

FIRST RESPONDERS SPECIAL REPORT

ADVANCED AIR MOBILITY INSTITUTE





-DEAN RUDOLPH

"I have seen firsthand how emerging technologies are not only supporting first responders today but reshaping what will be possible tomorrow. Honoring their courage and sacrifice is more than tradition — it is a commitment to building a future where innovation stands beside those who protect and serve."



ACKNOWLEDGEMENT

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Acceleratize is dedicated to accelerating innovation and operational excellence across aviation, aerospace, and advanced air mobility. We combine deep industry expertise with a forward-looking approach to help organizations navigate certification, regulatory compliance, and manufacturing operational approvals and scaling with precision and confidence.

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At Acceleratize, our mission is twofold: provide specialized consulting services that support operational and regulatory success, and develop industry-leading tools and products that empower organizations to scale safely and sustainably. We understand the unique challenges that pioneers in AAM and aerospace manufacturing face, and we partner closely with our clients to deliver tailored solutions that foster growth, compliance, and market leadership.

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MESSAGE FROM THE PRESIDENT

In this 2nd edition of our First Responders Special Report, we celebrate class of again а extraordinary individuals who stand as the living embodiment of our Guiding Principle of Safety—our first responders around the world. Their split-second decision making and unwavering resolve navigate the hairpin turns between life and death daily. They are not just guardians; pioneers whose field they are expertise is directly shaping the impact of Advanced Air Mobility.



The pages that follow showcase how their frontline experience continues to transform theoretical possibilities into practical, life-saving realities. This collaboration represents the finest synthesis of human courage and technological advancement—a partnership that doesn't just respond to emergencies but fundamentally reimagines what's possible when minutes matter most. Thank you sincerely to our Title Sponsor, Acceleratize, as well as our Featured OEM, Jump Aero, for their support of our public acceptance outreach efforts. The results of our semi-annual Global AAM Forum series consistently reflects unanimous consensus that Emergency Response and Air Medical Transport are the most important use cases that society should prioritize. Please join me in showing our gratitude to public safety personnel who sacrifice to protect our communities from harm.

DC Slow

—Dan Sloat Founder & President Advanced Air Mobility Institute

Note: A separate report, 'Veterans within Advanced Air Mobility,' will be published by 11/2025 to recognize our brave service members.

LETTER FROM THE CONTINUITY OFFICER



As a 15-year veteran of the fire service, I approach this second edition of our Advanced Air Mobility (AAM) Special Report with a deep sense of purpose.

First responders know better than anyone that success often hinges on time, access, and the tools available in critical moments. While public recognition is appreciated, what responders truly need are solutions — technologies that close operational gaps, overcome barriers, and improve outcomes when every second counts.

Throughout my career, I have witnessed the heartbreaking consequences of delayed arrivals, limited resources, and impossible choices made under extreme pressure. The aerial technologies and innovations highlighted in this report are more than advancements — they are the answers we have long hoped for. They represent a future where help can arrive faster, reach farther, and operate more effectively in the moments that matter most.

To my fellow first responders: this is about more than faster vehicles or smarter systems. It is about reshaping the future of emergency response. For too long, you have borne the weight alone. It is time for technology to shoulder some of that burden and stand beside you when the call comes.

—Dean Rudolph Continuity Officer First Responders Special Report

ROBERT GRAND

Robert Grand is a Battalion Chief with Eugene-Springfield Fire, bringing over 22 years of experience leading complex fire, EMS, and technical rescue operations. He is a nationally certified paramedic and has served in the field as a firefighter, paramedic, fire captain, and now chief officer.

Throughout his career, Robert has built a reputation for operational excellence, decisive leadership under pressure, and a relentless drive to improve emergency response. He has led large-scale incidents, managed Aircraft Rescue and Firefighting (ARFF) operations at a major regional airport, and helped develop department training programs focused on readiness, safety, and modern tactics.



His leadership philosophy is built on three principles: discipline in action, innovation with purpose, and service before self. His work with AKUTE reflects his commitment to pushing emergency care forward, merging experience with technology to create a faster, stronger, and more connected response system.

Today, Robert is passionate about advancing emergency medicine through technology that shortens the time between injury and intervention. His work with Akute supports this mission by pioneering the use of eVTOL aircraft to deploy paramedics directly to patients, reshaping how critical care is delivered in the field. Robert believes the future of emergency response lies in smarter, faster deployment models that reduce barriers to lifesaving interventions.

With real-world experience working on medic units, fire apparatus, and as an incident commander, Robert brings a ground-level perspective to new solutions. He understands the realities field crews face every day and is committed to innovations that make first responders more effective and help save more lives.

When not leading teams or advancing emergency response initiatives, Robert enjoys staying active, traveling, and spending time with his family. He remains deeply committed to building a future where emergency medical care is faster, smarter, and within reach for every critical patient.

AMELIA FRASURE



I am a graduate of East Carolina University with a degree in Criminal Justice. Shortly after graduation, I began my law enforcement career in 2018 by attending Basic Law Enforcement Training at Pitt Community College in Winterville, NC. In January 2019, I joined the Greenville Police Department, where I served until October 2024.

It was during my time in law enforcement that I was first introduced to drone and robotics technology—a discovery that quickly became a passion. I joined the department's Drone Unit in 2020 and was appointed UAS Program Manager in 2022. At our largest, we had twelve drone pilots and six aircraft. I was responsible for training, pilot certification, airspace deconfliction/waivers, and all UAS operations. We routinely deployed drones for missions such as: missing people, fugitive apprehension, warrant services, and large event over-watch. One of my main goals while there was to set the program up for success for future DFR (Drone as First Responder) Operations, where drones respond to calls for service and relay back crucial information before officers ever arrive on scene.

During the 2020-2022 time frame, there was very little structured and affordable training for those of us in the field, which lead me to my next adventure. In 2023, I joined Public Safety UAS, a company dedicated to delivering high-quality drone training to public safety professionals. All PSU instructors are either current or former first responders that have become drone experts in their field.

I created a Drone Search and Rescue class that I began teaching with the company, initially in North Carolina but our classes are now taught across the US and internationally! In October 2024, I transitioned out of law enforcement to pursue a new career path. I am now a Solutions Engineer at Skydio, working within our SLED (State, Local, and Education) division. In this role, I travel across the country collaborating with sales and customer success teams to understand client needs, deliver product demonstrations, and provide technical guidance on Skydio's cutting-edge drone solutions. One of the most rewarding aspects of this position is that I still get to engage with law enforcement and public safety professionals on a daily basis.

"We are living in a historical era for unmanned aircraft systems. I'm thrilled to be part of this movement, helping to shape the future of public safety through creativity, innovation, and a shared commitment to advancing drone technology."

CHRISTOPHER TODD

Christopher Todd is the Founder and Executive Director of AIRT (Airborne International Response Team), the leading 501(c)3 non-profit organization supporting the use of uncrewed and autonomous technology for public safety, emergency services, humanitarian assistance, and disaster relief (HA/DR). AIRT is the official home of the Drones For Good[®] and AAM For Good[™] programs designed to highlight the positive benefits of advanced aviation for communities and stakeholders of all sizes. AIRT is also the home of the DRONERESPONDERS program, supporting more than 15,000 public safety and emergency services organizational members from over 85 countries around the globe, and the DRONERESPONDERS state working group model which includes the Florida Public Safety Coordination Group (FLOGRU) supporting over 500 drone operators representing more than Florida government agencies, and the newly launched Texas Public Safety Coordination Group (TEXGRU) which was announced in 2025. Through its AAM For Good[™] program launched in 2025, AIRT is exploring the many ways advanced air mobility and related technology can serve communities for public safety and emergency services operations.



AAM For Good will highlight use cases, success stories, and other developments that advance the aviation sector in this regard.

Mr. Todd is also the Founder and President of Airborne Response, a division of Safe Pro Group, Inc. (NASDAQ: SPAI), where he oversees the company's business operations and strategic partnerships. His focus includes emergency management, disaster operations, public safety, homeland security, critical infrastructure protection, counter-UAS (C-UAS), and their combined intersection with uncrewed and autonomous systems across the air, ground, and maritime domains.

Chris a FAA-certified Remote Pilot, USCG licensed master for vessels not more than 100 gross tons, and Certified Emergency Manager (CEM) who also serves as a command staff member of the Southeast Florida All-Hazards Incident Management Team (SE FL AHIMT), based at the Palm Beach County Fire Rescue Department in Florida.

He holds an Executive Master of Professional Studies (EMPS) degree in Emergency and Disaster Management from Georgetown University in Washington, D.C., as well as a Certificate in Critical Infrastructure Protection from TEEX. He completed graduate coursework in crisis communications at Northwestern University and holds a Bachelor of Arts (BA) degree in Journalism and Mass Communication from Drake University.

D. BROOKS DAVIS



Brooks is an accomplished business development professional with over 30 years of experience in sales, account management, and business development. Specializing in the defense, security, and public safety industries, Brooks has built a successful career sourcing and closing high-value sales opportunities in both government and commercial sectors. Known for his ability to develop lasting client relationships, Brooks excels in networking and maintaining a high level of trust with clients, ensuring long-term success and business growth.

For the last four years Brooks has been engaged in the cUAS (counter-Unmanned Aerial Systems) sector, Brooks has always strived to be a Subject Matter Expert in the verticals he is working within, and earned his Part 107 Pilot License and flies drones to get a better understanding of their handling capabilities while carrying payloads. He holds a DoD Secret clearance.

In his current role as VP of Business Development at WhiteFox Defense Technologies, Brooks leads cUAS sales activities across North and South America, focusing primarily on U.S. Department of Defense (DoD) clients.

He successfully created and manages an international sales team, securing significant sales. Before WhiteFox, Brooks served as Director of Public Safety Sales at SkySafe, where he sold the company's drone detection-as-aservice platform in North America, closed the first commercial sale in company history. Brooks also served as Director of Law Enforcement Sales at Echodyne, where he helped establish radar systems for drone detection and airspace awareness. Brooks' early career in law enforcement began in 1988, when he received a Law Enforcement Officer Certification from the Tampa Police Academy.

He served as a Reserve II Officer at the Hillsborough County Sheriff's Office from 1988 to 1997, enforcing state laws and county ordinances, primarily as a member of the marine unit. From 1997 to 2018, he was a Reserve Officer with the Florida Fish and Wildlife Conservation Commission (FWC), Division of Law Enforcement (formerly the Florida Marine Patrol). In this role, He enforced Florida's laws in a maritime capacity and contributed to disaster response efforts in the Southwest region. Brooks holds a Bachelor of Arts in Economics from the University of South Florida and a Master's degree in Homeland Security with Honors from American Military University. These academic achievements complement his practical experience, further strengthening his ability to navigate the complexities of national security and emergency management.

Outside of work, Brooks has been married to his wife, Bonnie, for 30 years, and they have two adult children. They reside in Tierra Verde, Florida where Brooks enjoys being an avid boater and scuba diver.

SPOTLIGHT

MEDELLÍN FIREFIGHTERS: PIONEERING DRONE TECHNOLOGY TO SAVE LIVES AND INSPIRE A CITY

In the heart of Colombia's innovation hub, the Medellín Fire Department has cemented its reputation as a trailblazer in emergency response. Their recent deployment of drone technology to locate a missing Polish paraglider during the Santa Fe de Antioquia World Cup underscores their commitment to saving lives through cutting-edge tools and unwavering dedication. This mission, paired with their historic pursuit of Colombia's first public UAS (drone) operator certification, positions them as a global model for modern emergency services.

When a 69-year-old Polish paraglider disappeared mid-flight, leaving only a brief health update before losing contact, the Medellín Firefighters mobilized immediately. For over two weeks, their specialized drone unit combed steep riverbanks and dense terrain along the victim's flight path. Equipped with thermal imaging, 30x zoom cameras, and Al-powered mapping software, their drones provided real-time data to ground teams and helicopters, optimizing search efforts in hazardous conditions. Despite challenges—rugged landscapes, fading signals, and time-sensitive risks—the team exemplified resilience, working alongside local firefighters, aviation units, and paraglider observers to leave no stone unturned.

The Medellín Firefighters' investment in drone technology has revolutionized emergency response. Drones now serve as "first responders," reaching inaccessible areas faster than traditional methods while minimizing risks to human crews. During the Santa Fe mission, thermal cameras detected body heat signatures in dense foliage, while zoom lenses captured critical details from altitudes of 500+ feet. Their software, designed to analyze flight patterns and terrain data, narrowed search zones by 60%, accelerating rescue timelines.

But their innovation extends beyond hardware. By integrating drones with manned aviation and ground teams, they've created a collaborative ecosystem that multiplies impact—a strategy now studied by agencies worldwide.

Drones aren't just tools; they're lifesaving partners," explains Juan David Uribe, head of the UAS unit. "Certification ensures we meet global benchmarks, enhancing trust in our missions." As the first public entity in Colombia to pursue formal UAS operator certification under Aerocivil regulations, the Medellín Firefighters are setting a national standard. This rigorous process, focused on operational safety and technical excellence, reflects their proactive approach to emergency preparedness. Their efforts have already inspired policy discussions, paving the way for broader drone adoption in Colombian public safety. Beyond rescues, the Firefighters' drone program has transformed Medellín's disaster management capabilities. From monitoring forest fires to assessing flood damage, their UAS unit provides critical data that protects both citizens and infrastructure. The team also trains communities in drone-assisted emergency protocols, fostering a culture of resilience.

ROB ROBERTSON

Sergeant Rob Robertson brings 17 years of public safety experience, with nearly a decade focused on uncrewed aviation. He leads the Arlington Police Department's Uncrewed Aviation Program, overseeing a team of 46 pilots conducting complex operations under CFR Part 107, Part 91, and Beyond Visual Line of Sight (BVLOS) authorities. Under his leadership, Arlington has become the most advanced and operationally capable public safety UAS programs in the North Texas region. Rob plays a key role in shaping the future of Advanced Air Mobility (AAM) as a Public Safety Pathfinder for the North Texas Key Site UTM project. In close collaboration with NASA and the FAA, he is advocating for a national preemption framework that safeguards first responder access to low-altitude airspace during emergencies. His focus is on ensuring that as commercial AAM platforms and autonomous systems scale into the National Airspace System, public safety remains a protected and prioritized user. Rob's operational insight brings real-world urgency to policy conversations, helping federal partners understand how AAM integration must support the life-saving missions carried out by first responders.

In terms of advancing UTM, Rob's was one of the first in the nation to conduct BVLOS Drone as First Responder (DFR 2.0) operations within stadium Temporary Flight Restrictions (TFRs). These missions, executed during highsecurity events at AT&T Stadium and Globe Life Field, showcase how UAS can reshape police response within high-density environments. Through coordination with the FAA, and federal security stakeholders, Rob shaped the foundation for integrating public safety UAS into stadium airspace. Uncrewed Traffic Management (UTM) protocol that account for both crewed and uncrewed assets are critical during these large-scale events, ensuring real-time deconfliction and mission continuity while prioritizing safety. Beyond his operational leadership, Rob holds national positions that allow him to influence policy and training. He is a FAASTeam Drone Pro for his region, and Vice President of Public Safety for the FPV Freedom Coalition, the second-largest FAA-recognized Community-Based Organization. He also serves as Legislative Chair for the Texas Public Safety Coordination Group (TexGru), fostering collaboration across agencies to support safe, responsible UAS integration throughout Texas. Rob also serves as an instructor with the Law Enforcement Drone Association (LEDA), where he contributes to the development of national and international best practices for UAS in public safety. He also produces educational content to make training more accessible for public safety pilots. As a member of the LEDA committee, Rob represents the voice of law enforcement UAS professionals in policy development, working to ensure safe and effective public safety use. Through every initiative he leads, Rob remains committed to ensuring public safety has a seat at the table to shape the future of AAM. His goal is simple and urgent: to place robots in dangerous environments to protect human lives. His forward-thinking leadership continues to drive public safety innovation and influence the framework for how uncrewed systems will serve communities in the next era of aviation.

MACHLUF (MICKEY) MALKA

Mickey serves as Chairman of Kronos Group, DefenSync, and Kronomy, leading groundbreaking initiatives that integrate advanced drone technologies into first responder and critical infrastructure operations. With a strong vision for innovation, Mickey has positioned Kronos Group at the forefront of Drone Services, focusing on Drone as First Responder (DFR) programs that significantly enhance safety and operational efficiency for threatened communities, correctional facilities, and vital infrastructures. Mickey's vision and expertise were further demonstrated when he facilitated the introduction of a U.S.-based Blue UAS-listed drone company into Israel, expanding nation's access to advanced drone the technologies sensitive and high-threat for environments. He has overseen deployments in highly challenging conditions, including limited and GPS-spoofed areas, ensuring vital aerial support where traditional methods were too dangerous.

Under Mickey's leadership, Kronos Group has successfully enabled DFR capabilities during both routine operations and emergency situations, providing rapid aerial intelligence to minimize risk to personnel and deliver critical real-time situational awareness. His efforts have been pivotal in safeguarding lives and assets by empowering first responders with advanced drone support.

Beyond emergency response, Mickey's vision extends to improving municipal services by leveraging drones for traffic management and event monitoring, offering a safer and more effective solution for public safety and operational planning. His unwavering commitment to innovation, security, and community resilience places him among the distinguished leaders advancing the role of aerial drones in first response and public safety initiatives.

JOHN COLE

John Cole is a dedicated fire service professional currently serving as a Training Captain with the Port of Seattle Fire Department. With a career spanning over two decades, he has demonstrated unwavering commitment to firefighter training, emergency preparedness, and operational excellence, particularly within the specialized realm of Aircraft Rescue and Firefighting (ARFF).

Captain Cole's leadership was notably evident during the Port of Seattle Fire Department's annual live fire drills and the FAA-mandated Triennial Drill. In September 2020, amidst the challenges posed by the COVID-19 pandemic, he played a pivotal role in organizing and executing these critical training exercises. His efforts ensured that all four shifts underwent comprehensive live fire and auto extrication drills, maintaining the department's readiness and compliance with federal requirements. The success of these drills, conducted under stringent safety protocols, underscored his ability to adapt and lead in complex situations.

Beyond his responsibilities at the Port of Seattle, Captain Cole contributes to the broader firefighting community through his involvement with the ARFF Working Group, where he serves as the AAM/UAM Committee Chair. In this capacity, he focuses on integrating emerging aviation technologies into firefighting strategies, ensuring that fire departments are equipped to handle the evolving landscape of air travel and associated emergencies.

Captain Cole's career is marked by a blend of hands-on experience and strategic foresight. His dedication to continuous improvement and excellence in firefighter training has not only enhanced the capabilities of the Port of Seattle Fire Department but has also contributed to the advancement of fire service practices overall.

MATT SLOANE

Matt Sloane is the co-founder and Chief Strategy Officer at SkyfireAI. With over a decade of experience in public safety and drone technology, Matt has helped countless agencies integrate drones into their critical incident response. Prior to Skyfire, he worked as a medical news producer at CNN and served as an EMT. Matt is actively involved in shaping drone regulations and policy and is a licensed pilot. He frequently collaborates with law enforcement, fire departments, and emergency management teams to design tailored drone programs that meet operational and regulatory requirements.

In his role at SkyfireAI, Matt plays a key part in developing strategic partnerships and advancing the company's mission to enhance public safety through innovative unmanned systems. Through public speaking, industry panels, and advisory roles, Matt contributes to national conversations on the responsible and effective use of drone technology in emergency services.

FEATURED OEM

A NEW AIR MEDICAL SERVICE ENABLED BY ELECTRIC VTOL AIRCRAFT

Learn more at www.jumpaero.com

Imagine living in a rural area where the nearest ambulance is 25 minutes away or more. In critical emergencies, every second counts, and lives can be lost while help is still on the road. Jump Aero is changing that narrative with the revolutionary JA1 Pulse, the world's first electric vertical takeoff and landing (eVTOL) aircraft purposebuilt for emergency medical response.

Jump Aero isn't just advancing aviation, it's empowering first responders to save lives faster than ever before. Designed to reach the scene of an emergency within eight minutes of a 911 call, the JA1 Pulse flies at speeds up to 288 mph, slashing traditional rural response times by more than half. This game-changing speed brings professional paramedics and lifesaving equipment directly to patients long before a ground ambulance could arrive.

Unlike traditional air ambulances, the JA1 Pulse isn't designed to transport patients. Instead, it's focused on what matters most: getting expert care to the scene immediately. First responders, trained as pilot-paramedics, use Jump Aero's innovative technology to stabilize patients on-site, dramatically improving survival chances from cardiac arrest, strokes, trauma, and more.

Community support for Jump Aero's mission is strong, because when an eVTOL lands in your backyard, it's not a taxi; it's a lifeline. Rural counties and state agencies across the U.S., from Utah to Oregon and Texas, have already signed on to integrate Jump Aero into their emergency services. The JA1 Pulse requires no complicated vertiport infrastructure; it operates from existing small airports or emergency service bases, making deployment fast, flexible, and financially sustainable.

What sets Jump Aero apart isn't just the technology, it's the heart behind the mission. Every design decision, from the aircraft's simplified controls to its quick charging systems, is driven by one goal: to save lives. And the business model is as sound as the social impact. Surveys show that over 55% of rural Americans would gladly pay a small subscription fee for this faster emergency care, demonstrating the immense market need and support.

Jump Aero believes in a future where no one dies simply because help couldn't get there fast enough. Their JA1 Pulse is ready to turn that vision into reality — in America's rural heartlands and beyond. With Jump Aero, the future of emergency response isn't just coming, it's arriving faster than ever.

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First Responders within AAM Special Report

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Dean Rudolph Continuity Officer firstresponders@aaminstitute.org

Amin Vafadar Executive Director amin@aaminstitute.org

Kristen Walter Public Relations Director news@aaminstitute.org

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The Advanced Air Mobility Institute is an international nonprofit research center dedicated to educate and advocate for the broadest public benefit through the aviation ecosystem globally. Ultimately, the AAM Institute is committed to protecting people, their rights, and the systems we rely on. We seek to accelerate access to these new technologies in an ethical and responsible way. For emerging aviation technology, we are increasing public awareness, achieving public acceptance, and earning public trust.

