National Aeronautics and Space Administration



Past, Present, and Future Perceptions of Artificial Intelligence at NASA





Jul - Sep 2024

Volume 14 • Issue 3

Office of the CIO NASA Headquarters Mary W. Jackson Building 300 E Street SW Washington, D.C. 20546

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IT Talk is an official publication of the Office of the Chief Information Officer of the National Aeronautics and Space Administration, Headquarters, Washington, D.C. It is published by the OCIO office for all NASA employees and external audiences.

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Message from the NASA CIO

Artificial Intelligence (AI) can be a double-edged sword as its ever-growing power and potential pose new and even unknown risks. As AI becomes embedded in more aspects of our daily lives, NASA considers it imperative to educate team members on how to leverage these technologies safely and responsibly.

NASA recently announced David Salvagnini as our new chief artificial intelligence officer. In this issue, we will provide details on how Salvagnini will lead the newly formed AI strategy board to guide the agency toward responsible AI usage. This is in accordance with President Biden's new safety directives on AI security and safety.

Next, following the Office of Management and Budget's recent memorandum on 508 compliance and digital accessibility, we will examine the importance of promoting a positive culture of inclusivity at NASA for people with disabilities. We will also explore how the accessibility team at NASA is setting the bar in meeting Federal web accessibility standards.



We also witnessed a spectacular solar eclipse that swept across the United States on April 8. What makes this eclipse so special is that it was the last total solar eclipse visible in the contiguous United States until 2044! Come join us for a behind-the-scenes look through NASA's coverage of this extraordinary event, which took advantage of our new NASA website as well as the NASA+ streaming video service.

Lastly, we want to highlight a few of our own team members within OCIO for the work they have done and the recognition they have earned at the agency. Congratulations to Karl Mathias for receiving the first annual Vaughn Aiken Service Award and to Matt Dosberg for being selected as the first Digital Transformer of the Month.

I hope you will enjoy reading about the new developments and significant accomplishments featured in this issue of IT Talk.





Workplace and Collaboration Services (WCS) News and Updates

Check out the latest news from WCS (all links are internal to NASA):

- <u>Apple: Complete Preparation Steps and</u> <u>Migrate Your Mobile Device(s) to Intune</u>
- <u>Android: Complete Preparation Steps and</u> <u>Migrate Your Mobile Device(s) to Intune</u>
- Follow Me Print Rollout Almost Complete
- <u>Windows 11 Availability</u>
- <u>Block of Personal Identification Numbers</u> (PINs) Accidentally Entered in Teams

- <u>Changes to Computer and Mobile</u> <u>Device Delivery Options</u>
- <u>New Non-NEST Software Services Available to Order</u>
- <u>Teams Enhancements: Managing Time Zones with</u> <u>the Meeting Scheduling Assistant, Personalizing Your</u> <u>Group Chat Profile Pictures, Making Calls in Teams</u> <u>Mobile, and Sharing Contact Information in Chats</u>
- See What's New with ICAM

One Giant Leap for All Mankind: *The Voyage Toward Digital Inclusivity*

By Michelle Kim, Communications Strategist, NASA Headquarters

With sweaty palms and pounding hearts, millions of American households watched in excitement as the Apollo 11 spacecraft made its journey to the Moon. This historic event brought together over a hundred million people from all over the United States—young and old, men and women, and from many different backgrounds. Throughout the years, NASA has never fallen short of guiding our nation toward one unified mission: to watch humankind continuously reach new heights.

However, this pursuit is not limited to space exploration. The latest mission that the agency embarked on includes building a better and more inclusive future for *all* humankind by creating a reality where NASA best serves the public and ensures people of all abilities have equitable opportunities to contribute to NASA mission success. This includes fostering an information and communication technology environment that is accessible to all people, including those with disabilities.

Courtney Ritz, IT Accessibility Lead at NASA, took up the challenge of spearheading NASA's transformation toward a truly inclusive digital experience. She states that her goal is to "create an environment in which our workforce and members of the public can

confidently and efficiently utilize IT products and services without having to worry about whether or not they will be accessible."

Her mission statement coincides with the Office of Management and Budget's recent memorandum, M-24-08, which emphasizes the importance of accessibility as the cornerstone of digital experience. According to the memo, "the Federal Government cannot fulfill its obligations and effectively provide services to the public without responding to the needs of such a large segment of the population." The memo provides quidance to help agencies advance

digital accessibility by maintaining an accessible Federal technology environment, promoting accessible digital experiences, and continuing the implementation of accessibility standards in accordance with Section 508 of the Rehabilitation Act.

Ritz affirms, "ensuring that our IT is compliant with Section 508 is the foundation we build upon. Through partnering with Office of Diversity and Equal Opportunity (ODEO), we can help to improve and streamline the process for obtaining IT solutions as part of Reasonable Accommodations." Some notable developments from the IT Accessibility team include the following:

- Centralized IT Accessibility ticketing. As of this spring, employees can submit IT Accessibility issues through OCIO's Enterprise Service Desk [link internal to NASA]. This ticketing process provides a central location to report and track issues, in addition to gathering meaningful metrics to help improve the system.
- New Section 508 awareness training. A lunch-and-learn series focused on how to create 508-compliant content is slated to run in July. This series will ensure that NASA employees understand the needs of people with disabilities and have the skills to make their content accessible.
- The annual National Disability Employment Awareness Month campaign will run in October with subject matter experts teaching employees about digital accessibility.

Although seemingly small on their own, these small but mighty steps are the foundation of a giant leap forward toward a barrier-free future for people with disabilities to experience the limitless possibilities that a fully accessible digital world can offer.

DIGITAL ACCESSIBILITY

THE EVOLUTION OF

1973

The Rehabilitation Act Prohibits discrimination of people with disabilities in programs conducted by federal agencies, in programs receiving federal funding, in federal employment and in the employment practices of federal contractors.

1998

Amendment of Section 508

Section 508 of the Rehabilitation Act amended to require all federal agencies make their electronic and information technology accessible to people with disabilities.

2022-2024 Department of Justice

In 2022, the DOJ publishes guidance on how state and local governments and businesses can make sure their websites are accessible.

In 2024, the DOJ issues "final rule," obligating state and local governments to make their websites and mobile applications digitally accessible.

1990

Americans with Disabilities Act Prohibited discrimination based on disability in "places of public accommodation." In 1996, the Department of Justice asserts that websites are considered public accommodations.

1999

WCAG 1.0 Worldwide Web Consortium (W3C) publishes 14 technical guidelines on accessibility of websites.

2008-2018 WCAG 2.0 and 2.1

Restructured the guidelines into four principles of digital content: Perceivable, Operable, Understandable, Robust. WCAG 2.1 changes emphasize absent elements in 2.0 such as mobile device considerations.

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Instrumental Assistive Technology Used by NASA GSFC Engineer with ALS Continues to Empower Teams at Goddard

By Taylor Bromante, Project Support Specialist, Goddard Space Flight Center

In January 2020, Dave Parker, a NASA engineer who formerly worked on the Hubble Space Telescope Servicing Missions and the Exploration and In-Space Services Team at Goddard Space Flight Center (GSFC), began using the Tobii Dynavox Eye Gaze hardware and software, enabling him to continue his important work at NASA despite life-altering symptoms from Amyotrophic Lateral Sclerosis (ALS). When Parker was diagnosed in 2015, he and his wife Christy Hansen, Deputy Program Manager for the Commercial Low Earth Orbit (LEO) Development Program Office at NASA Johnson Space Center (JSC), anticipated loss of full hand and voice functionality years later. Hansen sought assistance, and, thanks to several groups in OCIO, a pioneering at-home solution became a reality. The research, development, approval, and support of eye-gaze technology enabled Parker to operate his IT system using only his eyes. Parker passed away in 2021 and is remembered for his invaluable contributions to NASA missions.

Four years later, the Tobii Eye Gaze is still critical for teams at GSFC. A member of the Joint Polar Satellite System (JPSS) Flight Dynamic Object Oriented Requirements System (DOORS) Team, Megan Gannon, is responsible for sending verification reports to engineers and linking databases provided by vendors. DOORS is a requirements management database that supports the JPSS-3 and JPSS-4 polar-orbiting, non-geosynchronous environmental satellites. Gannon stated, "In my personal life, I started working with eye gaze technology in 2006. As technology developed, I've had several different types of eye gaze systems but I've been using Tobii for

the last ten years or so. I have cerebral palsy and lack the motor control to use a keyboard and mouse, so finding assistive technology to enable me to work has been an ongoing challenge throughout my life."

The Tobii enables a person to control a computer or tablet by looking at words or commands on a video screen. It shines a very low-intensity light into one of the user's eyes, and a television camera detects reflections from the cornea and retina. Gannon's friend and coworker, Dorothy Wertz, who is the Requirements Manager for Landsat Next, has been assessing assistive technology since they were in college together at George Mason University. "It has been a long journey through different forms of technology, including training a voice recognition software to understand the unclear speech that I have due to my cerebral palsy," said Gannon. Once Wertz explored the Tobii's capabilities, she was confident that Gannon could support NASA on the DOORS team.

"She is a very important part of the JSS DOORS team," Wertz said. "I know she saves them hours of work, not only performing the back-end processing and reporting but she also tracks the deliverables that the team sends out, allowing them to make a yearend report detailing all the various drafts sent over the year."

"The integration of that application on the NASA device and NASA network gets very complicated very quickly," said Dan Carrick, JPSS Deputy IT Manager, NASA GSFC, X3M Systems, LLC. "You might get it to work, and then 15 minutes later a security compliance measure gets enforced and it breaks immediately." Carrick expressed how long some challenges can take to overcome with system integration but emphasized that Gannon is very effective at what she does.

Another key component of this process is customer relations. "The big problem was the amount of back and forth to get waivers in place for the software to fully work," said Kevin Tesler, an OCIO IT Business Relationship Manager. Tesler worked diligently to set up adequate support, contact technical points of contact, and expedite the process.

Gannon has had tremendous help from Adam Wilson, the LEO Tier 3 Server Administrator at GSFC. "Adam has gone above and beyond on several occasions to help resolve conflicts between my software and changes/upgrades to NASA's systems, like Cisco," Gannon said. "He also worked through the process of having Windows Hello Face Recognition installed on my computer for handsfree sign in." Another accomplishment made possible mostly by Wilson was getting the software to work with the NASA Virtual Private Network.

Wertz describes Gannon as an amazing woman, who was able to do college math in her head during their time at GMU, while her peers were having to jot it down. "She also was very good at finding mistakes on the board that the professors had made and correcting them in class," said Wertz.

Gannon's story is not only a testament to the synergistic work of NASA GSFC's OCIO professionals but also to the importance of advocating for diversity, equity, inclusion, and accessibility in all NASA efforts and missions.

Past, Present, and Future Perceptions of Artificial Intelligence at NASA

By Maya Kikuchi, Writer, Digital Transformation, NASA Headquarters

"If NASA is to anticipate true humanoid autonomous systems, much more fundamental work must be started and supported. The attempt to build very complex machines to imitate the functions of the human brain, when we do not properly understand either, may be compared to hoisting oneself by one's own bootlaces." — M.J. Pedelty, "<u>A</u> *Review of the Field of Artificial Intelligence and Its Possible Applications to NASA Objectives*," **1965**

"We've gone far beyond the technology limitations of the past to a new era of where human understanding and acceptance is the greater limitation." – Chief AI Officer Dave Salvagnini, **2024**

Although the topic of artificial intelligence (AI) has recently surged in public consciousness, we are no newcomers to an AI-enabled world, especially at NASA. Some of the earliest AI tools in use at NASA supported mission operations in the 1980s and '90s, *including the Voyager 2 and Galileo probes*. Even earlier, researchers and engineers explored whether emergent AI technology had viable applications in the space sciences—one 1965 review answered this question with "an unequivocal no." ("A Review of the Field of Artificial Intelligence and Its Possible Applications to NASA Objectives" by M.J. Pedelty) Clearly, AI has long since surpassed these technical limitations, finding applications across the sciences and beyond. To identify the next barriers to progress, some believe we must hold up a mirror.

As this technology becomes increasingly democratized, particularly with new generative AI and large language model (LLM) capabilities, I wanted to explore its evolution from the human side. How have perceptions of AI evolved within NASA, an organization that often pioneers these technologies and shapes the broader societal conversation? How do perceptions of the benefits and risks of AI shape predictions for the future?

I spoke with NASA's Chief AI Officer, Dave Salvagnini, a champion of AI innovation and strategy at the agency. In his new role, Salvagnini represents a sort of bridge from an AI past to its present and future. The AI of the past was for experts; NASA's scientists and engineers have a long history with this technology, and although those technical, high-level relationships with AI persist and continually yield mission-enabling advancements, Salvagnini says that the AI of the present is truly an AI for all, especially through publicly available tools like ChatGPT and Google Bard.

If the AI of the past was for experts, and the AI of the present is for everyone, what is the AI of the future?

Salvagnini stresses our responsibilities as humans in progressing toward an Al future. We must actively assert our own judgment when interacting with these tools, he says, particularly when considering AI's capability in creating a customized experience. "Is the AI now so tailored to our own individual preferences that we're effectively being surrounded by kind of an artificial world that's catered to us and only us? I think we have to recognize that possibility exists, and we have to realize that we have to go beyond. Just look at this as assistive technology, not as the sole source of truth." The benefits of personalization come with the risks of a self-affirming feedback loop.

However, with Salvagnini's caution and sense of responsibility comes a healthy dose of curiosity. "It's just interesting to watch how we're going to evolve. Our behavior is going to change as we interact more and more with the Al-enabled capabilities," he says. "I think it'll accelerate our scientific discovery and our understanding of the world around us." Al Deputy Ed McLarney echoes this sentiment, noting that many perceptions of Al risks at NASA stem from a commitment to the highest technical and professional standards. "I think many people want to make sure Al is applied in that same spirit, so they demand high-quality AI results and may think about AI being used incorrectly," says McLarney. "But NASA personnel think more about ways to proactively mitigate these risks instead of simply worrying about them. If anyone has AI fears, they are taking active steps to alleviate those fears."

Both McLarney and Salvagnini foresee Al becoming trusted colleagues and members of our teams. Our responsibilities may shift from completing specific tasks to selecting the best Al assistants for those tasks. It seems the AI of the future, at least at NASA, is an extension of AI for everyone—AI for an active, informed, equipped "everyone." In other words, our perspective may shift from "how can we advance the technology" to "how can we advance our own knowledge, use, and awareness of the technology?" Those past blueprints of complex, humanoid machines now form the architecture of our everyday lives. We must look at AI not as a passive structure to build upon but as an active architect and partner in shaping our future selves.



Our First Transformer of the Month: Matt Dosberg

By Maya Kikuchi, Writer, Digital Transformation, NASA Headquarters

It is impossible to pinpoint a single, static definition of what makes a "Digital Transformer." Although Matt Dosberg's official title is Digital Transformation and IT Innovation Lead for Goddard Space Flight Center (GSFC), his full contributions to NASA require a lengthier description. He is the nexus for everything under the Digital Transformation (DT) umbrella at GSFC, including digital engineering, AI, datadriven programmatics, data strategy, and more. He serves as liaison to the agency-level DT team and other centers, coordinating across directorates to drive cultural change within the organization, and has sponsored multiple DT events at GSFC, including the center's first AI Symposium. He strategizes on rolling out proofs of concept and pilots, working toward solutions that address agencywide barriers to technology readiness and adoption. Dosberg doesn't just do transformative work—he embodies transformation in an ever-adaptive role.

You can read more about what makes Matt Dosberg a "Digital Transformer" at <u>NASA.gov</u>.



In the Shadow of the Moon: How NASA Captured the Solar Eclipse

By Katherine Herrick, Office of the Chief Information Officer Communications Lead, Johnson Space Center

On April 8, 2024, NASA photographers and videographers set up cameras, telescopes, and broadcast trucks across the United States, ready to show the world the solar eclipse through NASA's lens.

More than 400 people, both civil servants and contractors, supported multimedia coverage of the eclipse, coordinating the travel, social media, photography, videography, uplink with the crew on orbit, and livestream for NASA+. "We had production covering 14 locations, so at any time we could switch between feeds," said Liz Hale, the Enterprise Multimedia and Integrated Technical Services (eMITS) Program Manager.

On the day of the eclipse, Hale watched the skies from Johnson Space Center: "It was a cloudy, overcast day, so we had to watch for any break in the clouds," she said. "During the eclipse, temperatures dropped, and you had that sensation it was dusk in the middle of the afternoon. After it passed, I went to my office, turned on NASA TV, and I watched it move to Indianapolis, then to Cleveland. It truly was an emotional experience watching the reactions of people who had clear skies under the path of totality. It was such a unifying experience."

According to Marc Etkind, Associate Administrator for Communications, the live eclipse broadcast on NASA+ pulled in 2.3 million views, a record for the platform, and there have been over 12 million views of the recording on YouTube. On the day of the eclipse, NASA's social media accounts had over 4 million engagements, and NASA's websites had huge traffic spikes with nearly 28.9 million views and 15.6 million unique visitors.

The event coverage was a collaborative effort between the Office of Communications and the Office of the Chief Information Officer. "We had to think about the communications elements, and then we had to coordinate all the IT it takes to do that," Hale said.

The team's efficient collaboration made the day run smoothly, but it was not without obstacles. Weather was a concern at every location. "The Texas forecast showed a blanket of clouds; Cleveland had storms, Maine had snow, so we had to prepare contingency plans for which locations to show," Hale said. On top of that, the date of the eclipse overlapped with the start of baseball season, making it difficult to reserve broadcast trucks for the event. "Who would've thought baseball would interfere with the eclipse?" Hale said.

Despite challenges, the team produced an incredibly complex broadcast, documenting a rare celestial phenomenon that will not happen again over the United States until 2044. "It was a moving experience," Hale said. "It made you feel very small in this big universe, and I'm so proud of our team."



Above: A total solar eclipse is seen in Sandusky, OH, on Monday, April 8, 2024. (Photo credit: NASA/Michael Porterfield)

Left: This composite image of multiple exposures shows the progression of a partial solar eclipse over the Washington Monument on Monday, April 8, 2024, in Washington, DC. A total solar eclipse swept across a narrow portion of the North American continent from Mexico's Pacific coast to the Atlantic coast of Newfoundland, Canada. A partial solar eclipse was visible across the entire North American continent, along with parts of Central America and Europe. (Photo credit: NASA/Bill Ingalls)



NaTS Enables NASA Coverage for 2024 Total Solar Eclipse

By Sylvester Placid, AEGIS Communications Team Lead, Marshall Space Flight Center

Network and Telecommunications Services (NaTS), supported by the Advanced Enterprise Global IT Solutions (AEGIS) team members across the United States, played essential roles in bringing the April 8 total solar eclipse to people around the world. From preparing event stages and crowd space at Glenn Research Center (GRC) to supporting multiple live video feeds from approximately 20 different sites across the country, the team powered coverage for this historical celestial event.

The GRC team prepared multiple locations for the crowd in the path of totality, from the main stage to areas in NASA Village, the Lake Erie waterfront, and the Great Lakes Science Discovery Center.

Enterprise Network Operations and engineering teams collaborated with NASA entities and circuit providers de-

livering network IT and video services in support of Great Lakes Science Center eclipse activities and events. Faced with an aggressive schedule, significant planning and design considerations took place to meet all IT and video requirements needed to support the eclipse coverage from Cleveland, OH. Circuit provisioning, circuit testing and acceptance, wireless access, network firewall rules, local and wide area networks design particulars, audio/video testing feeds, and distribution, logistics, and security measures were addressed and managed closely by the teams preparing for this event.

Services were designed, fully tested, and implemented with both network and audio/video services being provided on schedule and as requested. Network, IT, and audio/video services provided by the teams accommodated coverage from multiple locations throughout the country, providing the public, as well as scientific and educational institutions, with exceptional video coverage of the eclipse.

The Goddard Space Flight Center team supported the NASA TV eclipse broadcast from Goddard Television Operations. The Enterprise Video Content Delivery Network team provided live broadcast and on-demand video content for NASA TV, the NASA+ streaming app, and the NASA YouTube channel.

Twelve million viewers across the globe watched the solar eclipse on the NASA YouTube channel main feed, another **7 million** watched the NASA YouTube channel telescope feed, and **2.3 million** unique viewers watched in the NASA+ streaming app, making this the biggest live video event in NASA history.









Mission Success Requires Us to Be at Our Best

By Emma Antunes, Customer Engagement Office Director, and Jon Walsh, IT Strategist, Strategy and Architecture Office, NASA Headquarters

NASA's IT Strategic Plan outlines the agency's vision for strategically using IT to achieve successful mission outcomes through five strategic goals. These goals focus on achieving consistent operational excellence; transforming NASA through information and technology; and ensuring proactive, resilient cybersecurity, all supported by great customer experiences and an exceptional team. In this issue, we are focusing on Goal 1, Satisfaction — Deliver Great Customer Experiences.

Delivering great customer experiences is fundamental to our strategy because "how" we deliver our products and services is as important as "what" we deliver to our partners. While OCIO's Customer Engagement Office serves as a champion of our customer's perspective, everyone in OCIO is responsible for delivering products and services with high customer satisfaction that enable our scientists, engineers, technologists, and mission support personnel to accomplish NASA's missions.

The journey to consistently high satisfaction begins with a shared understanding of our customers' mission and business requirements. We must regularly engage with, and listen to, our customers' needs and perspectives and supplement this information with data to help us understand customer experience challenges and identify improvement opportunities. We will translate this feedback into actionable plans that are implemented to improve services in alignment with our customers' priorities. To further enhance experience, we will ensure that our products and services are accessible and intuitive so customers can easily find and use the services they need when they need them.

OCIO is actively enhancing customer experience in diverse ways. Some of the following links are internal to NASA.

The redesign of <u>www.nasa.gov</u>, NASA's flagship website, transformed how the public interacts with NASA and earned 2024 <u>Webby and People's Voice Awards</u>. We are continuing this transformation through our web modernization effort.

- The <u>new policy and request process for IT use on international</u> <u>travel</u> dramatically improved the experience for NASA travelers so they can be more productive.
- Users with disabilities now have an easy way to report accessibility issues through a simple <u>helpdesk ticket</u> so the service can be updated.
- Personnel can more easily find the services and support they are looking for on OCIO's redesigned "front door" <u>on the OneNASA</u> <u>intranet</u>.

Looking ahead, we will have more news and helpful content available on our site, such as a 90-day lookahead calendar and more intuitive self-help, including a chatbot.

Visit our *internal website* for more information on NASA's IT Strategic Plan, including explainers, presentations, and more. We are excited to share NASA's path for delivering exceptional value to our mission and business partners through IT!

NASA IT Strategic Plan Goals, Through Fiscal Year 2026



Goal 1: Satisfaction

Deliver Great Customer Experiences



Goal 2: Excellence

Achieve Consistent Operational Excellence



Goal 3: Transformation

Transform NASA with Information & Technology



Goal 4: Cybersecurity

Ensure Proactive, Resilient Cybersecurity



Goal 5: People

Develop an Exceptional OCIO Team

The strategic goals, strategic objectives, and performance objectives outline what our IT community will pursue to help make NASA's vision of the future a reality.

Introduction to the Cross-Cutting Business Solutions Portfolio

By Jennifer Sypien, CBS Portfolio Manager, Kennedy Space Center and Rachel Campbell, CBS Communications Lead, NASA Headquarters

What Is the Cross-Cutting Business Solutions Portfolio, and Why Do We Need It?

The Cross-Cutting Business Solutions (CBS) Portfolio, baselined last summer, was established to deliver an enterprise suite of cross-cutting business solutions to optimize transparency, productivity, integration, and collaboration across the Mission Support Community to support NASA's missions.

The Mission Support Community's application portfolio contains considerable disparate and duplicative business capability tools and processes used to perform critical business functions, operating at varying levels of maturity, integration, and results. This lack of cohesion causes increased and extraneous cost impacts in a budget-constrained environment, integration and collaboration gaps between organizations, and ineffective and inefficient business processes and operations.

CBS will establish a suite of tools to provide support from ideation through to decommissioning, providing clear visibility into the big picture of business management across the enterprise. This integrated suite of tools will seek to ensure efficient utilization of staff, financial resources, and technology across the agency; optimized decision making and alignment; reduced operating costs; and efficient and effective use of available funds and personnel.

An enterprise business solution can be a single tool or multiple tools or systems, but the solution ultimately solves one or more business problems. We are working to provide enterprise solutions that

- provide functionality and optimize mission support community and center support operations;
- focus on the connection between the organization's functions and the business problems; and



 implement people, processes, information, and technologies to deliver a set of processes and technical solutions.

The CBS portfolio is focused on providing solutions for use across the agency and therefore is working to engage stakeholders across NASA.

Current CBS Programs and Projects Current CBS portfolio programs and projects include the following:

IT Service Management (ITSM) Tool Transition Project: Implementing an Enterprise ITSM solution in a single ServiceNow instance and standardizing core ITSM processes, focusing on facilitating the delivery of IT services with the end user in mind, and ensuring that the right IT services are available to the customers at the right time. Enterprise Content Management System (ECMS) Project: Consolidating mission support community authoritative content into searchable M365 SharePoint Online repositories accessible by all authorized, internal NASA employees, while ensuring content management configuration control and best practices.

Pyxis Program-NASA's IT Com-

pass: Managing an enterprise set of interoperable and integrated business processes and tools to enable leadership and stakeholders to determine their bearings. The Pyxis program includes solutions that support Program Project Management, Strategic Portfolio Management, Performance Management, and Risk Management.

Karl Mathias Wins First-Ever Vaughn Aiken Service Award

By Michelle Kim, Communications Strategist, NASA Headquarters

Dr. Karl Mathias's face lit up as he recounted a fond memory of the late Vaughn Aiken during their time serving the U.S. Marshals. Mathias had just become the new Chief Information Officer (CIO) and received his corporate phone, when Aiken, the equipment manager, asked if he would like a phone case. Mathias declined but was caught off guard when the other started scolding him for not taking care of U.S. Marshal property.

Mathias laughed and recalled, "I liked him instantly," and the two would become close comrades.

Sadly, in 2017, Aiken was diagnosed with acute lymphoblastic leukemia, a cancer that affects many 9/11 responders who were exposed to toxic debris at Ground Zero. During his treatment, he was able to enroll in the World Trade Center Health Program for survivors, which provided him and his family with much-needed relief in settling his medical bills, making a world of difference in his quality of life during his final days.

Mathias said, "Vaughn was always about doing the right thing, even when it was hard. I remain convinced that even if he'd

known what poison awaited him at the 9/11 site, he'd have gone in anyway." Aiken passed away on September 3, 2018, with his wife, mother, and Mathias by his side. He became the first administrative employee to be inaugurated into the U.S. Marshals Wall of Honor. During his term as Chief Information Officer at the Department of Health and Human Services (HHS), Mathias was invited to the Armed Forces Communications & Electronics Association (AFCEA) IT Health 2023 summit as the keynote speaker to inform how Government and private-sector IT companies could unite to combat difficult healthcare challenges. At this conference, Vaughn Aiken's story was used to motivate HHS employees and other healthcare workers to excel at what they do as their efforts create a meaningful difference for real

> people—including heroes such as Aiken. This motivational speech became the inspiration for the AFCEA to commemorate Aiken's selfless contribution to our country by creating the award in his name.

And in May of this year, it came full circle as Karl Mathias, who is now NASA's Program Manager for Agency Business Solutions, was awarded the very first Vaughn Aiken Service Award. This award "recognizes individuals who go above and beyond to champion initiatives that promote wellness, resilience, and inclusivity within the health IT field."

Mathias expressed his thanks to AFCEA for memorializing Aiken: "It is a tribute to my lost colleague and friend that speaks volumes about the character of AF-CEA's leaders and members. I am deeply honored, and humbled, that you choose to make me the first recipient. I thank you from the bottom of my heart."



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