Submission on developing the Aotearoa New Zealand Aerospace Strategy

Your name and organisation

Name	Brian Whelan
Organisation (if applicable)	Peet Aviation

Overview of the Aerospace Strategy

Question 1:	Do the four areas above provide the right basis for the Aerospace Strategy?
Question 2:	What are the critical factors that you see for aerospace sector development?
Question 3:	How would an Aerospace Strategy help you?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Overview of the Aerospace Strategy

Questions – Overview of the Aerospace Strategy

1. Do the four areas above provide the right basis for the Aerospace Strategy?

2. What are the critical factors that you see for aerospace sector development?

3. How would an Aerospace Strategy help you?

Do the four areas provide the right basis for the Aerospace Strategy

The four broad areas may provide the appropriate basis for the Aerospace Strategy, provided the detail supporting and delivering on the four are incorporated correctly. The current detail needs to be further enhanced, as the basis of the four does not adequately cover the current state, from which to deliver on the 2030 vision.

The sector is diverse, with varying levels of productivity and economic growth, currently based on historical aerospace activity with, in later years, increased activity in space and increasingly R&D UAV activity. Profitability across the sector has been adversely affected by Covid 19 and is slowly re-establishing historical growth. Recognition of the historical economic and productive aerospace activity should be incorporated into the document, as initial short-term recovery in New Zealand will be from this base. For instance, the tourism and international travel industry was severely impacted by Covid 19, effectively destroying New Zealand's largest export earning sector. Recovery is now back and will be led, as we have seen in the industry after the GFC and Dot.com bubble collapse, by leisure and VFR international travellers. This recovery will be at a slow pace, as assets can be deployed back into the sector with operational support.

Aerospace activity occurs across multiple heights of airspace with different types of activity. Segmenting this activity will provide better clarity to support the 2030 Vision and should be considered through "layers of airspace use". These layers of activity have multiple domestic policy and regulatory guidance, international norms, standards and recommendations, international Conventions and associated Protocols, within which the activity operates. This complexity should be recognised and understood by participants engaged in the various "layers of airspace use", and their fit within the system.

What are the Critical Factors for Aerospace Sector Development

Framing the 2030 Vision is more than simply raising aspiration levels across a broad sweep of the sector. Defining the space of interest for New Zealand, whilst ensuring broad Vision, should be realistic as to what is achievable. What does the sector look like, what is our sector good at, what are we passionate about and how can we monetise it. The latter is more than about revenue per se, it encompasses achievement, enabling individuals, companies, and organisations within the sector to create products and ensure the strategy helps them to perform better. Critically, this also involves sustainability.

Our historical base of success remains and provides the leverage from which we can leverage into new opportunities. Evolution through reframing the 2030 Vision is an inclusive process.

A broad group of key sector people and organisations are important, along with the disruption that data, technology, tools and applications can provide. Appropriate levels of regulation, at each stage of aerospace activity and development, or other activities will ensure an operating environment is provided for new technologies through to historical activity is enabled.

Managing the risk, the downside should be recognised. The risk/reward trade-offs, the consequences of decisions and the impact they have will be an on-going process as the 2030 Vision strategic decisions will be made with imperfect information.

Resource allocation, capital, assets and people need to be available and deployed effectively. Effective allocation leads to productivity and economic growth. There is nothing strategic about losing money, there is nothing strategic about barriers to resources, skills and capability, whether that be through education, immigration or global relationships, they must be available to deliver on the 2030 Vision. External barriers could unintentionally get in the way of the 2030 Vision, the external risks will need to be managed. In part this risk can be managed through delivery of Milestones along the pathway to the 2030 Vision.

How Would an Aerospace Strategy Help

An appropriately structured Aerospace Strategy provides the framework that we can have confidence in, is stable and ensures at the individual, company or organisation level Vision, Strategy and Resource allocation can be implemented knowing the odds of success will be improved through the stable country level Government organisation Aerospace Strategy. Seeing the fundamental trends, identifying the themes we want to execute on well, across different levels of the company knowing the New Zealand Government has committed to stable output deliverables through key Milestones provides us with confidence in resource allocation.

Area One - A strategy for building our aerospace sector

Question 4:	Is the 2030 Future State set out in a way that enables New Zealand to build on its existing advantages to develop a leading place in the global aerospace economy?
Question 5:	Will the 2030 Future State support your ambitions for growth and participation in the sector?
Question 6:	What barriers are there to optimising sector growth?
Question 7:	How could the government and the sector work together to achieve the 2030 Future State?
Question 8:	How can the Government enable Māori ambitions for the sector?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

AREA ONE – A Strategy for Building our Aerospace Sector

Is the 2030 Future State set out in a way that enables New Zealand to build on its existing advantages to develop a leading place in the global aerospace economy

The draft 2030 Future State is aspirational, as expected, however, aspiration needs to be grounded to fundamentals from which economic and productivity growth can be achieved.

"Aerospace in New Zealand is a diverse and inclusive sector that is thriving, supporting tens of thousands of high-wage jobs", *both in New Zealand and internationally through onshore and offshore activities, facilities and infrastructure*.

To leverage our capability in this sector it is unlikely it can all be achieved solely in New Zealand, therefore, an expectation that companies will have an offshore presence should be accepted as it will enhance the onshore New Zealand activity. There will be external barriers to the aerospace sector, such as immigration and education, that can through risk management tactics be mitigated and this is likely to be through offshore activity.

"The sector is safe, innovative, and productive, made up of hundreds of research and development intensive firms with international connections." ✓

The international relationships, connections should not be under-estimated. They provide New Zealand based companies with access to resources that most likely cannot be accessed in-country. Wrapped around this needs to be New Zealand policy and regulations that protect Intellectual Property, especially as the importance of Intangible Assets are increasingly more important and provide the internationally competitive edge that will deliver at the company level economic and productivity growth.

"This multi-billion dollar industry leads the world in disruptive aerospace technologies. New Zealand is acknowledged internationally as a place with strong comparative advantage for undertaking aerospace activity, including through partnerships with Government."

The first sentence, while nice to state, in reality is not likely achievable, therefore it should be reworded*, "this multi-billion dollar industry is one of the acknowledged global leaders across some of the disruptive aerospace sector technologies."*

"Aerospace activities actively contribute towards improving our environment through reducing greenhouse gas emissions and enhancing sustainability across the New Zealand economy." ✓

"Technology development is enabled through iterative hardware and flight-testing capabilities that can transition seamlessly between low-altitude, high-altitude, sub-orbital and orbital operations." ✓

There are "layers of airspace use" and this needs to be considered as aerospace activity will occur through different layers, some through multiple layers. Recognising this will necessitate policy and regulations that accommodate this different

activity through the layers especially at lower altitudes, for instance below FL245, being flexible and adaptable to ensure safety and security of operations will be needed.

Articulating these layers will be important. To an extent they have been defined above and through recognised global standards and recommended practices, and subject to discussion can follow-on from the New Southern Skies CONOPS 2023 "layers of airspace use" and be extended to five layers; (1) below 500ft, (2) 500ft – FL130 (13,000ft), (3) FL130-FL600 (60,000ft), (4) FL600-FL1000 (100,00ft) and (5) above 100,000ft. These layers would then align with current aviation policy and regulations in New Zealand on airspace use.

"Aerospace technologies are incorporated into government services and systems, and support New Zealand's national interests and national security." ✓

Will the 2030 Future State support ambitions for growth and participation in the sector

Provided the 2030 Future State is consistent and stable over time it provides the confidence for deployment of resources and continued engagement within the sector.

What barriers are there for optimizing sector growth

- No stable, consistent government agency decision-making in the sector
- Not using Performance based regulation processes
- Lack of timely new or updated regulations
- External constraints, such as financial capital, immigration and education
- Substandard global engagement with sources of capital, skills and expertise

How could the government and the sector work together to achieve the 2030 Future State

The creation of the government and sector taskforce is a critical first step. Having been involved in a joint initiative previously that has successfully seen the engagement between government agencies, Ministry of Transport and CAANZ, with industry through the Aviation Community Advisory Group (ACAG), initially as interim Chairperson and then Chairperson from 2003-2011, the resultant positive outcomes, over time between the groups has been beneficial to appropriate policy and regulatory development or other initiatives for the safe and secure growth of aviation in New Zealand.

ACAG brought to New Zealand Safety Management Systems, Performance-based Navigation (known now as New Southern Skies), a structure to identify issues, and issue management. Collectively worked with Ministry of Transport and CAANZ in the development of the issues policy and regulatory development, or other initiative, process.

The creation of the sector taskforce should have clearly defined deliverables, importantly focussing on activity at the strategic level. There should be a strong connection through to the ACAG/MoT/CAANZ group for development of issues, policy and regulation through a performance-based process.

ACAG has in general been a positive interaction sector group engaging with government agencies, the model delivered significant benefits to New Zealand economically and productively.

The Emerging Technologies team at CAANZ will be crucial in bringing government agency aerospace policy and regulatory skills and capability to inform and advise New Zealand government agencies.

There is a separation between sub-orbital & orbital airspace and low & high-altitude airspace across international Conventions and Protocols, New Zealand government agencies responsibility, and policy and regulatory development. This will need to be accommodated in the risk management structures to ensure safety and security of airspace.

How can the government enable Māori ambitions for the sector

There are multiple levels of engagement across the sector from investment, education and supply of services. Additionally, there will be opportunities on the shoulder sector services not directly involved in the aerospace sector.

Area Two - Building strong foundations (Three Pillars)

Question 9:	What do you think of the Three Pillars and do you think they will support the 2030 Future State?
Question 10:	What else would you like to see in the Three Pillars?
Question 11:	What actions and initiatives could the sector focus on to support the Three Pillars?

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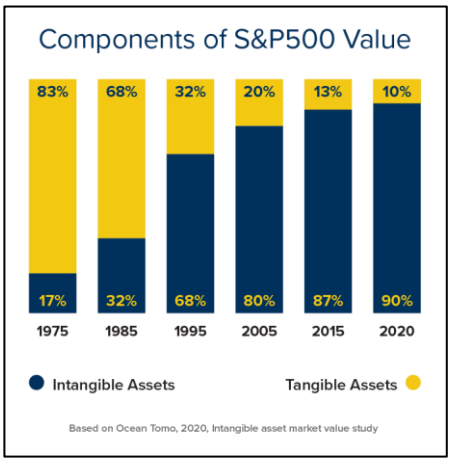
AREA TWO – Building Strong Foundations (Three Pillars)

What do you think of the Three Pillars and do you think they will support the 2030 Future State

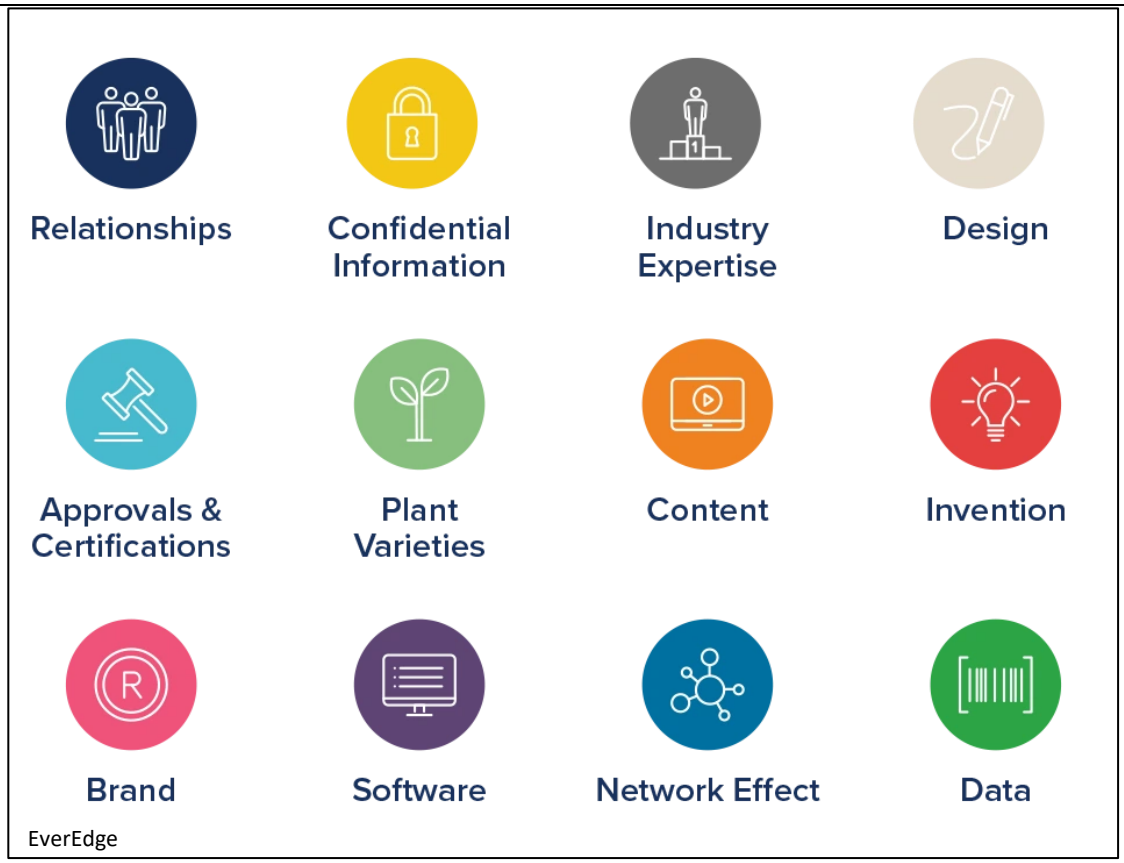
The Three Pillars are essentially the right structure through which to deliver the 2030 Future State. Building strong foundations, the Three Pillars, need to be aligned with a whole of government approach to economic and productivity pillars. The Three Pillars does not appear to have a consequential link to New Zealand whole of Government Pillar Foundations. Does the whole of Government have a foundation base for economic and productivity growth based on Pillars? Clearly articulating this link, will enhance the 2030 Strategic Outcome of the Three Pillars

To build a strong aerospace system domestically is most likely not totally achievable in New Zealand, however, working in collaboration with, or developing facilities and infrastructure globally provides wider access to the skills, capability, technology and resources that will be essential for development of the New Zealand based assets and resources.

The growth of Intangible Assets as the primary drivers of performance, growth and value in a company and organizations will need to be understood and accommodated in the Three Pillars.



Intangible Assets now make-up the greater proportion of company value than the historical fixed assets such as buildings, fixtures & fittings etc. and are commonly held off the balance sheet and not tracked on a risk register. Intangible assets such as brand, content, code, trade secrets and industrial know-how, data, regulatory approvals and standards compliance are primary drivers of competitive edge and ultimately financial performance.



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What else would you like to see in the Three Pillars

Incorporating recognition of the current historical aviation activity in New Zealand and ensuring continued airspace access should be acknowledged within the Three Pillars.

Recognising the economic and productivity current commercial aviation activity delivers to New Zealand.

What actions and initiatives could the sector focus on to support the Three Pillars

- Appropriate representation on the sector taskforce engagement with government agencies
- [redacted]
- Develop core working relationships between sector taskforce-ACAG-Emerging Technologies Team CAANZ
- Clear understanding of responsibilities in respect to international Conventions and Protocols and relationship to the 2030 Future State
- Engagement globally at appropriate international agencies and forums
- Development of Intangible Asset knowledge and the inter-relationship as a core driver for performance growth and value in delivering on and achieving Milestones through to 2030

Area Three - Goals for 2030

Question 12:	What do you think of the Goals for 2030?
Question 13:	Are the goals framed in a way that will enable New Zealand to build on its strengths and comparative advantages to achieve the 2030 Future State?
Question 14:	What activities and milestones can help us achieve these Goals?
Question 15:	Where do you see yourself in realising these Goals?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

AREA 3 – Goals for 2030

What do you think of the Goals for 2030

The Goals for 2030 will be delivered provided the government agencies-sector taskforce develop core relationships and establish Milestones that need to be delivered through to 2030 Future State.

Goal One should be reworded and expanded to: *Build a sustainable commercial aviation journey*

Are the Goals framed in a way that will enable New Zealand to build on its strengths and comparative advantages to achieve the 2030 Future State

A qualified yes. Further detail needs to ensure current commercial and general aviation activity is acknowledged and incorporated into the 2030 Future State.

What activities and Milestones can help us achieve these Goals

Further detail will be needed to develop the Milestones that deliver on the 2030 Future State, agreed between government agencies and the sector taskforce.

Where do you see yourself in realizing these Goals

My company is already involved in the Ed Tech sector of the aerospace industry with a global strategy.

Area Four - Pathway to the 2030 Future State

Question 16:	What policies, ideas, actions, and/or initiatives would you like to see in the Action Plan to help achieve the ambitious 2030 Future State?
Question 17:	What would be the benefits of these actions and how would they help grow the New Zealand aerospace sector?
Question 18:	How would you like to be involved in the delivery of the Aerospace Strategy?

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AREA FOUR – Pathways to the 2030 Future State

What policies, ideas, and/or initiatives would you like to see in the Action Plan to help achieve the ambitious 2030 Future State

Recognition of the importance Intangible Assets play in performance, growth and financial outcomes and how these assets are interrelated.

Appropriate levels of performance based regulation, at each stage of aerospace activity and development, or other activities will ensure an operating environment is provided for new technologies through to historical activity is enabled.

What would be the benefits of these actions and how would they help grow the New Zealand Aerospace Sector

Intangible Assets deliver a critical strategic competitive edge through building a moat around a business and ultimately the aerospace sector by driving the value of a business through data, content, analytics, relationships, designs, processes, approvals & certifications and supporting regulations.

How would you like to be involved in the delivery of the Aerospace Strategy

[redacted]