AERIAL APPLICATION ASSOCIATION OF AUSTRALIA LTD.

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Mr Jason Dymowski

Assistant Secretary, Aviation White Paper and Reform Branch

Department of Infrastructure, Transport, Regional Development, Communications and the Arts

By email: aviationwhitepaper@infrastructure.gov.au

Dear Jason

We appreciate the opportunity to provide our insights to inform the development of the Green Paper, and we understand the importance of this document in setting the long-term policies to guide the next generation of growth and innovation in the aviation sector.

As a leading organisation in the industry, we are committed to working with the Australian Government to ensure that the aviation sector is appropriately positioned to deliver aviation services in the coming decades. We are excited about the prospect of contributing to this important process and look forward to being involved in further consultations throughout the development of the green paper.

Please find our brief submission attached, which addresses a number of key priorities relevant to the Terms of Reference. We hope that our contribution will be of value and assist the government in charting the course of Australian aviation through to 2050.

Thank you for your consideration, and please don't hesitate to contact us for further expansion or input into the process.

Sincerely

Nat Nagy

Chief Executive Officer

Aviation White Paper Terms of Reference submission – Aerial Application Association of Australia

Summary

The Aerial Applications Association of Australia has highlighted several key priorities that should be considered in drafting the Green Paper. We emphasise the need for a whole-of-government approach that incorporates aviation into major government policies and programs. The economic value of the aerial work sector is also important, with a call for a comprehensive economic study to determine its full value to the Australian economy. The paper should also consider the integration of emerging technologies into low-level airspace, low level obstacles, as well as the improvement of regulatory and safety oversight environments. Additionally, the paper should explore ways to expand research and innovation in the use of aircraft for firefighting in the Australian environment. Lastly, training, skills, and education will underpin the success of the industry into the future. By considering these priorities, the aviation industry can become more productive, efficient, and safe, benefiting the wider Australian community.

Whole of Government approach

Clear understanding and alignment between various portfolio areas and aviation's contribution to the broader Australian economy are crucial. It is imperative for the government to have specific policies that continually improve and enhance the aviation industry. However, to achieve this, it is increasingly important to incorporate aviation into other major government policies and programs, such as environment, education, skills and training, agriculture, emergency services, regional development, taxation, tourism, home affairs and national security.

The white paper presents an opportunity to outline a comprehensive vision for a whole-of-government approach that fully integrates the aviation sector across Commonwealth and state governments. This approach aims to ensure a productive, efficient, and safe aviation industry that benefits not only the sector but also the wider Australian community.

Economic value of the aerial application and broader aerial work segment

The white paper should make clear reference to the contribution of aerial work as a distinct segment of the aviation industry, rather than focusing largely on commercial air transport activities. The contribution of aerial work to agriculture and emergency services is significant, and a comprehensive study of aviation's input into these sectors should explore the full economic value, including downstream positive impacts and productivity improvements.

While economic studies related to general aviation have previously focused on the income and expenditure of GA businesses, a comprehensive economic study of the downstream benefits provided by the aerial work sector to other parts of the economy should be undertaken. This should include agriculture, forestry, mining, aerial firefighting, and other emergency services activities.

Researchers have recently developed econometric models to estimate the value of aerial application in the United States, with initial estimates of the value to agriculture at $37 billion USD. Although the size of the Australian industry is much smaller, a similar study of the downstream benefits provided by the aerial application and broader aerial work sector to all segments would provide valuable information for policymakers, regulators, and the broader industry to understand the total economic benefit of the aerial work sector to the Australian economy.

Low level airspace – integration of emerging technologies and mapping of hazards

As technology advances, we can expect increasing integration of new technologies into airspace that has traditionally been occupied by manned aircraft. The focus of much of the discussion has been on higher density airspace surrounding licensed aerodromes and urban environments around major population centres. While it is important to maintain safety levels in these areas, it is equally important to ensure safety in low-level airspace below 500ft Above Ground Level (AGL). This is particularly important for agricultural, firefighting, and survey aircraft, which operate in these areas but have not previously had to contend with remotely piloted aircraft.

Given the high value of the work these aerial work businesses undertake, it is essential to ensure that their activities can continue safely, without imposing the cost of integrating new entrants onto existing operators. Therefore, the white paper should consider the development of systems and processes to maintain appropriate safety margins in regional and remote areas below 500 feet AGL. This should ensure that existing businesses do not absorb the burden of additional costs into their operations. Moreover, the management of low-level hazards, including power lines, communication towers, wind turbines, and other structures, should be improved. This includes the provision of robust data, accessible mapping and oversight of vertical obstacles and ground-based hazards in the low-level operating environment across the country. A practical approach to this would be to establish and fund a national database of powerlines, wind monitoring and power generation towers and other obstacles.

Creating a safe operating environment for current and future airspace users is crucial, particularly as the industry increasingly relies on automation to improve operational and productivity outcomes. Hence, it is necessary to invest in improving the infrastructure, technology, and regulatory frameworks to ensure the safety of all airspace users, including traditional manned aircraft and emerging remotely piloted aircraft systems. This will require ongoing collaboration between industry stakeholders, government, and regulatory bodies to develop comprehensive guidelines and standards for the integration of new technologies into the low level operating environment, ensuring that safety remains paramount at all times.

An efficient regulatory and safety oversight environment

Ensuring that regulatory bodies and safety agencies, such as CASA and the ATSB, are continuously evolving to meet the needs of the aviation industry is crucial. It is important to limit regulatory intervention to cases where it is absolutely necessary to maintain industry standards and safety of the travelling public. This should include having regulatory settings in place that take into account risk profiles of sectors that have limited safety impact on the travelling public. A modern, contemporary regulator with the necessary capabilities and skills should be the ultimate goal, and concrete actions to achieve this should be outlined in a clear and actionable manner.

Given the rapid pace of technological advancements and disruptive elements within the industry, it is of utmost importance to have a regulatory environment that can adapt at all levels of the organisation to appropriately manage the level of oversight required without placing undue burden on industry. Failure to do so may result in investment in the industry being stifled, which could have dire consequences. The white paper should therefore emphasise the importance of having a regulator that can support innovation while appropriately managing the unintended consequences that may arise when introducing innovations into the system.

In addition, the white paper should outline how the ATSB will support the entire aviation industry in the future to improve safety outcomes. To achieve this, they should be funded appropriately and

have a clear understanding of their role in improving all segments of the industry as it evolves. Their methodologies should be continually improved to ensure they are also evolving with the changing nature of the industry. By doing so, the ATSB can remain a valuable and reliable partner in the industry's efforts to continuously improve safety standards.

Aerial Firefighting excellence

The white paper should explore ways to expand research and innovation in the use of aircraft for firefighting in the Australian environment, leveraging the existing expertise of the Australian aerial application and firefighting industry. The ultimate vision is for Australia to be recognised as a global leader in aerial firefighting, and to fully utilise the local fleet of fixed and rotary wing aircraft that is already available. Achieving this goal will require significant effort to align all of the relevant expertise in Australia and to harmonise approaches between the different states. However, the benefits to the economy and society will be significant, including increased effectiveness in combating bushfires in the future and increased safety of operations for those involved in this vital role.

To achieve this vision, the National Aerial Firefighting Centre (NAFC) should be a fundamental element of the future plan. The NAFC should be structured, governed, and funded appropriately to achieve this goal, and should be tasked with coordinating efforts between various industry stakeholders, government agencies, and other organisations. The expertise that exists in the Australian industry cannot be underestimated, and for this initiative to be successful, full engagement with the entirety of the Australian industry must be a key pillar of the vision. This will involve fostering collaboration between researchers, operators, pilots, ground crews, and other relevant groups.

In addition to increasing the effectiveness of aerial firefighting in Australia, this initiative will have positive impacts on the economy and society at large. For example, it will create new jobs in the industry, support local manufacturing and technology development, and contribute to the overall resilience of communities and ecosystems in the face of increasingly frequent and severe bushfires. It will also position Australia as a leader in responding to environmental challenges, which has implications beyond the country's borders.

To achieve the vision of becoming a global leader in aerial firefighting, it will be important to invest in research and development of new technologies and approaches, as well as to establish clear standards and protocols for industry operations. Furthermore, ongoing collaboration with international partners will be important for knowledge sharing and cross-border cooperation.

Education, Training and skills

Australia is currently experiencing a severe shortage of skilled aviation workers across the entire supply chain, which poses a significant challenge for the industry. To address this issue, it is essential to develop a comprehensive vision that supports all segments of the industry in recruiting and retaining the necessary workforce both now and in the future.

One key element of this vision should involve creating incentives for workers to remain in regional areas and work in aviation operations, particularly in aerial agriculture and firefighting operations. This could include financial support, access to professional development opportunities, and improved work-life balance. Moreover, the Australian government should consider implementing initiatives to attract skilled workers from overseas to fill seasonal capacity shortfalls.

To achieve this, the government should streamline the process of recognising foreign licenses, experience, and qualifications, and offer simplified working visa options for skilled workers. This

could help to alleviate some of the pressure on the industry and ensure that operators, maintenance organisations, and other aviation-related businesses have access to the workers they need to operate effectively.

Furthermore, investing in training programs and education initiatives is crucial to building a strong pipeline of skilled workers for the aviation industry. This could involve partnering with universities, vocational training providers, and industry associations to develop targeted training programs that equip workers with the skills and knowledge needed to succeed in the aviation industry. It is also crucial to provide government financial support for all stages of training for all relevant workers, including pilots, loaders for agricultural aircraft, crew for aerial firefighting, engineers, and operations managers, amongst others.

Overall, by taking a proactive and strategic approach to addressing the shortage of skilled aviation workers in Australia, we can help to ensure the ongoing success and growth of the industry, while also supporting the broader economy and local communities. To achieve this, the industry and government must work together to create a supportive and attractive environment for skilled workers both in Australia and from overseas.

Aerial Application Association of Australia

The Aerial Application Association of Australia is the peak industry body representing over 300 operators, pilots and supporting businesses involved in aerial agricultural and firefighting operations across Australia. Further information about our activities can be found at aaaa.org.au.