National Aeronautics and Space Administration



THE STATE OF NASA PROCUREMENT 2020 A YEAR IN REVIEW





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OVERVIEW

Purpose of the Publication

Overview of the accomplishments and achievements of the NASA Office of Procurement.

Office of Procurement Mission Statement

Acquisition excellence in an evolving environment.

Office of Procurement Vision Statement

Explore and execute innovative, effective, and efficient acquisition business solutions to optimize capabilities and operations that enable NASA's missions. The NASA Headquarters Office of Procurement oversees the acquisition process to support successful accomplishment of the Agency's current and future missions. It provides policy, oversight, and optimization of procurement resources, and it supports Mission Directorate acquisition strategies to enable more efficient operations for the Agency.

Welcome



WELCOME

Welcome to the second edition of this publication and my first at the helm of the NASA Office of Procurement. I am extremely proud of the dedication, hard work, and contributions of NASA's 4,400-member acquisition workforce. Despite the challenges of operating in a remote environment for most of 2020, we delivered exceptional value to the American public in pursuit of the NASA mission.

During the past year, the NASA Office of Procurement embraced ingenuity, executed enhanced contracting flexibilities, and provided solutions to support the NASA mission by collaborating with our contractor workforce of more than 50,000 dispersed across the world, which resulted in savings of over \$1.1 billion in negotiated non-competitive actions, from the prior year.

These accomplishments are even more remarkable during a time of unprecedented Enterprise transformation and the indelible toll the coronavirus (COVID-19) epidemic has taken on our Nation.

This publication highlights some of these achievements—the Agency's biggest procurement successes. While not all-inclusive, it sets the stage and highlights the extraordinary range, depth, and quality of a committed and agile workforce.

I hope you are as inspired as I am, and I look forward to working with you over the coming year to reach new heights and even greater milestones.

Sincerely,

Karla Smith Jackson Assistant Administrator of Procurement, Senior Procurement Executive, and Deputy Chief Acquisition Officer

BACKGROUND



The NASA Headquarters Office of Procurement oversees the acquisition process to enable the Agency's current and future missions. It provides policy, oversight, and optimization of procurement resources, and it supports Mission Directorate acquisition strategies to enable more efficient Agency operations.

The Office of Procurement continued with the implementation of their transformation efforts approved under the Mission Support Future Architecture Program (MAP) in 2019 by moving forward with the realignment of the organization from a decentralized operating model to an enterprise operating model focusing on four key areas known as the Four P's: People (roles and responsibilities), Procure, Process, and Policies. This strategic approach to operations established a nationalized procurement workforce that will continue to reduce procurement lead times and standardize policies, procedures, processes, and information technology platforms, which will increase productivity and proficiencies and establish a common user experience.

While the Office of Procurement continued to make significant progress with our transformation efforts, the organization pivoted to the next logical step in our transformation efforts—performance reporting. Performancelevel reporting is an increasingly important mechanism for monitoring the success of our new service delivery model. In this vein, the Office of Procurement developed and ultimately received Agency approval of our new Baseline Performance Measures that represented clear, measurable baseline commitments as follows:

• Return on Investment (ROI)

Show value of Procurement to the Agency through obligations to cost ratio and demonstrate competitive obligation efficiency.

- Procurement Administrative Lead Time (PALT) Reduce PALT.
- Undefinitized Contract Actions (UCAs) Reduce overage UCAs (>180 days).
- Contract Closeout Reduce backlog Contract Closeout inventory.

Category Management

Increase utilization of Spend Under Management (SUM) and Federal Best-in-Class (BIC) contracts.

Customer Satisfaction

Improve performance based on annual internal customer satisfaction survey and the annual external Government-wide Customer Satisfaction Survey.

NASA BY THE NUMBERS

TRENDS IN AWARDS

		Procurement Obligations	
Fiscal Year	Total NASA Obligations	Amount	% of Total Obligations
2020	\$25,270.9	\$19,679.2	78.0%
2019	\$23,970.8	\$19,514.4	81.4%
2018	\$23,374.8	\$19,196.7	82.1%
2017	\$22,678.2	\$18,502.5	81.6%
2016	\$22,527.0	\$18,687.9	83.0%
2015	\$21,070.5	\$17,191.5	81.6%

NASA spends approximately **78** percent of its budget on acquiring goods and services.

NASA's procurements totaled over **\$19.6 billion**.

The number of procurement actions totaled over 28,000

(e.g., awards, modifications) and managed in excess of 25,000 instruments (including contracts, PO, TO, DO).

AWARDS BY CONTRACTOR TYPE



Actions



PEOPLE

Develop, train, inspire, and motivate the acquisition workforce

Priorities and Initiatives

Create a nationalized acquisition workforce that

- implements an enterprise-wide acquisition workforce model that leverages employee skills and capacity across the Agency;
- ensures agility in workload distribution across the Agency to meet evolving mission needs; and
- increases procurement capabilities through the establishment of subject matter experts (e.g., pricing, source selection, and contract closeout communities of practice).

Execute a strategic workforce plan in coordination with the Office of the Chief Human Capital Officer (OCHCO) that

- establishes the appropriate full-time equivalent/ work-year equivalent complement;
- fully utilizes recruitment and retention incentives, job rotations, detail assignments, and direct-hire authority to provide opportunities for employees to attain diverse career experience and broaden professional capabilities; and
- institutes a procurement professional mentoring and coaching program.

Improve acquisition career training and leadership development by fostering an environment of growth and learning by

- transitioning to the Federal Acquisition Institute Training Application System (FAITAS) to track acquisition training/certification;
- phasing in the planned transition of Procurement, Contracting Officer's Representative (CORs), and Program and Project Managers; and
- leveraging technology to provide just-in-time training to the acquisition workforce.

PEOPLE ACCOMPLISHMENTS

OP's strategy is to thoughtfully develop and maintain a pipeline of employees capable of successfully performing the various 1102 functions and prepared to assume increased levels of responsibility within the enterprise.

In 2020, the OP Strategic Workforce Plan formalized a Workforce Pipeline Plan to build bench strength to develop more experienced 1102s. The plan envisions using a combination of interns (OSTEM and Pathways) and term hires at grades GS-7 through GS-11 with non-competitive growth opportunity up to GS-12. OP will convert term employees who have performed well and successfully reached the full performance level as vacancies occur so that our investment in their training and development is not lost to other agencies.

For current NASA 1102s, the focus was on enhancing career development and providing opportunities across the enterprise. New position announcements are open to everyone who qualifies without a requirement to relocate, but to support any Center from any NASA location. The *OP Dispatch*, a weekly e-mail sent to the entire enterprise workforce, was used to share vacancy announcements.

A significant amount of effort was also undertaken by the OP Workforce Strategy Committee (WSC) that will positively impact our workforce. The following recommendations were presented and approved for implementation by the Procurement Leadership Committee (PLC): Restart and expand the Procurement Annual Awards Program to increase opportunities to recognize the wide range of accomplishments of the OP workforce.

Benefits of the Enterprise Recognition and Awards Program include the ability to retain top talent, build a positive workplace culture, create a collaborative work environment, and increase employee motivation and productivity.

 Develop an OP Enterprise Mentoring Program to ensure that knowledge is transferred while developing and retaining a highly qualified procurement workforce.

Benefits of the Enterprise Mentoring Program include developing skilled mentors within the procurement community to ensure that knowledge is transferred while developing and retaining a highly qualified procurement workforce, enabling those mentors to aid in the personal and professional growth of the workforce, and increasing employee satisfaction and cultivating a positive organizational climate.

Develop an Enterprise Detail Opportunity Process to increase opportunities for employee experiential development.

Benefits of the Enterprise Detail Opportunity Process (for short-term detail opportunities of less than one year) include increasing opportunities for employee experiential development and allowing Centers the ability to seek surge support for short-term needs. Develop Enterprise Career Path Guidelines and a Competency Assessment Process to improve employee development efforts and minimize skill gaps.

The Enterprise Career Path Guidelines tool aligns with the OP Workforce Pipeline stages and assists the workforce with the pursuit of formal training, direct experience, and other developmental opportunities at each career phase. The Competency Assessment Process will be beneficial for career development by helping workforce members assess their proficiency in a number of key technical and personal effectiveness areas to identify gaps. Closing the gaps via formal training, direct experience, and other developmental opportunities is encouraged.



NASA Office of Procurement Organization Chart

Awards

FY20 NASA Acquisition Improvement Awards

The winners of the fiscal year (FY)20 NASA **Acquisition Improvement Awards (AIA)** were selected after a thorough and extensive screening process. The process resulted in three nominations selected for a total of 56 Acquisition Improvement Awards presented to the individuals on the three teams. The three teams were the NASA Open Innovation Services 2 (NOIS2), KSC Gateway Logistics Services (GLS), and the KSC Mobile Launcher 2 (ML2). In honor of their tireless efforts, the Office of Procurement (OP) appreciates the innovative solutions that the recipients directly contributed to the effective and efficient acquisition business solutions that enable NASA's mission.



People Accomplishments

Johnson Space Center NASA Open Innovation Services 2 (NOIS2)

The NOIS2 competitive acquisition was the follow-on procurement to the original NOIS Contract and provides crowdsourcing and innovation support to the National Aeronautics and Space Administration (NASA) Johnson Space Center (JSC) Center of Excellence for Collaborative Innovation (CoECI) Office, other NASA Centers, and other Government agencies. The Federal Government continues to seek new and improved ways of solving problems and driving innovation through the use of existing and/or emerging open innovation tools, and interest continues to grow in the broader use of crowdsourcing as a tool to help NASA and other Government agencies meet their missions. The NOIS2 Contract provides an expanded set of crowdsourcing tools and methodologies, including, but not limited to, crowd-based challenges and prize competitions, crowd-based freelance projects, crowd-based micro-task projects, and other crowd-based methodologies to deliver various end products and services. The resulting multiple-award firmfixed-price Indefinite Delivery/Indefinite Quantity (IDIQ) contracts have a total value across all 19 awarded contracts of \$24.9M over five years.

The NOIS2 procurement is a stellar example of how a group of technical, procurement, and legal professionals can come together to execute a "traditional" Government acquisition and successfully evaluate 27 contractor proposals and award 19 contracts to highly non-traditional Government businesses within 91 days from proposal receipt to contract award.

People Accomplishments

Kennedy Space Center Gateway Logistics Services (GLS)

The Kennedy Space Center (KSC) Gateway Logistics Services (GLS) acquisition is an 8-year, firm-fixed-price contract valued at \$609 million, with a period of performance consisting of a 12-year ordering period. NASA is leading the development of the first permanent cislunar outpost known as the Gateway in support of the Artemis Program and the goal of landing the first woman and the next man on the Moon by 2024. The Gateway will be an outpost orbiting the Moon that provides vital support for a sustainable, long-term human return to the lunar surface, as well as a staging point for deep space exploration. The Gateway will be similar to the International Space Station that is orbiting Earth. The Gateway's core functions will include power and propulsion, communications, periodic crew habitation, robotics, an airlock, and, as relevant to this nomination, logistics resupply capabilities. This award recognized the achievements of the KSC GLS source selection team.

The GLS enabled NASA to order missions for as long as 12 years, which supports the ability to order additional missions as Gateway buildout and utilization needs dictate; and provided the ability to add new competitive providers and capabilities to drive down costs, encourage new logistics services capability development, and promote innovation. Specifically, pursuant to an innovative on-ramp clause developed by KSC procurement and launch services officials, the GLS contract will remain open throughout the ordering period, allowing the Government to request proposals from new and incumbent providers at appropriate times to



- maximize and optimize competition for future requirements not currently on the contract;
- allow qualified new service providers the opportunity to provide services; and
- enable existing contract holders to introduce new capabilities not available or identified at the time of the award of the initial contract.

In addition, since this innovative on-ramp clause maintains the minimum contract requirements; technical acceptability standards; and evaluation factors, solicitation terms and conditions, and basis for award for requests for new proposals, the Government is able to conduct future competitions in an effective, reasonable, and efficient manner. This approach reduces transaction costs for both Government and industry, improves the timeliness of procurements, and makes it easier for industry to do business with NASA.

Finally, acquisition streamlining was achieved through early and frequent exchanges with industry and stakeholders and identification of key discriminators. These initiatives streamlined the acquisition process by reducing the size and content of the solicitation, resulting in increased efficiency in proposal preparation, proposal evaluation, negotiation, and contract award, ultimately resulting in the source selection being made within 49 days from receipt of proposals.

PEOPLE

People Accomplishments



Kennedy Space Center Mobile Launcher 2 (ML2)

The ML2 contract is a cost-plus-award-fee end item contract providing for the design, build, test, and commission of a second mobile launcher to support NASA's Moon to Mars exploration approach. The contract has an estimated value of \$383 million and a 44-month period of performance. ML2 supports the assembly, testing, and servicing of the Space Launch System (SLS) Block 1B (B1B) rocket configuration and provides the platform on which SLS and Orion will launch. The approximately 380-foot-tall structure will consist of a base structure and launch umbilical tower; ground support equipment systems and subsystems for flight and vehicle interfaces; and facility ground support systems to include power, communications, and water. ML2 must also interface with the Vehicle Assembly Building and crawler-transporters to move the rocket to its launch location at NASA's Launch Complex 39B at KSC. This award recognized the achievements of the Kennedy Space Center (KSC) Gateway Logistics Services (GLS) source selection team.

The ML2 Team used various new and innovative techniques to reduce the cost and improve the timeliness of the acquisition. First, they used a two-phase design-build selection procedure. The ML2 Team was tasked with completing the acquisition within an unprecedented 10-month schedule to enable completion of design, construction, test, and commissioning of the ML2. Rather than the traditional design-bid-build approach to contracting (where design and construction are sequential and contracted for separately with two contracts and two contractors), the ML2 Team defined its acquisition strategy around the innovative, two-phase design-build

approach, which combines design and construction in a single contract with one contractor. This approach is typically faster than proceeding under a design-bid-build approach and was appropriate for the ML2 acquisition since program requirements were still being developed. Despite the lack of experience with this acquisition method, the ML2 Team quickly acquired the requisite knowledge of this procurement method and maintained alignment with critical schedule milestones. Secondly, the ML2 Team used multimedia presentations to streamline the source selection process. The phase 2 solicitation required the submission of a prerecorded multimedia presentation (as a supplement to the written proposal) to demonstrate the tools and processes used in the proposed technical approach and to illustrate the offeror's proposed approach through visual aids (e.g., computerized graphics, animation, storyboards). This approach assisted in the understanding of complex design solutions and facilitated an accurate understanding of the written proposal. Finally, the ML2 Team created the opportunity to transition to a lower-risk contract. Due to requirements uncertainty and to provide greater flexibility for design changes (e.g., SLS B1B requirements development and design modifications will be performed in parallel to the ML2 design and construction), the ML2 Team utilized a cost-reimbursement contract. However, the contract includes an innovative provision to permit the Government to convert the contract type to a firm-fixed-price contract if advantageous to the Government during the project. Specifically, the contract included a contract deliverable requiring the contractor to provide a firm-fixed-price proposal at approximately the 90 percent design stage.

People Accomplishments

OP Enterprise Awards

After many years of inactivity, the **OP Enterprise Awards** were revamped and reintroduced to the OP Enterprise to recognize those individuals who have exemplified professional and outstanding achievements in their duties for the year. This award includes 11 categories in which persons can be nominated. The awardees hold the title for one year and receive a plaque and monetary gift. This is another resource OP uses to reward the hardworking staff of the OP community. The 11 categories are as follows:

- Contract Specialist of the Year (Post Award)
- Contract Specialist of the Year (Pre-Award)
- Contracting Officer's Representative (COR) of the Year
- Cost Price Analyst Auditor of the Year
- Early Career Contract Specialist of the Year
- Enterprise Team Award
- Grants and Agreement Support Specialist of the Year
- Procurement Analyst of the Year
- Procurement Supervisor of the Year
- Procurement Support Person of the Year
- Simplified Acquisition Procedures Specialist of the Year

"

Deputy Assistant Administrator for Procurement William Roets:

"Change is inevitable. One should not fear change but embrace it wholeheartedly and take ownership of it. Because it is through change that we will ultimately make people's lives better."

Diversity in Procurement

In 2020, the NASA Administrator launched the NASA Unity Campaign, with the goal of enabling our talented workforce to continue excelling by fully contributing all possible skills, capabilities, knowledge, and solutions in a safe environment that promotes candid thinking, ideas, innovations, and concerns. In support of the Unity Campaign, in March of 2020, the Administrator shared new policy statements on Diversity and Inclusion, Equal Employment Opportunity, and Anti-Harassment. OP has embraced the Unity Campaign as well as these policy statements and developed a comprehensive Unity Campaign implementation plan aimed elevating our focus on the mission and strengthening teamwork and collaboration. OP's Unity Campaign implementation plan focused on areas of opportunities to expand mission focus and increased connectivity throughout the procurement community. The plan set out to strengthen teamwork and collaboration through periodic messaging to senior leadership and OP employees about diversity and inclusion through quarterly OP virtual all-hands events and Procurement Leadership Committee meetings, the posting of Unity Campaign information to the OP Agency-wide Public Dispatch website, and developing a repository on the OP website to contain these unity campaign messages. In 2020, the OP community found ways to connect with each other through such activities as

- A Unity Campaign presentation to the Agency Procurement Leadership Team
- A Unity Campaign presentation that included a Unity Campaign guest speaker at an Agencywide OP Manager/Supervisor F2F event at KSC (-100 attendees)
- OP Collaboration events that reinforced the objectives and principles of the Unity Campaign

- OP Leadership Team speed mentoring with KSC Procurement staff
- OP/OSBP MAP Update to industry at Small Business Expo at KSC
- OP Leadership Team speed mentoring with MSFC Procurement Staff
- Development and deployment of OP norms, challenges, and solutions to OP workforce through training events
- OP Leadership Team speed mentoring with ARC Procurement staff
- Formal industry roll-out of Enterprise Procurement Delivery Model to approximately 900 individuals representing NASA contractors
- HQ OP Super Bowl Party that fostered networking, information sharing, and comradery
- OP Leadership Team virtual happy hour during COVID-19 that fostered networking, information sharing, and comradery

The year 2020 was challenging, as we learned to live and work through the COVID-19 pandemic and the social unrest in our communities and around the world. As an OP community, we pulled together, encouraging everyone to have empathy and compassion for one another to better understand the deep pain and division we were all seeing across the country. Through it all, the OP community strove to create a space where individuals listened to each other and could have open, honest, respectful dialogue about what was happening, which made us better both as a community and individually.

People Accomplishments

NASA's Acquisition Workforce – The People

Effective acquisition outcomes are a direct result of having people with the right skills performing acquisition functions that support projects and programs. NASA has the right people with the right skills necessary to execute innovative, effective, and efficient acquisition business solutions to optimize capabilities and operations that enable NASA's missions. NASA acquisition professionals lead acquisition teams that plan, award, and manage a myriad of contracting requirements and contract types ranging from institutional supply and service fixed-price contracts to complex IT, scientific and research and development cost-type contracts in support of NASA's routine operational services, and major projects and programs such as Artemis, Gateway, SLS, ISS, and so many more that support NASA's mission. The Acquisition workforce is a critical segment of NASA's Workforce, and the Agency continues to provide training and development activities to ensure the workforce 1) has the knowledge, skills, and abilities to award and manage complex contracts; and 2) has training necessary to achieve and maintain FAC-C certifications at all levels as required by Federal Guidelines.

Acquisition Human Capital Plan

The Federal Government, overall, has a shortage of contracting resources at various FAC-C levels. It is widely discussed among acquisition leaders and known in the contracting community that the contracting workforce has remained stable while the work has increased in size and complexity due to mission requirements. NASA is not exempt from this issue, but our people are resilient and work hard to ensure contracts are awarded in a timely manner and manage contracts to ensure contractor's



performance is within cost, schedule, and contract performance standards.

In FY20, NASA had approximately 4,538 acquisition professionals. This includes approximately 766 procurement professionals who are in the 1102 Contracting Series with position titles of Contract Specialist, Contracting Officer, Contract Price/Cost Analyst, Procurement Analyst, and more. Other series that support contracting activities include the 1101 General Business and Industry Series and the 1105 Purchasing Series. NASA has 3,604 Contracting Officer's Representatives (CORs) and, on average, 168 Program/Project Managers (P/PM). As of September 2020, there was approximately 20 percent of the workforce eligible for retirement Agency-wide, with the projection increasing to about 40 percent by the end of 2023. In the Acquisition workforce there are approximately 14 percent retirement-eligible as of 2018, and in five years, we project that number to increase to 30 percent. NASA is being very proactive and exhausting numerous methods to recruit, acquire, and sustain a diverse acquisition workforce, such as Direct Hire Authority, NASA Pathway Program; Hiring Interns, Recent Graduates, and Presidential Management Fellows; Rehiring of Annuitants in Special Circumstances; Surge Hiring; and Other Special Hiring Authorities to sustain our acquisition workforce.

Certification Programs and Enhancements

The Federal Acquisition Certification (FAC) training programs include the Federal Acquisition Certification in Contracting (FAC-C), Federal Acquisition Certification for Contracting Officer's Representatives (FAC-COR), and the Federal Acquisition Certification in Program and Project Managers (FAC-P/PM)(OFPP Policy Letter 05-01, Developing and Managing the Acquisition Workforce). These programs establish consistent competencies and standards for the acquisition workforce that perform key **FAC-C Certification:** The percentage of 1102 personnel with FAC-C certification is 100% as of September 2020.



acquisition work roles and duties. NASA's Acquisition workforce is FAC-C certified: Level III at 65 percent, Level II at 26 percent, and Level I at 10 percent. See the chart above.

NASA's training and certification program for contracting is based on the requirements of the Federal Acquisition Certification in Contracting (FAC-C) Program with a unique twist. NASA's FAC-C Program includes general education, training, and experience requirements for contracting professionals, and includes unique certification requirements in addition to the Federal Acquisition Certification (FAC) requirements. The 1102 career paths provide a framework for career development that contracting personnel and their supervisors use to identify suitable training classes and developmental projects and opportunities. NASA has focused on developing cost and pricing skills and information technology skills in its acquisition workforce and has taken steps to grow this career path. New changes to the FAC-C Program are highlighted below:

- Updated the Procurement Career Development and Training Policy, NASA Procurement Career Development and Training Program Policy Handbook, revised December 2020.
- Offered an intense, comprehensive advanced cost and pricing course, entitled *Advanced Contract Pricing*, for its FAC-C Level III certification curriculum. This course was established to strengthen cost and pricing skills within the contracting workforce. This course is in addition to the basic and advanced Cost Proposal Evaluation courses offered as part of the NASA Acquisition Training Program.
- Incorporated impactful Agency-unique requirements to complement NASA's Federal Acquisition Certification in Contracting (FAC-C) program that added a virtual instructor-led course, OP's new Office of Procurement 360 Leadership Module and Advanced Contract Pricing Course.
- Transitioned all traditional classroom training to virtual platform, enabling OP to continue to address the training and development needs of the FAC-C and FAC-COR community, not only in response to the COVID-19 pandemic, but to meet the overall future diverse learning needs and accessibility of the Agency workforce.
- Initiated a Category Management Training Campaign in February 2020 whereby teams composed of various Centers competed against each other to claim the prize of highest percentage of completion of the Category Management 101 (FCL-CM-2500) course. In doing so, NASA

encouraged completion of the training in a fun and competitive manner that built teamwork and comradery across the procurement enterprise. NASA's training strategy yielded positive results; by the end of FY 2020, 100 percent of NASA's Office of Procurement (all 726 employees) had completed CM 101 training.

- Led enterprise efforts in the development of new and improved Agency tools in support of Career Development & Training initiatives, including Re-energize of Continuous Learning Policy, Mentoring, Enterprise Training Approach and Assessment, CD&T Continuous Process Improvements, Virtual On-Boarding, etc.
- Assessed and updated the Agency's Warrant Policy to define the enterprise approach that will enable the procurement workforce to support the assignment of Contracting Officers remotely across all NASA Centers.
- Participated in the *FAC-C Digital Services* (FAC-C DS) program. The FAC-C Digital Services specialization was launched on May 15, 2018. This program establishes a core–plus specialization in Digital Services and IT Contracting.
- Emphasized the many contracting training resources available for the 80 Continuous Learning Points (CLP) required every two years from the date of entry into the acquisition workforce to maintain FAC-Cs that involve classroom training, virtual training, and other options that do not involve formal classroom training.
- Added speed mentoring with Procurement Leadership from Headquarters and all 10 Procurement Officers to share information and exchange experiences with new, mid-level, and veteran acquisition professionals.

Training

NASA has a diverse and highly skilled acquisition workforce that is very proud of its integral role in supporting NASA's mission. This professional workforce includes Contracting Officers, Contracting Specialists, Contracting Officer Representatives, Contract Price Analysts/Cost Analysts, Procurement Analysts, and Senior Program and Project Managers.

NASA's Acquisition Training Program goal is to 1) ensure our acquisition professionals have the knowledge, skill, abilities, and experience to work on mission-essential and complex requirements and 2) adequately prepare the workforce for all FAC-C level stages with necessary training and experience.

The Office of Procurement works closely with Procurement Officers at all Centers and NASA's Acquisition Career Manager, and the COR Program Manager works closely with the Center Training Coordinators to closely monitor and track the training needs of the acquisition workforce and monitor the number of experienced and trained acquisition workforce at each of the NASA Centers. Transformative activities established in 2019 included knowledge management, leadership training, and mentoring programs.

Acquisition Workforce Training Courses

Our training program is designed to ensure our acquisition workforce 1) has access to acquisition training that aligns with their training needs, work duties, and professional and personal schedule; 2) has access to non-contracting courses to enhance leadership skills, business and decision-making skills, and communication skills; and 3) is introduced to innovative training to keep them abreast of new NASA and Federal contracting initiatives relevant to their contracting duties.

In FY20, OP held numerous acquisition training courses, including CON courses, COR courses, webinars, and others.



People Accomplishments

The CON courses reached more than 97 procurement professionals to support their pursuit of Federal Acquisition Certification in Contracting (FAC-C) certification and career development. In 2019, OP established a new Advanced Contract Pricing Course to improve cost and pricing skills across the Agency; to date, more than six sessions were regionally organized across the Centers that impacted over 100 acquisition professionals. The course is rated highly effective among the workforce, with notable mentions regarding the strategic and innovative approach that looks beyond just calculations to highlight the importance of critical thinking and logical reasoning. Additionally, nearly every attendee expressed that what they learned would improve their overall knowledge and on-the-job skills. This course continues to be highly recommended across the Agency for its use of innovative case studies, candid discussions with procurement leadership, and integration of real-time presentations, along with business and decision-making skills. This dynamic course requires students to use business and decision-making skills, critical thinking, oral communication, and collaboration skills.

As a bonus, NASA continued to enhance its FAC-C program by adding a leadership course as a Level III requirement. This program included a virtual instructor-led CON 360—Contracting for Decision Makers course coupled with an OP-designed two-and-a-half-day leadership module. The OP360 Leadership Module (OP LM) included an overview of OP's mission and vision, as well as various leadership and mentoring sessions that were aimed to inspire the next generation. This cohort



experience was hosted by the AA/DAA for Procurement and included firsthand engagement with NASA leadership and Agency senior executives. Several NASA officials shared their executive journey, and it served as a testament of NASA's commitment to developing and supporting its workforce. Notable mentions included fireside chats with NASA's 14th Deputy Administrator, James Morhard, the Agency's highest-ranking civil servant; NASA Associate Administrator Stephen Jurczyk; the then-Acting Chief Financial Officer, now NASA Deputy Associate Administrator Melanie Saunders; the Agency's General Counsel, Sumara M. Thompson-King; and Associate Administrator for Diversity and Equal Opportunity Steve Shih; along with the Associate Administrator for the Mission Support Directorate, Robert Gibbs; Center Directors of NASA's Goddard Space Flight Center, Glenn Research Center, and Langley Research Center; as well as numerous Procurement Officers and OP Division Directors. The program highlighted leadership in the 21st century and OP's leadership theme, "Connect, Create, and Cultivating Leaders." The inaugural course was rated a big success. The course survey and e-mails of appreciation overwhelmingly rated the leadership module as informative, inspirational, and a great experience. A special mention from one of the attendees noted that the course was "the best adult learning experience that I have had. I don't think anyone from the class will ever forget this." Based on the overall effectiveness of the leadership module, the OP vision was realized and brought to life by the NASA Acquisition Career Manager, Veronica B. Lansey.

Additionally, OP continues to host the NASA Procurement Quarterly Training Series webinars. The webinars cover innovative and timely contracting topics, such as "Suitability of a GSA Solution," "Ability One," and "NASA's Contract Closeout Guidance," which hosted more than 400 learners from various disciplines. On average, the OP Quarterly Webinar Series (DOC) draws attendance from as many as 200 to 400 participants each session.

Last, during this timeframe, OP offered COR certification training to approximately 617 CORs. OP maximized its use of the virtual platform by offering dozens of COR Basic and Refresher training courses.

FAITAS Transition for COR Acquisition Workforce

In 2020, OP successfully transitioned more than 3,000 Agency CORs to the Federal Acquisition Institute Training Application System (FAITAS)! This system enables use of the FAC-COR Certification and Continuous Learning Points (CLPs) through FAITAS modules for the COR acquisition workforce (AWF). FAITAS is now NASA's system of record for the Agency's FAC-C and FAC-COR certification program. This enterprise solution will allow the Agency greater insight into the AWF training and career development portfolio. The FAITAS modules will enable OP to transform the award, maintenance, and management of the Agency's FAC-COR certification program into an automated system that will promote efficiencies and, in turn, increase cost savings. NASA's workforce will have increased access to FAC-C training, continuous learning courses, and realtime management of their certification and continuous learning points and career development opportunities.

PROCURE

Deliver exceptional acquisition business solutions and results to enable NASA missions

AND THE A

Priorities and Initiatives

Procurement Portfolio Acquisition Model

- Continue development of enterprise procurement strategies to maximize interdependencies, reduce redundancies, increase productivity and proficiency, and incorporate Supply Chain Management Principles (e.g., Gateway Program Procurement Support Model and Institutional Product Support Lines).
- Assist and support Agency efforts to improve management of major acquisitions under Cross-Agency Priority (CAP) Goal 11 under the President's Management Agenda (PMA).

PMA CAP Goal 7 Category Management

- Increase utilization of best-in-class practices when appropriate for the requirement (e.g., expand the use of Solutions for Enterprise-Wide Procurement [SEWP]).
- Develop contract solutions with cross-Agency and/ or Government-wide contracting vehicles.

Reduce Procurement Lead Times

- Employ project management principles to the acquisition process to reduce the length of the procurement process.
- Increase the use of innovative procurement techniques (e.g., PPTO).

Reduce Redundant and Duplicative Contracts and Other Instruments

- Strengthen acquisition planning to ensure that the right contract vehicle is utilized for requirements.
- Establish a partnership between the Source Selection Community of Practice and APPEL to develop online, just-in-time Source Selection team training.
- Establish Closeout Process Community of Practice (CFO and Center Procurement reps) to increase the timeliness of contract close-outs and reduce unliquidated obligations (ULO).

PROCUREMENT ACCOMPLISHMENTS

COVID-19

COVID-19 Relief Efforts

With the onset of the COVID-19 pandemic in March 2020, the Headquarters Office of Procurement (OP) partnered with various Agency stakeholders, to include the Office of the Chief Medical Officer (OCHMO) and Office of Strategic Infrastructure (OSI) to ensure the Agency had the materials required to safely and effectively support mission-critical operations. In early May 2020, when the Agency determined there was a need for Personal Protective Equipment (PPE), HQ OP directed the NASA Shared Services Center (NSSC) to execute an enterprise-wide procurement for the Agency. HQ OP facilitated the enterprise-wide PPE procurement through various means:

- NSSC immediately executed an Interagency Agreement with the GSA Federal Acquisition Service (FAS) to leverage its established supply chain in support of an enterprise purchase. Within a few weeks, shipments of PPE began to arrive at each NASA Center's central receiving points.
- 2. Concurrently, OP worked with OSI to leverage GSA Global Supply in order to execute a second enterprise purchase in order to maintain the supply of critical PPE throughout the summer months.

In addition, NSSC began messaging to Agency Purchase Card holders guidance for leveraging FAR Part 18 Emergency Acquisition flexibilities in accordance with the President's declaration of a national emergency, increasing the micro-purchase threshold for purchases in support of COVID-19 relief efforts. This ensured NASA Centers could maintain continuity of operations in a rapidly changing environment and NASA employees had the requisite tools for operating in a long-term virtual environment.

As the pandemic continued into the summer and fall, OP and the NSSC continued to support various initiatives to mitigate risk and enhance the safety of NASA employees required to work onsite for essential activities. In coordination with HQ OP, NSSC took the following actions to ensure the safety of NASA's workforce:

- In August, as testing of the SLS rocket at Stennis Space Center (SSC) neared, NSSC quickly executed a contract to purchase touchless kiosks to support enhanced access control by providing wellness scans of SSC employees engaged in this important effort.
- In September, NSSC quickly executed a contract to purchase wearable technology for onsite NASA employees at select Centers to support early identification of potential COVID symptoms, reducing spread of the virus in NASA missioncritical areas and giving employees potential lifesaving health information.

As COVID testing became more widely available and reliable in the late fall of 2020, NSSC worked with OCHMO to identify potential sources for the COVID-19 polymerase chain reaction (PCR) test in the open market and under existing Government vehicles like the GSA Federal Supply Schedules (FSS). There was significant urgency to this requirement due to changing Federal directives associated with testing and mission travel. NSSC, working with the OCHMO as the technical organization, was able to solicit, evaluate quotes, and execute an Order under the FSS within 15 business days of receiving the requirement, ensuring no additional disruptions to NASA's programs and projects.

NASA Positions Itself To Be Successful Despite the Coronavirus Pandemic

In March 2020, due to the coronavirus (COVID-19) pandemic and adhering to the Centers for Disease Control and Prevention (CDC) guidelines, NASA restricted access to its facilities (10 Centers and Headquarters) and state and/or local governments restricted access to contractors facilities, thereby immediately impacting NASA missions and creating uncertainty within the workforce. Numerous contractors notified NASA of financial risks and impeding layoffs. NASA was challenged with urgency in identifying and implementing an enterprise-level solution enabling the Agency to maintain its mission and the space industrial base readiness.

NASA's goal was to immediately transition to a telework environment and preserve the readiness of the space industrial base and mission operational readiness for a contractor workforce that exceeded 50,000 and was geographically dispersed across the world. Utilizing a collaborative and diverse discipline team, within two weeks, the team created an enterprise solution flexible enough to adapt to NASA's unique missions, numerous geographical locations, and the evolving unprecedented COVID-19 emergency.

Through innovation and creativity, the team leveraged flexibilities within laws, regulations, and policies that



would enable NASA to immediately transition to a telework environment. The enterprise solution entailed the following highlights:

- Issuing a Global Contractor Notification, from NASA's Senior Procurement Executive, to all of NASA's contractors identifying NASA's approach to facilitating a contractor's mobile ready state, including 1) maximizing telework use, 2) identifying alternate work that can be performed remotely (e.g., training, documentation of process improvements, lessons learned, or other contract-specific items [drawings, processes, etc.]), and 3) for excepted cases of employees who are unable to work remotely, the creation of a Weather and Safety Leave category.
- Leveraging the CARES Act legislation, FAR
 52.242-15 Stop Work Order, and NFS 1852.242 72 Denied Access, NASA to create an enterprise
 Advance Agreement Template that enabled NASA
 and impacted contractors to collaborate regarding
 work, cost and invoice reporting, and identification
 of potential staffing impacts.
- Allowing for monthly provisional billing to enable contractors to maintain their workforce in a ready state.

NASA's unified approach to communication and implementation enabled a common experience between NASA civil servants and the contractor workforce. This has enabled the workforce to maintain focus on NASA's mission. Considering the COVID-19 pandemic, NASA has continued to achieve major mission milestones for numerous programs, highlighted by the first-ever launch of a commercially built and operated crew spacecraft with NASA astronauts delivered to the International Space Station, Space Launch System (SLS) Core Stage Green Run test, and most recently the landing of the Perseverance Rover on the surface of Mars.

Challenging traditional procurement thinking and practices regarding contractors' ability to telework and workforce availability enabled NASA to position itself to operate efficiently and effectively during the COVID-19 pandemic.

Artemis

SLS

NASA's Space Launch System, or SLS, is an advanced launch vehicle that provides the foundation for human exploration beyond Earth's orbit. With its unprecedented power and capabilities, SLS is the only rocket that can send Orion, astronauts, and large cargo to the Moon or beyond on a single mission.

SLS Stages include the massive SLS Core Stage, which will store super-cooled liquid hydrogen and liquid oxygen to power the RS-25 engines, as well as development of the Exploration Upper Stage (EUS). The primary accomplishment this year was the successful 24/7 Green Run testing support for Core Stage (CS)1 (planned for the Artemis 1 Mission). The Green Run testing was the first full test of all the Core Stage 1 hardware, including the integrated RS-25 engines. This test simulated the first 8 minutes of flight. OP was instrumental in assuring the contractor was indemnified against unusually hazardous risks in order for this testing to occur.

Propulsion for each SLS core stage is provided by four RS-25 engines. NASA Procurement definitized the procurement for an additional production of 18 RS-25 core stage engines which, when combined with other engines previously procured, are planned to be used on Artemis Missions 5–10. The new 18-engine purchase will take

Procurement Accomplishments



advantage of cost reductions currently achieved from the comprehensive engine redesign to improve affordability and production time through incorporation of modernized manufacturing, elimination of obsolete processes, and material lot buy savings. Because of knowledge gained during the execution of the current RS-25 engines contract, NASA became aware of significant supplier issues associated with the restart of this production line and an increase in nickel, which is used in the engines production. With the knowledge of this increased risk, NASA was able to structure the contract line item for the additional 18 engines in a manner that will enable NASA to monitor the costs and provide areas of emphasis that will aid in guiding the contractor to seek the maximum cost benefit for NASA without sacrificing schedule to ensure that a cost target is reached. The acquisition workforce benefits economies of scale with a single lot buy and a contract incentive structure to assure both NASA's schedule and costs goals can be accomplished.

NASA Procurement definitized the procurement of two additional Launch Vehicle Stage Adapters (LVSAs) and two additional Interim Cryogenic Propulsion Systems (ICPS). The new LVSAs and ICPS units will be used on Artemis Missions 2 and 3. In order to successfully definitize the ICPS procurement, NASA had to work in conjunction with the Boeing contractor on overcoming an unexpected commerciality claim from a major subcontractor. NASA was able to negotiate mechanisms to incentivize technical, schedule, and cost goals moving forward.

HLS

The Human Landing System (HLS) portion of the Artemis program will provide the lunar landing vehicle to return astronauts to the Moon with a goal date of 2024. NASA Procurement successfully and expeditiously awarded three contracts (total base period value

Procurement Accomplishments

of over \$900 million for approximately one year of effort) under the NextSTEP-2 (Next Space Technologies for Exploration Partnerships-2) Appendix H (Human Landing System) Broad Agency Announcement to begin development on a human landing system. The NextSTEP-2 BAA is a public-private partnership model that seeks commercial development of deep space exploration capabilities to support more extensive human spaceflight missions in and beyond cislunar space-the space near Earth that extends just beyond the Moon. The NextSTEP Appendix H (Human Landing System) contracts are performance-based; they define the function and performance of the HLS but do not prescribe how to design, build, certify, or operate any particular HLS integrated lander capability. Each contractor has developed a unique, innovative, and cost-effective HLS solution and provides meaningful in-kind or monetary contribution toward development. Currently the next phase of the NextSTEP Appendix H contract is in the midst of a limited-sources competition to choose the contractor(s) that will build one or more demonstration landers; the Option A award(s) will be valued in the multibillion-dollar range. This acquisition approach has provided invaluable experience in close collaboration within the NASA procurement, programmatic, safety, and engineering communities for something of this magnitude for expedited solicitation development much shorter than the typical process (e.g., the Option A RFP was released at the end of October 2020 with contracts to be awarded in April 2021).

Administration of the three base period contracts amidst this ongoing Option A competition has required complete focus and diligence from the NASA procurement team, as highlighted by the December 2020 continuation reviews (CR) whereby each contractor presented its critical design information for the most important base period milestone. Since the CR deliverables served dual purpose as the contractor's Option A technical proposal, careful control of this source-selection information was required, with NASA Procurement providing key guidance in this regard. This was a crucial balancing act that, if mishandled, could have halted the Option A limited-sources competition. The success of the CR process without incidents impacting the Option A competition, as well as the short duration of solicitation development and proposal evaluation, serve to enhance OP's standing and acknowledged professionalism within the Agency.

Gateway Virtual Procurement Office

The Gateway Virtual Procurement Office (VPO) was conceived and implemented to provide insight for the four Centers (GRC, JSC, KSC, and MSFC) performing the work under the program in a way to create synergy and integration of procurement strategies. The VPO allows for the Procurement Portfolio Manager to work across the Centers to manage workload, share responsibilities, and standardized policies and practices. The VPO will allow work to move across the project with ease when needed. Having biweekly meetings and regular communications helped to facilitate the co-manifest launch of the Habitation and Logistics Outpost (HALO) and the Power and Propulsion Element (PPE) under the NASA Launch Services II Contract. HALO will be the initial crew cabin for astronauts visiting the Gateway, providing basic life support needs for the visiting astronauts as they prepare for their trip to the lunar surface. The PPE is a high-power, 60-kilowatt solar electric propulsion spacecraft that will provide power, high-rate communications, attitude control, and orbital transfer capabilities for the Gateway.

Commercialization of Low-Earth Orbit (LEO)

In accordance with the NASA Transition Authorization Act of 2017, NASA is pursuing "an orderly transition for United States human space flight activities in low-Earth orbit from the current regime that relies heavily on NASA sponsorship (the International Space Station (ISS)), to a regime where NASA is one of many customers of a low-Earth orbit commercial human space flight enterprise " Post-ISS, NASA will still have a need for access to a human-rated destination in LEO for crew training, research, and hardware testing for exploration use. NASA's Commercial LEO initiatives range from opening the ISS for expanded commercial business to partnering with industry to develop and demonstrate LEO destinations. These efforts are aimed at encouraging increased commercial use of the ISS and facilitating industry development and demonstration of commercial destinations to succeed ISS.

In FY20, multidisciplined representatives from the ISS Program Office, Johnson Space Center, the Human Exploration and Operations Mission Directorate, and NASA Headquarters collaborated to establish the acquisition framework for a privately funded, commercial flight to the ISS for the conduct of approved commercial and marketing activities by private astronauts. The agreedupon framework for these private astronaut missions (PAMs) involves awarding basic ordering agreements (BOAs) to individual PAM providers to establish applicable terms and conditions followed by the issuance of orders thereunder to execute selected, individual missions and acquire services for NASA's use during mission execution (e.g., up/down mass). Implementation of this approach required novel application of the Chiles Act to authorize the use of a contract as the single implementing instrument to both enable the commercial activities and acquire services for NASA's direct benefit. Award of the

BOA and order for the inaugural PAM mission is scheduled to occur in FY21 in support of a 10-day mission to the ISS (8 days docked) in FY22.

Product Service Line Enterprise Procurement Strategies

In FY20, OP continued to implement the Enterprise Service Delivery model, which embraces concepts of Category Management principles by actively managing spending and utilizing OMB-identified Best-in-Class Contracts (BICs) through the creation of Product Service Lines (PSLs), with specific procurement assignments and buying locations, for institutional PSLs and a subset of programs/projects. Enterprise Procurement strategies were established for the following PSL: Communications, Logistics, OSTEM, and Protective Services, and they are incorporated in Appendix A of the NASA FAR Supplement. These strategies allow NASA to leverage its buying power, facilitate a more tactical use of critical resources, and reduce redundancies.

Category Management

Category Management is the business practice of buying common goods and services as an enterprise to eliminate redundancies, increase efficiency, and deliver more value and savings from the Government's acquisition programs. Annually, the Office of Management and Budget (OMB) sets Agency-specific targets for the Category Management key performance indicators (KPIs), which are based on the Government-wide KPI targets set by the President's Management Agenda.

The SUM KPI is a measure of an agency's spending obligated on agency or Government-wide contracts. In 2020, NASA OP exceeded its SUM target by almost 40 percent. The BIC KPI is a measure of an Agency's spending obligated on Best-in-Class (BIC) solutions, which are Procurement Accomplishments



FY20 Category Management Performance

contract vehicles available for use Government-wide that have been vetted by solution owners, agency users, and subject matter experts, resulting in a designation as Best-in-Class by OMB.

Although NASA fell just short of the BIC target by less than 6 percent in FY20, NASA's performance in this area continues to trend upward.

Yet another KPI under the category management framework focuses on training. The training KPI is a measure of the number of individuals trained in category management principles or tools. In FY20, NASA conducted a Category Management (CM) 101 Campaign, which required the procurement workforce to complete FCL-CM-2500, Category Management Foundations (CM 101). As a result, 726 NASA employees, representing 100 percent of NASA's Office of Procurement, had completed CM 101 by the end of FY20. NASA was recognized for its achievements in the area of training in the February 2021 edition of the *Category Management Monthly Newsletter* shared across the Federal Government.

NASA Establishes New Information Technology Procurement Office

The Office of Procurement (OP), in partnership with the Office of the Chief Information Officer (OCIO), has continued to evolve to meet the rapidly changing landscape regarding Information Technology (IT) Contracts. OP's most recent evolution is the creation of the IT Procurement Office, which is hosted at Goddard Space Flight Center (GSFC) with staff that is geographically dispersed across the Agency. The IT Procurement Office is a result of OP's enterprise realignment due to the Mission Support Future Architecture Program (MAP). The IT Procurement Office will continue the efforts that were initiated back in 2011 with the transition of the IT Infrastructure Program to the NASA Shared Services Center (NSSC), which resulted in the first-generation enterprise IT contracts.

The IT Procurement Office is responsible for oversight and execution of IT procurements on behalf of the Office of Procurement. The IT Procurement Office has been operational since October 2020, and the staff has exemplified commitment and dedication as they have worked tirelessly to transition and realign all personnel and contract portfolios and establish internal operating processes and procedures, all while maintaining ongoing operations at a high tempo.

Continuing to build upon best practices and lessons learned, the IT Procurement office in collaboration with the OCIO, has centralized IT procurements with the strategic priorities of

- Achieving consistency in IT requirements and enabling greater commonality in implementing IT solutions, leading to improved FITARA scorecard performance
- Eliminating duplication in IT contracts, leading to greater efficiencies, improving the Agency's Spend Under Management
- Developing a cadre of IT procuring experts, familiar with IT terminology and best practices
 - Leveraging best practices from industry and other agencies
 - Training and certifying staff in the Digital IT Acquisition Professional Course
- Creating space for IT Contracting Officer Representatives (CORs) to collaborate and share best practices

- Establishing common internal and external experiences with stakeholders
- Simplifying and streamlining the procurement process

The IT Procurement office portfolio exceeds \$1.5 billion in annual obligations, which enables the foundation of the Agency's IT infrastructure. The initial contract portfolio is composed of three primary areas: Enterprise IT Contracts, Center IT Contracts, and the Solutions for Enterprise-Wide Procurement (SEWP) Program. The Enterprise IT Contracts cover End-User IT services, Cybersecurity, Communications, and Application services. The Center IT contracts cover a wide breadth of traditional and Center-unique IT services. SEWP is a Government-wide Acquisition Contract (GWAC) that provides a variety of IT products and services to all Federal agencies.

The IT Procurement Office will continue to collaborate with Agency stakeholders regarding additional contracts that may be realigned to the IT Procurement Office.

NASA SEWP—Right at Home

NASA SEWP has represented the best of NASA to the larger Government-wide ICT community for years, and in FY20, agencies purchased more than \$9.2 billion through SEWP, more than any other GWAC. NASA SEWP has the systems and processes, in house, to capture and record a complete information record for every transaction made, including credit card transactions. Data quality, standards, and access are all key reasons why agencies leverage SEWP. No Federal system contains more comprehensive acquisition data than SEWP, and data remains a key piece of the program's strategy moving forward.

Procurement Accomplishments



NASA SEWP Top Federal Agency Users and Small Business Utilization

Note: SEWP V was used by more than 120 Federal agencies to address their ITC and AV acquisition needs.



This data capture is also driven by SEWP's commitment to Supply-Chain Risk Management (SCRM). SCRM and the state of the Federal Government's ICT supply chain has garnered a lot of attention in recent years. NASA SEWP is a 20-year member of "The Open Group," at the invitation of Department of Defense, and helped develop ISO 20243: the first internationally accepted SCRM standards. These standards help control for tainted products by identifying complete information, including country of origin, on the original equipment manufacturers (OEM) and advocating for procurement practices like approved reseller identification by OEMs to ensure chain of custody.

These are just a few of the reasons why NASA CIO, CISO, and HCA worked with SEWP to develop the

NASA Covered Articles Catalog, enabling Centers to quickly and easily purchase ICT and AV items cleared by the OCIO for Agency use. SEWP stands ready to continue supporting the entire NASA family fulfill their missions.

Doorway into Procurement

The NASA Office of Procurement (OP) developed a dynamic central repository for 25 Product Service Lines (PSLs) called the Doorway into Procurement, and additional PSLs may be added in the future. This website was established to serve as a research database of NASA Agency-wide contracts and Government-wide contracts, to expedite procurement research, and to improve the communication of procurement information across the Centers. It includes the following information for each PSL: status of the enterprise strategy, enterprise strategy details, points of contact, ordering instructions, templates, copies of contracts, other relevant documents, and frequently asked questions. The Doorway into Procurement is a one-stop, central location of procurement information for internal stakeholders (e.g., technical partners, acquisition professionals, end-users, and others) to use when researching specific procurement information about each PSL. Visit the Doorway into Procurement website for more information.

Contract Closeout

The Closeout Capability Group was formed to ensure that a cohesive approach to closeout processes and procedures is being used across the Agency instead of a Center-by-Center approach. This group made strides in creating an enterprise framework that provides oversight to the contract closeout process and creates innovations and improvements related to contract closeout policy, procedures, and metrics across the procurement organization. This effort has had a significant impact on the Agency by reducing the footprint of the number of overaged contracts, unliquidated obligations, and the amount of funds given back to the U.S. Treasury each year.

In FY20, the Closeout Capability Group

- released the Contract Closeout Guidance as Appendix B of the NASA FAR Supplement;
- released innovative policy inclusive of the use of Settlement Agreement to close overaged contract actions;
- streamlined the contract closeout transfer process;
- developed Enterprise Contract Closeout Metrics for consistent tracking of closeout status;
- developed Contract Closeout Brown Bag Training Series to be released in 2021;
- enhanced NASA's Audit Services Operating Model to standardize processes when NASA is the cognizant Federal Agency;
- centralized contract closeout support across OP's enterprise;
- conducted two informational sessions and one webinar on the contract closeout guidance in January 2020 (approximately 480 acquisition professionals attended this session); and
- centralized the contract closeout process. As a result, the Agency closed out 9,176 instruments and saved approximately \$3.2 million.

PROCESS

Develop sound and flexible procurement processes that integrate the acquisition workforce

Priorities and Initiatives

- Establish an Enterprise Procurement Knowledge Management Portal that provides a single repository for procurement information and collaboration.
- Standardize procurement procedures and focus on delivering a common procurement experience (internal and external).
- Enhance utilization of enterprise information technology resources (e.g., Virtual Source Selection Tool, Knowledge Bank).
- Establish a standard set of performance metrics that satisfy NASA Procurement's need to collect, analyze, and report key procurement data and metrics.
- Establish Automated Enterprise Performance Management Metrics that measure the health and success of the Procurement organization.
- Improve the functionality of the Procurement for Public Sector (PPS) contract-writing system.

PROCESS ACCOMPLISHMENTS

Vendor Outreach Plan (Outreach to Contractors)

NASA has worked closely with and contracted with private industry and academic sectors for its products and services, including research and development services, required to meet the Agency's mission and programs. More than 80 percent of the Agency's authorized funding and the resultant direct employment is dispersed widely in the national economy through NASA contracts and grants. NASA's Vendor Communication Plan was updated to reemphasize our commitment to Agency partners, established key focal points at each Center, and outlined outreach efforts dedicated to fortifying NASA communication and outreach efforts with all partners. NASA OP, in close coordination with the Office of Small Business Programs, will use the communication plan to ensure all businesses have a fair opportunity to compete for NASA contracting opportunities. NASA's Vendor Communication Plan is available at the OP website.

IT Efforts

The Office of Procurement IT Capability Group continues to leverage strong collaborative ties across the Agency to develop solutions to meet the challenges of today and tomorrow's OP IT needs. This group, made up of individuals from the Office of Procurement, is charged with developing strategic crosscutting solutions for the Enterprise IT needs of the future, as well as leading improvements to the NASA Contracting Writing System and other existing systems required by the Procurement workforce to operate effectively and efficiently. The OP continues to leverage existing information technology systems while using the existing Procurement Application Portfolio Management Board (P-APMB) structure to promote, prioritize, and integrate the future information technology solution within the existing procurement environment.

Working with the newly formed Business Innovation Office, led from the Office of the Administrator, the IT Capability group has been actively involved with NASA's Digital transformation efforts. Focusing on transforming NASA's work, workforce, and workplace, the IT Capability group has provided valuable insight into the acquisition process at NASA that will help to conceive, architect, and accelerate enterprise-wide IT solutions.

The IT Capability group has continued to partner with the Office of the Chief Information Officer (OCIO), participating in OCIO-led workshops to define IT requirements for the Office of Procurement and other Mission Support Directorate functional offices to develop crosscutting approaches to meeting the myriad IT requirements for the offices. The capability group also has been engaged with the OCIO collaboration lead regarding requirements and how they are met through the enterprise roadmap. As the collaboration roadmap continues to be refined, the capability group will continue to assess our IT posture for rationalization opportunities.

Over the course of 2020, the following transformative projects were either initiated or implemented:

- The NASA Strategic Sourcing repository was transitioned to a new platform with a new look and functionality, leading to an increased ease in the identification of strategic sourcing contracts that potentially could be utilized to meet new requirements as well as ease the burden of maintaining the data on the site.
- The Acquisition Forecast process was revamped utilizing a web-based data site for data collection and review. This has greatly simplified the acquisition forecast input and reporting process.
- The AAO has continued the OP Robotic Process Automation (RPA) Demonstration project. AAO began technology demonstrations to provide proof of concept bots to assist contracting officers with incremental funding actions and FPDS contract action report data entry.
- The OP Enterprise Metrics Dashboard development efforts continue. The dashboard will allow for enterprise-wide metric accessibility in one place, utilizing the 4 P's. Work continues to refine the data being pulled from FPDS. The first phase of the dashboard, "Procurement Data," is planned to be rolled out in the third quarter of FY21.

CPARS AI Pilot

NASA is participating in the CPARS Artificial Intelligence (AI) Project. This initiative is part of the executive branch's ongoing efforts to leverage emerging technology to improve efficiency and reduce friction in the acquisition process. In addition to NASA, the other agencies participating in the pilot include DHS, USAID, Air Force, DOE, GSA, HHS, DOI, DOC, and VA. The pilot involves allowing pilot vendors to access performance information for the purpose of using the powers of advanced technology to create reports of potentially relevant information along with access to original documents. This will give agencies access to services to improve the ability to evaluate information in CPARS for use during source selection. NASA has participated in the first two rounds of vendor demonstrations of their technology.

Acquisition Forecast

The Business Opportunity Development Reform Act of 1988 requires NASA to prepare an annual forecast and semiannual update of expected contract opportunities or classes of contract opportunities for each fiscal year and make this forecast available to the public. The Office of Procurement relies very heavily on the Acquisition Forecast to facilitate awards of contracts to small and small disadvantaged businesses, women-owned small businesses, HUBZone small businesses, veteran-owned small businesses. In addition, Senior leaders within the Office of Procurement use the forecast information as the basis for procurement planning discussions to be conducted with senior management.

In past years, the process for generating and maintaining the annual forecast has been a very time-intensive and manual process facilitated by an Excel spreadsheet. Over the course of 2020, the Office of Procurement worked to revamp the data collection process to be more streamlined and efficient through the rollout of the Acquisition Forecast site. Along with streamlining the data collection process, based on identified Federal best practices, the Office of Procurement added several new reportable data fields for each acquisition, providing a greater insight for potential offerors into upcoming acquisitions. This new site provides a consolidated approach for identifying and tracking all known contract opportunities in excess of the simplified acquisition threshold (currently \$250 thousand) as required by the NASA FAR Supplement (NFS).

POLICIES

Deliver procurement policy that is required, clear, and easily implemented

Priorities and Initiatives

Reduce or remove unnecessary/outdated/burdensome policy requirements that have outlived their intended purpose:

- Utilize the Quality Review Process to review and update all NASA FAR Supplement (NFS) parts
- Establish subject matter expert working groups from across the Agency to reduce, standardize, and integrate Agency- and Center-level procurement policies, processes, and templates

Standardize procurement policy that is clear, required, and easily implemented and enables the Enterprise Delivery model:

- New NFS Guidance on Counterfeit Parts (Authorization Act requirement)
- Updated NFS Award Fee Policy

Monitor the effectiveness of procurement guidance to improve compliance, oversight, contractor performance, and Agency procurement risk:

- Risk-based procurement management reviews
- Partner with the Chief Acquisition Officers Council and the CFO to explore legislative pathways to reduce meritless protests
- Establish process for identifying issues, trends, and drivers for bid protests and GAO/IG audits and develop systematic approaches to reduce reoccurrence and minimize impact

POLICY ACCOMPLISHMENTS

Section 889 (P-card pause due to 889 and NASA SEWP being all 889 compliant)

NASA took a number productive steps to implement Section 889(a)(1)(B) of the 2019 National Defense Authorization Act, Prohibition on Contracting with Entities Using Certain Telecommunications and Video Surveillance Services or Equipment. This section prohibits the Federal Government, Government contractors, and grant and loan recipients from procuring or using certain "covered telecommunication equipment or services" that are produced by Huawei, ZTE, Hytera, Hikvision, and Dahua and their subsidiaries as a "substantial or essential component of any system, or as critical technology as part of any system." It was established to prevent cyber-attacks and efforts to exfiltrate information and intellectual property by foreign adversaries which pose risks for the U.S. Government and industry.

- On January 30, 2020, NASA hosted an industry engagement meeting on Section 889(a)(1)(B) to explain this provision and obtain information on the impact of this prohibition on NASA contractors' operations and their ability to support NASA's mission.
- On July 14, 2020, the FAR Council agencies (NASA, DOD, GSA) changed the Federal Acquisition Regulation (FAR) to implement section 889(a)(1)(B), and this change became effective on August 13, 2020.

3. On August 11, 2020, NASA began issuing guidance to its contractors and acquisition workforce to implement Section 889(a)(1)(B). See Policy and Regulation, Section 889 Guidance. Specific policy purchase card guidance was issued to ensure compliance with Section 889 while providing flexibility to purchase card holders. See the NSSC Purchase Card website for specific information related to the use of the Purchase Card as it relates to Section 889.

Counterfeit NFS Policy

NASA published a proposed rule in the Federal Register 85 FR 663 on January 7, 2020, to implement section 823(c)(2)(B) of Public Law 115-10, the NASA Transition Authorization Act of 2017 changes into the NASA Federal Acquisition Regulation Supplement (NFS). This change requires covered contractors and subcontractors at all tiers to use electronic parts that are currently in production and purchased from the original manufacturers of the parts, their authorized dealers, or suppliers who obtain such parts exclusively from the original manufacturers of the parts or their authorized dealers. NASA published a final rule in Federal Register at 85 FR 52924 on August 27, 2020, to finalize this revision to the NFS. This rule became effective September 28, 2020.

Procurement Control Board

The Procurement Control Board (PCB) was formed in late FY19 as part of OP's transition to an enterprise organization and is chaired by the Deputy Assistant Administrator for Procurement. The PCB serves as the governance and decision-making body within the NASA Office of Procurement to approve standardized operational procurement policies and/or processes to be implemented enterprise-wide (e.g., templates/guides/ processes that the Buying Offices use for daily operations) as well as Agency-wide or regulatory procurement policy. Through hard work and perseverance in 2020, the PCB developed, approved, and established 59 enterprise-wide templates in 49 different topic areas that replaced 276 Center templates previously used across the Agency in these topic areas. This resulted in an overall 79 percent reduction in Agency templates and has significantly reduced the associated template

maintenance costs for the Agency. For example, where there were once 13 Pre-negotiation Position Memoranda (PPM)/Post-Negotiation Memorandum (PNM) in use across the NASA procurement workforce, there is one Agency-wide Pre-negotiation Position Memorandum (PPM)/Post-Negotiation Memorandum (PNM). This team also illustrated its flexibility, agility, and ability to go above and beyond by taking the initiative to develop a new procurement template called the Requirements Development Team (RDT) Template. This template represented a revolutionary change in the way NASA did business during the requirements development phase of the acquisition process. The team embraced this project, developing and ultimately deploying this template in less than 60 days, an unbelievable accomplishment since in years past such a template would have taken 6 months or more to develop and deploy.













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