UAS Use by Law Enforcement: A Case Study of Ethics and Community Perceptions

UAS: Use & Regulation
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History of the University of North Dakota UAS Research Compliance Committee

- July 2012–UND hears a proposal to collaborate with a local sheriff to study uses of UAS in law enforcement.

- August 2012–UND establishes an ad hoc committee to design an ethics committee to address privacy and other potential issues.

- October 2012–The UAS Research Compliance Committee is established as a University Presidential committee. Members are appointed and begin to address the first UAS proposed uses. Their responsibility is to review all research using UASs to ensure the research is done ethically.

- April 2013–The committee has a good sense of what would be acceptable to the community, based upon committee members' perceptions.

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Underlying Principles

- Risk vs. Benefit

- Transparency

- Community Standards Based Upon Community Representation

- Community Standards Confirmed by a Scientific Survey

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Typical Approved Proposals

- Missing Person Search (Approved 01/2013)
- Disaster Scene Assessment (Approved 01/2013)
- Suspect Search (Approved 02/2013)
- Crime and Traffic Accident Scene Analysis (Approved 02/2013)
- Major Event Monitoring (Approved 04/2013)
- Verify the Effectiveness of UAS-Mounted Sensors in Field Crop and Livestock Management Issues (Approved 05/2014)
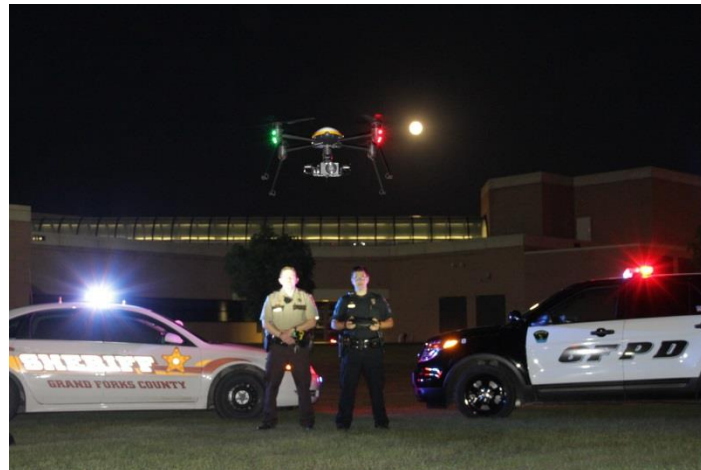
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Other Approved Uses

- Developing UAS for Wildlife Ecology Studies at UND (Approved 05/2014)
- Integrating Beyond Visual Line of Sight Command/Control Communications into UAS (Approved 01/2015)
- Surveying Wildlife and Vegetation in Northern Manitoba (Approved 04/2015)
- Verify the Effectiveness of UAS-Mounted Sensors in Field Crop and Livestock Management Issues-Revised Area (Approved 05/2015)
- UAS Test Site Flight Operations Development for Railway Environments 2015 (Approved 05/2015)
- Unmanned Aerial Systems for Building Assessment (Approved 05/2015

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Selected Survey Results

- Search and rescue, 80% to 90% support
- General law enforcement varied from 40% support for traffic violations to 85% support for a hostage situation
- Natural disasters, fires, weather, etc., 82% to 90% support
- Military uses, 72% to 80% support
- Commercial and Agriculture, 40% to 85% support

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Summary of Areas of Concern

Issue	Not at all	Not	Neutral	Concerned	Extremely
Personal Privacy	243 (38%)	217 (34%)	73 (11%)	81 (13%)	29 (5%)
Airspace Safety	86 (13%)	207 (32%)	124 (19%)	189 (39%)	30 (5%)
Safety on Ground	80 (12%)	218 (34%)	114 (18%)	201 (31%)	27 (4%)
Use by Government	146 (23%)	225 (35%)	138 (21%)	118 (18%)	14 (2%)
Use by Business	108 (17%)	242 (38%)	144 (22%)	129 (20)	16 (3%)
Use by Individuals	167 (26%)	246 (38%)	113 (18%)	96 (15%)	18 (3%)
Hijacking or Hacking	212 (33%)	274 (42%)	65 (10%)	71 (11%)	12 (2%)

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What is Not Acceptable

- Random persistent surveillance
- Maintaining data which is not required as evidence for longer than a minimum period
- Using a UAS without letting people know
- Using a UAS outside of the specific area described in the proposed use

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Lessons Learned

- Law enforcement wants to do the right thing

- Community is quite supportive of UAS where benefit is clear

- The UAS is not really the problem, but issues with sensors and data management are critical to review

- Safety is primary concern of public

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