Important Facts about the Unmanned Aircraft Industry

Commercial UAV Outlook

- As applicable regulations, operational requirements, and industry standards develop, so too will the commercial UAS industry.
- Relatively inexpensive UAVs under 55 pounds are economically viable from a commercial standpoint, and market demand for these aircraft will grow within the constraints of the regulatory and airspace requirements.
- By 2020, FAA estimates that about 30,000 small unmanned aircraft will be used for all types of business purposes.

Applications of UAVs

UAVs have a wide variety of applications that touch almost every industry:

- Border surveillance
- Pipe/power line surveillance
- Suspect tracking
- Agricultural applications
- Traffic monitoring
- Communications/broadcast
- Disaster response/relief
- Movie production
- Damage assessment
- Aerial news coverage
- Atmospheric/weather research
- Mail/freight transport
- Critical infrastructure monitoring
- Flood mapping
- Damage surveying
- Real estate mapping
- Aerial photography
- Mining
- Sporting events coverage
- Wildlife monitoring

Applications of UAVs for Insurance Industry

UAVs have numerous applications for insurance industry, with the six below currently on the forefront:

Roofing Investigations — UAV can be used to inspect damage (e.g., hail damage, nail pops, roof blisters, and wind damage)

Building Envelope Investigations — Infrared cameras attached to UAV can detect a building’s heat signature, can examine wet areas in roofs and walls, and are useful in identifying areas of excessive air leakage.

Locating individuals — Infrared cameras attached to UAV can help locate individuals by detecting a person’s heat signature at night or in bad weather.

Catastrophe Damage Assessment — Played a role in earthquake, flood, tsunami, and wildfire damage assessment internationally (in future, will do the same domestically). Also likely that UAV will be able to track weather in real-time, being able to fly with and within storms.

Fire and Explosion Investigations — UAV used to inspect large, complex fires and explosions, which have historically presented investigative challenges.

Underwriting Surveys — Assessing condition of building’s exterior in underwriting applications.

UAV MARKETS

Two Main Potential Markets for UAVs

- According to the Association for Unmanned Vehicle Systems International (AUVSI), the two most promising commercial and civil markets for UAVs are:
  - Precision agriculture
  - Public safety
- Precision agriculture and public safety are both estimated to account for 90% of the known potential markets for UAVs.