

Night Fire Suppression Operations 2018/19 Update 2

Phase 2 of Victoria's night fire suppression trial has reached a major milestone with a crew on shift for the first time in Australia on Friday December 7.

This is the culmination of at least two year's work for Victoria and it is a significant achievement. The teams dedicated to this project should be congratulated. Thanks goes to our partners in CFA, FFMVIC, CASA, NAFC, Coulsons and Kestrel Aviation. Recognition should also be provided to the work of Wayne Rigg and John Ginivan.

Operational deployment of the capability was possible from Friday 7 December, 2018 when dedicated night crewing of the aircraft commenced at Ballarat, with the Mangalore helitack coming on line 19 December.

Victoria is continuing the trial of night fire-bombing capability in the 18/19 fire season with a limited operational capability being delivered during the current fire season. I cannot overstate the "crawl, crawl, walk, run" mentality that is driving this part of the trial with safety the number one priority in the opportunity to learn.

This phase of the trial is focussing on developing safe systems of work and informing how a night fire-bombing capability is best integrated into existing fire suppression operations.

November has seen an additional focus on training, briefing and procedures and in early December final approvals of updated interagency standard operating procedures and other authorisations to proceed were put in place.

Friday also provided the first opportunity to test some of the systems with a call to prepare for night fire suppression operations for the Little River fire. More about how that occurred is provided below.

- Emergency Management Commissioner Andrew Crisp APM

Aircraft Involved

Two fire-bombing aircraft and two supporting tactical helicopters have been contracted and will be engaged in a range of training and operational deployments. Aircraft involved are:

NVIS Firebombing aircraft:-

- ❑ Helitack 349 – Sikorsky S61N – NOB Ballarat
- ❑ Helitack 346 – Bell 412 – NOB Mangalore

NVIS Supervision aircraft:-

- ❑ Firebird 322 – Sikorsky S76B – NOB Ballarat
- ❑ Firebird 318 – AS355 F2 – NOB Moorabbin



Outcomes for November

The focus during November has included:

- Training an additional four Air Attack Supervisor agency personal in NVIS use to build a pool of ten trained personnel – essential to build a sustainable pathway of NVIS capable Air Attack Supervisors (AAS)
- Finalising progressive review of existing interagency standard operating procedures to provide for the introduction of night operations, including fine tuning the go/no go checklist – broadly this demonstrated that existing daytime well-established operating procedures required relatively minor updating to cater for night operations.
- Developing and finalising guidelines to assist incident controllers in assessing whether to seek deployment of a night fire aerial suppression capability including understanding the logistical considerations involved.
- Delivering agency briefings on the capability and equally the realistic limitations of it, given the number of aircraft currently involved.
- Training flights involving water bombing and tactical support aircraft over managed fires and other simulations to fine tune cockpit procedures between aircrew and agency air attack supervisors – hugely valuable to optimise cockpit procedures and address variations in approach due to different training and development histories.
- Undertaking a range of NVIS trial flights including flights that transitioned from daylight to dark conditions – the objective for these training flights was to experience a range of terrain, lighting conditions and other conditions whilst in a non- operational mode.

December Status

On the 7th December the capability to deploy a night fire aerial suppression capability became a reality when double crewing of the Coulson S61N commenced. For this phase of the trial, aircrew have been engaged to undertake daytime operations, and separate aircrew engaged for night operations.

The Kestrel Helitack will be progressively integrated into future operations from 19 December.

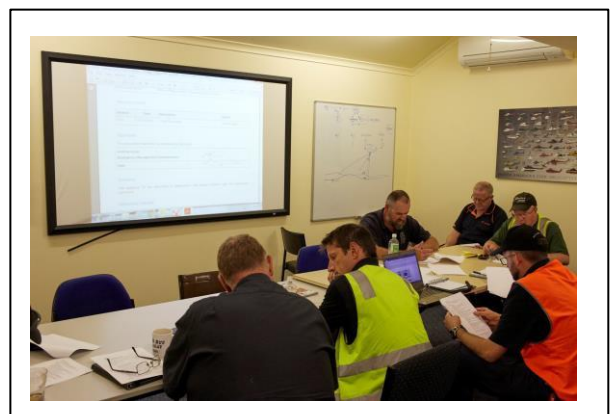
The delivery model currently includes dedicated Airbase Manager, Aircraft Officer and Air Attack Supervisor roles to allow a night aerial fire suppression to be integrated into incident management structures with least impact.

For example, under current daytime operations, an aircraft officer role would not normally be available during the night. The capability is also supported by company mobile fuelling facilities and mobile engineering support capability. In this phase a logistical footprint of about 18 - 20 persons is involved (this includes day and night capability).

7 December – A valuable Real World Learning Opportunity

The first day of operational readiness commenced with comprehensive briefings on final changes to interagency procedures, reinforcing the Crawl, Walk Run philosophy and continuing to work through logistical considerations.

It then progressed into a real world deployment opportunity.

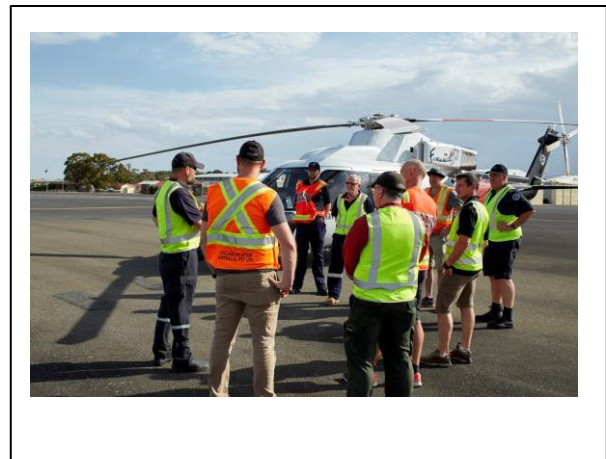


1734 Group Photo



During the group photo Wayne Rigg – Operational lead for the trial, received a phone call that the night fire aircraft was likely to be deployed to support containment efforts on a fast moving fire at Little River. The Coulson S61 helitack was already deployed to that fire undertaking daytime fire-bombing operations.

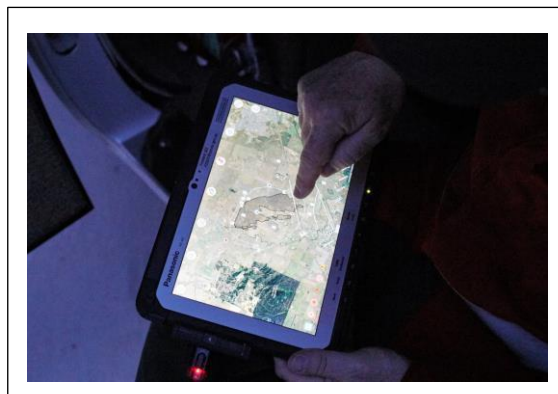
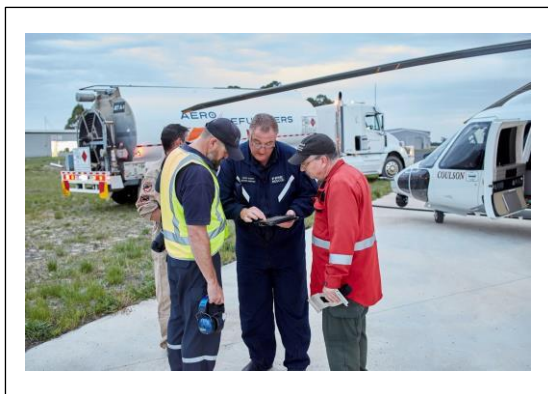
1736 – tactical discussion on best options for coordinating with the S61 fire-bombing aircraft when it came off day time fire-bombing duties, refuelling aircraft, and undertaking daytime reconnaissance flights over fire area as part of agreed standard operating procedures before any night operations can be undertaken. This resulted in the decision with the State Air Desk to stage the aircraft from the Lethbridge Airfield, which was well placed in the context of the fire location and likely impacts of any wind shift, and was practical in the context of getting fuel and engineering support to the aircraft, and still allowing the S76 and S61 aircraft to undertake risk and hazard assessment flights at about 1900.



Below, S61 and S76 aircraft returning to Lethbridge Airfield after reconnaissance flights over the fire and area where fire was anticipated to spread into depending on wind change impacts that were forecast, identification and suitability analysis of water pick up points, and assessment of hazards.



Immediately below, photos show the assessment of known fire extent, and discussion of areas where hotspots were present.



The two photos below show the engineering crews undertaking regular maintenance on S61 fire-bombing aircraft that had just completed about four hours of fire bombing.

And team members completing the Go/NoGo checklist following discussion of hazards, general observations about fire area, and consideration of flight back to Ballarat if the aircraft were stood down.



Wrap up of Friday's efforts

The Aircraft were stood down later on the Friday night after the forecast wind change did not exacerbate the fire, and aircraft and support crews returned to Ballarat.

The outcome for the very first day broadly confirmed that the preparations put in place prior to this point worked well, that the process for changing over from daytime operations to night time operations was fairly practical and that the choice of staging airfield worked well in relation to coordination with fuel and engineering support.

As distance from the aircraft home base increases, the logistical and time considerations in getting all logistical support in place will increase. This has been anticipated for the trial and will be better understood as experience is built.

A walk Crawl Run philosophy will be followed

During this phase of the trial, deployment to any fire will be dependent on aircraft and crews being able to be positioned to allow fire-bombing operations to commence during daylight and then continue after dark.

Deployment to new fire starts after dark will not be undertaken unless aircrews have undertaken aerial inspection and hazard assessment of the fire area during daylight.

Whilst the capability can be theoretically deployed anywhere in the state, given the limited number of aircraft involved, and their use for daytime fire suppression operations, there will be inherent limits on how and where the capability can effectively be deployed in this trial phase

Agency personnel have been briefed that if they are considering Night Operations, they should request the capability as early as possible to enable the aircraft and supporting crews to be integrated into the existing operation as early as possible. The more time for planning and travel to the fire the better

Staying informed

Regular updates will be produced as the trial progresses.