

Forty Years of Aviation and Forest Fire Bryan Rees, 2014

This article is based upon a talk Bryan gave to FCRPA Members in 2014.

Mike Leonard wanted me to talk about comparisons of working for nearly 40 years in aviation. What's changed?

With regards to what hasn't changed, I want to set a scene for some of you. Last Wednesday I was in a rappel helicopter from Buller flying low level, door open, clear NE day and the vista around me showed some of the most charismatic names in remote Victoria - the Bluff, the Razor, the Crosscut Saw, Terrible Hollow – this was my morning vista – some things don't change, it's still wondrous and I watched the eyeballs of our Canadian exchangee pop out of her head when she saw it.

I started with the FCV in 1976 in the Division of Forest Protection and with Richard Rawson in fire research. Val Cleary was the Chief and John Barry Johnston (JB) the 2IC. As I was reminded in my early years, I was just a Technical Assistant, not a forester. A lot of my early aviation days were with Richard and Con Wood on incendiary machines, retardant drop tests and, ironically, following the MAFFS around.

Nearly 40 years later I'm the Senior Aviation Services Officer, having been involved with aircraft since 1978. For about the last 25 years I've been responsible for aviation training and safety.

I left FCV in 1987 to work for the NSCA and had some wonderful experiences and worked with terrific guys, who also are still involved in aviation. I returned in 1989, after the NSCA collapse, to set up the rappel program for what was then the Department of Conservation and Environment (DCE). I stayed because I genuinely believed it was the best fire service in the country for aviation, and why go anywhere else, and I needed a job.

During my time I've been fortunate to be able to work and train with aircraft on fires in most States of Australia, and in NZ, Spain, Canada and the USA.

My first flight for the FCV was in a Hughes 500 with Ted Stuckey and Tony Manderson at Rowley's Ridge for a blivet burn run by Garry Squires, and some junior forester called Leonard. No doors, no safety brief, headset on and told just sit there and shut up.

In my time there have been six name changes (possibly seven) since the FCV, and I've worked under eight Chiefs of Division/Chief Fire Officers all of whom have had their unique style and faced their special challenges.

Progressively we have moved from purely suppressing fires to managing fires – we protect water from fire. The pressures of the urban interface and politics, and public expectation and public engagement, have intensified to a level I believe that the old Chiefs and District Foresters could not possibly have foreseen.

The catch cry these days is stakeholder and engagement. When I first started, a fork was a stakeholder and engagement was something you avoided.

The priority for an Incident Controller (IC) 10-20 years ago was to get the fire out. Now the priority is to manage the community and stakeholder expectations, and operations come second.

No longer can crews drop fusees out windows on the way home to reduce fuels. The approval and public consultation processes are lengthy and time consuming. I am not saying whether that is right or wrong – it just is.

Since I started fires have become bigger, with major events in 2002/03 and 2006/07 before Black Saturday replaced Ash Wednesday as the yardstick tragedy. Iconic parks such as Wilson's Promontory and the Grampians hadn't burnt in my first 25 or so years, but both have been cooked in the last 10 or so years.

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Agency staff have now fought fires in NSW, Tasmania, SA, Canada, and the USA, something unheard of pre-1994, and our fire and aviation skills are actively sought after, based on systems and experiences gained working under many of you.

What's Changed?

Pigs are now called slip-ons. Large tankers are going the way of the dodo.

We conduct aerial ignition operations at night looking through toilet roll holders called night vision goggles.

We don't carry beer to base camps, especially not in helicopters.

We drop napalm to conduct burns and back burns.

Dozers and dozer operators are worth their weight in gold because mechanical harvesters can't build fireline. Mechanical harvesting has decreased our pool of advanced fallers, very few saw skills are conducted in house, and we struggle to train due to liability issues and access to coupes.

When I started we had 2 x light helicopters on contract, at Horsham and Swifts Creek, and loose contracts with Ben Buckley at Benambra and Lindsay Seehusen at Stawell. Now there are 48 aircraft on contract, ranging from Bell Jetrangers to Erickson Aircranes and Larger Air Tankers (LATs).

The aviation budget is now around the \$25 million mark, just to have them available. Last season we used 75 aircraft and flew 11,000 hrs in 4 months. In 1996 we flew 1900 hrs with 17 aircraft.

We mixed retardant from 25kg bags into Pawnees of 600 litre capacity. Now one tonne Phosbins load 15000 litre LATs in 10 mins. Last fire season at Linga, 200000 litres of retardant was mixed, loaded and delivered in one day.

We have gone from Pawnees and Beavers in 1983 (payloads of 600-900 litres) to a DC10 (4200 litres) in 2010.

The biggest single change is the advent of technology for day-to-day operations that is available to all firefighters— for good or bad.

Ash Wednesday, arguably the worst day since 1939, was initially fought in isolation due to technology and organisational issues, while Black Saturday was played out immediately in the media.

There is incredible pressure on agency officers to make decisions which directly affect the lives of the public. The Air Attack Supervisor (AAS) is now playing God, selecting which houses to save. On Black Saturday I had to make the decision as to whether my Aircrane could stop the Bunyip fire burning into Drouin, or save the BP roadhouses and caravan park at Longwarry. It's still a day I wonder how I survived.

In 1985 at Bright, Peter Billing went into a chemist shop to develop Infrared (IR) photos for crews. The IR linescan process has gone from having a 4-6 hrs delay with manual interpretation, to a full topographical map produced in five minutes, and the IC will still complain it's not quick enough.

Weather information is no longer delivered via VL3AA at 1700 and 0900 on HF and VHF. It's instant, and it's direct to the fireline on iPads and phones. Radar images of fronts and weather change information are instantly available to firefighters in the field.

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Discussions were once held face to face. Information was gathered and processed for a morning shift. Now it's a photo from a phone emailed immediately and expectations are high.

GPS tracks all aircraft and vehicles, even rappel crews. We do SAR on all aircraft every 3 mins. I can tell where every aircraft is in the State immediately.

Cameras cannot only gather photos but can also tell where the photo was taken with a Latitude and Longitude, and then deliver it to the Incident Management Team (IMT) for all to view immediately.

The Forward Looking InfraRed (FLIR) units we first introduced in 1982 can now not only detect hot spots but, using laser technology, they can identify the Lat/Long of the hot spot itself.

What's Not Changed?

We still sleep in tents and whinge about food.

We still don't walk around the back of helicopters, though nowadays the blades of the tail rotors are bigger than the main rotors on the ones when I first started.

We still don't have enough people on the fireline.

We still drop Phoschek and it's still red.

Burns still get out.

Radios still don't work at times.

Vehicles still get bogged.

Dozers still don't have lights.

Overall

We've lost a lot of experience and critical mass, and that includes the CFA.

We're forgetting how to conduct remote area firefighting.

We're more risk averse, and firefighter safety is #1 although there is clearly nothing wrong with that.

There is a lot of Victoria covered by a term "fire killed ash" where we may not send firefighters. Does this mean we will get bigger fires?

We appear to have more media officers than we do Incident Controllers.

Still, I get to work in some amazing parts of Victoria with really good people.