How To Be a Responsible Pilot

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FAA, Aviation Safety Inspector
Aeronautical Decision Making
Risk Management
Real-World Scenario
Being Responsible

That’s just plain old common sense!
Being Responsible

Common sense is gained through our experiences.

We sometimes have those experiences because we didn’t have any common sense.
Being Responsible

Good judgement can be taught.
Being Responsible

Despite all the changes in technology to improve flight safety, one factor remains the same...
Being Responsible

...the Human Factor.
Aeronautical Decision Making

- Mental process used by pilots
- Consistently determine the best course of action
- Based on a given set of circumstances
Aeronautical Decision Making

Two Defining Elements

• **Hazard**
  – Real or perceived condition, event, or circumstance that a pilot encounters

• **Risk**
  – Assessment of the single or cumulative hazard(s) facing a pilot
Aeronautical Decision Making

- Identifying hazardous **attitudes**
- Modifying **behavior**
- Recognizing and coping with **stress**
- Assessing **risk**
- Use of all available **resources**
- Self-**evaluation**
Risk Management
Risk Management

Proactively identity safety-related hazards and mitigate the associated risks
# Risk Management

<table>
<thead>
<tr>
<th>Risk Likelihood</th>
<th>Risk Severity</th>
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<tbody>
<tr>
<td></td>
<td>Catastrophic A</td>
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<tr>
<td>Frequent</td>
<td>5</td>
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<tr>
<td>Occasional</td>
<td>4</td>
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<tr>
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<td>2</td>
</tr>
<tr>
<td>Extremely Improbable</td>
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Real-World Scenario
Real-World Scenario

It’s your first commercial UAS contract!

It’s a big project that needs to be done ASAP. There is a potential for future contracts based on your work.
Real-World Scenario

You arrive on site (3 hours away).

Weather and location are all within Part 107 requirements.
Real-World Scenario

During preflight, you notice a nick in your propeller blade.
Real-World Scenario

You realize you were so excited for your first mission, you left without bringing any spares.

You’ve flown before with a similar nick, but this one is just a little bit deeper.
Real-World Scenario

Decision Time

#UAS2019
Real-World Scenario

• Hazards
  – Nick in propeller blade
  – Pressure to complete mission
  – Safety of flight

• Risks
  – Loss of control
  – Loss of revenue
  – Loss of equipment
Questions?