

SOP 13.03 - Working with Firebombing Aircraft SOP

The new **13.03 Working with Firebombing Aircraft** replaces the old SOP 11.10 Waterbombing Aircraft working with

- Change to title and numbering, **was 11.10 Water Bombing Aircraft – Working With (2005)**
- Guidance for night-time firebombing operations.
- Commentary on presence of non-agency drones/RPAS during firebombing operations.
- Clarity of health safety procedures during or post firebombing drop.
- Considerations for environment and biodiversity are outlined to ensure CFA compliance with the Environment Protection Act 2017.
- Clarity of tasking aircraft and roles and responsibilities, expressly those of the Air Attack Supervisor and Incident Controller (including when an Air Attack Supervisor is not immediately available).
- Updates to reporting requirements following an aviation near miss and/or incident (e.g. salmon cards).

NOTE – We have done our best to match the new SOP clauses with the old SOP however in some cases they do not match and the comparison is left blank.

Colour code

	Minor change in wording
	Small updates in the wording but the intent is the same as the old SOP
	Significant change or new procedure in the new SOP

	NEW SOP 13.03- Working with Firebombing Aircraft	OLD SOP 11.10 – Water Bombing Aircraft – Working with
Scope	(2) This Standard Operating Procedure applies to all CFA members involved in operational activities.	This Standard Operating Procedure applies to all CFA members involved with operational activities.
Objective	(1) To enhance the safety of CFA members and the environment by detailing the considerations and actions to be taken when managing and working with aircraft involved in firebombing operations.	To enhance the safety of CFA members and the environment by detailing the actions to be taken when managing and working with aircraft involved in air attack operations.
Procedure Training	(3) Where practicable, as part of training, brigades should become familiar with firebombing and aircraft operations in their response area to ensure efficient tasking and utilisation of aircraft.	

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Roles and Tasking Aircraft	(4) All aircraft involved in firebombing operations on any fire are under the control of the Incident Controller. This control may be delegated to the Operations Officer.	1. All aircraft involved in air attack operations on any fire are under the control of the Incident Controller. This control may be delegated to the Operations Officer
	(5) The Incident Controller should ensure that the aircraft dispatched are fully supported and managed according to the Interagency Aviation Operating Policy and Procedures (IAOPs).	2. The Incident Controller or Operations Officer may delegate the tasking of air attack aircraft to an Air Operations Manager, Aircraft Officer, Division Commander or Sector Commander.
	(6) An Air Attack Supervisor should support all firebombing operations. The dispatch of an Air Attack Supervisor can be requested via Firecom or the State Duty Officer/District Duty Officer and should be requested as early as practicable. <ul style="list-style-type: none"> a. As per JSOP J02.06- Aviation Resources Readiness (Bushfire), certain weather conditions should have predetermined dispatch of aircraft and an Air Attack Supervisor. 	3. An Air Attack Supervisor shall support all air attack operations.
	(7) CFA members tasking firebombing aircraft should do so, where practicable, through the Air Attack Supervisor.	4. Pilots of aircraft involved in air attack operations shall only take instructions from the Air Attack Supervisor except under the circumstances described in procedure 5. CFA members tasking air attack shall do so through the air attack supervisor.
		5. Where only one (1) water bombing aircraft is operating and an air attack supervisor is not yet on scene, pilots may take instruction from an officer nominated by the incident controller or Operations Officer.
		6. An aircraft shall be released from deployment where it can no longer achieve constructive work at an incident.
	(8) Those responsible for tasking an aircraft should: <ul style="list-style-type: none"> a. keep their line of control or chain of command informed of all aircraft tasking; b. ensure that all CFA or other agency members working on the fireground are aware of the aircraft presence and tasking; and 	7. The Incident Controller, Operations Officer, or officer tasking aircraft shall ensure that all CFA or other Agency members working on the fireground are aware of the aircraft presence and tasking.

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	c. advise all CFA or other agency members working that part of the fire line where the drop is to be made and when it will occur.	
		8. Prior to tasking an aircraft for air attack operations, the officer tasking the aircraft shall advise all CFA or other Agency members working that part of the fire line where the drop is to be made and when it will occur.
		9. An Air Attack Supervisor or Pilot may stand down an aircraft if: 9.1. The safety of those in the air or on the ground is compromised; and/or 9.2. Communications fail.
	(9) All operations involving firebombing aircraft should adhere with IAOPs.	
	(10) Pilots of aircraft involved in firebombing operations should only take instructions from the Air Attack Supervisor except under the circumstance described in Clause 11.	
	(11) If an Air Attack Supervisor is not immediately available, the Incident Controller may, in line with IAOPs, authorise firebombing to be conducted when: a. fire control objectives would be adversely compromised by the delay of firebombing; b. the aircraft is fitted with an operating siren capability and is not a Large Air Tanker; c. the Incident Controller has undertaken a Dynamic Risk Assessment; d. the Incident Controller has ensured all systems, communications and procedures are in place to ensure the safety of ground and airborne personnel; and e. the Incident Controller has assessed and appropriately managed any environmental risks.	
	(12) Until a Air Attack Supervisor is appointed, the Incident Controller should:	

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	<ul style="list-style-type: none"> a. identify the control point in the first call with pilot; b. advise the pilot of any hazards such as power lines, towers, guy wires or other aircraft; c. describe the fire situation and ground crews locations to the firebombing pilot in clear and simple terms; d. state where the pilot should drop, and where organic properties are impacted, where to drop only water; e. ensure vehicles and ground crews have been warned by radio and are clear of the drop zone; f. inform the pilot that the crews are clear; g. if additional loads are required, instruct the pilot to reload and return; and h. decide when to release the aircraft 	
	<p>(13) An aircraft should be released from deployment by the Incident Controller when the objective has been achieved, where firebombing operations are ineffective or when directed by the Regional Controller or State Response Controller in accordance with the IAOPs.</p> <ul style="list-style-type: none"> a. The Incident Controller or State Duty Officer/District Duty Officer should notify FireCom or the State Air Desk of the release or cancellation of aircraft as soon as practicable. 	
	<p>(14) An Air Attack Supervisor or pilot should stand down an aircraft if:</p> <ul style="list-style-type: none"> a. the safety of those in the air or on the ground is compromised; and/or b. communications fail. 	
Firebombing Drop Zones	<p>(15) When firebombing operations are made, CFA members should ensure they are clear of firebombing drop zones.</p>	

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	(16) CFA members and ground personnel must be warned of incoming drops via radio by the Air Attack Supervisor and/or Incident Controller. The Air Attack Supervisor and Incident Controller should not permit drops to proceed until ground personnel are clear.	
	(17) The pilot of firebombing aircraft fitted with a siren should activate a siren prior to and during the release of any load as required in agency procedures.	
	(18) CFA members should be aware sirens may be difficult to hear in a noisy environment. Members should watch and listen for the noise of low flying aircraft which could indicate firebombing is imminent.	
	(19) If caught in a drop zone: <ul style="list-style-type: none"> a. move safely away from the fireline; b. do not run or panic; c. watch out for falling branches and debris; d. place hand tools well clear of you; e. secure your helmet or protect your head with your arms; f. watch your footing – foams and retardant can make the ground slippery; and g. maximise protection by sheltering in vehicles if practicable. 	
	(20) If physical contact with foam or retardant occurs: <ul style="list-style-type: none"> a. clean the area with water and neutral soap and refer to the relevant Safety Data Sheet (SDS); and b. if affected, flush eyes with clean water or saline wash in the foam management kit or first aid kit. 	
Night-time firebombing operations	(21) Night-time firebombing operations should operate in line with day time procedures and relevant IAOPs, specifically IAOP 4.15 – Night Vision Imaging System Operations.	

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Remotely Piloted Aircraft (RPA)	(22) If a CFA member encounters a member of the public or company conducting unauthorised or non agency RPA/drone operations, the CFA member should direct the individual to stop and inform the Incident Controller.	
	(23) The Incident Controller should report the situation to the State Air Desk as soon as practicable and inform the Aircraft Officer in the Incident Management Team (IMT) where activated.	
	(24) For further information on RPA, refer to 13.01 Establishment and Operation of RPAS Units SOP and 13.02 Use of Remotely Piloted Aircraft Systems (RPAS) SOP. Safety Note	
Safety Notes	(25) All aircraft operations must comply with the safety procedures outlined in IAOPs.	<ul style="list-style-type: none"> • Comply with Aircraft safety procedures • Not all aircraft are fitted with warning sirens for alerting ground crews prior to dropping • When air attack operations are made, remain clear of the fire line to avoid dislodged limbs and material from tree canopies • If caught in a drop zone: <ul style="list-style-type: none"> ○ Move quickly and safely away from the fire line; ○ Place hand tools well clear of you; ○ Secure helmet or protect your head with your arms; ○ Maximise protection by sheltering in vehicles if practicable; ○ Lie on the ground with head facing in the direction of the drop; ○ Watch out for falling branches or debris; ○ Be careful of wet and slippery surfaces after the drop; and ○ Wash with cold water if hit with foam or retardant ○ Consideration shall be given to the impact of Class A foam or retardant use on the environment ○ Every effort shall be taken to ensure that firefighting foam does not enter water bodies

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		<ul style="list-style-type: none"> ○ Where possible, avoid dropping retardants or Class A foam on, or near, sensitive areas as certified organic agriculture land. ○ Where water storages are to be used for water collection the relevant water management authority shall be notified ○ Where using treated water from sewerage treatment plants, regions need to identify appropriate ponds/water storages in consultation with water authorities.
	<p>(26) If an aircraft incident or near miss occurs:</p> <p>a. the Incident Controller and/or Air Attack Supervisor must immediately notify the State Duty Officer/District Duty Officer and State Air Desk; and</p> <p>b. the Incident Controller must, as soon as practicable, report to CFASafe; and ensure the State Air Desk receives an OH&S Incident Report Card (Salmon Card) in line with IAOP 1.01 Accident and Incident Response.</p>	
	<p>(27) If an incident with an aircraft occurs, refer to 10.01 Aircraft Incidents – Response SOP and IAOP 1.01 Accident and Incident Response.</p>	
	<p>(28) In the case a serious or notifiable incident occurs, refer to 14.06 Notifications of Injuries and Fatalities SOP.</p>	
Environmental Note	<p>(29) Consideration should be given to the impact of firefighting foams and/or retardants on the environment, with further care given to avoid firefighting foams and/or retardants impacting bodies of water or organic properties. For further operational guidance on managing environmental impact and risks, refer to 9.07 Firefighting Foams and Retardants SOP.</p>	
	<p>(30) CFA members have a responsibility to minimise contamination of sites and should report environmental notifiable</p>	

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	incidents to the Incident Controller who must report the incident to the Environment Protection Authority as soon as reasonably practical.	
	(31) Where water storages are to be used for water collection the relevant water management authority should be notified.	
	(32) Where using treated water from sewage treatment plants, regions need to identify appropriate ponds/water storages in consultation with water authorities.	

Section 5- Related Documents

Interagency Aviation Operating Policy and Procedures

J02.06- Aviation Resources Readiness (Bushfire) JSOP

J08.01- OH&S Incident Reporting and Investigation- Major Emergencies JSOP

9.07 Firefighting Foams and Retardants SOP

10.15 Pollution Spills Into Inland Waters SOP

11.02 Medical Monitoring- Biological and Hazardous Substances SOP

14.06 Notification of Injuries and Fatalities SOP

16.00 Environmental Care SO