OP 1.1.2
Joint
Operational Protocol
For
Remote Area Firefighting

Between

New South Wales Rural Fire Service

And

National Parks and Wildlife Service

Version 1.4
2022

Joint

Operational Protocol

For

Remote Area Firefighting (RAF)

For the use of all members of the NSW Rural Fire Service (NSW RFS)
And
NSW National Parks and Wildlife Service (NPWS)

Suggested Distribution:

NSW RFS
and
NPWS

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1 Links

NSW RFS / NPWS Operational Agreement – 2011 Remote Area Firefighting

NSW and ACT Fire Agencies Bushfire Aviation Standard Operating Procedures 2011 version 3.1

NSW RFS RAF – (2005) (Remote Area Firefighter) Course Guide

NSW RFS Remote Area Firefighting Doctrine

NPWS Fire Management Manual

2 Superseded Protocol

2.1 This Operational Protocol supersedes RFS Operational Protocol 1.1.2 for Remote Area Firefighting (RAF) 2009.

3 Purpose

3.1 Early suppression of fires in remote terrain can be essential to preventing the natural development of large, potentially destructive fires. The State has significant areas of bushland where rapid response to fire suppression operations by vehicle is not possible due to access, topography and/or the distance involved.

3.2 Remote Area Firefighting Teams (RAFTs) are established as a pivotal tool to enable Incident Controllers to deal with these situations. RAFT deployment is task based and by its nature requires hard, protracted physical activity. Personnel must meet strict medical, physical and competency standards.

3.3 This Operational Protocol is for joint agency use by the NSW Rural Fire Service (NSW RFS) and NSW National Parks and Wildlife Service (NPWS). This policy applies to any class of remote fire and includes remote prescribed burning operations. Both agencies have a duty of care to ensure that their staff, volunteers and contractors tasked to remote area firefighting operations are competent and capable of undertaking the tasks allocated to them and that those tasks are undertaken as safely as possible.

3.4 This Operational Protocol has been developed by the NSW RFS and NPWS to facilitate cooperative operations. Other agencies working with the NSW RFS and/or NPWS may operate under their organisations existing operating procedures or guidelines. The NSW RFS and NPWS will operate under this Operational Protocol when deployed in other agencie's jurisdictions and it will be these agencies responsibility to ensure compliance with this Operational Protocol.

3.5 NSW RFS RAFTs are established and administered at a District level as determined by the District management.

3.6 NPWS RAFTs are established and administered at a regional level on a needs basis for incident deployment.

3.7 Rapid Aerial Response Teams (RART) is a programme where specially trained firefighting teams (trained RAFT Firefighters) are placed on standby at appropriate times and in appropriate places, transported by helicopter to the scene of an incident when needed and, if necessary, transferred to the ground by winching or similar insertion techniques. The deployment and coordination of RART is operated under the Operational Protocol for Rapid Aerial ResponseTeams.

4 Qualifications for Remote Area Firefighting Team (RAFT) Firefighters

4.1 RAFT Firefighters

RAFT Firefighters must be currently competent in Remote Area Firefighting as set by the respective Fire Agency. The levels are outlined in the respective Fire Agencies *Training Guidelines for Remote Area Firefighting (RAF).*

4.2 RAFT Leaders

RAFT Leaders are to be qualified in Crew Leader in their respective Fire Agency, as well as currently being competent in Remote Area Firefighting as set by the respective Fire Agency.

5 Deployment Management Remote Area Firefighting Team (RAFT)

5.1 RAFT Firefighters may typically be deployed to:

(a) Areas that are only accessible by helicopter landing, hover entry/exit and winching;

(b) Areas that are only accessible by boat;

(c) Areas that are only accessible by foot; and

(d) Carry out tasks that require a high level of fitness and endurance over extended periods of time in steep and/or uneven terrain. Such tasks include extended periods of rake-hoe work and carrying of equipment.

5.2 The Incident Controller (IC) must only authorise deployment of RAFT following the completion of the *RAFT Risk Assessment Checklist for Incident Controllers* (appendix A).

5.3 RAFT deployment will be included in the Incident Action Plan (IAP) detailing the following information that is specific to the RAFT operation:

(a) Safety and contingency planning

(b) Communications and channel allocation

(c) Reporting mechanisms and timeframes

(d) Any other relevant factors that may affect the safe operation of the RAFT

5.4 Prior to RAFT deployment the Incident Controller or a delegate must,

(a) Conduct a briefing with the RAFT and provide an Incident Action Plan (IAP), and

(b) Provide a situational map to each RAFT Firefighter

5.5 RAFT Firefighters are to be properly equipped for the assigned task as per each Fire Agency schedule of equipment for Remote Area Firefighting.

5.6 In considering RAFT deployment Incident Controllers should be encouraged to consider the advantages of night operations.

5.7 A RAFT will consist of a minimum of two Firefighters including one qualified RAFT Leader and must have at least one Firefighter qualified in First Aid.

5.8 The RAFT Leader, in consultation with the RAFT and Aircrew will make the final determination whether or not the RAFT insertion takes place, utilising Crew Resource Management (CRM) process.

5.9 If at any stage during the deployment the IC or RAFT Leader become concerned with the safety and welfare of the RAFT, they can authorise the need for immediate extraction or relocation to a safe area or safety refuge.

6 Aviation

6.1 There are various options for aerial insertion, these are landing, hover entry/exit and winching. Winching should only be approved when other options are not possible. Procedures must be in accordance with the *NSW and ACT Fire Agencies Bushfire Aviation Standard Operating Procedures 2011 version 3.1*

Appendix A

RAFT Risk Analysis for Incident Controllers

The purpose of these questions is to ensure that the incident controller analyses the safe, effective and efficient deployment of RAFT. This analysis is to be used as a guide and to inform the Incident Action Plan (IAP).

Incident Name…… Date……..

1. **Is close containment the best option? Has consideration been given to the advantages and disadvantages of close containment versus broader containment strategies?**
2. **Has consideration been given to the time taken to get to the fire ground and whether sufficient gains can be made during shift lengths?**
3. **Has consideration been given to the effectiveness of RAFT night operations?**
4. **In initiating RAFT night operations has consideration been given to the availability of extraction, the level of support required and relief opportunities?**
5. **Have fire weather conditions based on both the BOM Special Fire Weather Forecast and fire ground weather , including current, forecasted and predicted weather at deployment location for the period of deployment, been assessed? Conditions that require special consideration include: temp>40º, RH<10%, wind > 20kph, FBI 24 and above.**
6. **Are key weather parameters suitable for the deployment?**
7. **Throughout the deployment will weather conditions continue to be monitored to ensure that if there are significant changes the deployment will need to be re-evaluated?**
8. **Have the factors effecting fire behaviour including vegetation type, overall fire hazard, slope, aspect and weather conditions been adequately assessed?**
9. **Are conditions conducive to safe and effective control?**
   Conditions that require special consideration including: size > 20 ha, active edge > 1km, flame height > 1.5 m, Overall Fuel Hazard > High?
10. **Has a safe insertion point been identified?**
    The RAFT Crew Leader, in consultation with their team and aircrew will make the final determination whether or not the insertion takes place and confirm extraction point for crews.
11. **Have at least one (1) means of extraction and a safe refuge <u>or</u> two (2) means of escape been identified?**

12. **Are adequate communications available to allow the crew leader to communicate either directly or indirectly with the incident control centre?**
13. **Has consideration been given to proximity of medical assistance and the possible need for additional designated medical resources eg deployment of paramedic crew at heli base?**
14. **Have sufficient aircraft resources been identified to support the RAFT deployment?**
15. **Are crews adequately equipped for the deployment, including overnight kits, food, water and fire fighting tools?**
16. **Has an assessment of the deployment task considered the level of fitness and physical exertion required to successfully complete the task?**
17. **Is the deployment more than 45 minutes from mechanical extraction?**

    If so, NPWS Moderate RAFT crews are not permitted to participate in this deployment?
18. **Are the available RAFT personnel appropriately experienced for the proposed task?**
19. **Have key decision points or triggers for the extraction of crews been identified?**
20. **Are there any special considerations that need to be examined prior to deployment?**

Prepared By:	**Approved By:**
Signature	**Signature:**
DTG:	**DTG:**

Appendix B

Remote Area Firefighting Team Personal Equipment List

The following equipment is designed as a minimum set of equipment for Remote Area Firefighters. Equipment can be added to the kits on a local identified needs basis.

1 x 30 Litre Back Pack Summit Gear Cockatoo RFS or similar
1 x 3 litre Camelback Bladder or similar
1 x Sleeping Bag
1 x Sleeping Mat
1 x Emergency solid fuel stove
1 x Spare fuel stove tablets box
1 x Headlight Yukon HL
1 x Leatherman type tool
1 x Compass with mirror Silva Ranger S or similar
1 x 5 metres x 6mm Light Rope
1 x Insect Repellent Bushmans Ultra
1 x Oz Hiker Fly 350x210 hoochie
2 x Matchbox waterproof
1 x Screw gate Carabina
1 x Personal First Aid Kit
1 x Whistle Plastic Torpeko
1 x Emergency Space Blanket
1 x Nylon Poncho or Raincoat
1 x Roll Heavy Duty 50mm tape
2 x Cyallume sticks
1 x 420ml Polypropylene cup
1 x Polypropylene deep plate
1 x Knife Fork Spoon set
1 x Small aluminium billy
1 x Notebook + Pencil

Appendix C

Remote Area Firefighting Team Firefighting Equipment

The following equipment is designed as a minimum set of equipment for Remote Area Firefighters. Equipment can be added to the kits on a local identified needs basis.

Hand Tool Kit

4 x McLeod Tools

2 x Summit gear splat mats or equivalent

1 x Summit Gear winch bag winch3-PB

Chain Saw Kit

1 x MS261 Stihl chainsaw with 16 inch bar

1x Chain saw tool kit

1 x Helmet with visor and ear muffs

1 x Chainsaw chaps Stihl

1 x File kit .325

2 x Wedges alloy large

2 x Fuel bottles MSR 887ml

1 x Bar oil, bottle MSR 590ml

1 x Axe with cover

1 x Spare chain for chainsaw

1 x Stump vice

1 x Summit Gear chainsaw winch bag RFS-CB

Pump Kit

1 x 4 Stroke 25mm outlet pump Honda Gaam WX10 or similar, with suction hose and strainer

1 x Pump tool kit

3 x 25mm x 10m peculating storz coupled hoses

1 x Dial a Jet Nozzle

2 x Fuel bottles MSR 887ml

1 x Summit Gear pump winch bag RFS-PB

Blower Kit

1 x Stihl BR600 leaf blower hi pressure

1 x Blower tool kit

2 x Fuel bottles MSR 887ml

1 x Summit Gear blower winch bag RFS-BB

1 x Ear protection

Appendix D

Remote Area Firefighting Team Communications Kit

The following equipment is designed as a minimum set of equipment for Remote Area Firefighters. Equipment can be added to the kits on a local identified needs basis.

1 x Motorola GRN portable radio
1 x Charger unit
1 x Spare battery

2 x Fireground portable radios
2 x Charger units
2 x Spare batteries

1 x Mid band frequency portable radio (NPWS, State Forests programmed)
1 x Charger unit
1 x Spare battery

1 x PMR/40 channel UHF portable radio
1 x Charger unit
1 x Spare battery

1 x GPS Garmin GPSMAP 78S or similar
1 x 406 MHz personal EPIRB
1 x Kestrel 3000 pocket weather meter
1 x Personal strobe light
1 x Dual radio chest harness

1 x Hard Case Pelican or similar