Attack of the Drones

2016 CAS Annual Meeting November 14, 2016



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Agenda

- Potential Exposures & Coverage Implications
- Rating Considerations
- Underwriting Considerations
- ISO Response to Drones







Potential Exposures & Underwriting Considerations











Reported And Potential Uses

- Military
- Law Enforcement And Security Surveillance
- Search And Rescue Operations
- Agriculture
- Communications
- Delivery
- Photography
- Inspection



Potential Drone Exposures

Drones

- Lost link
- Fly away
- Depleted battery

Operators

- Pilot skill
- Human factors
- Maintenance

Flying Environment

- Weather
- Location-specific hazards
- Wildlife



Coverage Implications

Liability

- Design/manufacture defect
- Collision
- Data-link transmission failure

Personal Injury

- Invasion of privacy
- Trespass and nuisance
- Infringement and defamation

Property Damage

- First-party property damage
- Perils of aircraft and falling objects
- Business interruption losses





Drone Rating Considerations

Limited Data

- Crashes
 - Bodily Injury
 - Property Damage
 - Will all crashes result in one or the other -- or both?





Drone Rating Considerations (Cont'd)

Location

- Rural
- Urban
- Weather



Drone Characteristics

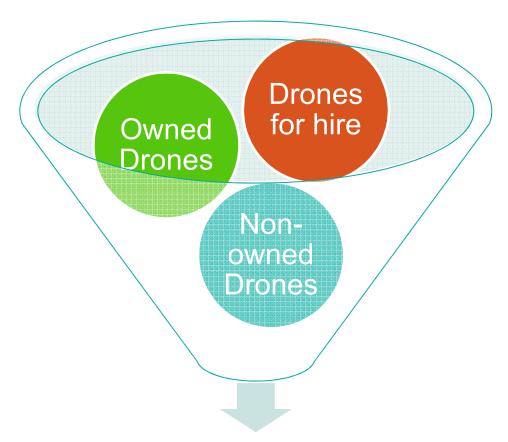
- Size
- Capabilities and Operations (photography, spraying, payload capabilities)

Operator

- Experience
- Training



Underwriting Considerations



Exposure Range: Nuisance to Catastrophe



Line of Sight Considerations



Beyond Line of Sight.

 Centralized Tracking System

- Launch Protocol
- Operations
- Operating System
- Maintenance Protocol
- Hardware

Visual Line of Pilot/Insured Behavior

- Operations
- Operating System
- Payload & Modifications Payload & Modifications
- Maintenance Protocol
- Hardware



ISO - Response to Drones







ISO Drones Options

Liability endorsements implemented 6-1-2015

- 3 exclusionary endorsements
- 3 limited coverage endorsements

Commercial Lines property products

- Commercial Inland Marine released February, 2016
- Commercial Property and Capital Assets filed in April, 2016

Businessowners

- Liability endorsements filed in Q2 2016
- Property endorsements to be filed in 2017
- Farm endorsements to be filed in 2017



New ISO Liability Endorsements

- Optional exclusion endorsements GL
 - Coverage A only (CG 21 10)
 - Coverage B only (CG 21 11)
 - Coverage A and B (CG 21 09)
- Optional coverage endorsements GL
 - Coverage A only (CG 24 51)
 - Coverage B only (CG 24 52)
 - Coverage A and B (CG 24 50)
- Similar options for use with the ISO CU Program



ISO Commercial Inland Marine - Drones

- New unmanned aircraft (drone) coverage options
 - Stand-alone policy (IH 00 61) → new non-filed class in Inland Marine Handbook
 - Application, Declarations, Coverage Form
 - Endorsement (IH 99 29) designed to attach to:
 - Contractors Equipment floater
 - Machinery & Equipment floater
 - Miscellaneous Articles floater
- Underwriting Considerations and Loss Control Recommendations provided



ISO Commercial Inland Marine - Drones

Stand-alone drone policy

- Covered Property
 - Drones and related equipment
 - -Drones owned by or leased to insured
 - -Option for drones leased or loaned to others
 - Owned cargo carried by insured drone
 - Cargo of others carried by insured drone (carrier-for-hire)
- Scheduled and blanket options
- Rental reimbursement option
- Coverage also applies while drone is in flight
 - If part of scheduled business operations
- Business interruption → use current BI form



ISO Commercial Inland Marine - Drones

Drone endorsement

- Covered Property
 - Unmanned aircraft and related equipment
- Scheduled and blanket options
- Separate limit of insurance
- Separate deductible
- Coverage also applies while drone is in flight
 - If part of scheduled business operations



ISO Commercial Property - Drones

- Endorsement (CP 04 14) addresses:
 - Drones and related equipment
 - Business personal property in or used in conjunction with drones
- Scheduled and blanket features
- Designed for use with Special Form policies
- Coverage also applies while drone is in flight
 - If part of scheduled business operations
- No coverage:
 - When drone is leased or loaned to others
 - For delivery of goods to others
- Option for business interruption if part of base policy



Drone Resources

- ISO Drone Resource Center
 - www.verisk.com/iso/drones.html

- Ongoing monitoring
 - Emerging Issues Portal

Questions?







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Thank you.

