

Leading with Innovation

NIC Virtual Conference
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Drones: Implications of Unmanned Aircraft

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A Panel Discussion in Three Parts

- Law Enforcement Applications
- Threats to Secure Facilities
- Drone Law

Polling Question

What is your current experience on drones at your agency?

(A) We have experienced drone intrusions

(B) We have implemented using drones

(C) We haven't had any issues with drones but are considering adding drone policy

(D) We don't have any experience with drones positive or negative and did not know it was an issue.

Law Enforcement Applications of Unmanned Aircraft Systems



Unmanned Safety Institute

Our Mission:

To improve safety in Unmanned Aircraft System operations

Our Philosophy:

The Unmanned Safety Institute is a professional training organization for UAS operators and proponents focused on improving safety in UAS operations through the adoption and modification of time honored aviation safety and training practices.

Routine Response to Calls

- Crimes in Progress
- Searches for Persons
- Traffic accident and crime scene photography
- Alarm Calls

Special Operations

- Crowd and traffic control at special events
- Pre-raid reconnaissance and intelligence
- Surveillance of high crime areas
- Disaster assessment
- Hazmat and radiological sampling/monitoring

Why Use Unmanned Aircraft

- Helicopter costs:
 - Average light turbine helicopter: \$1-2 M
 - \$300-550 per hour (without crew)
- UAS costs: \$1K-50K

Case Study Helicopter vs. UAS

- Case #16-35111
 - Same location but better visual perspective to SAO/Jury utilizing sUAS

UAS Flight Plan of Incident

- Aerial Videography Reconstruction

Crime Scene Reconstruction

- Mock Hit and Run Crime Scene 3D Reconstruction

Start-Up Suggestions

- Honesty and Transparency Critical
 - Don't hide information from community – Engage
 - Welcome the media and answer questions
 - Distribute Policies and Procedures to community



Slow and steady wins the race

- Make sure your agency has mission or goal in mind
- Seek other agencies who have successful UAS programs
- Research equipment for mission
- Seek General Counsel assistance in writing policies

Slow and steady wins the race

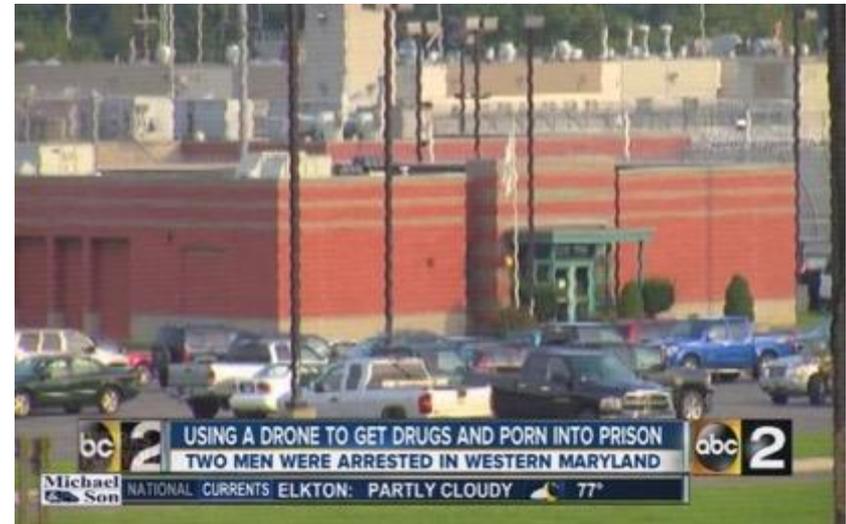
- Coordinate with FAA on obtaining authorization (COA)
- Get OEM authorized training



Drone/UAV Threats to Secure Facilities



Two men arrested in what is the first known plot in Maryland to use a drone to smuggle drugs, tobacco and pornography into a prison



Contraband Introduced to the Facility

- 11 DVDs with pornographic titles
- 51 packages of "Scooby Snax" — suspected synthetic marijuana
- 116 packages of buprenorphine
- Suspected tobacco
- Hundreds of rolling papers
- .40-caliber handgun

Quadra-copter Threat to Prisons

- Regular problem to prisons
- Gangs/Individuals utilizing drones to transfer contraband
- Drones found on three different prison grounds in Hong Kong

Contraband



Drone/UAV Threats to Secure Facilities



Thaddeus Shortz

Military veteran with prior UAV experience

Aviation Attorney Focusing on Drone Law

Jonathan Rupprecht, Esq.
Commercial Pilot & Flight Instructor
Rupprecht Law, P.A.

Polling Question

Is it legal to shoot down a drone if it is hovering over a prison?

- (a) Yes, because it is in prison airspace.
- (b) Yes, because it is outside of the FAA's jurisdiction if it maneuvers too low.
- (c) No, drones are aircraft and it is illegal to shoot down aircraft.

Are Drones Regulated?

- Drones are aircraft, not toys, and **ARE** regulated if they operate in the national airspace.
- There are multiple ways drones can get approved to fly
 - exemptions
 - waivers
 - Part 101, Part 107
 - airworthiness certificate plus waiver.

Statuses of Aircraft

Civil Aircraft

- Everything is this by default.

Public Aircraft

- Owned/Leased in 1 of 5 Ways.
- Governmental Function. (“Law Enforcement”)
- No Compensation/Reimbursement for the Flight.

Statuses of Aircraft

	Public (Some Regulations)	Civil (All Regulations)	
Unmanned	Declaration Letter+ Public COA	Recreational (Part 101)	Non- Recreational (Part 107 & Section 333 Exemption)
Manned	Declaration Letter	Recreational (Part 91)	Non- recreational (Part 119, 121, 135)

Can Prisons Use Drones?

Federal Laws

- Public COA - “Law Enforcement” is a governmental function.
- Part 107 - Civil
- Section 333 Exemptions

State Laws

- Many states have passed laws governing law enforcement use of drones.
- Warrant requirements and exceptions.

Civilians Flying Near a Prison

- Recreational
 - Not Prohibited
 - Registered and Identified
- Non-Recreational
 - Section 333 Exemptions
 - Documentation
 - Compliance
 - FAA cannot delegate

Civilians Flying Near A Prison

- Temporary flight restriction
- Interference with law enforcement or emergency response
 - Civil penalty not more than \$20,000
- May petition the FAA to prohibit or restrict operation of unmanned aircraft close to:
 - Fixed Site Facility
 - Other warranted locations
 - Protection of persons & property

Can I Jam the Drone?

- Communications Act of 1934
- FCC Regulations
- Criminal Code

What If We Want to Use the Shotgun?

Destruction of aircraft or aircraft facilities

“(a) Whoever willfully— (1) sets fire to, damages, destroys, disables, or wrecks any aircraft in the special aircraft jurisdiction of the United States or any civil aircraft used, operated, or employed in interstate, overseas, or foreign air commerce;” . . .

“shall be fined under this title or imprisoned not more than twenty years or both.”

What are your questions?



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The image displays the user interface for the NIC 2016 Virtual Conference. The header features the NIC logo and the text "2016 VIRTUAL CONFERENCE LEADING WITH INNOVATION". A vertical sidebar on the left contains a list of navigation options, each with a corresponding icon: SCHEDULE, LOBBY, PRESENTATION HALL, EXHIBIT HALL, RESOURCE ROOM, INNOVATION CHATS, DISCUSSION FORUM, CONFERENCE TUTORIALS, HELP DESK, WELCOME VIDEO, PARTICIPANT CONTACT INFO, USER PROFILE, and LOG OFF. The main content area is a virtual conference lobby with a large central screen displaying the NIC logo and a welcome message. Below the screen are three interactive panels: "Discussion Forum", "Conference Tutorials", and "Help Desk". A "Schedule" panel is also visible on the right. The background shows a modern conference hall with people and various icons representing different conference activities.

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National Institute of Corrections

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