MANATEE COUNTY’S GAME OF DRONES
Video of Dragon scene followed by video of Daenerys wearing goggles to activate drones
• Terrorism
• Liability
• Invasion of Privacy
• Sunshine Law
• Nuisance Noise
• Cost of Repairs
• Funding
• Managing the program
• Social Media
In the Beginning....
Spring of 2015

Drone2Map
We LOVE GIS. While at the 2015 ESRI User’s conference, it was announced Drone2Map would be released.

Consulting Firm uses Thermal Imagery
GLE Consultants were using a DJI Inspire with a thermal camera to capture any leakage from windows and doors at the Judicial Center.

Melissa the Hobbyist
County’s photographer/videographer, marketing specialist.

Series of Events
Video of Mating Manatees
Conversation with Directors

Presented to Leadership Team “Drones in Government”

Request for Proposal for UAS Consultants and Services

First Request for Legal Services was submitted

Laying out a Plan
Example of Fee Rates

<table>
<thead>
<tr>
<th>Description/Notes</th>
<th>Hyatt Survey</th>
<th>Maser Consulting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of Tasks/PM</td>
<td>$125</td>
<td>$130</td>
</tr>
<tr>
<td>UAS Pilot</td>
<td>$100 (DJI Phantom 4 Pro)</td>
<td>$85 (DJI, Inspire Mavic) Quad</td>
</tr>
<tr>
<td>Visual Flight Observer</td>
<td>$45</td>
<td>$60</td>
</tr>
<tr>
<td>Data Processing/Graphics</td>
<td>$85</td>
<td>$150</td>
</tr>
<tr>
<td>Image Analysis</td>
<td>$85</td>
<td>$95</td>
</tr>
</tbody>
</table>

- Maser is more costly, but they have experience and offer more in addition to a great selection of drones.
- In Exhibit B, you will see the Training Task fee rates. I plan to spend a portion of my budget on consult for policy, procedures, Certificate of Authorization and would like to offer the Part 107 training which is a 2 day, up to 15 personnel from various departments.
Realizing Benefits Outweigh the Fears
Publicity

Promote and market what your area
Insert video or series of photos – Manatee County Fair, Beaches, bridges, etc.
• Roof Inspections
• Thermal Imagery of windows/doors
• Search and Rescue
• Damage Assessment
• Vegetation
• Land Use (laying out irrigation at parks)
• Asset Management
• Dam Inspection
• Mosquito Control
Drafted a Policy

Initiated a Work Assignment to review the policy, train, implement a public COA

Classroom and Field Ops Training

Second Request for Legal Services was submitted
Part 107
Classroom Training
Training Details

- Over forty employees from most departments requested to participate. Thirty were able to begin the process which included:
  - On-line sUAS course (safety focused)
  - Classroom Training – preparing for the Part 107 pilot exam – one full day
  - Scheduling tests at centers (Ex: Dolphin Aviation)
  - Field Operations Training – 12 hours

To Date: Twenty-Five have passed their test and have completed training requirements. The number wanting to become a pilot has grown
Field Operations Training
Policy and Procedure Content

• Policy includes use of Unmanned Aerial Vehicles - component of an Unmanned Aircraft system program

• Safety – Privacy laws

• UAS Team – Program Manager and Program Coordinators

• Responsibilities of roles
  • Pilot in Command (PIC)
  • Visual Observer

• Forms, forms and more forms
  • Request to train
  • Request for mission
  • Maintain flight hours & maintenance
We Love Drone Selfies
Challenges

• Waiting on EVERYTHING
• Policy vs Procedure vs Policy
• Recruited Pilots who did not complete training
• Training (two hurricanes)
• Interaction with Vendor
• FAA communication
• Drone Policy (most were designed for police or fire/rescue)
Challenges (there were many)!

• Drone Policy (most were designed for police or fire/rescue
• Initial insurance concerns (our Risk Manager took the training)
• Getting training / practice time in during business hours (where to fly?)
• Perception of “toys”
• Accountability...forms, forms and more forms
Leadership Team Meeting – Rules to be followed

• To become insured and be a reputable program, ALL requirements must be met.
• “I can fly as a “hobbyist” for the County.” NO YOU CANNOT!
• “I don’t really have to fill out mission requests or keep up with my flights/hours and submit reports to the Program manager.” WRONG. You will be removed from the program.
• “I do not have time to recertify.” THEN YOU WILL NOT FLY UNTIL YOU DO!
• “I can buy drones and not share this information with the Program Manager.” WRONG. You, of course, may purchase your own drones, but do not fly until you have registered them and sent information to the Program Manager.
Recognition!
We Are Pilots!
Team

Charlie Bishop
Director of Property Management

Diana Robinson
Energy Manager-Property Management
UAS Program Manager & Drone Pilot
(Mother of Drones)

Melissa Matisko
Videographer/Photographer – County Administration
Drone Pilot
• Be Brave
• Be Patient
• Be Clear
• Be Firm
• Be Persistent
• Be Safe
• Be Considerate
Game and insert Melissa and Diana studio photos

Thank you!
Bend the Knee….or Not!