



## OPERATIONAL CIRCULAR 21/2025

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May 2025

### REMOTELY PILOTED AIRCRAFT SYSTEMS (RPAS or 'DRONES') UPDATE

#### Key Message

DFES has recently completed a trial of Remotely Piloted Aircraft Systems (RPAS) capability, enabling authorised DFES personnel to pilot drones under strict operating guidelines.

Personnel operating RPAS must comply with the requirements of the DFES Remote Operators Certificate, as issued by the Civil Aviation Safety Authority (CASA). All flights conducted under this approval **must** be authorised by the Chief Remote Pilot.

SOP 3.11.07 "Use of Remotely Piloted Aircraft Systems," outlines and facilitates compliance on DFES controlled RPAS operations. [Operational Circular 69/2020](#) is being rescinded as these requirements are captured in the new SOP 3.11.07. Any use of RPAS outside of SOP 3.11.07 (such as the use of contractors or other third parties) must be approved by the relevant Assistant Commissioner, or after hours, the Duty Assistant Commissioner.

#### What's been happening?

A Chief Remote Pilot (CRP) and Maintenance Controller (MC) have been appointed to manage the compliance, maintenance and oversight of the DFES RPAS program. The RPAS program aims to support bushfire mitigation and other general taskings. These capabilities have been tested on an ad hoc basis over the previous 12 months with good results.

RPAS were trialed at a number of bushfires during the 2024/2025 high threat period upon request, particularly during night time operations for intelligence, surveillance and reconnaissance.

DFES is bound by CASA regulatory requirements, and airspace requirements which may preclude the attendance and tasking of RPAS. Additionally, RPAS operators are not specifically rostered and may not always be available due to other operational commitments, fatigue management and other factors.

A summary report of learnings and recommendations from the trial has been provided to Operations Command for consideration on the implementation of RPAS operations more broadly into business-as-usual operations.

Currently, there is no requirement for personnel to express an interest in becoming a qualified RPAS operator.

#### What do I need to do?

DFES operates RPAS under the conditions and requirements of CASA approval. Operating outside of these boundaries without permission presents significant organisational and personal risks.

Target Audience: All operational personnel				
A	B	C	D	Vol
O.I.C. is to communicate content to all relevant personnel under their command, discuss implications, and sign appropriate box above. Once completed Circulars shall be filed on station and forwarded to Information Resources at the end of each financial year.				
OC-21-25	Issue Date:	Contact:	Rural Fire Division	
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The attached fact sheet provides information on the current RPAS capability and provides answers to common questions.

All RPAS must be registered under CASA regulations and all flights must be authorised. If your business unit owns an RPAS, please notify the Chief Remote Pilot via e-mail at [rpas@dfes.wa.gov.au](mailto:rpas@dfes.wa.gov.au).

#### **Further information**

[SOP 3.11.07 – Use of Remotely Piloted Aircraft Systems \(RPAS\)](#)

For further information, please contact Russell Wells, DFES Chief Remote Pilot, via [rpas@dfes.wa.gov.au](mailto:rpas@dfes.wa.gov.au)

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# Remotely Piloted Aircraft Systems (RPAS)

## Fact sheet

### What are RPAS?

RPAS stands for Remotely Piloted Aircraft Systems. RPAS may also be commonly known as drones or unmanned aerial vehicles (UAVs). In Australia, the use of RPAS is governed by the Civil Aviation Safety Authority (CASA).

### What is the capability of RPAS that DFES operates?

DFES currently operates two primary RPAS; the DJI Mavic 3 Enterprise series and the DJI Matrice 30 Thermal. A summary of the capability of these aircraft is below.

	Mavic 3 Enterprise	Matrice 30 Thermal
<b>Weight</b>	920g	3770g
<b>Capability</b>	Visual camera Thermal camera  <b>Optional:</b> Loudspeaker Beacon Searchlight	Wide-angle camera Zoom camera Thermal camera Laser range finder  <b>Optional:</b> Loudspeaker Searchlight
<b>Max flight time</b>	45 mins	41 mins
<b>Maximum wind resistance</b>	43 km/h	55 km/h
<b>Water protection rating</b>	None	IP55 (light rain)

### Are there restrictions on RPAS operations?

DFES must operate RPAS in accordance with approval from CASA (known as a Remote Operators Certificate or ReOC). Failure to comply with these requirements can result in this approval being revoked and other penalties being issued by CASA.

Standard flight rules must be followed for all operations under the ReOC, including not flying:

- higher than 120 m (400 ft) above ground level
- closer than 30 m to people — other than those helping to control or navigate your drone
- over or above people at any time or height
- in a way that creates a hazard to another person, property or aircraft
- in prohibited or restricted airspace
- closer than 5.5 km to a controlled airport, or an uncontrolled airport where aircraft are moving, taking off or landing

All RPAS flights must be approved by the DFES Chief Remote Pilot, prior to taking place.

## Can current DFES RPAS fly at night?

Endorsed pilots can fly at night within visual line of sight under the DFES ReOC, subject to complying with standard flight rules. Prior to being endorsed to fly RPAS at night, endorsed pilots must undertake additional training, a proficiency flight and have acquired a minimum number of flying hours.

## How far can DFES RPAS fly?

DFES currently has approval for visual line of sight (VLOS) flights only. This means that the pilot must be able to always see the RPAS when flying without the use of aids such as binoculars.

As a rough rule of thumb, this distance is approximately 500m - 800m, depending on the size of the RPAS, weather, terrain and vegetation.

In the future, it is expected DFES will obtain extended visual line of sight (EVLOS) approvals which allows operations up to 80% of the maximum link range of the RPAS using observers to maintain visual contact with the RPAS.

## What about other aircraft?

For safety reasons, RPAS cannot be flown where crewed aircraft are operating.

The Chief Remote Pilot is working with DFES Aviation Services to formalise processes to ensure aircraft are notified of proposed RPAS missions and can include this in briefings.

Under CASA regulations, there is a general prohibition from operating RPAS in a way that creates a hazard to another aircraft, another person, or property.

## I have my own drone. Can I fly it for DFES?

DFES staff and volunteers **are not** permitted to fly any personally owned RPAS in the performance of their duties. Only DFES-owned RPAS may be flown by endorsed DFES personnel, under authorisation provided by the DFES RPAS Operations Manual.

## I want to fly drones for DFES. How can I do this?

If the RPAS program is expanded in the future, more information will be provided on how personnel can get involved. Currently, there is no requirement for personnel to express an interest in becoming qualified as a RPAS operator.

## Why are DFES trialing the capability and not progressing to full implementation?

Trialing the RPAS capability enables the gathering of data and important lessons learned, prior to a comprehensive business case being prepared for consideration of the DFES Corporate Executive.

There are a range of considerations for expanding the RPAS capability, such as resource requirements, supporting infrastructure, ICT implications, training needs, budgeting, modification to existing business processes and ongoing coordination.

## What happens after the trial?

At the conclusion of the trial, a report with recommendations will be provided to Operations Command for consideration.

It is likely this report will inform the development of a comprehensive business case and implementation plan.

## More information

For more general information about RPAS and regulation, please visit the CASA website:  
<https://www.casa.gov.au/drones>

For more DFES-specific RPAS information, please contact [RPAS@dfes.wa.gov.au](mailto:RPAS@dfes.wa.gov.au).