

Developing UAV Insurance and Risk Management Strategies

Grant E. Goldsmith, cic, crm, BS, MASCL, PGD-MA
President, Overwatch
Bronze Sponsor
Independent Insurance Broker and
Consultants

Why is Insurance and Risk Management Important to Growth

- Monetization requires Commercialization
- Commercialization depends on Insurability
- Insurability depends on meeting underwriting standards (Best Practices) to include but not limited to the minimum standards imposed by rules, laws and regulations (FAA)



Why is UAV Insurance Hard to Get?

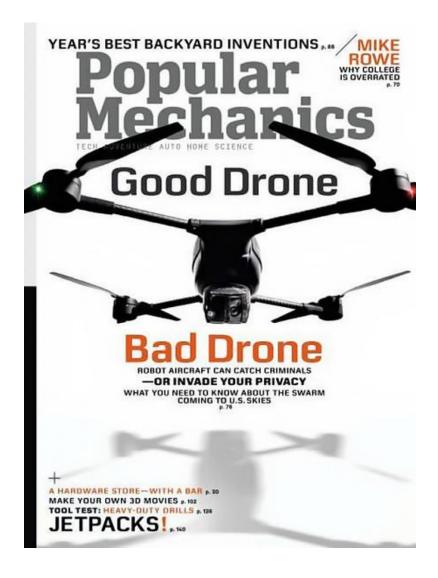
Is Unmanned Flight Safe?

What are the statistics telling us?

How do people "feel" about it?









What is the Public Perception?

Safe and Manageable



Scary and Threatening



Whatever you do don't call it a "Drone". The term Drone has become synonymous with words like "Predator" and "Reaper"



Basic Underwriting Concerns

- Legality/Authority (FAA Authorized or Not Subject to FAA Control)
- Flight Plans and Operational Uses
 - Airspace, Weather, Terrain, LOS or Beyond LOS, Night or Day, Populated Area
- Pilot or Ground Station Operator Training and Experience
 - Licensed Pilot, Military Trained, Manufacturer Trained, University Trained
- UAV System Predictability and Reliability
 - System Redundancies, Safety Measures, Performance History
- System Value, Hull Value, Payload Value
- Retention Levels, Deductibles
- Loss History



Risk Controls and Mitigation

- Formal Civilian Undergraduate and Certificate Training Programs
 - Universities offering UAV Aviation courses
 - Military Training and Experience
 - Certificate Training may become an entry level standard in the future
- Improving UAV flight safety
 - Ground station controls (Human Factors and Situational Awareness)
 - RTB autopilot, UAV Sensor Systems and Programming (sense and avoid)
 - Air space management procedures (Regulatory Policy)



Role of Insurance - Financing UAV Risk

- Availability of commercial insurance is key to the overall risk management process and ultimately commercialization
- If something is uninsurable then it is typically viewed as "High Risk" and potentially dangerous to the public
- Lack of UAV insurance products creates a "High Risk" perception that UAV operations are "Too Risky"
- Need to create insurance products to answer the demands of the users, regulatory bodies and the general public (liability)



UAV Insurance Going Forward

- There is a need for "real" insurance and not junk products that are too narrowly written to provide actual coverage for real accidents
- Group coverage should be sought when possible as this maximizes buying power and negotiating leverage on price and coverage



Creating and Modifying the Policies

- Coverage will have to be updated frequently to keep up with rapidly changing technology and improvements
- Insurance companies typically write a form and then stick to a wording – this won't work for this industry with the rapid changes



Your Input is Crucial

- Your input is very important you understand the risks and are creating the necessary solutions that make UAV flight operations safer and ultimately easier to insure
- We appreciate any open source information that you would like to share with us or <u>your specific</u> requirements for insurance coverage





Contact Information

Our Booth is in the lobby

+1 713 429 7580

ggoldsmith@avalonrisk.com