



FAA Challenge

Smart Airport Student Competition

2021 VIRTUAL FORUM PROGRAM

June 22-23, 2021

<http://faachallenge.nianet.org/>

#FAAChallenge2021
#AviationSTEM
#FAASTEM

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Forum Agenda

TUESDAY, JUNE 22, 2021

- 11:00 – 11:10 am **Welcome & Introductions**
Shelley Spears, National Institute of Aerospace
- 11:10 – 11:20 am **Federal Aviation Administration Welcome and Opening Remarks**
Shelley Yak, Federal Aviation Administration
- 11:20 – 11:50 am **FAA Smart Airport Overview**
Jon Schleifer, Federal Aviation Administration
- 11:50 – 12:30 pm Lunch Break

Team Presentations

- 12:30 – 1:15 pm **“Applying UAS for Wildlife Hazard Management at Airports”**
Embry-Riddle Aeronautical University

Team Members: Anthony Chimino, Jose Cabrera, Matthew Schwarz (Team Lead), Nathan Woolf
Faculty Advisor(s): Prof. Flavio Mendonca (Lead Advisor), Prof. John Robbins, Prof. Ryan Wallace, Prof. Nickolas Macchiarella, Prof. Kevin Adkins

- 1:15 – 1:45 pm **Embry-Riddle Aeronautical University Q&A Session**
- 1:45 – 2:00 pm Break

- 2:00 – 2:45 pm **“Inspector Drover”**
Hampton University

Team Members: Ryan Ford, Julian Payne-Dillard (Team Lead), Ellis Woodyard, Myles Divinity, Monta Williams, Jr., Griffin Weathers
Faculty Advisor(s): Prof. Andrew Smith

- 2:45 – 3:15 pm **Hampton University Q&A Session**
- 3:15 – 3:30 pm Break

- 3:30 – 4:15 pm **“ARKE: Public Safety – Situational Intelligence Platform”**
Rowan University

Team Members: Matthew Guardiani, Cole Kirstein, Brandon Carmosino, Steven Jiang, Matthew Schofield, John Stranahan, Benny Liang, Brandon Graham (Team Lead)
Faculty Advisor(s): Prof. Hong Zhang (Lead Advisor), Prof. Ratneshwar Jha

- 4:15 – 4:45 pm **Rowan University Q&A Session**
- 4:45 – 5:00 pm **Wrap-Up & Adjourn**

Day 1 of the FAA Challenge Virtual Forum will be live streamed at <https://livestream.com/viewnow/faachallenge>.

All times are in Eastern Daylight Time (EDT).

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Forum Agenda

WEDNESDAY, JUNE 23, 2021

- 12:00 – 12:15 pm **Day 2 Welcome**
- 12:15 – 12:45 pm **Poster Session**
- 12:50 – 1:20 pm **New Jersey Aviation Innovation Hub**
Lauren Moore, President of the Atlantic County Economic Alliance (ACEA)
- 1:20 – 1:50 pm **“Accelerating Your Business Growth”**
Carole Mattessich, Executive Director, Smart Airport and Aviation Partnership (SAAP)
- 1:50 – 2:00 pm Break
- 2:00 – 2:45 pm **Roundtable Discussion: “Aviation’s Next Golden Age: Launching Your Career in Aviation and Aerospace”**
- Abigail Glenn-Chase, Director of Programming and Communications, Air Traffic Control Association (ATCA)
 - Ronicsa Chambers, ATO Diversity and Inclusion and FAA HBCU Initiative, Federal Aviation Administration
 - Ariel Scheirer, Principal, TheScheirer Group
- 2:45 – 3:25 pm **FAA Personal Journeys**
- Dr. Angela Campbell, Manager of Fuels and Energy Section
 - Lyndsay Digneo, Program Manager of Aviation Science, Technology, Engineering, and Math (AvSTEM) Program
- 3:25 – 3:50 pm **“My Journey to the FAA and a Pandemic”**
Dr. Anthony Tvaryanas, Manager of the Aerospace Medicine Research Division, FAA
- 3:50 – 4:00 pm Break
- 4:00 – 4:30 pm **FAA Challenge Panel Discussion**
2021 FAA Challenge Steering Committee Members
- 4:30 – 4:50 pm **2021 FAA Challenge: Smart Airport Student Competition Award Ceremony**
Presented by Shelley Yak
- 4:50 – 5:00 pm **Closing & Adjourn**

Day 2 of the FAA Challenge Virtual Forum is private and will not be live streamed.
All times are in Eastern Daylight Time (EDT).

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Challenge Leadership Team

On behalf of the National Institute of Aerospace and the FAA Challenge Steering Committee, it is our pleasure to welcome you to the 2021 FAA Challenge Virtual Forum!

Shelley Duguid Spears – National Institute of Aerospace

PMP, Director of Education and Outreach and FAA Challenge Program Director



Ms. Shelley Spears is an experienced business and program management leader responsible for developing and executing multi-million-dollar programs for industry and government. Since 2009, Ms. Spears has worked at the National Institute of Aerospace as Director of Education and Outreach where she serves as a strategic partner with government and industry leaders in aerospace, science, and aviation to design and executive multi-year initiatives to meet research, outreach, communications, and education objectives. She previously held senior management roles with Nortel Networks, a global technology corporation, the Federal Emergency Management Agency, and US Senator Charles S. Robb (VA).

Ms. Spears holds a Bachelor of Arts in English with honors from James Madison University, Harrisonburg, Virginia, and a graduate certificate from Cornell University in Data Analytics.

Shelley Yak – Federal Aviation Administration

Director, William J. Hughes Technical Center



Ms. Shelley Yak serves as principal advisor and is responsible for managing, operating, and maintaining world class aviation laboratories; planning and coordinating FAA's research and development program; conducting applied research and development; testing, evaluating, verifying, and validating current national airspace system and future next generation air transportation systems; providing facility maintenance, engineering support, support services for all properties located at the William J. Hughes Technical Center.

Ms. Yak has extensive operational experience in leading organizations through change, building cross-organizational teams, leveraging strong project management and leadership capabilities to build effective business processes and deliver technology solutions. Her prior position within the FAA included Deputy Director that supported the previous Director in making the Center the nation's premier aviation and air traffic management federal laboratory. Ms. Yak was also the Division Manager of the Center Operations team where she was responsible for the operation, maintenance, and sustainment of the Technical Center facilities, which provide support and technical services. During her tenure in this position, she also acted in the position of Director of NextGen Performance and Reporting and was responsible for defining and establishing this newly formed organization and Director of Operational Evolution Partnership Planning. Previously, Ms. Yak held the position of Division Manager of Information Technology (IT) responsible for the management and security of the Technical Center IT network and telecommunications infrastructure, help desk and desktop support services, and software application development and support. Prior to joining the FAA in 1997, Ms. Yak was the Superintendent of Power Delivery Dispatch and Support for Atlantic City Electric where she oversaw the dispatch of personnel responsible for the investigation and restoration of power during normal and emergency conditions and the technical staff

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Challenge Leadership Team

responsible for maintaining, operating and supporting the Energy Management and Power Distribution Management computer systems.

Ms. Yak holds a B.S. in Information and System Science from Stockton University and a M.S. in Engineering Management from Rowan University. She has received numerous internal and industry leadership and excellence awards throughout her career and resides in Little Egg Harbor Township, New Jersey with her husband and two sons.

Jon Schleifer – Federal Aviation Administration

Manager, Research & Development Management Division, William J. Hughes Technical Center



Mr. Jon Schleifer serves as the Manager of the Research and Development Management Division. He is responsible in providing planning and coordination of the FAA's R&D program. Jon manages the work of a large, multi-level organization, integrates work of multiple organizations to meet strategic goals of the FAA. He additionally participates in strategic planning for the FAA.

Mr. Schleifer additionally provides leadership in the formulation, presentation and coordination of aviation research priorities across FAA lines of business and with other agencies, Advisory Boards and international organizations, to ensure agency investments address known research needs, emerging aviation issues and supports continued United States global leadership in aviation. He aligns research programs with the Administrator's strategic initiatives, the Department of Transportation R&D strategic plan, and other national plans and policy directives governing aviation and aeronautics research.

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Steering Committee Members

Edward “Ed” Marciano, FAA Challenge Chairman – Federal Aviation Administration *Electronic Engineer, Next Generation (NextGen) Concepts and Systems Integration Branch*



Mr. Edward Marciano is an Electronic Engineer for the Next Generation (NextGen) Concepts and Systems Integration Branch of the Federal Aviation Administration's William J. Hughes Technical Center (WJHTC). In his role, Mr. Marciano brings 40 years of FAA service in support of the FAA's planning, development, test and evaluation, implementation, and sustainment of the air traffic control systems used in all FAA domains. Mr. Marciano has spent the past 20 years of service focusing on the NextGen Air Transportation System for Class A airspace. Additionally, Mr. Marciano was on detail as the FAA WJHTC Laboratory Integration Lead. During this assignment, he was the lead technical representative for several multi-discipline WJHTC teams. These teams focused on topics that included the integration of Department of Defense Unmanned Aircraft Systems (UAS) into the National Airspace System (NAS). The use of NextGen implemented technologies to reopen arrivals on runway 29 at Liberty International Airport. Operational suitability of NASA developed Terminal Sequencing and Spacing (TSAS) time-based operations. The UAS test team was a recipient of the Department of Transportation Secretary's Team Award in 2015.

In his previous assignments, Mr. Marciano served as a manager, test director, or program management office technical lead for the following FAA acquisition programs. Host Computer System, Tower Computer Control Complex/Remote Terminal Radar Approach Control, Initial Sector Suite System, the Display Channel Complex Rehost, Standard Terminal Approach Replacement System, and Automated Radar Terminal System color display. Throughout his career with the FAA, Mr. Marciano has sought to make the WJHTC a better place to work. As a Manager, Mr. Marciano initiated chapters of the Federal Women's Program and the National Organization for Women. Mr. Marciano currently serves on the WJHTC Employee Engagement Team.

Mr. Marciano holds a B.S. degree in Electrical Engineering from Drexel University. During his personal time, he and his wife are "Puppy Raisers" for The Seeing Eye foundation: a not-for-profit organization that provides service guide dogs for the visually impaired. Edward and his wife Laura have been married for 35 years.

Dr. Kenneth Allendoerfer – Federal Aviation Administration *Manager, Human Factors Branch*



Dr. Kenneth Allendoerfer is the manager of the Human Factors Branch at the Federal Aviation Administration William J. Hughes Technical Center. The branch conducts human-centered research and development in the areas of air traffic control (ATC), traffic flow management, technical operations, and unmanned aircraft systems with a goal of increasing aviation safety and improving human-system performance. Dr. Allendoerfer has led human factors activities supporting many of the major ATC automation and communication systems used today nationwide, including the Standard Terminal Automation Replacement System (STARS). His research focuses on developing effective human-machine interfaces, helping users manage data-intensive environments, and improving the interactions between humans and highly automated systems.

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Steering Committee Members

Outside of work, Dr. Allendoerfer is deeply involved in improving educational opportunities in his community. He is an FAA Aviation STEM ambassador and speaks regularly to schools and community groups about aviation and research. He is the lead organizer and coach for the Odyssey of the Mind creative problem-solving program in his hometown, Collingswood, New Jersey, and President of the Board of Trustees of the Collingswood Public Library. He is an active member of the Human Factors and Ergonomics Society and a part-time lecturer at Rutgers University in experimental psychology.

He holds a B.A. in Psychology from Carleton College, an M.A. in Psychology from SUNY Buffalo, and a Ph.D. in information Science and Technology from Drexel University.

Armando Gaetano – Federal Aviation Administration

Flight Program Liaison, Laboratory Services Division



Mr. Armando Gaetano is the Flight Program Liaison for the Laboratory Services Division. He coordinates and provides subject matter expertise in support of Research, Development, Test and Evaluation programs requiring flight testing. Previous to this assignment, Mr. Gaetano led the R&D Flight Test Program, a highly diverse and experienced team of Pilots, Engineers, Technicians, and Aircraft Mechanics, for over ten years. The team's mission was to maintain, modify, and operate six flight test aircraft in support of Agency programs requiring airborne testing. These programs included Microwave Landing Systems (MLS), Traffic Collision and Avoidance Systems (TCAS), and Global Positions Systems (GPS).

Mr. Gaetano holds an M.S. Degree in Mechanical Engineering from Villanova University. He had been a certified Flight Engineer and holds a Patent based on his work with the U.S. Navy. He is especially proud of being selected for the White House 1999 Closing the Circle Award presented by Vice President Gore.

Jerome Johnson – Federal Aviation Administration

Architect, Office of Administrator for NextGen



Mr. Jerome Johnson is an Architect for the ANG Division of the federal Aviation Administration's William J. Hughes Technical Center (WJHTC) and also serves in the US Army Reserve as an Engineer Officer. Mr. Johnson began his federal career at the FAA William J. Hughes Technical Center in Atlantic City, New Jersey, in November 2016. Jerome analyzes ways to introduce technology and innovation into the workplace through renovation. His responsibilities have included providing architectural design and consultation services to support WJHTC programs through project coordination and scheduling within budget to satisfy the project objectives and building tenants.

Prior to joining the FAA, Mr. Johnson worked with the United State Army Corps of Engineers (USACE) in Fort Shafter, HI. As a service member, Mr. Johnson has provided operational support in the following countries as an architect to further base camp development and the sustainment of life safety for US Soldiers, US Embassy, Coalition and NATO Forces, and Foreign Nationals: South Korea, Kuwait, Iraq, and the Republic of the Marshall Islands. He has managed small design teams aiding

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Steering Committee Members

in the completion of design, renovation, maintenance and repair, and existing condition reports for a variety of projects. Mr. Johnson holds a Master of Architecture first professional degree from Hampton University.

During his personal time, volunteers locally in Atlantic County, with the American Engineering Science Robotic Academy (AESRA) and with the FAA Aviation Science, Technology, Engineering, and Math (AvSTEM) Program to introduce career opportunities aligned with a student's personal interest. He mentors students and soldiers pursuing civilian and/or military careers in Science Technology Engineering and Math (STEM) pass the collegiate level. For fun, Jerome enjoys the random adventures of solo-traveling and fine dining. He currently resides in Galloway Township.

Dr. James Jones – Massachusetts Institute of Technology Lincoln Laboratory *Technical Staff, Air Traffic Control Systems Group*



Dr. James Jones is Technical Staff in the Air Traffic Control Systems Group at MIT Lincoln Laboratory. He currently serves as the principal investigator on a number of aviation-related projects, developing advanced technology and prototypes. His current efforts lie in the areas of weather-related air traffic management, commercial space vehicle integration and advanced air mobility concepts. During his time at Lincoln, he has also worked on aircraft collision avoidance, trajectory-based operations and military airlift planning applications. He has a Ph.D. in Civil and Environmental Engineering from the University of Maryland with a focus in aviation operations research. Prior to completing his Ph.D., James worked at Northrop Grumman where he developed algorithms for airborne surveillance and tracking systems on the EA-18G and P-8 aircraft.

Lauren Rainier – Federal Aviation Administration *Safety and Occupational Health Specialist*



Ms. Lauren Rainier is a Safety and Occupational Health Specialist for the Federal Aviation Administration at the William J. Hughes Technical Center. She has been with the FAA since 2018, initially as an intern with the Pathways Internship Program. She has discovered her passion in providing people comfort and safety throughout their lives.

Along with maintaining the health and safety of the employees at the Technical Center, Ms. Rainier is the Secretary of the Southern New Jersey Field Federal Safety & Health Council. This council consists of local federal employees, safety, and health professionals who collaborate to improve safety and health in the federal government. She is also a member of the NJ Medical Reserve Corps. In 2020, Ms. Rainier became the Lead of the WJHTC's Employee Engagement Team.

Ms. Rainier holds a B.S. from Stockton University. During her free time, she likes to go to the beach, read, and travel. Ms. Rainier has goals to change the world for the better in even the slightest way. She currently resides in Smithville, New Jersey with her cats Autumn and Herbie.

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Steering Committee Members

Martin Seuch – Federal Aviation Administration

Operational Integration and Test Strategic Coordinator, Air Traffic Systems Test and Evaluation Services



Mr. Martin Seuch serves as the Operational Integration and Test Strategic Coordinator in the Air Traffic Systems Test and Evaluation Services Division at the FAA William J. Hughes Technical Center. As a senior technical staff member, he supports the Federal Aviation Administration's (FAA) Next Generation Air Transportation (NextGen) vision for Trajectory Based Operations (TBO). He serves as a Subject Matter Expert (SME) liaison between the FAA (test teams, program offices, etc.), other partners, and contractor personnel in order integrate and test National Airspace System (NAS) enterprise capabilities and services, as well as identifying enterprise risks and associated mitigation.

Mr. Seuch managed and led the Test Fielded Systems Team in the En Route and Oceanic Second Level Engineering Group in the Program Management Organization.

His teams supported the successful operational integration of the En Route Automation Modernization (ERAM) system at all twenty Air Route Traffic Control Centers (ARTCCs) across the National Airspace System (NAS). Mr. Seuch began his 32-year career in the United States Air Force as a RADAR Technician and then later as an Air Traffic Control Specialist. He served with honor and was awarded the prestigious Lt General Gordon A. Blake Aircraft Save Award for his extraordinary dedication to duty and application of knowledge in the field of Air Traffic Control.

Dr. Anthony Tvaryanas – Federal Aviation Administration

Manager, Aerospace Medical Research Division, Civil Aerospace Medical Institute



Dr. Anthony Tvaryanas is the manager of the Aerospace Medical Research Division at the Federal Aviation Administration's Civil Aerospace Medical Institute (CAMI). The division conducts basic and applied research in the biomedical, biodynamics and survivability/cabin safety sciences with the goal of enhancing crewmember, passenger, and air traffic control specialist health, safety, and performance in current and forecasted future civilian aerospace operations.

Dr. Tvaryanas has nearly 30 years of experience in aerospace and occupational medicine serving in clinical, research, and management positions. He served 24 years in the U.S. Air Force, starting his career as an operational flight surgeon. He transitioned to research and development at the Air Force Research Laboratory, where he led multiple projects addressing human systems integration challenges related to the adoption of unmanned aircraft systems. Later research explored the application of big data analytics and techniques to very large, combined operational and healthcare datasets to inform operational risk-based decision making. In 2017, he left the government and worked in the commercial sector as a senior scientist and program manager for an operational focused life sciences research program. Dr. Tvaryanas returned to the government in 2019, when he joined the FAA at CAMI.

He holds a B.S. in Chemistry from the George Washington University, an MPH&TM from Tulane University, an M.D. from the Uniformed Services University of the Health Sciences, and a Ph.D. in Modeling, Virtual Environments, and Simulation from the Naval Postgraduate School.

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Steering Committee Members

Ralph Venuto – Federal Aviation Administration

Computer Scientist, Communications Section of Lab Maintenance



Mr. Ralph Venuto started working for the FAA through the Intern Pathways Program in 2017 during his senior year of undergraduate studies. Later that year, he graduated from Stockton University with a degree in computer science. He currently works at the William J. Hughes Technical Center, in the communications section of lab maintenance as a computer scientist.

Mr. Venuto and his team support various testing activities in the labs as well as installing, modifying, and configuring computer systems, computer networks, and digital voice communications systems. He has solely developed multiple web applications that support lab maintenance for data management such as an inventory management system, and a system for submitting, approving and recording system changes. When away from work, Mr. Venuto enjoys many hands-on activities, including but not limited to building DIY home improvement projects, spending time with his dog Vanna, and playing chess and puzzle games.

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Featured Guest Speakers

Dr. Angela Campbell – Federal Aviation Administration *Manager, Fuels and Energy Section*



Dr. Angela Campbell is currently the acting manager of the Fuels and Energy Section at the FAA Technical Center where she oversees research on alternative fuels for general aviation, electrical systems, and electric propulsion. Prior to her current position, Dr. Campbell joined the FAA as an Aerospace Engineer at the FAA William J. Hughes Technical Center in 2015. In her role as an Aerospace Engineer, Dr. Campbell conducted research on technology and training solutions for commercial aircraft that mitigate risks that occur during the approach and landing phase of flight. The goal of this research was to reduce the number of accidents that happen at or near an airport such a runway overruns and loss-of-control in-flight. Her specialties include simulation, experiment design, and data analysis.

Prior to joining the FAA, Dr. Campbell completed her Ph.D. in aerospace engineering at Georgia Tech in December 2014. During that time, she also worked at NASA Glenn Research Center through a student fellowship program where she developed a method for analyzing the reliability of electric propulsion systems. Dr. Campbell received her M.S. in aerospace engineering in May 2012 from Georgia Tech, and she received her B.S. in aerospace engineering in May 2009 from the University of Miami. In her free time, Dr. Campbell enjoys competitive swimming, disc golf, and traveling.

Ronicsa Chambers – Federal Aviation Administration *Manager, Diversity and Inclusion*



Ms. Ronicsa Chambers is the Manager of Diversity and Inclusion at the Federal Aviation Administration (FAA). Prior to this position, she spent over fifteen years in aviation finance. She is a proud graduate of the Florida A&M University. Next, she obtained both a Professional Certificate in Leadership and a Master's Degree in Business Administration from John Hopkins University. She was awarded the Edward W. Stegman award for academic excellence for maintaining a 4.0 GPA while pursuing her degree.

Her career path has included many diverse experiences, including three professional internships during college. Upon graduation, she joined the Amoco Oil Company as a Marketing and Strategic Planning executive. After receiving her MBA, her career at US Airways began and she eventually became a Financial Comptroller.

In 2005, she continued her career in aviation finance at the FAA. In 2009, she became the Comptroller for the Technical Training Division, the first African- American woman to hold that position. After completing a Detail in Air Traffic Recruitment, she recognized a unique opportunity to work in the area of Diversity & Inclusion becoming the Manager of the ATO Diversity & Inclusion team. In 2019, she was able to merge to areas that she is passionate about, aviation and HBCUs (Historically Black Colleges and Universities), serving as Program Lead for the FAA HBCU Program Initiative. In her free time, she volunteers in the community through her sorority, church and other civic organizations. She also enjoys planning events for her family and friends, mentoring, playing with her daughter's puppy and books on audible.

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Featured Guest Speakers

Lyndsay Digneo – Federal Aviation Administration

Program Manager, Aviation Science, Technology, Engineering, and Math (AvSTEM) Program



During her 17 years at the Technical Center, Ms. Lyndsay Digneo has managed several laboratory environments, led research efforts for emerging aviation weather capabilities, conducted test and evaluation for several aviation weather programs, and collaborated with representatives from other government agencies as well as industry and academia. She is an original member of the FAA Technical Center's AvSTEM program since its formation in 2015, and her participation has been instrumental in building the program's framework. As the AvSTEM Program Manager, she collaborates with educators and subject matter experts across the FAA and aerospace industry to develop aviation focused lessons to complement mathematics and science curriculum standards. Additionally, Ms. Digneo serves as an outreach ambassador and encourages students from elementary school through college to explore aviation

related career fields.

Throughout her career, Ms. Digneo has worked with nationally recognized engineering programs including Rowan University as a member of the Electrical and Computer Engineering External Advisory Board and The Ohio State University's Center for Aviation Studies through the FAA's Center of Excellence for General Aviation. Prior to joining the FAA, Ms. Digneo attended Drexel University, where she received a M.S. in Electrical Engineering in 2008. She also attended Rowan University and received a B.S. in Electrical and Computer Engineering in 2004.

Carole Mattessich – Smart Airport and Aviation Partnership

Director



Carole M. Mattessich, Esq., is Director of the Smart Airport and Aviation Partnership (SAAP), centered in Southern New Jersey. Established through a Regional Innovation Strategies Grant from the U.S. Economic Development Administration, SAAP is helping transform Southern New Jersey's innovation ecosystem by incubating, accelerating, and attracting new businesses into a high-tech cluster. The companies in the cluster will leverage "smart" infrastructure and Internet-of-Things technologies for airport and aviation applications in collaboration with the Federal Aviation Administration (FAA) and airports in both Atlantic County and Cape May County.

Since 2012, Ms. Mattessich has served in Economic Development leadership roles. She holds a law degree from Catholic University Law School, where she served as Editor-in-Chief of the Law Review. She was a Law Clerk on the United States Court of Appeals for the Third Circuit and her subsequent legal experience included major litigation involving leading-edge internet technology. She has worked as a journalist in New Jersey where she received several honors for excellence from the New Jersey Press Association. Ms. Mattessich brings to SAAP an intimate knowledge of Southern New Jersey aviation business opportunities, having assisted in building the Cape May County UAS Program for five years.

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Featured Guest Speakers

Lauren Moore, Jr. – Atlantic County Economic Alliance President



Lauren H. Moore, Jr. is currently the President of the Atlantic County Economic Alliance (ACEA). The ACEA's core mission is to drive economic growth in Atlantic County through strategic planning and public-private partnerships that attract, retain and support a diversity of businesses and industries, create quality jobs and lower property taxes.

As President of the ACEA, Mr. Moore leads economic development efforts for the Atlantic County region and maintains a broad range of responsibilities. These include working with state, local and federal business assistance and incentive programs; assisting businesses in commercial real estate site selection services; advising and guiding companies on regulatory and permitting matters; developing and encouraging domestic and foreign-based firms to invest in Atlantic County; and promoting and marketing Atlantic County as a place to live, work and do business.

Mr. Moore previously worked as the Executive Director of the New Jersey Business Action Center (BAC) where he reported to the Lieutenant Governor and oversaw all units of the BAC including Business Advocacy, Planning Advocacy, Small Business Advocacy, the Call Center and the Office of International Business Development and Protocol.

Mr. Moore has more than 30 years of professional experience, holding numerous management positions in government. He has a Bachelor's Degree in Environmental Science from Stockton University and is a licensed New Jersey professional planner and member of the American Institute of Certified Planners (AICP).

Ariel Scheirer – The Scheirer Group Principal



Ariel Scheirer leads The Scheirer Group, a premier consulting group that specializes in strategy for organizations and self-paced personal finances programs for women leaders. As Principal of The Scheirer Group, Ariel leads multi-disciplinary teams, to address long-standing technical and process challenges in large organizations. In 2020, she launched a new program to support women leaders in making decisions with big financial outcomes. Prior to starting The Scheirer Group, she founded and sold an airplane rental business, and enjoyed working in marketing, legislative, and financial management roles in aerospace and international development. She holds a Master's Degree in Quantitative Methods from Columbia University and a Bachelor's Degree in International Studies from American University. In her spare time, she enjoys running marathons, and rehabbing houses with her husband and four children.

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum Challenge Finalist Teams

Embry-Riddle Aeronautical University

"Applying UAS for Wildlife Hazard Management at Airports"



Anthony Chimino



Jose Cabrera



Matthew Schwarz



Nathan Woolf

B.S. in Aeronautical Science

B.S. in Unmanned Aircraft Systems Science

Team Members: Anthony Chimino, Jose Cabrera, Matthew Schwarz (Team Lead), Nathan Woolf
Faculty Advisors: Prof. Flavio Mendonca (Lead Advisor), Prof. John Robbins, Prof. Ryan Wallace,
Prof. Nickolas Macchiarella, Prof. Kevin Adkins

Hampton University

"Inspector Drover"



Ryan Ford

B.S. Aviation Management: ATC



Julian Payne-Dillard

B.S. Aviation Management: ATC



Ellis Woodyard

B.S. Flight Education



Myles Divinity

B.S. Flight Education



Montá Williams Jr

B.S. Aviation Management: Admin



Griffin Weathers

B.S. Flight Education

Team Members: Ryan Ford, Julian Payne-Dillard (Team Lead), Ellis Woodyard, Myles Divinity,
Monta Williams, Jr., Griffin Weathers
Faculty Advisor: Prof. Andrew Smith

2021 FAA Challenge: Smart Airport Student Competition Virtual Forum

Challenge Finalist Teams

Rowan University

"ARKE: Public Safety - Situational Intelligence Platform"



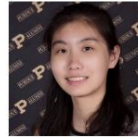
Quinn Joyce

B.S. Aerospace Engineering



Eric Eagon

M.S. Aerospace Engineering



Xingmei Zhu

B.S. Aerospace Engineering



James Pannullo

B.S. Aerospace Engineering



Austin Barrow

B.S. Aerospace Engineering



Brendan Kerr

B.S. Data Science



Dylan Kerr

B.S. Aerospace Engineering

Team Members: Matthew Guardiani, Cole Kirstein, Brandon Carmosino, Steven Jiang,
Matthew Schofield, John Stranahan, Benny Liang, Brandon Graham (Team Lead)

Faculty Advisors: Prof. Hong Zhang (Lead Advisor), Prof. Ratneshwar Jha