

Fire 2

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Royal Commission into National Natural Disaster Arrangements'

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[REDACTED]

Dear Air Chief Marshal (retired) Mark Binskin,

I wish to make, as an individual, a submission to the above Royal Commission. The views and suggestions are my own.

I particularly want to address the issue of operational response, the role of the Commonwealth government in terms of assistance and resource availability and the overall preparedness processes in dealing with the growing intensity of the bushfire threat in our country.

As a full-time elected union official at the [REDACTED] (1988-2014) I had cause to be involved in many State government advisory bodies. Of particular relevance to your inquiry was my involvement as a member of the [REDACTED] [REDACTED] - May 2009 through to 2011 and earlier I was also a member of both the Victorian Government's [REDACTED] (after a huge chemical fire) and the subsequent [REDACTED], between 1991 and 1993.

Please find my views and suggestions attached.

Yours sincerely

[REDACTED]

[REDACTED]

[REDACTED]

1.

The 2019-20 national bushfire season-where to from here

“We can put a man on the moon but we can’t put out a [bush] fire”, a resident from the Australian Capital Territory, interviewed on the Channel 10 news, 5 30pm, Friday, January 31, 2020.

Preamble

The above quote is an appropriate lead in to my submission.

We now have governments of all persuasions (federal, state and territory) acknowledging that the role of climate change is a key contributor to the occurrence of more extreme bushfires and other natural disasters. This has led to an acceptance that all governments need to work together to improve emergency responses and, in particular, come up with more practical activities leading to enhanced prevention, mitigation and effectiveness in tackling bushfires in particular into the future.

Coordination between all levels of government is now high on the agenda. It is accepted that the scale and severity of the recent blazes needs a more dedicated effort than all other responses in the past.

It is not enough to now simply factor in the effects of climate change, even though this will be a major step forward.

The earlier emphases on individual members of the public, during a bushfire season, to seek initial ‘advice’ then move to ‘watch and act’ before considering ‘stay and defend’ or ‘evacuate’ if an emergency is declared, is no longer satisfactory.

We need a new state of readiness-I suggest: ‘detect and suppress’, become the primary, initial and overarching framework of activities to be instigated in the future.

The catastrophic fire danger threat requires such a dedicated approach to be applied at the earliest stage and opportunity. This shift in policy is a move away from placing a lot of responsibility on the individual generally and what is occurring in local inhabited areas. It demands a more coordinated fire suppression effort by the empowered relevant authorities.

What didn’t happen in 2019-20

It has to be acknowledged that the need to put in place long-term plans aimed at strengthening bushfire mitigation efforts, after previous Royal commissions and enquiries, were never fully investigated or implemented. In particular there was no appreciation that not only the built environment and human life had to be protected, but also the broader natural environment had to be EQUALLY protected to achieve the first.

2.

The new priority should be to anticipate and prevent fire from spreading from its initial ignition source e.g. lightning strike, powerline ignition. From what happened in 2019-20 (and on prior occasions), it should not be simply accepted that some wildfires can continue to exceed our capacity for suppression.

The February 2009 bushfire disaster, that swept through Victoria, burnt more than a million acres, destroyed whole towns, razed thousands of buildings and killed 173 people. Many of these blazes started in remote areas of bush and were allowed to reach fireball proportions with flames of over 30 m high or more that can, and did, overwhelm human habitation. This is what happened to Marysville in 2009.

Fuel reduction programs had occurred but were no match for rolling, wind driven fireballs.

The current firefighting ability and methodology is far from adequate, despite the hard work and determination of firefighters on the ground.

Fireproofing the nation should not be described as a pipedream. It is a national challenge that should be faced and resolved.

We have not only the responsibility to protect life and property, but we also have a national responsibility to protect the remaining and shrinking millions of hectares of native forest and bushland across the country. In fact many fires often start in remote areas and become massive forces of energy which move into human habitation at great cost. It is imperative and logical, the initial ignition point must be targeted.

Prevention and suppression.

Our scientists are in agreement that reduction in fuel loads can play a role in certain circumstances. It is now also acknowledged that fuel reduction burning alone will not fix the threat of modern day bushfires. Catastrophic bushfires are here to stay.

The best response to future bushfires deserves a much more determined broader prevention strategy that will require more expenditure on resources than ever before. The recent bushfires experience exposes a serious vacuum in our disaster planning, as a nation.

We need to acknowledge that back in 2018 a proposal for a dedicated national water bomber fleet was ignored. The country's National Aerial Firefighting Centre sought a funding commitment for such a fleet in December 2017. It seems now, after the events of the recent summer, that this funding may now be addressed.

This is an important development as many emergency experts are now openly proposing that water bombing small fires before they turn into mega-blazes needs to be now become a major priority, if not the priority. The cost of early prevention water bombing on fires in remote areas, initially well away from lives and property, has to be considered.

The ability to keep fires small has been hampered by the lack of resources under current arrangements. The past bushfire season saw thousands of (dry) lightning strikes leading to huge blazes in remote bushland that eventually impacted on the human built environment.

3.

Secret mission-Wollemi Pines

During the recent bushfire crisis a precedent was set for targeted operations. Water-bombing aircraft and large air tankers dropped fire retardant to save the world-famous Wollemi Pines at a secret location in remote bush in New South Wales. This small cluster of remnant trees are the only known survivors of the plant in the world, having survived over the last 200 million years.

In a subsequent media report the New South Wales environment Minister said it was “like a military-style operation”. Infrared scanning was used in the fire control room tracking the threat of the fire as it moved towards the rare Pines. A helicopter was used to provide pinpoint grid references (GPS) for the water-bombing operation. A successful mission was achieved.

Back in mid-2018 the National Disaster Risk Reduction Framework was published. It warned the changing climate was exposing Australia to various natural disasters on “unimagined scales, in unprecedented combinations and in unexpected locations”. A national implementation plan was promised by the government in 2019. It laid out a blueprint for a nationally coordinated pre-emptive response to natural disasters saying increase investment would be necessary.

It wasn't put in place.

Deployment of more technology-including satellites.

Besides the call for a more permanent larger fleet of water bombing aircraft (eg: C 130 tankers) public discussion has also started around the need to deploy more sophisticated technology to assist in future firefighting overall.

On ABC radio news, 10 AM, Monday 13/1/20 the Federal environment Minister floated the idea of “satellite mapping” to assist in the bushfire effort. This comment was principally about assisting wildlife recovery.

Similarly a company called Digital Agriculture Services (DAS) revealed it had done special analysis of satellite photos and other data that revealed that almost 1,500,000 ha of forest had already been burnt in the fires by the third week of January 2020. The primary source of the primary information was not revealed.

Of greater significance was a very interesting article in the Australian newspaper of 14 January 2020. It was written by ██████████ of Pancontinental Mining. He wrote in part: “We should summon technology to the cause-and the technology exists to provide us with an early warning system that can be launched before the next fire season... For Australia's purpose, the system would operate to remotely sense fires while they are still small enough to be readily suppressed. For years scientists have been developing increasingly accurate thermal infrared sensors that can manage this. They can be deployed in aircraft, drones or on satellites to map vast areas prone to fires GPS will pinpoint the relevant locations to within a metre.

4.

“██████████, a physicist and former chief operating officer and president of Loral Space Systems, one of the world’s largest satellite manufacturers and operators, is confident we will soon use satellites to detect fires in their early stages. He says all the technology required is available and would be carried on low earth orbiting satellites, and a height of 600 km to 1000 km. “They are cheap, \$1 million or less,” ██████████ says.

“It should be possible to establish an integrated early warning system consisting of real-time observation... Over fire-prone territory, a downloading capability to a command and control centre that analyses the data, and a communication system that alerts the firefighters... This system could be operated by the CSIRO in conjunction with the Australian Space Agency.”

Tony Grey’s article concluded with the following paragraphs: “Affordable satellite technology is available that might help save lives, houses, businesses and properties. Not a week before [Prime Minister] Morrison’s \$2 billion pledge, the US use similar technology to target an Iranian general in a fast moving car hundreds of kilometres away.

“It’s not the future. It’s here.”

Putting aside Mr ██████████ hyperbole, his information deserves serious thought.

In a subsequent press article in the Herald-Sun newspaper of 4 March 2020, under the heading-‘Spy in the sky to beat blazes/firefighting by satellite’, journalist ██████████ reported in part: “An infra-red satellite is being designed by scientists to identify bushfire risks and to measure fuel loads.

“The shoebox -sized high-resolution satellite, to be developed by the Australian National University’s Institute for Space, will also measure vegetation moisture levels, detecting changes in highly-flammable plants and trees such as eucalyptus to help plan back burning operations in high-risk areas.

“ANU remote sensing expert ██████████ said the world-first development of such technology could cut the number of bushfires... ANU Mt Stromlo has secured \$1 million in design funding and has approached the new Australian Space Agency for a construction and launch grant, with the hope of having a “constellation” of such satellites monitoring Australia from 2022.”

Emergency powers and use of military

By mid - January 2020 the federal government was flagging the creation of new Commonwealth emergency powers to allow the federal government to respond more proactively when disasters strike.

By the end of January the federal government was floating specific legislative change to enable the federal government to declare national states of emergency and have the ability to deploy whatever resources it deemed necessary in circumstances that required such a declaration. It was state that the power to declare a national state of emergency and call out the Defence Force, was needed to break the cycle of natural disasters such as dangerous fires.

5.

With agreement between the federal government and the state governments military assets were deployed during a recent catastrophic bushfires of 2019-20.

For example a P-8A Poseidon advanced surveillance aircraft conducted reconnaissance flights. The Australian Navy ship the HMAS Adelaide delivered relief provisions and heavy equipment to clear roads. Taipan, Seahawk and EC-135 helicopters were used for fire mapping, surveillance and search-and-rescue operations.

The precedent for the deployment of military assets has been set.

Federal-State and Territory coordination essential.

Back on 13 March 2020 COAG had a meeting in Sydney in the wake of the catastrophic fire season last summer. A preliminary report prepared by the CSIRO was received by the meeting. It emphasised that extreme weather was becoming increasingly prevalent and will have ongoing "significant impact".

The meeting endorsed in principle a national risk reduction framework to build resilience and improve responses to natural disasters, with an immediate commitment of \$260 million to a Federal-State partnership to deal with all relevant issues. Further initiatives around government investment in disaster resilience will be dealt with at a future meeting.

Another suggestion is that the federal government use its military and security ties with the US in particular, to allow immediate access (with the appropriate security protocols in place) to geo-stationary satellite technology, already in existence globally, to provide real-time, location data concerning imminent natural disaster threats impacting on the Australian continent.

This could be put in place while our own domestic, satellite technology is developed and put in place under an enhanced National Firefighting framework.

In summary.

It is clear that Australia needs to move to a comprehensive technological response to natural disasters, in particular to end the cycle of catastrophic bushfires that are so deadly and so costly to human habitation and the natural environment.

The public and political conversation must move to the details of how all of this can be put into place as soon as possible.

6.

Detect: The use of available geo-stationary satellite technology is needed now. Under the new co-operation arrangements, the Federal government should activate current satellite information via military and security treaties to monitor ignition points in real time. { Meanwhile the development of our own national satellite assets should be accelerated}.

Suppress: The establishment of a permanent water-bombing fleet of suitable aircraft must be invested in expeditiously so that the real time satellite and other data can be reacted to in a timely and effective manner. This fleet will require a team of well - trained crews. Airfields will needed to strategically selected (and built if necessary) so that response times for successful suppression missions can be met.

Thank you.

THIS SHOULD NOT ALLOWED TO HAPPEN AGAIN