14 December 2016

Dr Jane Thomson
Committee Secretary
Senate Standing Committee on Rural and Regional Affairs and Transport
PO Box 6100
Parliament House
Canberra ACT 2600

Dr Thomson,

Inquiry into regulatory requirements that impact on the safe use of Remotely Piloted Aircraft Systems (RPAS), Unmanned Aerial Systems and associated systems.

Thank you for the invitation of 20 October 2016 addressed to Mr Stuart Ellis, CEO of AFAC and Mr Trevor Essex, Company Secretary of NAFC, to provide a submission to the aforementioned Inquiry. As the interests of AFAC and NAFC are closely aligned in this matter, we have chosen to provide a joint submission.

Introduction

AFAC

The Australasian Fire and Emergency Service Authorities Council (AFAC) is the Australian and New Zealand national council for fire, emergency service and land management agencies, creating synergies across the emergency management sector. Our members support mitigation and response phases of emergency management across multiple hazards and the transition to recovery. AFAC represents 31 member organisations, comprising 37,000 permanent, 6,000 part-time and 257,000 volunteer personnel. AFAC also has 21 affiliate members. More information about AFAC is available from www.afac.com.au

NAFC

The National Aerial Firefighting Centre (NAFC) was formed in 2003 by the Australian states and territories, with the support of the Australian Government, to provide a national arrangement for the provision of aerial firefighting resources for combating bushfires. NAFC is a cooperative of all Australian states and mainland territories, and aims to improve the effectiveness and efficiency of aerial firefighting in Australia by facilitating cooperation and collaboration, including the sharing of aircraft and related resources, between states and territories. NAFC also plays a key role in ensuring standardisation of operating practices for use of aircraft in fire and emergency management across Australia. Appropriate standardisation ensures safety of operations. More information about NAFC is available from www.nafc.org.au

Both AFAC and NAFC emphasise primacy of life, community safety, and working to support our member agencies achieve their stated missions: protecting life, property and the environment.

Background

Fire, emergency and land management agencies in Australia are already routinely using RPAS in various forms. A number of agencies own and operate their own RPAS, while other agencies source RPAS services from approved providers. Both AFAC and NAFC welcome recent advances in RPAS and associated technologies and see potential for further development. AFAC and NAFC are keen to work with industry and regulatory authorities to ensure appropriate application of new technology in order to provide improved support for fire and emergency management.

Examples of current and potential applications where RPAS may be effective for fire, emergency and land management agencies in the near future include, but are not limited to: information gathering, mapping (including in 3D), situation awareness, hazard assessment, hazard reduction (lighting prescribed fire), search and rescue, security, damage assessments, fire bombing, inventory/asset management, package delivery, communications relay and remote water and air quality monitoring.

AFAC and NAFC generally support the current approach to regulation of RPAS, with some caveats as outlined below. AFAC and NAFC are of the view that it is important that appropriate, nationally regulated standards are maintained for RPAS airworthiness and integrity, for organisations operating RPAS and for persons piloting RPAS. At the same time we acknowledge the practical difficulties of intensively regulating the recreational and hobbyist segment for small RPAS and support the concept of appropriate blanket standard operating conditions for these segments in the Civil Aviation Safety Regulations (CASR), provided that these standard conditions continue to include clear requirements to remain clear of public safety or emergency operations without prior approval; and that these conditions continue to be appropriately enforced.

Our member agencies are, however, conscious that much of the utility that RPAS can offer in emergency situations is likely to come from RPAS operations that do not meet the standard RPA operating conditions currently prescribed by CASR Part 101. RPAS likely to be engaged to support emergency management will often be of the heavier variety, or will be required to be flown Beyond Visual Line Of Sight (BVLOS) or above 400 feet Above Ground Level (AGL). By their very nature, emergencies require timely response and often require urgent gathering of information in situations where conventional line-of-sight means are not practical. The current regulatory requirements around operation of RPAS under these circumstances, and in particular the requirements to obtain advance approvals for such operations, often with significant lead times, do effectively preclude this type of RPAS operation in support of response to emergencies. NAFC and AFAC would be pleased to work with CASA and AirServices Australia to explore avenues which will, in emergency situations, facilitate safe, timely operation of larger RPAS as well as operations BVLOS and at greater than 400 feet AGL.

Fire, emergency and land management agencies understand the importance of maintaining internal doctrine to ensure that their operation of RPAS, or integration of third-party RPAS operations, is legal and safe. Agencies currently operating RPAS continue to develop such doctrine. AFAC and NAFC are also working with member agencies to assist in ensuring that doctrine is current and consistent.

As the popularity of RPAS increases, so too does the likelihood of them being flown in conditions that pose risk to persons or property. This applies especially to emergency situations such as bushfires, floods, emergency road incidents and other events where people may choose to fly RPAS when they should not. RPAS of any shape and size can represent a safety risk to piloted aircraft. Due to this risk, firefighting aircraft may be grounded if other unauthorised aircraft are spotted near firefighting operations. Flying RPAS within the vicinity of fire fighting and other emergency services operations can not only put the pilots and other emergency responders lives in danger, but also the lives of the people and property that emergency services are trying to protect. NAFC has been pleased to work with CASA to develop public awareness material focussing on safe operation of RPAS and cautioning recreational users to remain well clear of emergency operations. NAFC and AFAC recognise however, that the risk of unsafe incursions through improper or illegal use of RPAS is likely to increase, and are concerned to ensure that

active education and awareness campaigns continue, along with adequate enforcement activity. AFAC and NAFC are working with member agencies to develop doctrine regarding the unauthorised or illegal use of RPAS in the vicinity of emergency operations. The scope of this doctrine aims to ensure agencies apply consistent actions and risk mitigation strategies regarding the unauthorised or illegal use of RPAS in the vicinity of fires and other emergencies.

AFAC and NAFC joint statements

- AFAC and NAFC see considerable potential benefit, including enhanced community safety, from the appropriate application of RPAS in fire and emergency management. AFAC and NAFC offer to provide suitable opportunities to suppliers to better understand agency requirements and for agencies to understand available and developing capabilities. Where such opportunities are operational (for example trials of RPAS during actual or simulated emergency operations), this will be considered in a coordinated manner with prior planning to ensure risks are mitigated and management of the operation is not impacted.

- AFAC and NAFC acknowledge that there is a need for agencies using RPAS to have in place appropriate risk management, including consistent, rigorous procedures and standards for operating RPAS (whether in-house or through service providers). Generally these practices would be consistent with those applicable to conventional aircraft. AFAC and NAFC will continue to work with member agencies to ensure that RPAS procedures and standards are current and consistent as far as practicable.

- AFAC and NAFC generally support the current regulatory environment for RPAS in Australia, including the concept of standard operating conditions, with the provisos outlined below.

- NAFC and AFAC offer to work with the Civil Aviation Safety Authority and AirServices Australia to examine the implementation of regulatory measures which will enable safe, timely and effective deployment of larger RPAS, and deployment of RPAS above 400' AGL or BVLOS in support of emergency response operations.

- AFAC and NAFC support the Civil Aviation Safety Authority's collaborative approach to public education regarding inappropriate and illegal use of RPAS. AFAC and NAFC are however concerned to ensure continuing adequate enforcement activity around illegal use of RPAS.

AFAC and NAFC would be pleased to assist the Inquiry in any way and would welcome the opportunity to provide more information as required.

Yours sincerely,

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