



Small Unmanned Aircraft Systems Operations (sUAS) Course

LOCATION:

Savannah Convention Center;
Room 102

COURSE LENGTH:

Three days, 24 classroom hrs.

DATE / TIME:

Monday, July 18 –
Wednesday, 20, 2016
0800 – 1700 hours each day

INSTRUCTORS:

CHIEF DON SHINNAMON

Port St. Lucie (FL) Police Department
(Retired)

Chief Shinnamon currently serves as a public safety aviation consultant. He most recently served as the Chief of Police for the City of Port Saint Lucie, FL, retiring from public service in late 2010. Chief Shinnamon served as the chair of the Aviation Committee of the International Association of Chiefs of Police (IACP) for over 15 years. In 2008, he was selected to serve on the first FAA rule making committee to draft regulatory language to integrate small-unmanned aircraft systems into the national airspace system.

A certified police officer and firefighter, Chief Shinnamon holds a Master's degree from the University of Baltimore and completed a fellowship at Harvard University. He is a commercial pilot, rated in both helicopters and airplanes.

ALAN FRAZIER

Assistant Professor, Aviation
University of North Dakota

Bringing 34 years of experience in local, state and federal law enforcement agencies, Alan spent the majority of his career with the Glendale (CA) Police Department, where he served in a wide variety of assignments including officer-in-charge of the Air Support Unit.

Alan is currently employed as an assistant professor of aviation at the University of North Dakota, where he teaches helicopter and public safety related courses. He is also employed as a Grand Forks County (ND) Deputy Sheriff, supervising the department's Unmanned Aircraft Systems Unit. Alan possesses an FAA Airline Transport Certificate with airplane, helicopter, glider and flight instructor ratings.

COURSE OBJECTIVES: This course is designed to provide the student with a review of Small Unmanned Aircraft System (sUAS) start-up, missions and applications, FAA regulations, a review of the legal and privacy issues, management issues and all facets of starting and operating a successful program. The course is a must-have for agencies looking to start a sUAS unit. Success completion requires attendance at all 24 hours of classroom courses.
Maximum enrollment: 60

INTENDED AUDIENCE: This course is intended for law enforcement personnel, both sworn and non-sworn, researching the feasibility in starting a sUAS unit. In addition, the course is intended for management and supervisory law enforcement personnel who may oversee such a unit.

COURSE OUTLINE

DAY ONE		
0800 – 0900	Introductions, Missions and Course Review	Don Shinnamon
0900 – 1000	Introduction to sUAS	Alan Frazier
1000 – 1100	Implications of sUAS	Dr. Andrew Shepherd, PhD
1100 – 1200	sUAS Missions and Applications	Alan Frazier
1200 – 1300	Lunch On Own	
1300 – 1400	Public Acceptance of sUAS	Don Shinnamon
1400 – 1600	Privacy Issues	Douglas Marshall
1600 – 1700	Data Retention Considerations	Ben Miller

DAY TWO		
0800 – 1000	Regulatory Issues	David Morton
1000 – 1100	Legislative Issues	Panel (Facilitated by Marshall)
1100 – 1200	Marketing Your sUAS Unit	Panel (Facilitated by Miller)
1200 – 1300	Lunch On Own	
1300 – 1400	Crash Scene/Crime Scene Photography	Ben Miller
1400 – 1500	Aerial Searching Techniques	Alan Frazier
1500 – 1700	Public Safety sUAS Case Studies	Miller/Frazier/Cohen

DAY THREE		
0800 – 1000	Managing a sUAS Unit	Don Shinnamon
1000 – 1200	Purchasing Decisions	Ben Miller
1200 – 1300	Lunch On Own	
1300 – 1400	sUAS Case Studies	Patrick Fung
1400 – 1600	sUAS Case Studies	Brad Muir
1600 – 1700	Course Review and Critique	Don Shinnamon

AIRBORNE LAW ENFORCEMENT ASSOCIATION / SUAS OPERATIONS COURSE / INSTRUCTOR PROFILES:

BENJAMIN MILLER | Draganfly Innovations, Inc.

Ben is a 14-year veteran of the Mesa County (CO) Sheriff's Office and, among other duties, is the Unmanned Aircraft Program Manager. Six years ago the concept of an unmanned aircraft program began with Ben and in the years since, he has been very involved with the United States Department of Justice and its coordinating effort to assist the Federal Aviation Administration with regulation regarding the use of UAS by public safety organizations, now called the "common strategy." Ben has offered guidance to other departments across the country and continues his focus on the integration of UAS. He now manages an operational team and has flown many Public Safety related missions. His team is also broadening its service base, determined to demonstrate UAS as a community resource, in assisting with aerial survey work for his county's Public Works department, the Western Colorado 'Museum of the West' with the survey of a paleontological dig site and is exploring the applications of Agricultural inspection, as well.

Ben is considered a thought leader on the applications of small-unmanned aircraft and his perspective has been sought in presentations at UAS gatherings across the United States and Canada, including testimony to the United States Senate Judiciary Committee and well as other members of Congress at both the State and National levels. His expertise has been sought by prestigious organizations such as NASA, the FAA's NextGen Institute and the United States Department of Defense.

Ben is the recipient of the Mesa County Sheriff's 2011 Excellence Award as well as the 2012 AUVSI Member of the Year award.

PATRICK FUNG | Netherlands National Police Force

Patrick Fung is a police sergeant working in the Aviation Department of the National Police in the Netherlands. He has been working for the police for 15 years, the last 9 years he worked on the field of aviation law enforcement, aircraft accident investigation on behalf of the police and is very experienced in Aviation Law. He is now working in the project group for using RPAS within the Netherlands National Police.

He is a licensed fixed wing pilot and one of the first licensed unmanned pilots for the National Police.

SERGEANT ANDREW COHEN | Miami (FL) Police Department

Andrew Cohen was born and raised in New York City where he began his Law Enforcement Career. He later joined the Miami-Dade Police Department and relocated to South Florida. In his 22 years in law enforcement, he has worked a variety of assignments to include Patrol, General Investigations, Auto Theft Investigations and Sexual Crimes. He served as a Field Training Officer for several years and has instructed extensively for both in-service and academy classes, in various subjects to include; Traffic Crash Investigations and Report Writing, Professional Traffic Stops, Police Traffic Radar and Laser, Standardized Field Sobriety Testing (SFST) and Drinking Lab Workshops, Vehicle Operations and Training the Field Training Officer. Sergeant Cohen has a commercial rotorcraft and fixed-wing license with an instrument rating.

Since November of 2004, he has been assigned to the Aviation Unit. Andrew was instrumental in the development of the MDPD Unmanned Aerial Vehicle (UAV) program, creating policy and procedure for the utilization and deployment of the UAV. He oversaw the initial training of personnel as pilots, and conducts recurrent training. He was responsible for coordinating the FAA's on-site testing for approval, completion of paperwork associated with approval of Certificate of Authorizations for both program testing locations and operational areas. He consults regularly with local and national media affiliates regarding the Miami Dade Police Departments UAV program.

ANDREW SHEPHERD, PhD | Sinclair Community College, Dayton, Ohio

Dr. Andrew Shepherd serves as the Director for Unmanned Aerial Systems at Sinclair Community College in Dayton, Ohio. With more than a decade of experience in the defense industry and academia focused on modeling and simulation, research, course development, accreditation, instruction, and mentorship, Shepherd offers extensive knowledge in many areas of technology, higher education, and workforce training and development. He serves as the Managing Editor for the Journal of Unmanned Aerial Systems, an Editorial Advisory Board Member for the Two Cultures Journal, and as a Board Member for the Aviation Trail, a non-profit corporation in partnership with the National Park Service to promote Aviation Heritage in the Dayton region. Named to both Dayton's top 40 Under 40 and top 100 Defense and Aerospace Professionals by the Dayton Business Journal in 2014, Shepherd is an active member of his community and broader aerospace industry.

BRAD MUIR | Ontario Provincial Police

Profile forthcoming.

DAVID MORTON | FAA (Retired)

*David Morton is a retired Aviation Safety Inspector and the National Law Enforcement UAS Program Resource manager within the FAA's Flight Standards UAS Integration Office. He has worked in the FAA since his 2008 retirement from the Department of Justice, United States Marshals Service, Air Operations Division in Oklahoma City where he served as the Director of Safety and a Captain flying domestic and international operations for the Justice Prisoner and Alien Transportation System. He is rated in multiple transport aircraft including the Boeing 737, 727 and DC/9-MD-80 and is a former Naval Aviator. Mr. Morton has accumulated over 14,000 flight hours. He is a graduate of the Navy Post-Graduate School's Aviation Safety School and the University of Southern California's Aviation Safety Management and Accident Investigator certificate program. He graduated with Honors from the Florida Institute of Technology in 1979 with a Bachelor of Science in Transportation Technology. He later earned a Master of Science in Aerospace Science with minor in Aviation Business Management and Safety from the Embry-Riddle Aeronautical University. Mr. Morton is a veteran of operations Desert Shield and Desert Storm and has received several personal decorations during his military career. He has been published in AIR BEAT Magazine and is frequently invited to speak to diverse government and civilian audiences about Unmanned Aircraft Systems, Aviation Safety, Safety Management Systems, Organizational Culture and Organizational Change Management. In 2003, he was awarded the Interagency Committee for Aviation Policy (ICAP) **Federal Aviation Professional of the Year** for significant contributions to Federal Government Aviation Safety and he remains an active member of the ICAP. Most recently, Mr. Morton was recognized as the FAA's **Aviation Safety Inspector of the Year**, and this past November, he was distinguished as a recipient of the **Department of Transportation "Secretary's Silver Medal Award"** for Meritorious Contributions to Aviation Safety. He is married to the former Ms. Natalena S. Scanlin of Orange Park, Florida, and the family resides in Northern Virginia. They have eight children (three of which they adopted from Ethiopia). Dave was awarded the ALEA UAS award of excellence in 2015.*

DOUGLAS MARSHALL | President, True North Consulting, LLC

President, TrueNorth Consulting, LLC, an aviation consulting organization specializing in regulations, standards and legal issues relating to the integration of unmanned and remotely piloted aircraft into civil airspace.

Division Manager, UAS Regulations & Standards Development at the Physical Science Laboratory, New Mexico State University, previously a Professor of Aviation at the University of North Dakota. He has been engaged full time on UAS related activities for over 9 years, is the co-editor of two books related to aviation, co-author of the recently published "Introduction to Unmanned Aircraft Systems" and is the author of numerous published articles on aviation law, regulations and remotely piloted aircraft.

He has served on RTCA SC-203, ASTM F-38 and SAE G-10 Committees, the AUVSI Advocacy Committee, the Arctic Monitoring and Assessment Program UAS Expert Group, the Small UAS Aviation Rulemaking Committee and the current UAS Aviation Rulemaking Committee. He has also served on the Steering Committee, Civil Applications of Unmanned Aerial Systems Conference, Boulder, CO, and several other committees dedicated to the development of UA systems and has delivered presentations on international aviation regulations and airspace issues at conferences around the world.

Mr. Marshall received a Bachelor of Arts degree at the University of California, Santa Barbara in 1969 and a Juris Doctor from the University of California's Hastings College of the Law in 1972. He also holds a commercial pilot's certificate and has co-owned two GA aircraft.

In his pre-academia life he practiced law in the fields of maritime and aviation related litigation and employment law and was president and general counsel of a commuter airline.

Revised: May 26, 2016