



Standing Order

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Engagement and Operations of RPA or UAVs in Support of Emergency Operations

Purpose

The purpose of this Standing Order is to detail the procedures for engaging and/or operating **Remotely Piloted Aircraft (RPA) or Unmanned Aerial Vehicles (UAVs)** in support of emergency operations.

Application

This Standing Order applies to all Queensland Fire and Emergency Services (QFES) operational staff and volunteers, including the Rural Fire Service Queensland (RFSQ) and State Emergency Service (SES).

Background

The development of RPA, also known as UAVs or drones, has reached the point where they present a viable option for gathering intelligence over emergency operations in Queensland. Small RPAs have become relatively inexpensive, are easy to operate and provide basic intelligence gathering capabilities.

There are inherent risks, however, in the use of RPA. RPA can pose a safety concern, especially in the context of aerial operations, where the potential for airspace incursion by unmanned aircraft into QFES emergency operations is very high. RPA also present problems in terms of ensuring the safety of other users of airspace and persons on the ground.

Civil Aviation Safety Regulation (CASR) Part 101 – Unmanned Aircraft and Rockets is the guiding instrument for the operation of remotely piloted aircraft in Australia. Specifically, CASR 101.055 (1) states: “A person must not operate an unmanned aircraft in a way that creates a hazard to another aircraft, another person, or property.” Civil Aviation Safety Authority (CASA) has relaxed the rules governing small RPA (i.e. RPA weighing less than 2kg with all up payload and fuel) effectively deregulating their use as long as the Remote Pilot complies with the Standard Conditions details in CASR 101.270.

The QFES views any RPA operation conducted for the QFES by third-party providers, including Rural Fire Brigades (RFBs) and SES, as being ‘for the purposes other than sport or recreation’ (as defined by CASR 101.235). As such, all RPA operations conducted for the QFES will fall under CASR 1998 Part 101 Sub Part F. This means only pilots holding a CASA UAV Controllers Certificate (as defined by CASR 101.F.3), working under a UAV Operator’s Certificate (CASR 101.F4) engaged under Standing Offer Arrangement (SOA) F-1888 – Provision of ‘Call When Needed’ Helicopter and/or Fixed Wing Support for Fire and Emergency Operations will be eligible to fly RPAs in support of QFES fire and emergency operations.

Policy

Safety

To ensure the safety of all staff and volunteers, QFES staff including Incident Controllers (ICs), Aviation Specialists and Ground Crews are to note the following safety issues/limitations:

- a) RPA are not to be used unless the IC through the Regional Manager, RFSQ or SES; and/or Regional Assistant Commissioner has first consulted with the State Air Desk (SAD) to ensure aircraft deconfliction over the incident.
- b) If the SAD vetoes the flight, the RPA must not be flown.
- c) If the IC; Regional Manager, RFSQ or SES; and/or Regional Assistant Commissioner veto the flight, the RPA must not be launched.
- d) The presence of any unauthorised RPA operating over an incident will result in the SAD immediately suspending aerial operations due to safety considerations.

General Operating Requirements During Emergency Operations Response

The following general operating requirements apply to all RPA/UAV operations in support of QFES emergency operations:

- a) RPA are regarded as aircraft for the purposes of utilisation by the QFES and must comply with the QFES Operations Doctrine.
- b) All private and corporate RPA operators and pilots are required to be registered and approved under the SOA F-1888 process before the RPA is permitted to operate as part of the emergency operation.
- c) Pilots of RPA are responsible for ensuring that the RPA is operated safely and legally, remaining clear of potential air traffic and people on the ground.
- d) Pilots of RPAs must comply with the Standard Conditions as identified in CASR 101 unless their Air Operator's Certificate specifically endorses them to be able to do otherwise.
- e) If any QFES staff or volunteer is approached by a member of the public or a company wishing to operate a RPA over the incident, consent must **not** be provided. Only RPA operators pre-registered with the QFES through the SOA F-1888 process will be permitted to operate RPA as part of QFES emergency operations.
- f) If any QFES staff or volunteer notices someone operating a RPA over the incident, they must direct that person to cease and desist and refer the matter immediately to the IC; Regional Manager, RFSQ or SES; and/or Regional Assistant Commissioner who will inform the SAD.

UAV/RPA Requests and Approvals

- a) **RPA/UAV Requests:** Can be made by the IC or Regional Management in accordance with QFES Operations Doctrine Incident Directive (INCDIR) 1.3 – Air Operations – Aircraft Activation.
- b) **RPA/UAV Activation Approvals:** In accordance with QFES Operations Doctrine INCDIR 1.3 – Air Operations – Aircraft Activation, all RPA/UAV activations are to be approved by the Assistant Commissioner, RFSQ; Director, SES Management and Support Services; Deputy Commissioners; or Commissioner, QFES.
- c) If, at any stage, the flight is vetoed, **the RPA must not be launched**. This will ensure that RPA/UAVs do not impact on aerial operations.
- d) The IC and/or Regional Manager, RFSQ or SES must notify the SAD once the RPA has ceased operations. This will ensure deconfliction over the incident.

Information Privacy

- a) RPA are not to impinge on the privacy of individuals. Images must be restricted to the incident operation and not stray beyond the incident.
- b) The handling of all imagery captured by RPA must comply with the departmental Privacy Policy. This includes the posting of any imagery, still or video, on social media or other websites, or sharing with any third party.

Use

- a) It is the responsibility of the IC to ensure that the aircraft is utilised in a safe, efficient and cost effective manner whilst allocated to the incident.
- b) Tasking of aircraft will be in accordance with the Incident Action Plan (IAP) approved by the IC.
- c) QFES staff and volunteers are not to use RPA unless:
 - they possess a UAV Controller's Certificate;
 - are duly authorised by the QFES to undertake such activities in support of QFES operations; and
 - RPA operations have been authorised in accordance with QFES Operations Doctrine INCDIR 1.3 – Air Operations – Aircraft Activation.
- d) Only small RPA may be operated by members authorised in paragraph c) above.

Operational Limitations

- a) RPA must not operate in or over a prohibited area or a restricted area as defined by CASR 101.
- b) RPA must not be operated in a way that creates a hazard to another aircraft, another person, or property.
- c) RPA must not operate **above 400 feet (121 m)** above ground level.
- d) RPA must not operate **within 30 metres** or over any person, including operational staff and volunteers.
- e) RPA must not operate **within 30 metres** of a structure or dwelling without first being given approval by the IC; Regional Manager, RFSQ or SES; and/or Regional Assistant Commissioner; Queensland Police Service (QPS) Officer; or the structure/dwellings owner. This approval will take into account any identified risks to the community and/or operational staff and volunteers whilst also ensuring that evidence is not damaged by the RPA.
- f) RPA must not operate **within three nautical miles (five and a half kilometres)** of an aerodrome.
- g) RPA, when flying, must **remain in the Visual Line of Sight (VLOS)** of the RPA operator at all times. VLOS means the Remote Pilot must be able to see the RPA with either their naked eye or spectacles. The use of telescopes or binoculars does not constitute compliance with VLOS requirements.
- h) RPA must fly in **Visual Meteorological Conditions (VMC)** only, i.e. not in thick smoke or cloud.
- i) The RPA operator **must not cause a thing to be dropped or discharged from a RPA in a way that creates a hazard to another aircraft, a person, or property.**
- j) A broadcast radio message must be issued to all units operating at the incident prior to the RPA's launch, notifying the launch of the RPA.
- k) A broadcast radio message must be issued to all units operating at the incident every 15 minutes that the RPA is airborne identifying the operational location of the RPA.
- l) A broadcast radio message must be issued to all units operating at the incident when the RPA has landed.

Superseded Documents

This is a new Standing Order.

Relevant Legislation, Standards and Guidelines

- *Civil Aviation Safety Regulation 1998 Part 101*
- *Information Privacy Act 2009*
- *Public Records Act 2002*
- Criminal Code 1899, Section 227A
- Office of the Information Commissioner Guidelines – *Information Privacy Act 2009*
 - Privacy and Drone Technology – an Introduction
 - Drones – outsourcing, use and disclosure of personal information
 - Drones – collection, storage and security of personal information

Associated Documents

- Queensland Government Code of Conduct For the Queensland Public Service
- QFES Operations Doctrine INCDIR 1.3 – Air Operations – Aircraft Activation
- QFES Total Station Workload (TSWL) Business Rule C3.3 – Coordinate Awareness of Information Management
- QFES Administration Reference Guide (ARG) Business Rule PD3.5 – Coordinate Release of QFRS Information
- QFES Rural Fire Brigade Manual (RFBM) Business Rule D2.1.1 – Information Privacy
- QFES SES Operations Doctrine Business Administration Directive (BMA) 6.0 – Administration – Information Privacy
- SOA F-1888 – Provision of ‘Call When Needed’ Helicopter and/or Fixed Wing Support for Fire and Emergency Operations

This Standing Order, or parts thereof, may be transferred to the appropriate Policy/Procedure Manual during the next annual review.

A handwritten signature in blue ink, appearing to read 'Lee A Johnson'.

Lee A Johnson AFSM FIFireE
Commissioner