

## Newsletter of the Mississippi Enterprise for Technology

### MESSAGE FROM MSET:

Welcome to this, the first edition of the MSET Newsletter. In these days of social distancing and restrictions on in-person events, another mechanism to get the word out on Stennis agencies and companies was in order. With the cancelation of our Small Business Summit featuring NOAA, we felt they were the obvious choice for our first edition. Although this will never substitute for in-person events, we hope it will provide you interesting information about NOAA activities and possible opportunities for your organization.

Cheers, Laurie Jugan  
MSET Program Director

### UPCOMING EVENTS:

Global OCEANS 2020 – a virtual event that combines OCEANS 2020 Singapore and OCEANS 2020 Gulf Coast into one! Visit <https://global20.oceansconference.org> October 5-30, 2020.

### WEBSITE:

[www.mset.org](http://www.mset.org)

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### NOAA's Southeast Regional Office

Work at the National Oceanic and Atmospheric Administration (NOAA) affects more than one-third of America's gross domestic product. Part of the Department of Commerce, NOAA provides reliable information that helps people make decisions on topics ranging from weather to coastal restoration to fisheries.

NOAA invests significantly in research and development, and has new strategies to grow its application of emerging science and technologies. NOAA recently released its Research and Development Vision Areas for 2020-2026, describing priorities in three areas:

- Reducing societal impacts from hazardous weather and other environmental phenomena;
- Sustainable use and stewardship of ocean and coastal resources; and
- A robust and effective research, development, and transition enterprise.

NOAA's products and services help protect life and property. They also help grow the Blue Economy in fields like seafood production, tourism and recreation, ocean exploration, marine transportation, and coastal resilience. NOAA will make transformative advancements in its products and services through its strategies in five science and technology focus areas:

- Unmanned Systems;
- Artificial Intelligence;
- 'Omics, or advanced methods to analyze materials like DNA, RNA, or proteins;
- Cloud Computing; and
- Data.

NOAA has many offices at or near Stennis; several featured in this newsletter. Here is a partial selection of other NOAA groups and activities that may interest you. We partner with Gulf states and communities for coastal resiliency and management, and conduct coastal ocean science. We have fisheries laboratories in Galveston, TX, Pascagoula and Stennis, MS, and Panama City, FL. Three NOAA research ships are based in Pascagoula, and our aircraft operate from Lakeland, FL. The Disaster Response Center in Mobile, AL emphasizes training and preparedness. The National Water Center is in Tuscaloosa, AL. Weather Forecast Offices and River Forecast Centers serve locations around the country. Among others, the Northern Gulf Institute, Gulf of Mexico Coastal Ocean Observing System, Sea Grant Programs, and National Estuarine Research Reserves are members of the NOAA family. NOAA and partners produce information about our planet that people use to make all kinds of decisions, which requires continued advances and application of science and technology.

#### Helpful links:

[NOAA homepage](#)

[NOAA Research and Development Vision Areas: 2020-2026](#)

[NOAA Science and Technology Focus Areas](#)



## National Data Buoy Center

The National Data Buoy Center (NDBC), located at the NASA Stennis Space Center (SSC) is part of National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS).

The NDBC network of 250 buoys and coastal stations provides meteorological and oceanographic data from locations in the coastal zones surrounding the United States, and across the Pacific Ocean, Gulf of Mexico, Caribbean Sea, and into the Atlantic Ocean. NDBC facility-based operations, including receiving and monitoring marine observation data; and the construction, assembly, and testing of buoys and station equipment occurs at SSC. NDBC's Mission Control Center monitors and manages data from NDBC's observing network, and supports the data management for other partners collecting observations in the marine environment.

NDBC data are critical for NOAA's weather and ocean forecast and warnings products, and also used across a variety of economic sectors, such as marine transportation, research and academia, energy resource assessment, national defense and security, spacecraft and satellite launch and recovery operations, fishing and aquaculture, ecosystem monitoring, recreation and tourism.

NDBC's multi-sector workforce consists of 40 NOAA federal staff, a small US Coast Guard liaison office, and a technical services contract recently awarded to PAE that provides about 130 onsite personnel. In addition to conducting near year-round maintenance of our buoys and stations, NDBC continuously addresses the challenges to develop affordable, sustainable and reliable observing systems.

NDBC procures a variety of services in addition to the technical services contract - charter vessels to conduct buoy maintenance, logistics, engineering, testing, and other services. NDBC also procures commercial communications technologies and services, data management systems and services, commercial off the shelf buoy systems as well as common and specialized parts and materials, sensors, power systems, etc. for repairs and upgrades for the current inventory of buoy and coastal stations.

More information about the NDBC can be found at <https://www.ndbc.noaa.gov/>. Information about procurement opportunities with NOAA can be found at <https://www.protechservices.noaa.gov/>. Information on doing business with the Federal Government and procurement opportunities, can be found at <https://beta.sam.gov/>.



## National Centers for Environmental Information



NOAA's mission is to understand and predict changes in climate, weather, oceans and coasts. Environmental data underpin all aspects of this mission. NOAA National Centers for Environmental Information (NCEI) hosts and provides public access to one of the most significant archives for environmental data on Earth. The NCEI archive contains more than 35 petabytes of data, equivalent to about 400 million filing cabinets filled with documents. NCEI stewardship practices maximize the Nation's investment in environmental research. NCEI's Mississippi location at the Stennis Space Center has a 20-year record of collaborating with regional partners to produce retrospective environmental data analyses and trend information that help form the basis of environmental policy and resource management decisions. In the near future, NCEI's local footprint will expand to the Wicker Ocean Enterprise Facility in Gulfport Mississippi in support of NOAA's Unmanned System Strategic Data Enterprise.

As the Nation's leading authority for environmental data, NCEI is well positioned to support the newly-released [NOAA's Data Strategy: Maximizing the Value of NOAA Data](#). The purpose of the NOAA Data Strategy is to maximize openness and transparency to dramatically accelerate the use of data across by key partners, while protecting data quality, integrity, security, privacy, and confidentiality. NOAA's Data Strategy will provide the framework for stewarding the volume and velocity of NOAA, data which are expected to increase exponentially with the advent of new observing systems, such as unmanned observing systems and satellite platforms. The strategy is designed to provide consistency while still being flexible and adaptable to stakeholder input and new technologies.

As the volume of data increases, the systems and infrastructure that process, store, and disseminate NOAA's data are also becoming increasingly complex. [NOAA's Cloud Strategy](#) provides a path toward modernizing our infrastructure by leveraging cloud services as a solution to meet future demand. Likewise, existing operational capabilities such as [NOAA's Cloud Utility Contract](#) vehicle and [NOAA's Big Data Program's](#) public-private partnership provide a foundational platform and target to inform and shape the Cloud Implementation Plan. Crucially, the Cloud Implementation Plan will support the implementation plans of the other NOAA Science and Technology Strategies (i.e., [Artificial Intelligence](#), [Omics](#), [Unmanned Systems](#)) to maximize coordination and promote synergies across the strategies.

## Office of Oceanic and Atmospheric Research (OAR): Unmanned Systems

In 2018, NOAA began to change its formal approach to using unmanned maritime systems (UMS) following the passage of the Commercial Engagement Through Ocean Technologies Act (CENOTE; 33 USC 54; Public Law 115 - 394). Introduced by Sen. Roger Wicker (R, MS) and co-sponsored in the House by Mr. Palazzo (R-MS 4), the Act codified informal UMS activities that NOAA had been undertaking for nearly a decade; formally designated the NOAA Office of Marine and Aviation Operations (OMAO) and the NOAA Office of Oceanic and Atmospheric Research (OAR) as the lead Line Offices in NOAA for UMS work; and greatly expanded the formal relationship between NOAA and the U.S. Navy through the Naval Meteorological and Oceanographic Command at Stennis Space Center, MS.

In 2019, NOAA delivered a national strategy on unmanned systems, to include UMS and Unmanned Aircraft Systems (UAS).

While not specifically CENOTE focused, [the NOAA Unmanned Systems Strategy](#) provides a corporate framework within which NOAA can implement CENOTE successfully. The UxS strategy is one of five [NOAA Technology Focus Areas](#) for the 21st Century. NOAA is currently developing a corporate implementation plan which will guide specific investments over the next 5 years. That plan will be released to the public in late October 2020.

NOAA has begun staffing CENOTE activities with the placement of an Unmanned Maritime Systems Research & Development Coordinator (within OAR) at the University of Southern Mississippi (USM) Marine Research Center in Gulfport to work full time on UMS data ingest and management, as well as service to users.



## Navigation Response Team 1, Eastern Gulf of Mexico



When hurricanes make landfall, they often bring with them stronger-than-normal ocean currents that can shift navigational channels and bring debris that can threaten the ability of vessels to navigate safely along the coast. This greatly affects our nation's U.S. ports and waterways that handle more than 2 billion tons of domestic and import/export cargo annually. Delays in shipping, even minor ones, cost the economy millions each year.

NOAA's Office of Coast Survey's [Navigation Response Team](#) located here at Stennis Space Center is one of six hydrographic survey response teams that work around-the-clock after a storm to speed the reopening of ports and waterways. This 4-person team including LT John Kidd, LTJG Collin Walker, Alex Ligon, and Joshua Bergeron, operates a trailer-able survey launch equipped with multibeam and side scan sonar which help identify dangers to navigation.

The team was [homeported at Stennis](#) and co-located with NOAA's National Data Buoy Center in late 2016. Being homeported adjacent to other federal and state partners involved in seafloor mapping and unmanned hydrographic survey systems provides an advantage. This particular team specializes in mobile integrated survey equipment as well as the operation of unmanned hydrographic survey vessels.

When they aren't responding to requests to survey following natural disasters, the team conducts routine hydrographic surveys to update [NOAA's suite of nautical charts](#).

## RESTORE Opportunity

The NOAA RESTORE Science Program plans to release its next funding opportunity in August 2020. This competition will provide natural resource managers, researchers, and other stakeholders with funding to plan a research project that informs a specific management decision impacting natural resources in the Gulf of Mexico. The Science Program will make approximately \$2.5 million available for this competition to fund approximately 20 planning projects that will run for one year each. Private companies, institutions of higher education; non-profit institutions; and local, state, federal, and tribal government agencies are eligible to compete for funding. At least one natural resource manager must either lead or be on the project team. For additional details on our next competition including references for guidelines and best-practices for co-producing actionable science click [here](#).



The Science Program plans to release another competition for funding about a year after awards from this competition are made (fall 2022). This second competition will provide funding to execute and apply actionable science in the Gulf of Mexico. It will make approximately \$15 million available for about 10 projects that will run for three to four years.

The NOAA RESTORE Science Program was authorized by Congress in the wake of the Deepwater Horizon oil spill to carry out research, observation, and monitoring to support the long-term sustainability of the Gulf of Mexico ecosystem. The program offers an opportunity to improve our understanding of the Gulf of Mexico ecosystem and, at the same time, use that knowledge to sustainably manage it. In practice, what this means is supporting teams of resource managers and researchers to work together to produce science that helps answer the questions resource managers are facing. By investing in resource manager and researcher partnerships, supporting actionable science, and promoting the practice of co-production over the next two decades, the Science Program aims to transform roughly \$133M of the penalties from the oil spill into applied ecosystem science in the Gulf of Mexico and advance the sustainability of the Gulf.

If you have any questions or feedback, please reach out to the Science Program at [noaarestorescience@noaa.gov](mailto:noaarestorescience@noaa.gov).

## Technology Partnerships Office

The NOAA Technology Partnerships Office, or TPO, is the one office in NOAA dedicated to supporting the growth of U.S. science and technology businesses to further the NOAA mission. We support business through two programs: the Small Business Innovation Research (SBIR) Program, which provides grants to small companies with innovative ideas, and the Technology Transfer Program, which encourages collaborations between NOAA scientists and engineers across the country and private companies to develop technology that is both commercially viable and useful for NOAA's mission.

Both Programs directly support innovation by engaging with the private sector to accomplish goals that will help to meet NOAA's mission and vision. NOAA's recently released Research and Development Vision (<https://nrc.noaa.gov/Council-Products/Research-Plans>) highlights three priorities:

1. Reducing societal impacts from hazardous weather and other environmental phenomena
2. Sustainable use and stewardship of ocean and coastal resources
3. Robust and effective transition of research into use.

To reach our vision, NOAA has also identified focus areas that are likely to have the most impact in the coming years:

- Artificial intelligence
- 'Omics
- Unmanned Systems
- Data and Cloud

These priorities cut across and support all NOAA's mission areas, so they are likely to be the focus of much upcoming work.

The SBIR Program is a great way for a small business to get involved with NOAA's mission. The SBIR is a government-wide program that provides funding specifically to domestic small businesses for innovative research and development work. The SBIR is competitive and is structured across three phases of activity: feasibility, proof of concept, and commercialization.

NOAA's SBIR offers up to \$150,000 under Phase I (6 month award) and up to \$500,000 for Phase II (2-year award). The final phase is commercial sales, so it is not funded by SBIR. However, NOAA does offer a commercialization assistance program to help new businesses increase their chance for Phase III success.

We look forward to working with you in the future!

#### Resources:

<https://nrc.noaa.gov/NOAA-Science-Technology-Focus-Areas>

<https://www.sbir.gov/>

<https://techpartnerships.noaa.gov/SBIR>

[@NOAASBIR](#)

## ProTech Update

NOAA initiated execution of the Professional, Technical, and Scientific Services (ProTech) Program in 2016. The ProTech Program is a mandatory source for NOAA and for other Department of Commerce Bureaus (where applicable). ProTech has also been designated as a "Tier 1 Spend-Under-Management" vehicle for the Department of Commerce.

The ProTech multiple-award Indefinite Delivery/Indefinite Quantity (IDIQ) contracts were awarded per Domain, each aligns with one of the four primary NOAA mission areas.

- Satellite Domain – contracts awarded June 2017
- Fisheries Domain – contracts awarded September 2018
- Oceans Domain – contracts awarded February 2019
- Weather Domain – contracts awarded January 2020



The contracts have a period of performance consisting of a two-year base period and three one-year option periods. The ProTech program has a total shared ceiling of \$3 Billion over the five-year performance period.

The ProTech public website link: <https://www.protechservices.noaa.gov>

Each ProTech Domain has its own homepage, with links to the Master Contract, Task Areas, Labor Categories, a Task Order Procurement Forecast, a Task Order Award report, and a list of Prime vendors (and their company contact info). Task Order Forecast and Task Order Award reports are updated on a monthly (or other) periodicity. An overall view of the ProTech program, updated quarterly, is found on the "Quarterly Report" link.

Each Domain has a dedicated "Account Manager" who also functions as the IDIQ-level COR. The Domain Account Manager assists NOAA Program requirements owners (Line & Staff Offices) with requirements review, Independent Government Cost Estimate development, coordinates vendor engagements, and provides other support and guidance.

Companies that do not currently have a ProTech Prime Award, can reach out to any company with a ProTech Prime Award to propose teaming. The Domain-specific Task Order Procurement Forecasts, as well as the Task Order Award reports, are provided on the Domain homepages for transparency and to encourage potential teaming.

ProTech Task Order Requests for Proposals are sent only to the ProTech Prime vendors (at the competition level set by the Task Order Contracting Officer). Companies pursuing service contracts not included in the ProTech program should continue to review BetaSAM for those opportunities.

Please send any questions to us at: [protech.services@noaa.gov](mailto:protech.services@noaa.gov)

**South Mississippi Contract Procurement Center (SMCPC)**, your local PTAC office, has moved! We are now located at 11975 Seaway Rd, Ste A220, Gulfport, MS 39576. Our telephone number is 228-396-1288. Ask us about our free bid matching service!

### **National Aeronautics and Space Administration (NASA)**

NASA is transitioning their vendor database to Google Forms. The previous database is now inactive. If you would like to continue to receive updates from NASA Office of Small Business Programs (OSBP) and other Agency acquisition personnel, please complete the [Google Form](#). Please note that by signing up for the NASA Vendor Database Registration list, you agree that NASA OSBP may share your company information with others at the Agency and fellow vendor registrants.

Please check the [NASA Procurement Forecast](#) for updates, open, and planned acquisitions. Current open solicitations at Stennis are for Atmospheric Nitrogen Generation and Lease/Rental of NASA Space. Upcoming is the NASA Information Technology Services (ITS) contract.

NASA OSBP Calendar of Events: <https://osbp.nasa.gov/calendar-osbp.html>

Check out the NASA OSBP mobile app!

### **University of Southern Mississippi (USM)**

In late August, USM's Mississippi Defense Initiative grant will fund a fulltime economic development position at MSET's Stennis Office. The position will support collaboration with NASA, the Navy, NOAA, and other federal agencies to leverage the resources of Stennis Space Center to catalyze tech-based economic growth. This position will also work with local, state, and regional economic development organizations to target and recruit aerospace, defense, and commercial space industries to Stennis. For more about this grant visit: <https://www.usm.edu/news/2020/release/ms-defense-initiative-to-boost-diverse-economies.php>.

### **Start-Up and Entrepreneurship Webinars**

Innovate Mississippi: <https://www.innovate.ms/>

Louisiana Technology Transfer Office: <https://lsu.edu/innovationpark/LTTO-SBIR/index.php>