which requires NOSWC support to be equally fluid. NOSWC personnel often deploy to data sparse or denied environments and rely on man-portable, stand-alone expeditionary sensors to produce tailored forecast products.

NOSWC forecasters are environmental experts specializing in nearshore oceanography, riverine hydrology, and coastal meteorology. NSW embedded forecasters provide micro-scale support for operational planning and mission execution decisions with global responsibility. NOSWC maintains a unique, specialized METOC training pipeline to support certification for a diverse set of mission critical environmental factors. NSW operations highlight the importance of METOC manning (quality versus quantity) to provide continued organic support. The future NSW operating environment (beyond theater campaigns) will pose more environmental risks and require greater organic METOC support and operational knowledge of forecasting for oceanographic elements, especially in the near-shore, littoral and surf zones, which are mission critical in terms of NSW support.

If you are a highly motivated forecaster and want to become part of the Naval Oceanography Special Warfare team that provides critical mission support to Navy SEALs and experiences the deep camaraderie that accompanies this duty, please contact AGCS (IDW/AW/FMF) Dave Perrin, NOSWC Command Senior Enlisted @ 619- 437-5439 or email david.perrin@navsoc.socom.mil.

Spotlight Employees

AG1(EXW/SW) Michael A. Ramos



Aerographer's Mate First Class Michael Ramos joined Naval Oceanography Special Warfare Component (NOSW CP) Stennis in April 2010 and has epitomized what it means to be a versatile and productive Sailor. He qualified as a NSW Expeditionary Forecaster in support of Special Boat Team Twenty Two (SBT-22). He has produced over 450 tactical METOC products in support of two SBT-22 Riverine Troop deployments in both SOUTHCOM and AFRICOM AORs. As a result of his work in both theaters, he was rapidly selected as NSW Task Element (NSWTE) Colombia LPO, coordinating NSW efforts in the AOR. In addition, he was hand-selected by the U.S. Air Force to supervise host nation Air Force pilots on the Unmanned Aerial System (UAS) Scan Eagle platform. His 64 hours of supervision and training enhanced the tactics and techniques of host nation UAV pilots leading to improved mission capabilities. As the SBT-22 UAS program manager, Ramos has led over 30 PUMA UAS training sorties and is responsible for over \$1 million in UAV equipment deployed worldwide. He also spearheaded the development effort of a UAS Mission Qualification Training (MQT) course onboard Stennis Space Center, establishing local training that saved the Navy over \$12,000. Ramos has deployed for 340 days during his three-year tour, completed three college classes and volunteered over 40 hours in the community, both locally and abroad.

AG1(EXW/NAO) Shane M. McAleer

Since reporting from Aerographer's Mate C-school in February 2010, Aerographer's Mate First Class Shane McAleer has been an invaluable asset to Naval Oceanography Special Warfare Detachment Pearl Harbor (NOSWD-PH) in direct support of SEAL Delivery Vehicle Team One (SDVT-1). McAleer has supported Joint Special Operations Task Force-Philippines (JSOTF-P) and SDV Bravo Platoon's Combat Service Support Team. He is certified as an air mobility load planner and small boat coxswain and has deployed four times, supporting land warfare, cold water advanced operator training, initial certification (ICERT), and multi-national special operation forces exercises where he received his secondary NEC-5306 (NSW Combat Service Support) and was promoted to Leading Petty Officer of NOSWD-PH. As an NSW Expeditionary Forecaster, McAleer has provided support to over 1,400 environmental support packages, dive forecasts, littoral zone forecasts, over-the-beach/special reconnaissance, commander update briefs and has lead the movement for seven SOF deployments of over \$24 million in highly sensitive equipment and 265 SOF personnel. As coxswain, McAleer has supported over 140 operations. As a subject matter expert, he has conducted over 90 hours of in-depth training in NSW expeditionary forecasting, expeditionary warfare, coxswain, and air mobility training, strengthening the overall effectiveness of NSW support personnel at SDVT-1. McAleer has certified as a meteorologist through the USMAP program and will graduate with bachelor's degree in natural science and mathematics in the summer of 2013.



Social Media

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