



Welcome to “The Alliance Matters,” where you can read about our initiatives and accomplishments and relevant news about CNY, our defense ecosystem, our members, partners, and upcoming events.

Check out Central NY is Thriving!!

<https://www.facebook.com/watch/?v=598503340900040>

Federal and Defense assets power CNY's high-tech economy. The Alliance works to protect and expand those assets and the countless jobs and opportunities they bring to the region. We are your voice in Washington, Albany, and beyond!

OUR MISSION: Promote, Advocate, Strengthen and Expand the Defense and Federal assets that support the economies of the five-county CNY region, including:

- **Air Force Research Laboratory Information Directorate (AFRL/RI),**
- **Defense Finance and Accounting Service (DFAS),**
- **Eastern Area Defense Sector (EADS),**
- **FAA-Designated New York Unmanned Aerial System (UAS) Test Site.**

In spite of numerous challenges, the Alliance is proud of the many exciting milestones and achievements we were able to celebrate throughout the Central New York region in 2020. In our final newsletter of the year, we wanted to share some of those accomplishments along with news for the coming new year.

I don't think anyone really understood the impact of this pandemic would have on all of us and that we are all dealing with it the best we can. The CNY Defense Alliance Board of Directors made a conscious decision not to stress or burden our partners with a request for 2020 membership. As you read the info below, I think you will agree the CNY Defense Alliance is an important Central NY advocate and partner committed to building an internationally recognized technology hub in CNY. We hope we can count on your support in 2021. On behalf of the CNY Defense Alliance happy holidays and please be safe and healthy.

New Leader of AFRL Visits Rome

In October, Brig. Gen. Heather Pringle, who assumed command of the Air Force Research Laboratory in June 2020, followed all of NY's COVID-19 guidelines in order to travel to Central NY to visit the AFRL Information Directorate in person, in recognition of the enormous contributions that Rome Lab makes to the Lab's mission. During her visit, Pringle acknowledged the high-performing team at Rome Lab, interacted with Rome personnel, and met with Rome Mayor Jacqueline M. Izzo.

SUNY Upstate Develops New, Easy to Administer Saliva Test for COVID-19

A critical scientific contribution to the fight against COVID-19 came from Central NY. A COVID-19 test developed at SUNY Upstate Medical University was recently recognized by the FDA as the number one saliva test in the world, and the sixth most reliable out of all the tests worldwide for detecting COVID-19 early. Developed by a collaboration of Prof. Frank Middleton's laboratory at Upstate Medical and New York start-up Quadrant Biosciences, the test uses a simple and portable kit that is safe and easy to administer, using saliva rather than a nasal swab. The test is extremely sensitive and very accurate. "That means [it detects] asymptomatic people who are infectious, that is exactly the time you want to catch the virus," said SUNY Chancellor Jim Malatras. This saliva test is an easier and less expensive alternative to the nasal swab.

CNY Defense Alliance Success: Innovare Advancement Center Is a Reality

Without question the most exciting addition to the Central NY innovation ecosystem this year is the Innovare Advancement Center. A special thanks goes out to Senator Schumer and Congressman Brindisi for their commitment to the work and vision of the AFRL Information Directorate (Rome Lab) to be an internationally recognized leader in the global technology ecosystem. Innovare is a key part of the Central NY Defense Alliance's long-term effort to support the creation of a global technology and innovation hub in Central NY, advancing collaborative research in quantum, neuromorphic computing, artificial intelligence, cyber and unmanned aerial systems. The grand opening on September 1st featured a "Million Dollar Quantum Tech U Accelerator" event to celebrate the virtual ribbon-cutting. Over a thousand international participants took part in an exciting slate of presentations, including a keynote by famed astrophysicist Neil DeGrasse Tyson and U.S. Air Force and U.S. Space Force Acquisition Executive Will Roper. 18 major research awards were also announced at the event. Details can be found here: [Innovare Launch PR-9-4](#). The entire event is available on YouTube, and the complete set of research posters presented can be viewed here: <https://milliondollarquantumutech.eventcreate.com/>.

Innovare is a collaboration between AFRL Information Directorate, a.k.a. Rome Lab, the State University of New York (SUNY), the Griffiss Institute, and a growing collection of government, academic, and industry partners. Although visits and tours of the incredible facility have been limited by COVID safety measures, the Center is up and running with personnel on site. In addition to meeting and collaboration space to support an array of research areas, the building features a cutting-edge Quantum computing laboratory and advanced computer/electronics space designed to support state-of-the-art Neuromorphic computing research. The facility is adjacent to SkyDome, enabling a vast array of opportunities for research into Unmanned Aerial Systems, autonomy, quantum technology, AI/ML, and much, much more!

The second major Innovare event, the Trusted AI Challenge series, kicked off on October 14th. [Innovare Advancement Center](#), in partnership with the [Air Force Research Laboratory Information Directorate \(AFRL/RI\)](#) and [The State University of New York \(SUNY\)](#), and supported by [NYSTEC](#), [Griffiss Institute \(GI\)](#), the [United States Air Force \(USAF\)](#), [National Security Innovation Network \(NSIN\)](#), [The Research Foundation](#)



for SUNY, and the Innovation Collective, hosted the first event in the series with the goal of building the vision, formalizing challenges, and advancing the art of next generation Artificial Intelligence (AI) systems. The Trusted AI Challenge is designed to cultivate, define, and fund creative solutions to problems in trustworthy AI, especially dynamic, autonomous systems that learn and adapt behaviors. The event featured talks and an interactive panel of industry, research, and government participants. “Intelligent systems are optimizing our lives... this Series is designed to get at the technical challenges associated with certifying self-aware learning systems,” said Dr. Bryant Wysocki, United States Air Force Technical Advisor for

Command, Control, Communications, Computing, Intelligence & Cyber, Air Force Research Laboratory.

Innovare’s Virtual Quantum Collider 2.0 on December 1-2, 2020, a follow up to AFRL’s hugely successful Virtual Quantum Collider held on June 15th, was another great success. The two-day virtual event featured talks on Air Force Research Laboratory Quantum Strategy, a National Strategic Overview for Quantum Information Science and panel discussion on workforce development and supply chain management. The goal of the event was to build purposeful partnerships among government, industry, academia, and the small-business community, furthering the development of a robust quantum ecosystem in Rome, NY, and the establishment of Innovare, Rome Lab, and the Central NY innovation ecosystem as an important international hub for quantum research.

Featured guest speakers include:

- 19-year-old phenomenon Alyssa Carson: astronaut in training, global TEDx speaker, future Mars walker, and author; joined by Bert Carson, her father and advocate.
- Dr. Will Roper, United States Air Force and Space Force Acquisition Executive and Innovation Lead.
- Dr. Celia Merzbacher of the Quantum Economic Development Consortium, leading a panel discussion on quantum supply chain.
- Dr. Charles Tahan, Assistant Director for Quantum Information Science at the Office of Science and Technology Policy, and Director of the National Quantum Coordination Office.
- Dr. Corey Stambaugh of the National Quantum Coordination Office, leading a panel discussion on creating a quantum-smart workforce of the future.
- Brigadier General Heather L. Pringle, Commander for the Air Force Research Laboratory, Air Force Material Command in Dayton, OH.

Innovare Inclusion Day: Actively Engaging Community Partners

Further demonstrating their commitment to community engagement, on November 12th Innovare hosted a virtual “Inclusion Day,” bringing together a group of local community partners to share the status of the Innovare Center, brief on upcoming events, and gather feedback and insight on the technical challenges the Center hope to address in collaboration with industry and academe. The event was facilitated by AFWERX, who created an interactive virtual collaboration environment and led participants through a process to validate and hone the way technical challenges will be presented. Participants learned details about the planned challenges and submitted questions and feedback to enable Innovare to more effectively engage with the broader research community to address them. Current proposed research areas include Hierarchical and Multi-Domain Planning, Transfer Learning of Control Policies, Quantum-Enabled Computer & Network Security, Legacy Code challenges, Fusion at the Edge, Video Scene Captioning, and Validation of Data Transmission Algorithms. The group also proposed additional industry sectors and potential partners for targeted outreach efforts. 2021 looks like a very promising year for a wide range of different companies and academic institutions seeking to partner with AFRL-RI and Innovare!

Innovation Collective

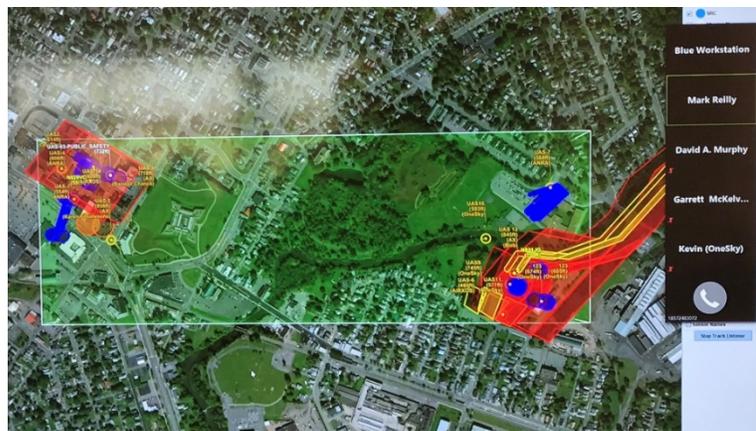
Another exciting development in 2020 has been the selection of Utica as an Innovation Collective community. The Innovation Collective (IC) describes itself as an “education and human capital company.” They bring together entrepreneurial and creative communities through online groups, unique workspaces, events, mentoring programs, skills training, and even proprietary software, all aimed to help start and grow innovative businesses. The unique goal of the IC is to mobilize entire communities to set and achieve goals and pursue new skills and education to become a distributed research and development “engine” for an industry sector or even a specific company. For more information, go to <https://www.innovationcollective.co/communities/>.

NY UAS Test Site Executed Successful FAA UPP2 Demonstration

After a highly competitive process, the NY UAS Test Site (NYUASTS) was selected as one of two FAA sites to participate in the FAA Unmanned Traffic Management (UTM) Pilot Program 2 (UPP2), designed to further test the evolving system that will enable the safe integration of Unmanned Aerial Systems (UAS) into the National Airspace System and enable their widespread use in urban and suburban environments.

The NYUASTS brought together a large group of partners, including first responders, to conduct two large Shakedown events and a final Demonstration to test the current state of the art in UTM. The New York team featured four different UAS Service Suppliers (USSs), one from local company AX Enterprize, joined by GE AirXOS, ANRA Technologies, and OneSky, all working together to create an integrated UTM environment. The events featured

more than 15 simultaneous drone flights conducted within a .2 square mile area stretching from City Hall in downtown Rome to Pinti Field to the East. Many of these flights were conducted Beyond Visual Line of



Sight (BVLOS), using advanced sensors and UTM software operated both from the NYUASTS's Operations Center at Griffiss Airport and from a Mobile Operations Center (MOC) located in downtown Rome. "The demonstrations will help move us closer to safe beyond-visual-line-of-sight drone operations," said Pamela Whitley, the FAA's acting assistant administrator for NextGen. "Flight testing UTM capabilities in high-density airspace will help us develop policy for safely and efficiently integrating drones into our national airspace while benefiting and serving communities." The NYUASTS events were an unmitigated success, garnering praise from the FAA and all of the participants. <https://nuair.org/2020/12/02/new-york-uas-test-site-completes-advanced-drone-operations-for-faa-drone-integration-program/>

Griffiss International Airport One of a Kind Manned and Unmanned Testbed

Griffiss International Airport (GIA) is ready to support a wide range of manned and unmanned aircraft test needs. GIA offers a unique set of capabilities, including an instrumented airfield and corridor that stretches to Syracuse, diverse airspace, and four seasons of environmental conditions that make it an ideal location for testing aircraft platforms and payloads of all sizes. GIA is home to the NY UAS Test Site (NYUASTS) and SkyDome and is the only one among the seven FAA Designated Test Sites in the country with an active air traffic control tower. Efforts are underway to develop SkyDome, a first-of-its-kind indoor test facility with a netted area that extends out to the tarmac (approximately 230'l x 150'w x 70'h) creating a crawl/walk/run environment for testing new Unmanned Aerial Systems technologies before introducing them into widespread commercial or defense use. This facility represents an over \$9 Million transformation of the West Bay Hanger adjacent to the Innovare Advancement Center. Initial demolition has been completed and a contract has been awarded to create an instrumented and radio-frequency-managed interior environment. The facility is scheduled for a 2021 grand opening.

DFAS Rome Gets Great News

U.S. Senator Charles E. Schumer, U.S. Senator Kirsten E. Gillibrand, and U.S. Congressman Anthony Brindisi announced on 10 December 2020 that the Fiscal Year 2021 National Defense Authorization Act (NDAA) conference bill defers to language secured earlier this year in the Senate NDAA report that would provide congress with more oversight over DFAS personnel changes and adds an additional layer of protection for DFAS employees. This will have a significant impact on the funding and security of the roughly one thousand good-paying jobs DFAS supports in the Mohawk Valley.

The Defense Finance and Accounting Service was created in 1991 to standardize and improve accounting and financial operations for Department of Defense. They provide payroll services for Department of Defense military and civilian personnel, retirees and other major contractors and vendors. DFAS operates as a separate and unique entity in Department of Defense, to ensure transparency and accountability on behalf of Department of Defense financing and accounting.

CNY Defense Alliance Success: Funds Secured for Rome Lab' \$13M Perimeter Security

The transition of Griffiss Air Force Base to the Griffiss Business and Technology Park left Rome Lab and DFAS without the protection and security associated with an active military base. The absence of adequate perimeter security was officially identified in a request for Military Construction (MILCON) funding in 2010. The request was a result of threat assessments and risk evaluations in 2008 by the Joint Staff Integrated Vulnerability Assessment teams.

Since 2011, the Alliance has worked to promote the importance of investing in perimeter security to our Federal and State representatives. It would provide the needed entry control to the lab and it would provide the Air Force the confidence the lab was protected. With the help of Federal representatives, the

Rome Lab MILCON project was approved in the 2018 defense bill, known as the National Defense Authorization Act (NDAA). Construction began in 2020 and will be completed in the Fall of 2021.

Congratulations and Welcome to Strategic Global Aviation

We would like to welcome Strategic Global Aviation, LLC (SGA) an established C-130 Maintenance Repair & Overhaul facility headquartered at Griffiss International Airport in Rome, NY. SGA is a U.S. Government and New York State designated Service Disabled Veteran Owned Small Business (SDVOSB) New York Limited Liability Company formed in August 2017 by John Hester, its founder, a retired Air Force veteran. John is a 100% disabled veteran whose disability was principally caused by Agent Orange exposure during his tour(s) of duty in Viet Nam. SGA is 9001:2015 and AS9110C certified. They received the first C130 requiring upgrades this fall and are expecting many more to be landing at Griffiss. For more information go to: <https://strategicglobalaviation.com/>

Preparing to Say Farewell to AFRL-RI Director Col Timothy Lawrence

For more than two years, Central NY has been fortunate to have Col Timothy Lawrence at the helm of the AFRL Information Directorate in Rome. He has been a terrific leader within the Lab, and an innovative and engaged partner for the greater CNY community. Sadly, this coming summer marks the end of his rotation, so we will soon be saying goodbye to Col. Lawrence and welcoming his successor, Col. Fred Garcia.

Rome Lab, located at Griffiss Business and Technology Park is a huge employer in the region, with more than 750 civilian and 60 military jobs and supporting an additional 400-plus on-site contractors. Wright-Patterson describes Rome Lab as leading “the Air Force and nation in Command, Control, Communications, Computers, and Intelligence (C4I) and cyber science, technology, research, and development.” Col. Lawrence has made significant contributions to the Lab and the region, increasing awareness and collaboration with AFRL in the regional business ecosystem. The Innovare Advancement Center was launched under his leadership, along with numerous community engagement events.

Replacing him will be Col. Fred Garcia, according to Wright-Patterson Air Force Base in Ohio where the overall Air Force Research Laboratory (AFRL) is headquartered. According to AFRL, more information will be available about Col. Garcia in future months.