

RPAS Operations
Impact on Other
Stakeholders from the
perspective of Airports

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Presentation Outline

- Potential Impacts
- ACI's Position: how should stakeholders work together?
- Recommendations for airports on mitigate safety and security risk
- Conclusion



Potential Impacts

- Safety
- Capacity and Efficiency
- Security





"Drones are flying FOD" a veteran airfield operations manager at a busy air hub in Asia Pacific



Industry Urges Users for Caution

- Joint ACI, IATA,IFALPA statement,2016
- Calls for common sense and abiding by law
- Risk of collision at all altitudes and locations







Safety Awareness for Users of Remotely Piloted Aircraft (RPA) in Close Vicinity of Airports

IATA, ACI, IFALPA

February 2016

Background

- 1.1 Remotely Piloted Aircraft (RPA), commonly known as drones, are increasingly being used, for commercial and recreational purposes.
- 1.2 There has been a very large increase in reports from all regions of the world of instances in which drones have been observed being flown dangerously close to aircraft and airports.
- 1.3 A review of 856 safety reports was carried out, to analyze the safety risks associated with drones.
 - The analysis showed a significant increase in the monthly number of reported drone encounters.
 - There was no correlation between the distance from the airport or the attitude of the drone and the likelihood of a near collision. Therefore, risk of collision with aircraft is at all attitudes and locations.
 - The drones encountered were primarily small in size (less than 6 feet in length/diameter).
 - Reports were not limited to recreational drones.

II. Safety Risks:

Flying a drone in the close vicinity of an airport or an aircraft can pose a serious risk to the safety of those on board the aircraft. In the event of a collision or near-collision between the drone and the aircraft, the resulting accident pould cause to loss of life.

¹ The period covered in the analysis is from January 2013 to August 2015. Data was obtained from 7 official sources, 87% (743 of 856) of the reports used in the analysis came from North American data sources.



Impact on Capacity and Efficiency

- Interference with regular operations if not properly integrated
- Competing for the same airspace
- Slot coordination



Security Risks

- RPAS a new weapon to overfly security fencing
- Aircraft arriving or departing most vulnerable
- Potential attacks with
 - Simply with mass of RPAS
 - Explosives, CBR agent attached





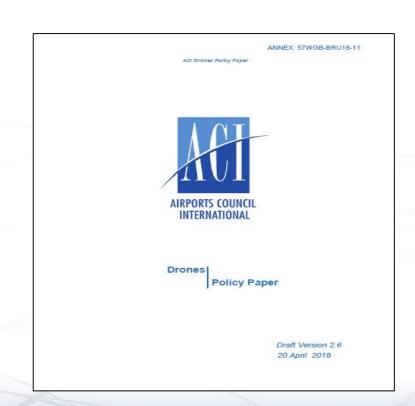
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ACI Position and Recommendations

- General position
- Specifics aimed at:
 - Regulators
 - ANSP
 - RPAS operators
 - Airports





ACI General Positions on Drones

- Drones operations should be <u>facilitated</u>, provided no negative impact on safety, security, efficiency or capacity
- Integrated into controlled and uncontrolled airspace
- Airports should be able to recover costs
- Slot coordination if needed



Position on Safety Regulation

- Should be regulated to the <u>equivalent level of safety</u> as manned aircraft
- Risk based regulation
- Recreational drones near airport should have authorization of airport and ANSP
- State and ANSPs may implement prohibitions and additional requirements such as communications, transponders, standard positioning, anti-collision lights





 ANSP should consult and collaborate with airport operators to facilitate legitimate drone operations and avoid negative impact on airport operations.



For Drones Operators

- Should have Air Operator Certificate
- Same noise and emission standards
- Maintenance standards
- Registration number for tracking
- Insurance
- Capability to decipher visual aids?







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Recommendations for Airports

- Should have staff trained on
 - National regulations
 - Types of drones authorized
 - Tracking and identification
 - Coordination with ATC and state authorities
 - Safety risk assessments
- should inform regulator and ANSP of drone poses a risk to airport operations



Conclusion

- Drones a technological advancement whose adoption should be facilitated; but
- Impact on safety, security, capacity and efficiency should be carefully and collaboratively managed by stakeholders.