

# The Trade Winds

ISSUE NO.

01

APRIL 2023



## IN THIS ISSUE

02 Welcome!

02 Community Connections

03 Feature DET- ASW Sigonella

04 Feature DET- U.S. National Ice Center

06 Historic Weather Event-  
Tornado Outbreak of 2019

08 Honoring Black History

09 Women's History Feature

10 The FWC Archive

17 From the Commanding Officer



@Naval Oceanography



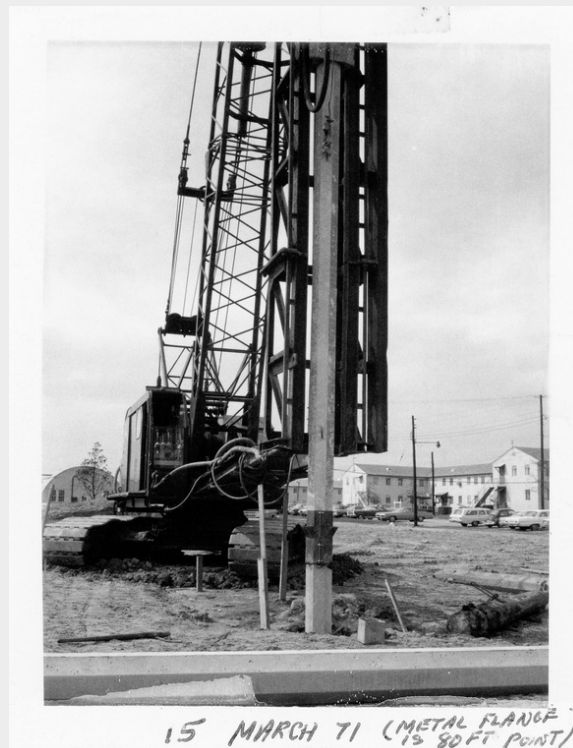
@FleetWeatherCenterNorfolk

## Welcome!

Welcome to the first issue of The Trade Winds! You might be thinking, how is this any different than a plan of the week or an all hands email? The Trade Winds will serve as a means of communication and a way to keep Fleet Weather Center and our global detachments abreast to what is going on within our community. This is a one stop shop where all of our detachments can appreciate each other and be recognized for how they contribute to the readiness of the fleet.

**AG2 Elliott**

Assistant Public Affairs Officer, FWC-N



## Community Connections

The sailors of Fleet Weather Center ASW Detachment Jacksonville participated in a clean-up of Jacksonville Beach on February 24th, 2023. The event was coordinated by the command MWR Representative, AG2 Nicolas Mele, as part of a command commitment to monthly community service. Previous events include a gift drive in support of Wolfson's Children's Hospital and the renovation of the Jacksonville Ronald McDonald House.

**AWO2 Dahms**

ASW Detachment Jacksonville



(Left to right: AG2 Nicolas Mele, AG1 Juan Deen, AG2 Joseph Castagnos, AWO2 Donovan Cebula, AG2 Gabriel Alvarez-Rivera, AWO2 Kaitlyn Karr)



@Naval Oceanography



@FleetWeatherCenterNorfolk

## Feature Detachment- ASW Sigonella



**Command Mission:** Fleet Weather Center ASW Detachment- Sigonella provides detailed and tactically relevant predictions of atmospheric electromagnetic propagation and underwater acoustic transmission to the warfighter in support of ASW, ASUW, and ISR operations for mission planning, in-flight updates, and post mission analysis to maximize sensor and ordnance performance.

**Command History:** CTF-67 support originally began by receiving products provided by ASW Detachment-Jacksonville. After demand signal from CTF-67 in 2018 for on-site support and the establishment of a local detachment, NOAC Stennis was tasked to provide deployable personnel in the interim while the detachment could be officially stood up. Prior to its disestablishment, NOAC Stennis provided support to CTF-67 from 2018 to 2020 with its last deployed team departing Sigonella in September 2020. In November 2020, FWC ASW Detachment- Sigonella was officially deemed a fully mission capable command, providing 24/7 ASW support for CTF-67.



**Featured Sailor:** AWO1 Caldwell joined the navy out of Monahans, TX in 2014. After completing his subsequent training schools after boot camp, he checked onboard Patrol Squadron-26 in 2016 based out of Jacksonville, FL. While there, he completed 3 deployments to 7th fleet, 6th fleet, and 4th fleet in El Salvador, rising through the ranks to become a Patrol Squadron Acoustics Instructor for the command. After departing VP-26, AWO1 arrived at Fleet Weather Center ASW Detachment- Sigonella in December 2020 where he is serving as a Fleet ASW Liaison. While also providing support as a watchstander, he works to fine tune the METOC products provided to the squadrons deployed to CTF-67. AWO1 is here with his wife Michelle and two children, Bryson and Jolee. Michelle is a Kindergarten teacher at the DoDEA Elementary School.

**AG2 Hovorka**  
ASW Detachment Sigonella



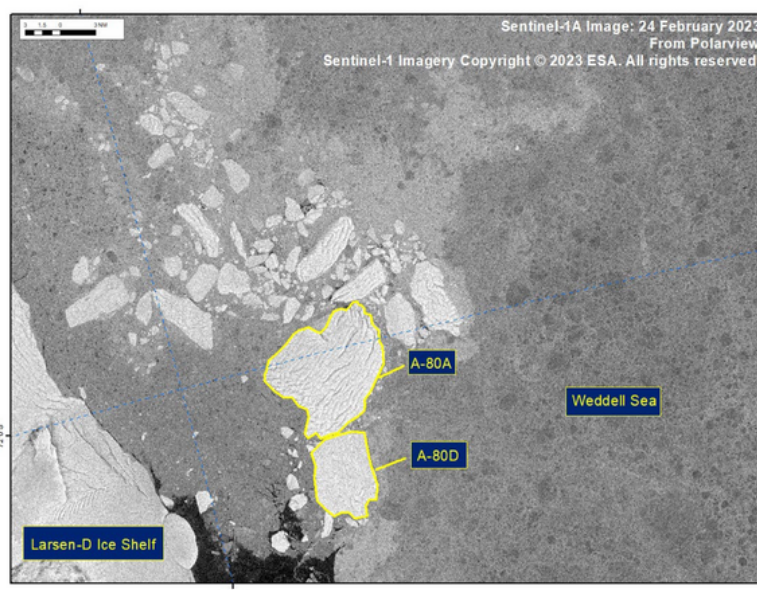
## Feature Detachment- U.S. National Ice Center



The U.S. National Ice Center (USNIC) is a tri-agency organization of the Navy, the National Oceanic and Atmospheric Administration (NOAA) and the Coast Guard with a mission to provide global to tactical scale ice and snow information, ice forecasting, and related environmental intelligence services for the U.S. government. The Commanding Officer of the Naval Ice Center (the Navy's contribution to the national entity) is dual-hatted to also serve as the Director of the USNIC. From its facility in Suitland, MD, a team of less than 50 uniformed, civilian, and contract personnel provide routine analyses of the Arctic, Antarctic, Great Lakes, and other geostrategic locations where ice may be present. The USNIC is the only national ice center with a global area of responsibility.

Beginning in the 1960s, both NOAA and the Navy recognized the value of satellite imagery to monitor global sea ice conditions for daily marine operations and climatology. In 1976, the two agencies joined to form the Joint Ice Center (JIC) and began to collaborate on the production of sea ice services and products. The JIC operated for nearly 20 years before it expanded to include the Coast Guard, forming the USNIC as we know it today.

Throughout most of the 80s and early 90s, the analysis process of the USNIC relied largely upon hardcopy techniques. Mr. Chris Szorc, a master ice analyst who retired from the Center in 2021 served two tours as an Aerographer's Mate at the USNIC; he once recounted: "In the 90s, the Navy operated in the Arctic, but we [USNIC] primarily supported just submarines. At that time, ice analysts received satellite imagery via fax or film, overlaid the imagery onto a chart, and hand drew the sea ice extent. The chart was then shrunk to scale and obtained via a fax request."



Example of imagery used by USNIC analysts to assess size and position of icebergs. A-80D (lower) formed by breaking away (calving) from A-80A at the end of February. A-80D measured 7X5nm at the time of the calving event.



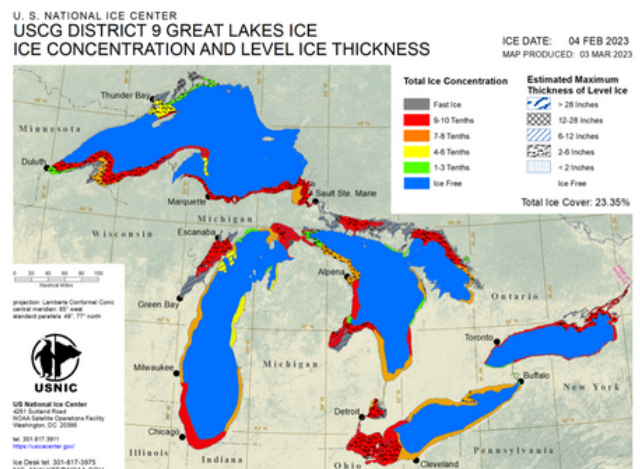
Today, the USNIC's methods are far more streamlined. Analysts are able to download satellite imagery files into a Geographic Information System (GIS) database and process data with the assistance of digitization and automated processing. Synthetic aperture radar (SAR) imagery is considered the bread and butter of the USNIC's analyses for its ability to penetrate clouds and provide reliable, hi-resolution images day and night. However, the USNIC does rely upon in-situ information from sea buoys and even deployed analysts. Regular on-scene support includes the Navy's Arctic Exercise (ARCEX) and Ice Exercise (ICEX) and deployment aboard USCG icebreakers.



CWO2 Mike Latin at the North Pole during USCGC Healy's 2022 Synoptic Arctic Survey

From these remote and in-situ observations, the USNIC, daily, characterizes the extent and concentration of sea ice. Weekly, USNIC analyzes the ice's thickness. The majority of all products are publicly available at the Center's website ([usicecenter.gov](https://usicecenter.gov)). In addition to these regular products, analysts support individual vessels with customized support tailored to their operating area and mission requirements. A fully digital workflow environment allows the USNIC to deliver a wide range of products via email, including its tailored support.

As global sea ice extent continues to be influenced by climate change, the workload for operational centers like the USNIC will continue to grow. Portions of the Arctic that have historically been unnavigable are increasingly ice-free, creating unprecedented maritime routes and leading to increased vessel traffic in ice-infested waters. Per the U.S. Navy's Arctic blueprint (2021), a navigable Arctic Ocean has the potential to connect over 75% percent of the world's population. To meet increased demand for ice intelligence, the USNIC looks to automate workflows, including introducing artificial intelligence/machine learning (AI/ML) algorithms. AI/ML will increase the efficiency of the USNIC's ability to characterize the polar environment and redirect analysts' work towards the nuances of individual tailored support needs. The USNIC looks forward to the challenge of supporting a growing national defense presence in the Arctic and meeting the operational needs of tomorrow's mariner.



USNIC called that the Great Lakes had reached its maximum ice coverage for the 2022-2023 season on February 4. This is almost a month ahead of the norm.

**LT Putnam**

U.S. National Ice Center

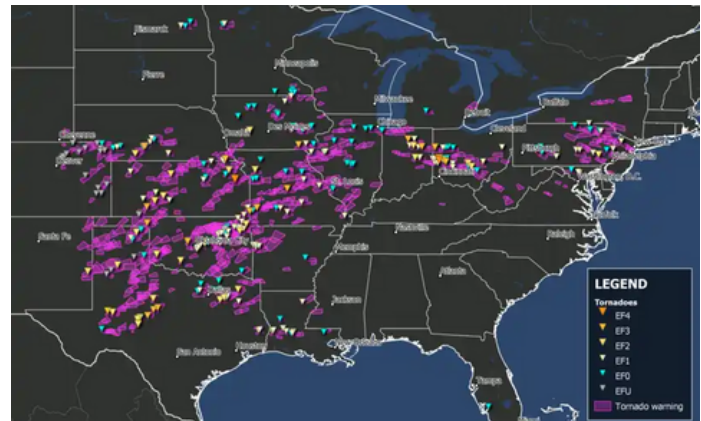
# Historical Weather Event- The Tornado Outbreak Sequence of May 2019

Tornado outbreaks are a yearly phenomenon that are typically pretty hard to predict, even if it's just a few days out. These systems of Supercells that explode into existence typically cause millions, if not billions in damage, and change people's lives forever. One of the more notable outbreaks in recent history is the May 2019 tornado outbreak, which is known for its usually low death count, especially with what damage was done.

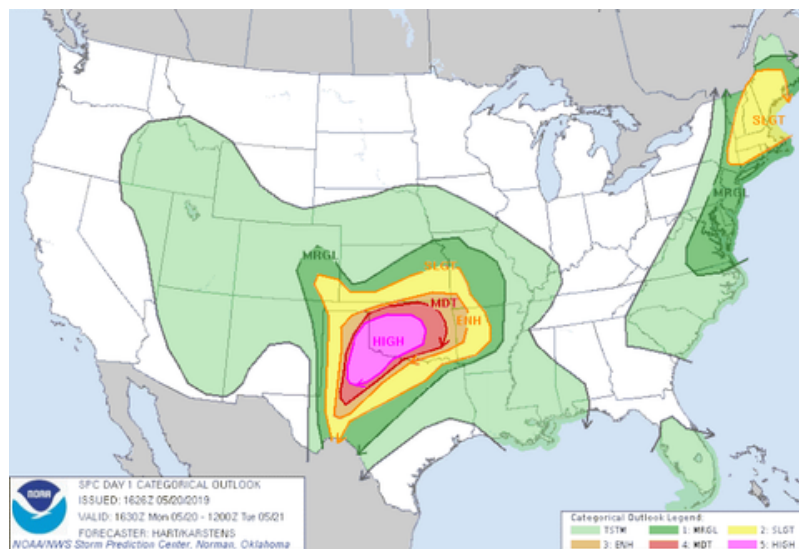
Across two weeks from May 17, 2019 to May 30, 2019; a total of 402 tornadoes tore across the United States. Of the tornadoes, 53 were considered significant (EF2+), 18 EF3s, and 2 EF4s. Across the event there were 8 fatalities and 288 injuries. Thankfully, however, due to seamless forecasting, 30 minutes or more of warning time

prevented any death in the case of the only two EF4 tornadoes. This event is noted as being remarkable due to the low death count in relation to both the number and intensity of tornadoes that occurred.

A handful of records were broken with this systematic outbreak, for example, Pennsylvania exceeded its yearly average of tornadoes in this single system alone, and record level flooding occurred in Eastern Canada which prevented survey teams from collecting data. Another notable mention would be non-prone tornado areas saw touchdowns, such as California, New Jersey, Nevada, and Arizona.



Tracks in the tornado outbreak



SPC Day 1 outlook for May 20th 1630Z

In terms of meteorological synopses, a common trend found in this tornado outbreak was upper-level troughing, associated with high dew points in the upper 60s-70s. Adding fuel onto the fire, an eastward moving dryline interacting with an unstable atmosphere due to a cap in the region allowed for supercells to explode later in the afternoons early on in the outbreak.



---

## Historical Weather Event- Cont.

As the storms died off and the calm once again began to wash over The United States, the after effects were felt widespread across the nation. Numerous states issued states of emergency due to the effects that the storms, both tornadic and non-tornadic had on the country. Texas being one of the states, had to extend their state of emergency from Hurricane Harvey.

It truly is a blessing that the most destructive storms in this system didn't have as large as an impact that they could have had. Thanks to expert forecasting, countless lives were saved in this outbreak. However, it doesn't go unseen that meteorologists have learned a lot from this particular system, which has definitely helped with forecasting in the future.

**AGAA Mazurik**

Assistant Public Affairs Officer, FWC-N



An EF3 tornado near Minneola, Kansas, on May 17, 2019

---

## Meteorologists - The History Behind The Name

Meteorology is the study of atmospheric properties and phenomena; it is a science that includes the atmosphere's physics and chemistry. Meteorologists are observers and researchers that note the physical conditions of the atmosphere above us. We study maps, satellite data, and radar information. We analyze and compare various kinds of weather data from local, regional, and global sources. The name Meteorology comes from the ancient Greeks. In approximately 340 B.C.E., the Greek philosopher Aristotle wrote a book called "Meteorology". This publication covered the scientific knowledge and theory regarding weather and climate during that era. Aristotle named his book after the Greek word *meteoron*, which translates to "a thing high up" and referred to anything observed in the atmosphere. The name proved to have staying power and thus the brilliant few and fortunate in the field of atmospheric science have come to be known as meteorologists.

**AG2 Johnson**

Assistant Public Affairs Officer, FWC-N



@Naval Oceanography



@FleetWeatherCenterNorfolk

## Honoring Black History

African Americans have long been contributing patriots in the perilous fight for American independence. Whenever we think of African American Naval history, Navy Cross awardee Third Class Petty Officer Doris Miller and Master Diver Master Chief Carl Brashear are at the forefront of most minds. The testimonies of these great men are not only inspiring but profoundly courageous; however, they are threads in a strong long-standing fabric of the devotion and bravery of African Americans in service of the nation. African Americans have been active participants in Naval affairs dating back to the American Revolution. African Americans made up 10% of the Continental Navy, serving aboard both state vessels and as privateers. African Americans served prominently in both the American and British Royal Navy.

One of the most prominent African American Seamen during the Revolutionary War was James Forten. He served aboard the Royal Louis under the command of privateer Stephen Decatur Sr. who would eventually go on to

commission as a Captain in the United States Navy. Most notably, Stephen Decatur Sr. was father to the future United States Navy Commodore Stephen Decatur Jr., who would go on to later become the namesake for the USS Decatur.

During James Forten's tenure aboard the Royal Louis, they captured several British ships. However, as fate would have it, they were captured by the HMS Nympe and the HMS Amphion in 1781. They were taken as prisoners of war; the HMS Nympe and the HMS Amphion were renowned for their horrendous treatment of prisoners of war and the living conditions provided to POWs.

Despite the odds, James Forten survived and was eventually set free. He would go on to become a wealthy businessman in Philadelphia and an abolitionist fighting for the freedoms and liberties of all African Americans. James Forten was one of the many heroes of the Revolutionary War that embodied the Navy's core values of Honor, Courage, and Commitment.



**AG2 Johnson**

Assistant Public Affairs Officer, FWC-N



@Naval Oceanography



@FleetWeatherCenterNorfolk



## Women's History



Navy at the time, Frank Knox, was firmly against the advancement of people of color in the armed forces.

Women have always supported the war effort in various manners whether it be in the art of espionage (Josephine Baker), as a courier (Sybil Ludington), in the field of nursing (Florence Nightingale and Clara Barton), or an as a multi-faceted patriot serving as a scout, spy, nurse and Combahee Ferry Raid commander (Harriet Tubman). Oftentimes women's efforts were not always properly recognized or rewarded until years later.

Although women have always faced barriers and women's service was not always openly welcomed, they never gave up the fight to support their nation. In 1942, the fight for the right of women to serve started to gain ground when congress amended the Naval Reserve Act of 1938. This amendment allowed women to serve in a limited capacity. Unfortunately this right did not extend to African American women due to the fact that the sitting Secretary of the

Determined to have their right to serve acknowledged, African Americans lobbied congress and the Roosevelt administration. Finally, nearly two years later, their efforts paid off. Secretary James Forrestal was a firm supporter of integration in the Navy. On December 22nd, 1944, Lieutenant Junior Grade Pickens and Ensign Wills made history by becoming the first African American women to be commissioned as Navy officers.

**AG2 Johnson**

Assistant Public Affairs Officer, FWC-N





## The FWC Archive

While making room for a professional library on the watchfloor, a few Sailors found hundreds of photographs from Fleet Weather Center Norfolk's past. These photos date back up to 50 years and range from the construction and dedication of the of the McAdie building to numerous holiday celebrations, ceremonies, and glimpses into day to day operations. The photos were stored in scrapbooks, boxes and binders, mostly taped or glued onto paper backing and put into a storage cabinet.

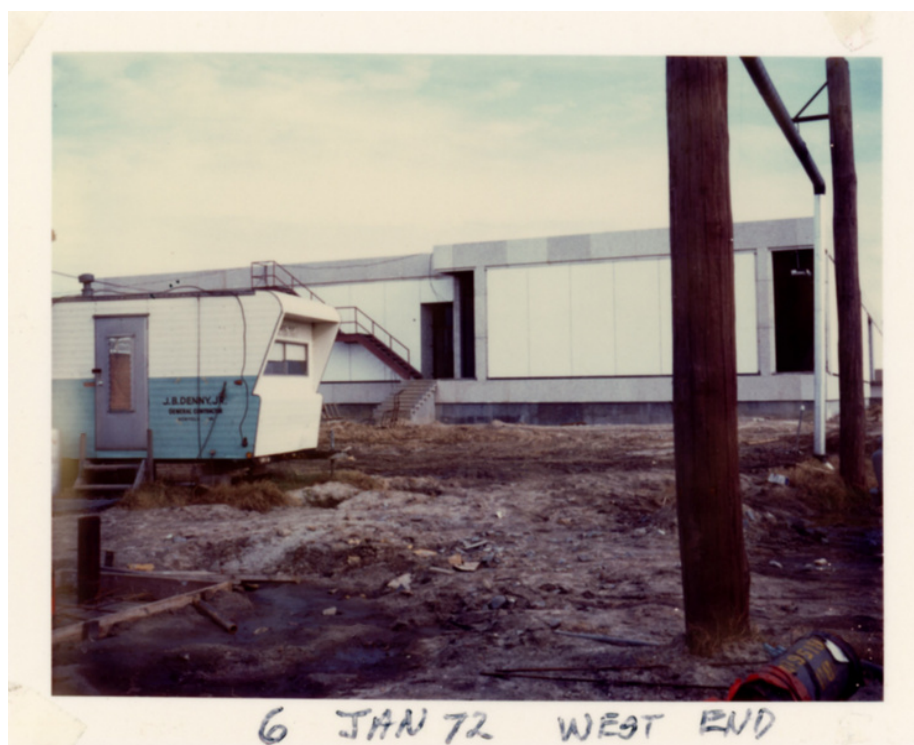
The PAO team is working to carefully preserve these memories, hand scanning each photograph and properly storing them to avoid any further damage. We will share a selection of FWC Archive photos in each issue of The Trade Winds. You might recognize a former shipmate, family member, or even yourself! You might also see some FWC Archive photos on our Facebook page, so check in often for updates.

For this month, we are featuring a few selections from the construction of the McAdie building; fitting for our inaugural issue! These photos, dated from 1971-1972, were taken on an old Polaroid Land Camera, scanned and lightly retouched to account for fading. As a bonus, check out the Then vs. Now and see how the scenery has changed over 50+ years!

If you would like a high resolution digital copy of an Archive photo, please reach out to AG1 McClanahan or AG2 Elliott at [fwc-norfolk\\_pao\\_distro@us.navy.mil](mailto:fwc-norfolk_pao_distro@us.navy.mil).

**AG1 McClanahan**

Assistant Public Affairs Officer, FWC-N

















## Photo Contest Winner

Thank you to those who submitted a photo for the first Trade Winds photo contest! All submissions were required to be weather themed- Anything from a beautiful sunset to a looming storm was welcome. We had some gorgeous images that made it hard for the Triad to choose, but they narrowed it down to a winner and very close runner up!



**First Place**

Photo submitted by AG2 Hovorka, ASW Det Sigonella

**Honorable  
Mention**



Photo submitted by LCDR Kerley, FWC-N



@Naval Oceanography



@FleetWeatherCenterNorfolk

## From the Commanding Officer

Hello Fleet Weather Center Norfolk Team! We are truly excited to assemble and send out our first quarterly newsletter as a way to capture and highlight the amazing work of Fleet Weather Center Norfolk and detachments. Thank you to our PAO team and to all who submitted input! Our goal is to share information and successes across the broader command, to build and connect in our relationship, to highlight Sailor and Civilian teammates, to promote upcoming events and to educate. As we share in this journey, please share photos, shout outs and recommendations for future releases.

When I arrived in April of 2021, I asked for your personal best every day, to be technical experts in our fields, and to be exceptional in our watch standing and training. I challenged you to continuously seek improvement. The results speak for itself. The team isn't supposed to run faster than their leader. As I write this, I am exhausted because I had to sprint continuously for 24 months to keep up! You are a class act, a tight knit family of Sailors and Civilians who embody the core values of honor, courage and commitment. Each of us joined the navy to do something better with our lives, to be something bigger than we are. I encourage you to continue to live up to the tremendous legacy of our naval service and those who have gone before us. I also encourage you to create a personal legacy that you are proud of.

It's been an absolute honor to work alongside such an exceptional group of professionals. Watching you work and accomplish the mission every day is awe-inspiring. You are central to Fleet safety, to Fleet maneuver and to Fleet lethality. I will miss your personal stories, your challenges, and the look of determination on your faces. I will miss your victories and your smiles. I will miss our simple greetings, our discussions and our celebrations. If you ever wonder where I get my energy - it comes from you. You motivate me to come to work every day and be the very best I can be for you. As I transition to my next job, my work relationship with you won't end, but it will evolve. I will watch you fondly from behind the front lines and I look forward to serving you and to serving alongside you in my next capacity.

Thank you, Bravo Zulu and JOB WELL DONE.



**Captain Acosta**

Commanding Officer, Fleet Weather Center Norfolk