



SOP

Aircraft Operations

2.2.1

The ACT Rural Fire Service Chief Officer has issued this SOP under Section 38(1) of the *Emergencies Act 2004* – A Chief Officer may determine standards and protocols.

Purpose

This procedure establishes the practices to be followed for the allocation, prioritisation and acceptable use of RFS contracted aircraft, and to ensure safety in aircraft operations at incidents and during other RFS activities.

It ensures that the RFS prioritises and reports all requests for aircraft use in a timely manner.

Scope

This Standard Operating Procedure (SOP) is applicable to personnel engaging in firefighting operations within the ACT, which includes personnel from ACT Rural Fire Service (RFS), ACT Fire & Rescue Service (ACTF&R), ACT Parks and Conservation Service or under contract to the ACT RFS.

It includes the use of contracted aerial resources and provides instructions on how to deal with unauthorised or illegal use of remotely piloted aircraft at or near emergency sites.

Aviation operations are described in the NSW and ACT Aviation Standard Operating Procedures.

Note: Refuelling of aircraft is the responsibility of the contractor.

Background

Contracted aircraft

ESA contracts use of aerial resources for firefighting and fire detection activities. These aircraft include helicopters, single engine air tankers (SEAT), small fixed wing aircraft, large aerial tankers (LAT) and the Specialist Intelligence Gathering (SIG) helicopter.

Remotely piloted aircraft

Remotely piloted aircraft, commonly known as drones, are becoming increasingly popular, particularly when fitted with camera equipment. While these may be approved for use in assisting firefighting operations, (with IC approval) there is an increasing risk of their illegal and unauthorised use. This use poses a risk to persons and property and may impact adversely on emergency response operations and manned aircraft response operations. Air operations should cease when an unidentified RPA is flying within the flight path of incident aircraft.

Responsibilities

RFS Duty Officer (RFS DO) RFS Aviation Officer / IMT Air Operations Manager or Aircraft Officer	<ul style="list-style-type: none"> Assesses and prioritises requests for use of aerial resources, including interstate or interagency requests. Completes NSW/ACT ARENA request and forwards it to the National Aerial Firefighting Centre within 24 hours. Contacts ESA Spatial Operations Officer if spatial data collection and information dissemination is required (typically SIG activation).
RFS Chief Officer (RFS CO)	<ul style="list-style-type: none"> Determines priorities for allocation of aerial resources. Assesses and approves non-incident and training use of aerial resources. Approves inclusion of personnel on flights.
RFS Aviation Officer	<ul style="list-style-type: none"> Determines aircraft contract start dates and extensions. Assesses and prioritises requests for non-incident use of aerial resources.
Pilot	<ul style="list-style-type: none"> Completes Aircraft Flight Operation Return (FOR) and submits it to the authorising officer within 7 days.

Applicability of this SOP

This SOP applies to the use of all aerial resources within the ACT or on request from interstate for their use.

Aircraft operation procedures

Authorising air assistance for an incident

All requests for aircraft use within the ESA (other than Toll) must be referred to the appropriate authorising officer:

- RFS Duty Officer (RFS DO) and or RFS Aviation Officer
- Designated Air Operations Manager or Aircraft Officer in the Incident Management Team (IMT) (Level 2 or 3 incident)
- RFS Chief Officer (non-incident related activities).

The authorising officer may approve the flight verbally or in writing, however written confirmation of the approval must be supplied through ARENA within 24 hours.

Additional aircraft for an incident is to be requested and tasked using ARENA or the ACT/NSW SAD

Where the SIG aircraft is being deployed, the authorising officer should notify the on-call Spatial Operations Officer to request spatial data collection and information dissemination.

Authorising an air operation for non-incident use

1. All requests for non-incident aircraft use within the ESA (other than Toll) requires assessment by the RFS Aviation Officer and approval by the RFS CO.
2. The RFS Aviation Officer will determine priorities for allocation of the aircraft as described below.
3. The RFS CO or delegate must supply approval for the flight in writing and submit it to ARENA.
4. Requirements for personnel to be taken on flights are described below.
5. Upon authorisation, the requesting officer will be given a time and location to meet the pilot and will be given instructions to ensure appropriate safety briefings are provided for all persons on the flight.

Prioritising aircraft use

If there are conflicts for the use of the same aircraft, the authorising officer will determine the sequencing of aircraft according to the following priorities:

1. Hazards to life
2. Project time for a mission assessed against the available time
3. Flight time limits for pilots and aircraft
4. Aircraft configuration
5. Other priorities as determined by the RFS Chief Officer.

Personnel on flights

Under no circumstances are personnel to be taken on any flight unless essential for conducting the task. Only authorised passengers that are incident/task related may travel on service-tasked aircraft. Any deviation to this must be authorised by the RFS Chief Officer or RFS Aviation Officer.

All passengers are to be listed on a manifest, a copy of which is to be provided to the RFS DO or the authorised officer.

Record keeping

On completion of the flight, the pilot must complete the NSW/ACT State Aircraft Flight Operation Return (FOR) form and submit it to the RFS Operations Manager for approval within 7 days.

Use of aerial resources for non-ESA activities

Aerial resources for non-ESA activities must be approved as described above. An emergency incident use must be approved by the RFS DO or authorised officer; non-incident related use must be approved by the RFS Operations Manager or RFS CO.

If approval is given to an external agency to access any aircraft contracted to the ESA, for tasking for non-ESA activities, the following conditions must be met:

All costs must be met by the agency external to ESA.

1. All contractual obligations of the ESA must still be met.
2. The aircraft can be recalled with no notice by the ESA.
3. Any information or reporting required by the RFS DO or RFS CO in relation to this tasking must be supplied.

Additional safety considerations

Prohibited or unauthorised air operations

Unauthorised remotely piloted aircraft are not permitted to be flown within 5 Nm (9 kilometres) of a fire.

If it is deemed to be unsafe to operate an aerial resource due to the presence of unauthorised remotely piloted aircraft, the planned aerial operation should be stopped or modified to ensure air safety as specified by CASA.

Air operations near windfarms

Turbine towers, meteorological monitoring towers and power transmission infrastructure pose risks for aerial firefighting operations. Meteorological monitoring towers and power transmission infrastructure are generally difficult for aerial personnel to see, if they are not marked appropriately. If wind turbines are not shut down, moving blades and wake turbulence may create significant hazards for low-flying aircraft.

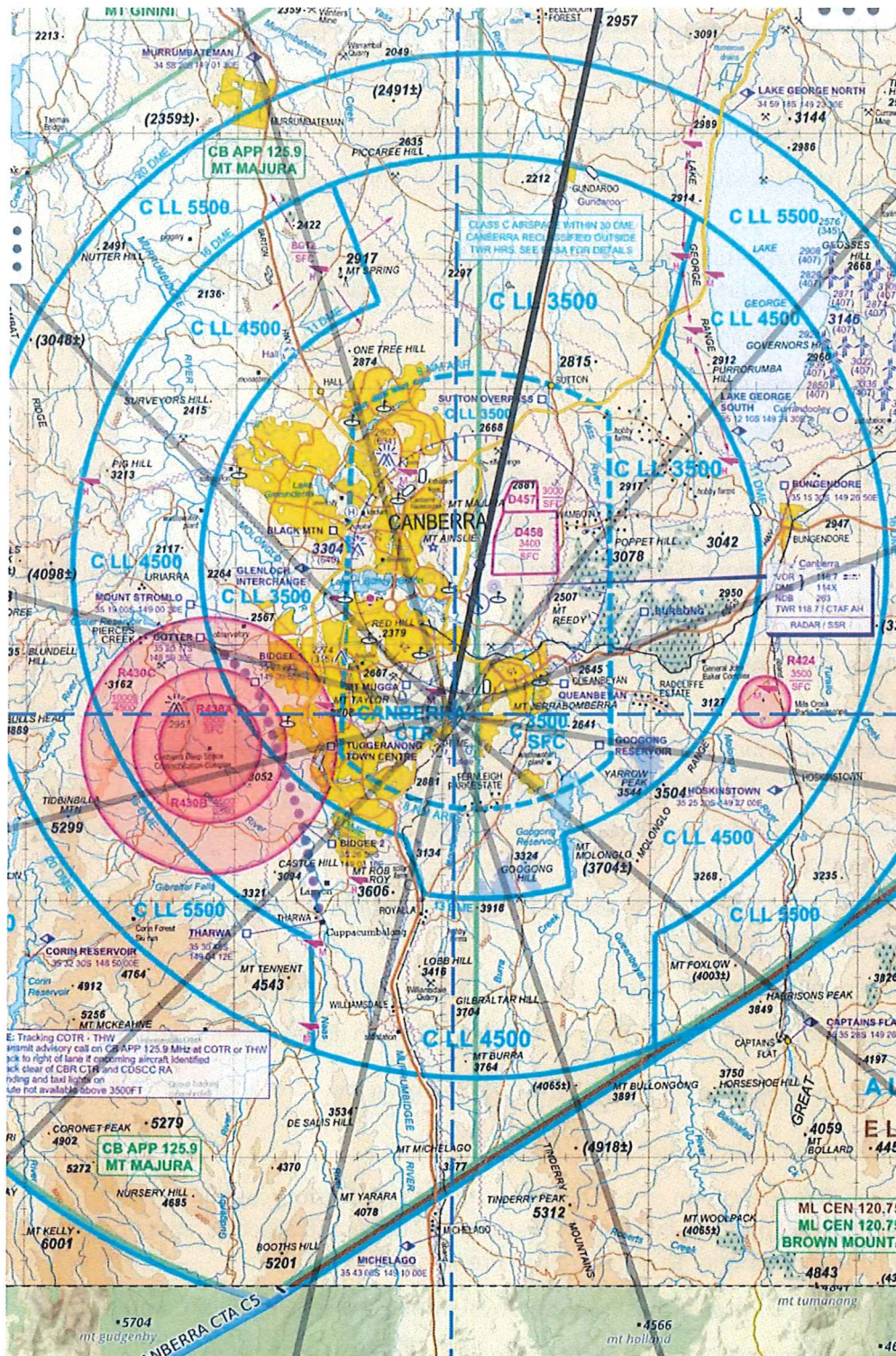
Where possible, blades should be stopped in the 'Y' or 'rabbit ear' position to allow for maximum airspace for aircraft to manoeuvre underneath the blades.

Restricted air space in the Canberra region

All aircraft operating on behalf of the ESA must be informed of the Special Restricted and Restricted airspace over the ACT. Each zone has specific entry and flight path requirements. The

Pilot in Command (PIC) **MUST** seek relevant approvals from Air Traffic Control (ATC) prior to approaching these zones.

- R430 (A, B, C) Tidbinbilla Deep Space Tracking Station
- D457 & D 456 Majura Firing Range
- R424 Hoskinstown Radio Telescope



ACT regional map displaying restricted flight zones within the Canberra region.

Additional agency involvement

This SOP applies to the use of ESA-contracted and call when needed (CWN) aerial resources both within the ACT and interstate.

Trigger points for the Activation of the Special Intelligence Gathering Aircraft

- Fires in the Rural Area of the ACT where:
 - Elevated fire dangers are forecast or being experienced
 - Fire tower reports indicate an increasing volume of smoke, with no ground assets on scene
 - Multiple fires in the rural area, where the Incident Management Team require quality intelligence to support rapid decision making on resourcing and public messaging
- Request from ground commander for aerial observation
- Flood or Storm Intelligence gathering
- Major Industrial fire intelligence
- Other incidents at the request of Chief Officers of ESA
- Missing Persons search (cost recovery AFP or NSW Police)
- Request from local NSW regions (Fires or Lightning detection) released on immediate return to the ACT if required. (cost recovery)

Trigger points for the Activation of medium firebombing Aircraft or Single Engine Air Tanker (SEAT)

- Immediate launch to interface fires where a large volume of '000" or other intelligence indicating property or assets at risk, is being received from the ground.
- Watering bombing of remote fires, where SIG/ Air Observer has recommended water bombing as containment strategy.
- Insertion of remote area firefighters to remote fires, where vehicle access is beyond a reasonable distance to walk firefighters in.
- Incident controller requests aerial support for direct suppression firefighting.
- Senior Officer requests the RFS Duty Officer or Aircraft Officer to dispatch to incident.

Trigger points for the Activation of Large Air Tanker (LAT)


- Major fire threat to built assets or infrastructure
 - Rural/remote area Risk analysis on cost of aircraft v cost of suppression/containment – including large scale backburning, machinery, firefighter or other aircraft costs, containment of a larger fire or containment prior to expected bad fire weather.
 - Duty Officer or Incident Controller must seek approval from the Chief Officer or Commissioner
- See LAT Considerations for interstate deployment for additional supporting information.*

Document information

Version history

Author	Version	Version Approval Date	Summary of Changes
Andrew Stark	1.0	15/2/2011	Previously SOP 2.1
Carmel Summers	2.0 Draft	28/11/2019	Reviewed and Updated
Simon May	3.0	22/06/2021	Administrative Review

Approved by

Name	Title/Role	Signature	Date
Rohan Scott	CO ACT RFS		23.07.21

Document Owner

Position	Section
Director	Operations

Next review due: 28/11/2022

Related documents

Document name	Version
NSW and ACT Aviation Standard Operating Procedures 2018 – Version 4.1	
2.2.2 Use of Air Observers Standard Operating Procedure	
AFAC Wind Farms and Bushfire Operations	
AFAC Unauthorised or Illegal Use of Remotely Piloted Aircraft at or near Emergencies	
Civil Aviation Safety Authority (CASA) Drone safety rules	

Signed documents will be scanned and filed in TRIM.

