



CANADIAN UNMANNED AIRCRAFT SYSTEM REGULATIONS

ICAO RPAS Symposium

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OVERVIEW

- Aeronautics Act
- Unmanned Aircraft Systems and Model Aircraft
- Canadian Aviation Regulations
- Special Flight Operations Certificate
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AERONAUTICS ACT

- Civil unmanned aircraft are “aircraft” under the *Aeronautics Act* and are governed by the *Canadian Aviation Regulations* when operating in civil airspace or military restricted airspace.
- Domestic or foreign military unmanned aircraft systems are under the authority of the Minister of National Defence when operating in civil airspace or military restricted airspace and are subject to Military Flying Orders.
- While both organizations’ mandates are legally separate in terms of civil and military regulation, formal collaborative efforts in the area of unmanned aircraft system requirements for military and civil operations have been underway for the past decade.



UNMANNED AIRCRAFT SYSTEMS

In Canada, Unmanned Aircraft Systems are referenced as Unmanned Air Vehicles (UAVs) in Canadian legislation. Terminology will be harmonized with ICAO during future regulatory development.

- **Unmanned Air Vehicle** - a power-driven aircraft, other than a model aircraft, that is designed to fly without a human operator on board.
- **Model Aircraft** - an aircraft with a total weight not exceeding 35 kg that is mechanically driven or launched into flight for recreational purposes and not designed to carry persons or other living creatures.



CANADIAN AVIATION REGULATIONS

- 101.01 – Definitions
- 602.41 – Requirement to hold a Special Flight Operations Certificate (SFOC) to conduct unmanned aircraft system operations.
- 603.66 – Requirement to comply with the conditions in an SFOC.
- 603.67 – Requirement for the Minister of Transport to issue an SFOC.
- 623.65 – Standards that apply to the application for, and the operation of, an unmanned aircraft system.



SPECIAL FLIGHT OPERATIONS CERTIFICATE

- Applications for a Special Flight Operations Certificate (SFOC) are dealt with on a case-by-case basis.
 - Individual assessments of the associated risks are conducted for each operation before an SFOC is issued.
 - Operating certificates issued once a applicant demonstrates that risks can be managed to an acceptable level.
 - Operating conditions vary depending on aircraft performance capabilities, mission requirements, operating environment and complexity of the operation.
- Applicants are responsible for ensuring that the safety of persons and property on the ground and other airspace users is not jeopardized.



REGULATORY EXEMPTIONS

- Two Regulatory Exemptions were issued in November 2014 to allow lower risk visual line-of-sight UAV operations to be conducted without a Special Flight Operations Certificate.
- One exemption addresses UAVs that are 2Kg or less. The operator must comply with 37 safety conditions.
- The second exemption addresses UAVs greater than 2 Kg up to and including 25 Kg. The Operator must comply with 58 safety conditions and notify Transport Canada in advance of the operation.
- An Advisory Circular was released with the exemptions to support greater understanding of the safety conditions.
- Those that cannot operate under the exemptions must apply for a Special Flight Operations Certificate.

REGULATORY DEVELOPMENT

- Minister of Transport has directed an accelerated regulatory approach towards unmanned aircraft systems.
- Transport Canada is targeting a spring 2015 publication of a Notice of Proposed Rulemaking for small (25Kg or less) unmanned aircraft operating within visual line-of-sight.
- Promulgation of regulations in 2016.
- Transport Canada will continue to work with international partners, including ICAO, to ensure a consistent approach to safely integrating UAS into Canadian airspace.



REFERENCES

UAV Guidance Material for Processing SFOC Applications

<http://www.tc.gc.ca/eng/civilaviation/opssvs/management-services-referencecentre-documents-600-623-001-972.htm>

Transport Canada UAV Exemptions

<http://www.tc.gc.ca/civilaviation/regserv/affairs/exemptions/docs/en/2880.htm>

<http://www.tc.gc.ca/civilaviation/regserv/affairs/exemptions/docs/en/2879.htm>

Transport Canada UAV Advisory Circular

www.tc.gc.ca/eng/civilaviation/opssvs/ac-600-004-2136.html



QUESTIONS/DISCUSSION