



Federal Assistance Capability for Crisis Response

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MCDERMOTT AVIATION RESPONSE

Background

McDermott Aviation (McDAV) has operated in the emergency, public health, and utility aviation sector since the 1980's. In that period, we have grown our fleet to around 50 helicopters of varying size and load capacity and have recently added three large, fixed wing transport aircraft which will be capable of deploying those helicopters anywhere in the world. All machines and supporting systems are suited to the emergency response sector with rapid response, role flexibility and field reliability.

McDAV operates nationally, through all the States of Australia, and globally through our Pacific Neighbours, and beyond into Asia, North America and Europe. Operating offshore enables us to hone our skills and refine equipment by competing and collaborating successfully with the best in the world.

The most consistent contracted emergency services work for the company is in the wildfire suppression and supporting services (more than 20 years' experience and up to 30 helicopters deployed) but we have carried out a wide range of additional emergency response roles including flood and cyclone evacuation and recovery work, shipping disasters/salvage, medevac, observation and disaster assessment platforms, infrastructure and asset rebuilding, and general pax, cargo and lifting support to ground responders. We have short- and medium-term contracts for fires - which have a relatively predictable seasonal cycle - and this underpins the availability of the aircraft and crews for other emergency Ops. Our aircraft can be transported offshore via a range of air and sea freight options and can be role reconfigured at short notice.

McDAV works with all Emergency services agencies in the States and also works with federal coordination agencies and the ADF for utility roles in Australia and internationally.

With this background we offer the following response to the questions asked and finish with general comments on the emergency services' capability.

Response Questions

- **Acknowledging the primary role of state and territories in emergency response, what longer-term capacities and capabilities does the Commonwealth need to develop to meet the challenges of the evolving strategic environment?**

The Commonwealth has a role in supporting and managing "surge" capability which can be transferred across jurisdictions in times of emergency to bolster State and Territory resources. Through AMSAR and NAFC (ARENA) (at least) the Commonwealth has databases of "pre-qualified" aerial resources (incl crew), geographic locations and current tasking status which can be used to add to whatever the States and Territories currently have in action. These databases already go a long way in identifying the aircraft configured for specific (or multiple) roles which can be used to determine the asset/s most suitable to respond to different crises. The databases include contracted and Call When Needed (CWN) availability.

The NAFC model provides several positive factors which should be considered for tasking of aircraft for other non-fire emergencies -

- Database of aircraft and crew status and location (ARENA) operators update with aircraft available and location if they are ready to work – switch off availability if absent or in maintenance.
 - Classification of a range of fire related roles and aircraft categories along with standards for determining the classification of assets
 - Standards for aircraft configuration items and service delivery
 - Although the NAFC speaker in the conf the other day nominated it as a “non-Govt” agency – it is owned by the States combined and the board comprises heads of the State and Territory fire and emergency service agencies. What this does is establish an immediate and high-level forum for the discussion and potential resolution of cross jurisdictional issues and resource sharing.
 - Coordination of a tender and contracting system which acknowledges support and management capability as well as asset suitability; and support for medium-long term asset availability and updates to technology
- **At a national level, what are likely to be the key pressure points or challenges for the Commonwealth responding to competing and concurrent crises?**

Most resources are managed at State and Territory level and this sometimes results in difficulties with triaging requirements across different locations or jurisdictions. Without a supported pool of surge assets, the Commonwealth will have limited ability to supplement (or influence) whatever the States and Territories are already using and/or controlling.

Climate change along with population increases have the potential to produce more severe and frequent crises and longer high-threat periods both domestically and abroad. Aerial assets are increasingly being deployed to the Northern Hemisphere either in anticipation of, or in response to, similar crises on an international level. With extended high-risk weather periods in both hemispheres, the overlap and demand for resources is increasing. This limits the availability of the pool of surge assets available to the Commonwealth and requires a different approach to ensure availability and access to resources – both in terms of retaining assets in country, increasing asset availability, and in having access to asset data to identify what is available should the need arise. Australian operators would probably prefer to operate at home but require commercial signals to sustain their presence in any geographic location. The “loss” of assets to the northern hemisphere is directly connected to the need to secure commercial contracts for aircraft utilisation. Northern hemisphere assets (particularly N American assets) are “lost” to Australia during southern hemisphere summers due primarily to NAFC contracts providing the incentive for lengthy terms away from their home bases. Many of the larger foreign assets deployed in Australia have had their development funded by their home Govts.

MCDAV has always been able to scramble and provide surge resources for emergencies to date because our home base is Australia. As the demands for our services become more numerous and widespread our capacity to bankroll a private “surge capacity” will be more stretched.

- **How could the Commonwealth build community resilience and capability so they are better able to respond to and recover from national-level crises?**
- Better planning for aerial capability availability for community recovery and cleanup – post disaster.
 - The demands are for competent utility aircraft – dual cab 4wd of the sky rather than luxury people movers. Classify aircraft type, size and capability for better matching of assets to needs
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- Ideally some integrated training exercises with ground responders and others before response is required
- **What changes in the current system are necessary to help Australia have the right capabilities and capacity to handle concurrent crises?**
- Support for the private sector to maintain and deliver surge capability for multi-role support during and following emergencies within Australia and within Australia's zone of interest in the Pacific.
- Australian operators have the skills, capacity and expertise to deliver what is required.

This could be done via reserve-style contracts – to secure, maintain and sustain private sector capability to be available when required. The private sector will provide the most efficient use of aerial assets by investment in equipment and training. This means multi-role capability, crew training and recurrency (air and ground support), geographical mobility, technology upgrades etc. in order to provide an effective and current standing capability.

Most Govt owned assets are high end specialised (e.g. military, air ambulance, offshore rescue and transfer, restricted category fire bombers etc) committed to long term full utilisation contracts by Govt agencies or OGP companies. Many are not readily reconfigurable, nor do they have spare capacity to cover utility roles in and around a variety of emergencies. Many Govt owned aircraft in the emergency sector are maintained and operated by commercial operators anyway, so the Govt is taking all the commercial risk associated with the asset and still paying for operations and maintenance. If that is acceptable then the model should be opened up to Australian operators. Civilian operators can provide the surge capacity if the financial incentives are there to keep crews and machinery in reserve.

- **What models could the Commonwealth explore to replace or supplement support currently provided by the ADF during domestic crisis?**
 - **What does the right mix of Commonwealth capabilities look like?**

ADF aerial assets and aircrews are configured and maintained for military operations which are not always compatible with emergency situations. Crews are not trained for flying or delivering civil emergency response. Civilian capability in a reservist type model could be deployed into civil disasters without depleting ADF capabilities. Civilian aircraft could carry ADF personnel and provide transport and logistical support into emergency operations in Australia and offshore. This capacity needs to be readily and quickly deployable (under its own steam or via transport aircraft), utility multirole type, cost efficient, self-sufficient, field maintainable in a disaster area, capable of moving and operating across international boundaries and with fully trained and experienced crews. In order to have it available – financial incentives are required to keep private assets available to fulfill substitute or complementary roles

The positive elements of the NAFC model as outlined above could be incorporated in a model to deliver Federal surge capacity.

- **How could a Commonwealth workforce surge capacity be replicated in a scalable, efficient and effective way?**

Like the ADF reserves model, suitable civilian aircraft are already distributed widely around the country and could be contracted to provide capability at varying levels of readiness in various locations and at varying times of the year. Classification of aircraft by size and mission capability would allow a pool of reserve aircraft to be catalogued by type, size and geographical location.

- **How could we harness the critical role of volunteers and civilian groups under this model?**

Private sector operators could participate in combined training exercises to complement or substitute ADF capability. Many operators including MCDAV already work with SES and volunteer fire brigade personnel and have systems in place to deliver what they need.

- **How do these models supplement, but not replicate, existing models operating at a state and territory and local level?**

Currently the Commonwealth provides funds to the States and Territories and the States and Territories have no role in international emergencies. Many State-owned resources are limited by role capability and headroom capacity to take on additional services in the same way as the ADF and could be readily complemented/substituted by private sector assets.

- **What role could industry / the private sector play? How can the Government attract increased investment in emergency management from the private sector?**

The private sector will invest if there is a clear pathway to returns for the investment. The easiest way to give these signals is via medium term contracts to provide certain services (as per NAFC for bushfires). Private sector resources are nimble, efficient and self-contained for operation, training, and legal compliance. Current examples of State "ownership" of assets still has a (foreign) private sector management and operating structure with additional bureaucratic layers and a financial responsibility of those Govts to upgrade and dispose of the assets during and at end of life. A commitment to use the assets at some reasonable level of utilisation (to retain exclusive use when required) should be enough for the private sector to acquire and equip assets to meet Commonwealth needs.

- **What gaps currently exist in state and territory emergency management capability?**

- Cross jurisdictional (cross border) emergency response and incompatibility of assets and resources to provide a seamless integrated response (communications, equipment, training qualifications).
- No basis or framework to provide international assistance
- **Are there sectors that could replicate the capabilities provided by the ADF?**
- GA utility sector could complement and provide a range of civil response (non-military) actions – cargo and personnel carriage, SAR, general logistical support to communities and emergency services personnel.
- Commercial civilian assets can be deployed internationally under civilian air laws and require no particular diplomatic overheads that would apply to overseas military deployments.
- **What are the critical functions the Commonwealth Government should continue to perform in disaster relief and recovery, in support of local, state and territory governments?**

Specialised surge capability funded to ensure at least a minimum level of availability when required.

- **What legislative, regulatory or policy changes could be undertaken to make it financially viable for other sectors to contribute to a Commonwealth crisis response capability?**

Policy changes to support a civil emergency response capability prior to an emergency occurring.

Additional general comments

McDAV are relatively quiet achievers in this space, carrying out more utility emergency response utility operations such as firefighting and resupply/recovery during cyclones, flooding, transport disasters than any other civilian or government aviation operator in Australia. The list of operations over the years and their varied geographic dispersal and operational nature is lengthy and distinguished. In the last 25 years, all major fires, all cyclones, major flooding on the east and west coasts, Pasha Bulk and Shen Neng ship groundings have been relieved through use of our aircraft in support of ground efforts. They have often been carried out concurrently and in different countries simultaneously. Our record over the last decade of fires and other emergencies is greater than 97% year-round availability across the globe.

This capability has been developed and underpinned by private capital. The importance of this is that it drives innovation, efficiency and reliability. Govts at all levels can now take advantage of a large, reliable multirole fleet tailored to emergency utility use which has cost them nothing other than operational contracts to access. Our purpose in this submission is to use one of few opportunities to step outside the commercial environment of client and provider to work collaboratively to make emergency aviation response seamless amongst the capable parties. We want to see this work to meet mutual goals and objectives.

Reactivity

As with all emergency responses, the speed at which the circumstance can be remedied, or action taken greatly enhances the outcome and minimises the long-term effect. This is often only utilised within pure aeromedical operations, with firefighting in recent times employing this tactic. The same cannot be said with all natural disaster responses. This is often due to the complexity of finding the correct solution; there are many databases of available aircraft spread amongst different agencies, many with overlap. Centralisation of this information is the key, and with prequalified providers of task specialist operations sitting in this framework will give solid reliable support to emergency services.

Interoperability

The key to any joint response is to ensure all parts are working as efficiently as possible, and this can only be done when there is collaboration and training beforehand. This can be carried out simply and efficiently in desktop exercises for standard response, but when it comes to system or equipment integration, this needs to be trained and practiced. McDAV have carried out many missions both for and with the ADF, and in general terms the operation is not a joint effort. Joint utilisation of assets would be a key goal, the ADF have excellent transport and logistics capability, yet often require the civil contractor to utilise standard commercial arrangements.

SUMMARY

There is an increasing demand for aerial resources to respond to the compounding and concurrent crises driven by natural disasters and the high-risk weather landscape. The Commonwealth has a role in supporting and managing “surge” capability which can be transferred across jurisdictions in times of emergency to bolster State and Territory resources, as well as supporting our regional neighbours.

Utilising civilian capability to bolster this surge capacity would allow the ADF to dedicate its aerial assets to their core function and instead call on civilian assets that are already equipped and configured to respond to such crises. Existing databases (e.g. ARENA and AMSAR) provide critical and timely information on the availability of pre-qualified and role-appropriate assets which can be deployed when required.

To retain these assets for Commonwealth use and to ensure availability when required, reserve-style contracts could be implemented to incentivise participation by operators who may otherwise look to send their assets elsewhere to offset holding costs of the aircraft and personnel. This model can be scalable with varying levels of readiness across locations and jurisdictions to optimise cost effectiveness, but also efficiencies in reactivity when crises arise.

We welcome the opportunity to follow up with later stages of the project.
