

14/09/23

Dear Panel Members,

Thank you for the opportunity to engage with Government to find a solution to defend Australia from natural disasters. My area of interest and action is how we can mitigate the losses due to catastrophic wildfires.

For many years I have advocated a different response to how we fight bushfires. I have also at times been a critic of such measures like 'fire hazard reduction burns' in an attempt to reduce fuel loads and in the belief that it will make a difference to fire risk and intensity. Statistically less than 30% of fire hazard reduction burns can be considered optimal. This is in itself a very large and controversial topic and is not covered by this submission.

Climate change due to excess carbon compounds emitted since the beginning of the industrial revolution has seen average global temperatures rising. The extremes of all major weather events are clearly getting worse year by year. Such events as the 2019/20 wildfires in Australia have seen fire behaviour and intensity not previously experienced. Fires in Greece, Spain, Hawaii, Canada, and USA in recent weeks have resulted in catastrophic loss of life and property, even in the suburban environment. It is possible that the western sprawl of residential Sydney could be similarly impacted in the future. The cost or losses of the 2019/20 fires has been estimated to be between 78 to 88 billion dollars plus the annihilation of flora and fauna across some 25 million hectares. Many dwellings destroyed in the rural towns and bush land setting were uninsured due to the cost of risk. Similarly, many dwellings in flood prone areas were also uninsured. Though this submission deals only with fire it is worth noting the uncertainty that many Australians live with during all adverse extreme weather conditions or events. We cannot stop the rain but we can do something about the threat and evolution of wildfires.

This discussion paper is all about the difference between capabilities and responsibilities.

Largely now it is the States that have the responsibility in each of their jurisdictions. The ground crews and assets are a mixture of professional firefighters and volunteer brigades as well as aircraft leased by each of them during the fire season. NSW has one Boeing 737 LAT, which at the time of writing this submission is firefighting in Nth. America during the most extreme fires in their history. The Commonwealth Government through AFAC provides funding for its Business agency, NAFC, to lease further airborne support and deploy as needed and requested by the States.

The Royal Commission into National Natural Disaster Arrangements heard that first response at the earliest opportunity by airborne assets saw the best results. When we say Natural Disaster it is important to remember that not all fires, indeed the majority of wildfires, are not natural at all. Many are caused by energy transmission infrastructure. Others may be hazard reduction burns gone wrong, the use of machinery on days of extreme or catastrophic risk, accidents or malicious acts of arson. The natural ones are those started by lightning strike. Currently, right across Australia, the penalties for arson are too weak and do not reflect the cost, suffering and threat they cause.

For an optimal outcome the deployment of airborne assets as first responders is imperative. Fire seasons in the northern and southern hemispheres are overlapping stretching global air asset capabilities and delaying the availability of LAT's that are leased from the USA. The North American airborne fleet numbers less than eighteen LAT's yet the US has 67 submarines. Globally we are irresponsibly under resourced in this regard. Here in Australia we have one LAT operated by the NSW Rural Fire Service.

So who should be responsible for wildfires? Should it be a State or Federal responsibility? We are far too cavalier in the way we handle fire hazards, risk and response. The ADF do not want the responsibility of firefighting and certainly not as first responders. They have not the capability, despite having suitable airframes. I note their involvement and help in relief and recovery during recent natural disasters but they have made their position clear by stating they would prefer to be the force of last resort. They do not wish to be distracted from their core role of defending Australia and its national interest.

We who are here now are the custodians of this nation and if we don't take on this challenge it will lead to a loss of biodiversity and of human life and suffering across this nation, impacting regions, towns, communities of people, communities of plants, communities of a diverse and unique fauna. The longer we put up with it will only cost those that come next even more in dollar terms to save less. I don't have a sense of smell or taste but I used to once and I have heard on three different occasions people talking of their experiences in the 2019/20 wildfires where they said, "before the fire came upon us, even before we could smell the smoke there was this sweet, sweet smell. It was like the smell of the Aussie BBQ". That is the smell of protein being cooked. The smell of grazing stock and wildlife burning. Nothing escapes except those on the fringes and we can all remember, in particular, images of koalas severely injured by fire. Yet they were the lucky ones.

I met with the Hon. Alan Wilkie MP, Member for Clarke in his first term to discuss Australian's attitudes and response to fire. My concern in simple terms was, all that you needed to be a terrorist in Australia was a box of matches and catastrophic risk. An action by an enemy state may only need a couple of dozen operatives with

matches to bring Australia to its knees. This is not made as a flippant aside. It is a valid concern and we are unprepared for any such events. We need to get really, really good at putting fires out within hours of when they start. Not days. Days will almost certainly become months.

We need a Sovereign airborne capability of a substantial force as first responders. The ADF don't want the responsibility. The states each have their own capabilities but cannot step up to the level of what's needed. There needs to be a fleet of at least eight Large Air Tankers, LAT's. NAFC is a Business Agency attached to AFAC. I am aware of their function but they do not own aircraft. Why not? Either set them up with a fleet of eight LAT's or create another Business Agency that owns and operates them. We need sovereign capability in this regard. In Australia we need at least eight C130 Hercules aircraft each equipped with Modular Airborne Fire Fighting System Mark 2, MAFFS II. These are a roll on roll off asset that converts the airframe to a LAT in less than two hours. Each aircraft has a crew of three. Importantly these aircraft can utilise major airports, regional airports and many rural airstrips plus RAAF bases as long as ground support can be provided. They can operate 24 hours a day which most of the roughly 160 aircraft that NAFC operate cannot. As well as this much needed capability they can also be used for disaster relief and humanitarian assistance at home and in our region without the need to distract the ADF from their core role. I would envisage them also operating in the Northern hemisphere during their fire seasons. In dollar terms it means an initial investment of less than 10% of the losses experienced in the 2019/20 wildfires.

My hope is that the option I propose will focus on 'disaster avoidance' by being the first responders to fires no matter how they start. In mid-November 2019 the length of fire fronts was roughly 6,000 kilometres. By mid-January 2020 this was exceeded many times over. We are unable to address wildfires by any means that we currently employ. Higher ambient temperatures multiply the risk such that no measures we are equipped for can make a difference once the fire storms that a warming planet creates are at our door. We have real time data of lightning strikes as well as high resolution thermal imaging that can help us determine the best use of LAT's to avoid the likelihood of wildfires, especially in remote and inaccessible terrain. We have a responsibility to act in a manner proportional to the risk and inevitable losses. Having a capability as outlined above would make a significant difference to the impact and consequences of fires by simply 'nipping them in the bud'. Don't play with fire.

Australia's Disaster Defence Response to Emergency Situations Service, (ADDRESS), needs to be a sovereign squadron of at least eight LAT's as a priority as soon as can be enabled. This capability needs to be provided by the Commonwealth Government and crewed by civilian aircrews. If the ADF can offer any assistance in this effort it would, I'm sure, be welcome but ADDRESS needs to be an autonomous stand-alone capability, funded and managed by the Commonwealth and deployed in cooperation with NAFC and the various State firefighting services, tasked as first responders and guided by the intelligence data available to preserve sensitive environmental values, crops, stock, property and life. The imperative being the prevention of catastrophic wildfires.

Respectfully,
Rob Hayes.