GOODHUE COUNTY MINNESOTA

TO EFFECTIVELY PROMOTE THE SAFETY, HEALTH, AND WELL-BEING OF OUR RESIDENTS

Committee of the Whole Agenda

County Board Room
Government Center
Red Wing, MN

March 6, 2018
5:30 p.m.

1. UAS: Unmanned Aircraft Systems

   Documents:

   UAS_GoodhueCountyCOW.pdf

UAS: Unmanned Aircraft Systems

What's a UAS?

- UAV = Unmanned Aerial Vehicle (the aircraft itself)
- UAS = Unmanned Aircraft System (aircraft, controller, data collector, pilot, etc.)
- Drone = a common misnomer for UAS/UAV…drone in the military is a target used in missile testing

APPLICATIONS






Law Enforcement

- Search & Rescue
- Civil Air Patrol
- Investigation
- Drug Enforcement
- Anti-terrorism
- First Responder Support
- Emergency Management
- Accident reconstruction

SWCD

- Project Planning & Follow up
- Agricultural Buffers
- Feedlot Reviews

Land Use Management

- Violations/Enforcement
- Disaster Analysis
- Land Use Planning
- Inspections

Public Works

- Transportation Mapping
- Project Planning and Progress
- Bridge Inspections

Regulations

- **FAA strictly regulates UAS via authority over U.S. airspace**
- Recreational/Hobbyist flyers must follow rules/guidelines
- Public entities must either continue to obtain a certificate of authorization (COA) or have the operator(s) obtain authority under 114CFR, Part 107

Option 1 – Special Rule for Model Aircraft

- Fly for hobby or recreational purposes only
- Register UAS with the FAA*
- Follow community-based safety guidelines
- Fly within visual line-of-sight
- Give way to manned aircraft
- Provide notification to airport and air traffic control towers within 5 miles
- UAS ≤ 55 lbs. unless certified by a community-based organization

Option 2 – 114 CFR Part 107

- Requires Remote Pilot Certificate (RPC)
- Keep UAS within visual line-of-sight*
- Fly at or below 400 feet*
- Fly during daylight or civil twilight*
- Fly at or under 100 mph*
- Yield right of way to manned aircraft*
- Do not fly directly over people*
- Do not fly from a moving vehicle, unless in a sparsely populated area*

Option 3 – Certificate Of Authorization (COA)

- For law enforcement/public safety use only
- Specific range of uses specified in COA application
- Can only operate the specific UAS identified in the COA
- Pilots self-certify through monthly training and flight time requirements

*Refer to the FAA regulations for the most current information .

Training

Remote Pilot Certificate (RPC)

- More versatile option than COA
- Exam costs $150 per person.
- Typically proctored at a local FAA approved airport
- Training need for 12+ staff members

RPC Exam Prep

Multiple companies offer specific training:

- $350 - $7500 per person
- Includes manual and hands on practice
- Practice FAA exam
- Will deliver program at site of our choosing

Insurance - MCIT

Minnesota Counties Intergovernmental Trust

MCIT Coverage and Drone Use
If an MCIT member uses drones for official government business, MCIT coverage would respond as follows:

Property: MCIT provides coverage for physical damage to a member's drone under Electronic Data Processing (EDP) if the drone is scheduled. Failure to schedule results in no property coverage.

General liability: Most claims for property damage and bodily injury caused to others are excluded under the Aviation Activity exclusion. However, MCIT provides coverage for physical damage and bodily injury caused to a third party by a member's drone if the drone is being used for specified law enforcement activities, such as search and rescue operations, criminal apprehension and public safety actions to address immediate threats to human life or property.

Public employees liability: MCIT provides coverage for claims alleging wrongful acts (violation of civil rights) arising from a member's use of a drone. This coverage is subject to standard exclusions, such as claims alleging an intentional act or malicious or criminal act.

Insurance - MCIT

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RISKS OF USING DRONES FOR GOVERNMENT BUSINESS

- strike property and damage it (worst-case scenario, the drone could collide or interfere with a piloted aircraft).
- open the government entity to a suit alleging invasion of privacy if it is used for surveillance or mapping.
- subject the entity to potential fines and penalties if it is not operated pursuant to federal regulations.

Develop Policies for Managing Risks of Using Drones

Any government entity that seeks to operate drones should create the appropriate use policies and procedures so as to manage the risks of using drones.

Renting, Contracting Considerations for Drones

If a government entity leases—rather than owns—drones and operates them, the entity still may need to obtain the appropriate authority to operate them. However, government entities may avoid the need for obtaining a COA or Part 107 licensure by contracting with a private commercial drone operator.

Plan Ahead to Manage Risks of Using Drones

Drone technology may provide efficiencies and benefits to government entities, but failure to manage the risks of using drones could have potentially significant consequences. Government entities should ensure compliance with applicable rules and regulations and that operators have requisite skills and training.

What our program would look like

Staff believe this tool would be beneficial for daily work and projects

It involves more than a $1500 piece of equipment

- Training
- Testing
- Equipment maintenance
- Staying current with rule changes

As government employees/projects, we need to establish and follow standard procedures for the protection of the County while addressing privacy concerns

What our program would look like

Sheriff's Office would Coordinate Drone Activities with quarterly staff meetings

We would train multiple staff from different departments (someone always available)

Establish flight procedures: Log flight details, personnel, purpose

Establish flight protocols: (2-3 people: Pilot, visual observer, sensor operator)

Schedule projects (Emergency has priority)

Pool resources (equipment purchases, trained staff availability)

Pool knowledge (keeping current with rule changes and technology)

Discuss how to manage data collected

Questions?