

The First Year of the NASA Acquisition Innovation Launchpad (NAIL) and Our Shared Stories

MARCH



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Shifting the Paradigm of Procurement Innovation

Collaborate to Innovate

The NASA Acquisition Innovation Launchpad (NAIL) was established with a bold vision: to act as a catalyst for institutionalizing innovation and enhancing acquisition efficiency across NASA. This vision is not just a statement of intent but a commitment to fostering a culture where innovation thrives at every level, in every corner of our agency and drive mission success.

I am proud of the collective efforts that have driven our success across our centers and enterprise community in NAIL's inaugural year. In the coming year, we will focus on the following priorities:

Engaging Our Innovation Network





Promoting Success Stories

Investing in Talent and Technology

Let us continue to champion creativity, embrace new ideas, and build a future where innovation is at the core of everything we do. Here's to another year of groundbreaking achievements and transformative progress.



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

The NASA Acquisition Innovation Launchpad

MISSION

To act as a catalyst for institutionalizing innovation and infusing acquisition efficiency across NASA to enable improved mission outcomes. We believe that ideas can come from anywhere and anyone, and we empower Innovation Champions at all levels to promote groundbreaking acquisition techniques and smart program management tools.

By treating acquisition as a team sport, we unlock greater potential for innovative ideas. Our structured framework supports managed risk-taking through the submission, review, prioritization, approval, and measurement of innovative testbed efforts from across the NASA enterprise.

The NAIL focuses on four critical domains to drive NASA acquisition performance:



Techniques | Innovating new acquisition methods



Process and Policy Improvement | Streamlining and enhancing policies and procedures



Automation | Implementing advanced automation solutions

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Relationships | Building strong, collaborative relationships within and beyond NASA

Our first year has been a testament to what we can achieve through collaboration and innovation. As we look to the future, we are excited about the possibilities that lie ahead. Together, we can continue to drive transformative changes in acquisition, harnessing the power of collective ideas and perspectives. Join us as we shape the next chapter of innovation at NASA.

The Inaugural Year



Innovation Techniques



Shaping Pain Points into Possibilities with Techniques

At NASA, innovation is more than a buzzword—it's a necessity. Our employees are leveraging innovative techniques to tackle complex challenges and pain points. These stories highlight how NASA staff, from various fields and roles, have creatively applied new methodologies to improve efficiency, enhance processes, and achieve remarkable results. Explore how our team members have turned obstacles into opportunities through the power of innovation.

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While we effectively utilize the proven techniques from the Periodic Table of Acquisition Innovations (PTAI), our commitment to innovation doesn't stop there. NAIL pushed the boundaries by developing and implementing new methodologies tailored to our unique challenges. Combining established practices with fresh, creative approaches, we are not only solving today's problems but setting the stage for future advancements in acquisition and program management.

TECHNIQUES Alternate Authorities

NASA drives the full spectrum of 'alternate authorities' for acquisition innovation and efficiency. Partnerships with industry and academia partners go beyond traditional procurement.

JOINT VENTURE PARTNERSHIPS 🕨

Solving problems together from Launch and Landing to Space Suits. <u>www.nasa.gov/partnerships</u>

SMALL BUSINESS INNOVATION RESEARCH (SBIR) I, II, & III 🕨

Phase I | 300 awards for a total of \$45 million Phase II | 107 awards for a total of \$93.5 million SBIR III accomplished across the spectrum of NASA technology

PRIZES & CHALLENGES 🕨

NASA challenges bring together the broad range of citizen, academic, and industry partners for science challenges and involve all for the benefit of humanity.

www.nasa.gov/get-involved



Kelly Rubio Team Lead and Contracting Officer, Office of Procurement, Johnson Space Center, NASA

Innovation Story | Other Transaction (OT) Authority

Space Act Agreements or NASA's Other Transaction (OT) Authority under the authority of 51 U.S.C § 20113(e). Using OTs, NASA facilitated private astronaut missions to the International Space Station (ISS), streamlining and reducing administrative burdens. These agreements enabled us to secure essential services, such as crew supplies, cargo delivery, and specialized in-orbit resources, ensuring mission success and promoting a thriving commercial space marketplace. This collaborative approach transforms low-Earth orbit into a hub for research and innovation.

TECHNIQUES Market Research

At NASA, we employ all five recognized market research techniques to ensure our projects are grounded in comprehensive insights and data.



Facilitated Requirements Development Workshops | accomplished at NASA's Johnson Space Center in Houston for problem solving and multi-functional requirement collaboration.



Interactive Q&As | Used across centers both virtually and in-person.

Example: NASA Johnson Space Center developed training and frameworks to ensure clear lines for continued communication.



One-on-Ones | Best practice agency level mechanism used across centers to increase industry dialog through blackout.

Example: NASA's Marshall Space Flight Center in Huntsville, Alabama conducts over 400 industry counseling sessions each fiscal year.



Andrea Ross Sr. Contract Officer & SEWP Procuremen Team Lead, Office of Procurement, NASA Goddard Space Flight Center



George Nicol NASA SEWP Deputy Program Director, NASA Goddard Space Flight Center



Joanne Woytek Program Director for NASA EWP, NASA Goddard Space Elight Center



Sheila Roche enior Procurement Analyst, NAS Headquarters



Acacia Henry Manager for SEWP Events and Logistics Department, NASA Goddard Space Flight Center



Zakia Lieske Manager for SEWP Events and leetings, NASA Goddard Space Flight Center

Innovation Story | Reverse Industry Day

Reverse industry days were held for both NASA Solutions for Enterprise-Wide Procurement (SEWP) and Ability One communities. Events included both Reverse Industry Meetings with over 500 businesses participating across the events. Events provided key feedback on new methodologies for evaluation scoring, key feedback for how to integrate and increase small business participation, and ways to best incorporate AbilityOne from the industry perspective across AbilityOne's 15 lines of business. The First Year of the NAIL and Our Shared Stories



TECHNIQUES Solicitation

At NASA, we regularly employ all 11 of the 13 recognized solicitation techniques enhancing better ways to conduct business and are trying new methods every day. NAIL projects have resulted in recognized trial of new things to solve key problems.



Innovation Story | Choose Your Own Adventure Contract Type

NEW TECHNIQUE: In an environment where there is a mix of qualified traditional and non-traditional vendors, there is often an issue of reducing competition due to contract type vectors. The contract type decision is based on risk and function, but there are many ways to structure a contract. With high-risk efforts, it is really important to gain the best industry ideas. For one NAIL project, NASA provided a structure that focused on technology ahead of contract type and price, allowing vendors to choose the approach that made the most sense from the problem set at hand with flexibility in the business model.



TECHNIQUES Evaluation, Award, and Post Award

NASA uses all nine recognized evaluation, award, and postaward techniques. Techniques are used to push efficiency and solve critical problems with solutions that benefit humanity. These are not always limited to recognized techniques.

For example, NASA is using innovation in pricing techniques and incentive models to improve our results and contract terms to drive performance in administration. These techniques are based not just on a model of technique, but also on the critical thinking of our workforce.



Mandy Kuehn Team Lead and Contracting Officer, Office of Procurement, Johnson Space Center NASA

Innovation Story | Incentives

Incentives drive performance, and while these are often set at the contract start, when we consider performance through the life cycle, we can craft incentives that drive performance and enable an excellent output. For this NAIL project, incentives were initially aligned with government-driven reviews, GFP delivery, and third-party actions. By realigning to include contractor-driven outputs, incentives shifted to expedite vendor efficiency and achievements and reduce contractor downtime, producing greater results for a critical Artemis mission.

TECHNIQUES Collaborate to Innovate

With new techniques being tested every day, the NAIL team developed an internal sharing mechanism to provide our employees grass roots power to innovate and then share across the enterprise with videos and resources.



Process and Policy

Cost, Schedule, Performance Measurable Results





Acquisition as a Team Sport

At NASA, we embrace the concept of acquisition as a team sport, recognizing that collaborative efforts across various departments and stakeholders are crucial for enhancing procurement policies and processes. By involving mission directors, legal experts, small business representatives, and industry partners, we ensure a comprehensive approach to procurement that leverages perspectives and expertise.

This collective effort allows us to identify inefficiencies, streamline procedures, and implement innovative solutions that improve acquisition outcomes. Through teamwork, we cultivate a culture of continuous improvement and innovation, driving forward NASA's mission with greater agility and effectiveness. The chart to the right provides a few of NAIL's projects that provide critical improvements to Big-A Acquisition at NASA.

Alternate Buying Mechanisms	Use of leasing programs for heavy construction equipment. Savings in lifecycle costs.
Data Processing and Archive System (DPAS) Process	Review/revamp of NASA processes for DPAS use (in concert with Supply Chain Resiliency Board.)
Source Selection Ethics Training	Build of a virtual version of source selection training on Saturn. Schedule and touch labor reduction.
Pricing Resource Library	Collection of pricing tools and templates that streamline vendor proposals and evaluation. Reduction in duplication of effort and increased knowledge/capacity.
Standard Operating Procedure (SOP) for Broad Agency Announcements (BAA)	Procedure guides for tool/way-ahead sharing.
Ordering Guide for Agency- Wide Contracts Template	Standardized process to provide resources to more easily/better use Product Service Line (PSL) and strategic sourcing resources.
Acquisition Specific Small Business Goaling	Differentiated process surrounding small business goaling used on a specific acquisition.
Contract Transition Template	Resource to reduce touch labor for contract transition. Touch labor savings.
Tool Creation Through SharePoint for Transfer of Government Property	Resource to increase accuracy and transparency of government property transfer/usage on contracts with high levels of government property. Increased transparency/reduced touch labor.

Automation





Data Visibility

Enhancing Operations Ithrough Automation Innovation

At NASA's Office of Procurement, our approach to automation extends beyond the recognized techniques to incorporate innovative, grassroots ideas that enhance our systems. NASA is at the forefront of Artificial Intelligence (AI) and Robotic Processing Automation (RPA) has built and shared technology that shifts the landscape for procurement.

Through the NAIL, we further harness the creativity and insights of our workforce to build strategic-level automations that address both immediate tactical needs and long-term goals. By integrating Al capabilities into our systems, we are able to provide smarter, more efficient solutions that streamline procurement processes and improve overall efficiency. This bottom-up approach ensures that our automation efforts are directly aligned with the practical needs of our team, fostering a culture of continuous improvement and cutting-edge innovation.

AUTOMATION Dashboards - Visibility through Data



NASA by the Numbers Dashboard



Joshua Koger Enterprise Procurement Data Architect, Enterprise Service and Analysis Division, Office of Procurement, NASA Headquarters

Innovation Story | NASA by the Numbers

NASA by the Numbers is a project for dashboards that significantly enhances procurement data visibility, providing users across the NASA enterprise with a centralized and intuitive interface to access and interpret complex data sets. By consolidating information from various sources into a single, coherent view, dashboards enable real-time monitoring and analysis, which facilitates quicker and more informed decision-making. It offers customizable visualizations that highlight key performance indicators and trends, making it easier to identify areas of improvement and track progress against goals, thereby fostering a data-driven culture and supporting strategic planning efforts.

AUTOMATION 889 Tool



Innovation Story | 889 Tool

NASA created and piloted a Section 889 compliance search tool aimed at aiding acquisition professionals in verifying compliance with requirements associated with Section 889 of the National Defense Authorization Act for fiscal year 2019. Aware of the tool's vast potential and broader scope and impact on the acquisition community, NASA made the decision to transfer this tool to General Services Administration (GSA) for governmentwide use.

AUTOMATION The NASA Enterprise Acquisition Repository



Steve Shiplett EBSO Director, Office of Procurement, NASA Headquarters

Innovation Story | NEAR

The NASA Enterprise Acquisition Repository (NEAR) is a groundbreaking life cycle acquisition system designed to revolutionize the procurement process. NEAR serves as an official repository and routing platform for contract documents, incorporating business intelligence capabilities to autogenerate files with built-in processes, policies, tasks, documents, and user guides. Its dynamic dashboards offer unparalleled data visibility and real-time insights through advanced data crawl capabilities, including Procurement Administrative Lead Time generation. By driving cost and touch labor efficiencies. NEAR automates the majority of strategic data collection, enabling more streamlined and effective acquisition management. This innovative system ensures that stakeholders have access to essential resources and information at every stage of the acquisition lifecycle, enhancing decision-making and fostering a more efficient and transparent procurement environment.

AUTOMATION Acquisition Navigator -Multi-Functional Touchpoints





Heather Hendrix Enterprise Service and Analysis Division, Office of Procurement, NASA Headquarters

Innovation Story | Acquisition Navigator

Acquisition Navigator was developed to enhance the procurement process by providing earlier touchpoints for multi-functional partners and delivering resources precisely when needed. This tool allows stakeholders and partners to access critical information and guidance at the time of need. By offering a userfriendly interface and comprehensive resources, the Acquisition Navigator helps streamline workflows, reduce delays, and improve overall efficiency. Ultimately, the Acquisition Navigator empowers partners to navigate the complexities of procurement with confidence and precision, leading to more successful outcomes and stronger partnerships.

Closing Thoughts from a Highly Successful First Year

The NAIL Story – Our People Make Our Success



1ST YEAR NAIL LEADERSHIP

Mr. Geoffrey Sage, Executive Director

Dr. Jennifer Elkins, Program Manager

Margaret Robinson & Brandon Lentz First NAIL Detailees

Centralized Support with Decentralized Execution

In this first year, I have worked to stand up and operate the NAIL, and I am so very proud of our team. The NAIL has provided a place for NASA acquisition to **connect**, **share**, **and be empowered**. Each of us are empowered in our own space to change those things that hold us back. Over this last year, I have focused on creating 'leaders of leaders' meaning that we have leaders at every level that are changing the conversation for what is possible.

The design of the NAIL provides the support both internal and external to try something new. It is a bottom-up framework routed with top-down support. This is what makes us different. Innovation is not just for a special team—innovation is for everyone. By using a part-time framework for nearly all involved and rotating, the NAIL team is always primed with new ideas and grounded to execution.

2023 NAIL ORGANIZATIONAL CHART



Passion to Make a Difference

SUBMISSIONS BY CENTER/FIELD ACTIVITY

Using touch points in every center, the NAIL is able to infuse new ideas within the unique cultures and missions of each center and ensure representation in our ideas that are shared. This has yielded projects from every center and location. Each center representative brings a passion for NASA missions.



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23 Sharing Engagements with Other Federal Agencies

Our approach is grounded in research and provides measurable results. This year, NAIL provided expertise to other federal agencies setting up their new procurement labs. We were interviewed for our work and featured in broadcasts and engagements at the National Contract Management Association World Congress and chapter events, Procurement Leaders World Congress, and more. These engagements support a growing dialog for the entirety of the contracting field for how we can do more together with internal, external, and industry partners.



An Approach Based in Research with Case Studies for Measurable Results

Elkins, J. W. (2023). A Tale of Two Organizations: A Qualitative Comparative Study of Contracting Organizations. Defense Acquisition Research Journal. 30(2), (146-177). <u>https://www.dau.edu/index.php/darj/arj-1052</u>



23 Sharing Engagements with Other Federal Agencies

How do you solve problems past constraints? Let's think past the typical!





