

Submission on developing the Aotearoa New Zealand Aerospace Strategy

Your name and organisation

Name	Shivneel Rattan
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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.

Question 1: *Do the four areas above provide the right basis for the Aerospace Strategy?*

I think that the four areas covered are a good basis for New Zealand's Aerospace Strategy.

Question 2: *What are the critical factors that you see for aerospace sector development?*

Research & Development, as well as local serial production with increased vertical integration. Basically, I would like to see Kiwi companies research their ideas with Kiwi planes and Kiwi equipment.

Question 3: *How would an Aerospace Strategy help you?*

As a software developer, this would be helpful in creating additional programming / software development jobs in New Zealand.

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.

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?*

Yes.

Question 5: *Will the 2030 Future State support your ambitions for growth and participation in the sector?*

Yes.

Question 6: *What barriers are there to optimising sector growth?*

I believe that the lack of aerospace industry / manufacturing is going to be a hurdle, especially with regards to agile development. For example, lets say you have redesigned a crucial part that needs to be manufactured again for real time testing. The production of the part will take around three (3) hours in an overseas factory, but flying the part over will take at least twelve (12) hours. In that time, a local factory that takes four (4) hours to produce, and one (1) hour to ship the part, will be able to turnaround the part much faster, in this case, three (3) times faster.

Question 7: *How could the government and the sector work together to achieve the 2030 Future State?*

I think that to help stimulate the sector, the government could work with the sector to research what **current issues** that could be resolved with **current aerospace solutions**. Then the government can provide the required funding and the ability to manufacture equipment, in exchange for products / solutions to the issues that the government is facing. For example, lets say New Zealand is facing a feral cat problem. The issue is helicopters are expensive, and parts, while available, take some time to arrive, so an unexpected failure can curtail operations. The government and the aerospace sector can agree to produce spare parts for the helicopters, in exchange for funding / manufacturing of the sector. The sector could

also suggest the use of drones to achieve the same task.

In addition, the sector could also work to obtain other government contracts. As mentioned in the example earlier, while feral cats unfortunately do endanger New Zealand native species, feral pigs (hogs) cause much more damage to industry all over the world. It would be **very profitable** to create an aircraft / drone with low operating, maintenance, and environmental costs to be made in New Zealand, but sold all over the world. This profit can then be used for cutting-edge R&D in New Zealand.

Question 8: N/A

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?

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

- Question 9:** *What do you think of the Three Pillars and do you think they will support the 2030 Future State?*
Yes. I believe that they will support the 2030 Future State. I think that it may be useful to also mention that all skilled jobs will increase - not only high-wage / high-skill jobs.
- Question 10:** *What else would you like to see in the Three Pillars?*
N/A
- Question 11:** *What actions and initiatives could the sector focus on to support the Three Pillars?*
See question 7.

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.

Question 12: *What do you think of the Goals for 2030?*

I think that the goals are okay, however, as mentioned a few times in this submission, I think that one goal should be centered around the manufacturing/production side as well.

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?*

Somewhat. I find the goals a bit too general, and does not specifically state what New Zealand is doing for the goal already, or what New Zealand plans to focus on in the future. A good example is: *Goal Three – At the forefront of global sustainable space activities.*

Question 14: *What activities and milestones can help us achieve these Goals? (All of these are long term goals)*

- Serial production of a Domestic R.C / Remote Control plane / drone / toy. (At the moment, New Zealand has no capacity to produce a complete toy plane, and, it is actually harder than it sounds because it will also require the local manufacturing of semiconductors, and, a functional supply chain and logistics).
- Presentation of the integration of sensors and AI into an aerial vehicle (R.C plane mentioned earlier). Think Boston Dynamics showcasing their product.
- Serial production of an Integrated product / solution, i.e a solution to Question 7.
- *Goal Three: – At the forefront of global sustainable space activities.* - Showcase a concept that would be suitable for this goal, and;
- Follow through with a design and final product / production to this problem.
- R&D with technology to determine if humans can travel to the I.S.S (International Space Station) in a sustainable manner.
- Travel to the I.S.S. (To the best of my knowledge, no New Zealander has been on the I.S.S)
- Showcase advanced R&D concepts / design in the ability to sustain human life in space (Goal Four).

Question 15: *Where do you see yourself in realising these Goals?*

Perhaps, on the software development side. The R&D side is unlikely for me.

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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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?*

*Innovative and responsive regulatory and policy approaches, such as the Airspace Integration Trials Programme (AITP) that was created to support the safe testing, **development, market validation, and production** of advanced uncrewed aircraft.*

Question 17: *What would be the benefits of these actions and how would they help grow the New Zealand aerospace sector?*

With regards to the addition, local manufacturing would help New Zealand's economy, and help produce manufacturing jobs and local talent. In addition, it would also be beneficial for other sectors as well. For example, composite aerospace manufacturing and design could help New Zealand's boat building industry, or may help foster a car / OEM part production industry from scratch.

Question 18: *How would you like to be involved in the delivery of the Aerospace Strategy?*

N/A