

From: [REDACTED]
Sent: Sunday, 30 October 2022 3:37 PM
To: Aerospace Strategy
Subject: Submission

Subject: NZ Aerospace Strategy: Submissions
Date: October 30
From: Reihana Robinson
To: MBIE

Support Peace Movement Aotearoa's submission below and Wellington Peace Action

THERE IS NO ROOM FOR LOCKHEED MARTIN ON OUR WHENUA

My name is Reihana Robinson

[REDACTED]

Email as per this email

I write as tangata whenua, a tamaiti whāngai and environmental activist, poet, organic farmer and researcher

"Three pillars" "Future State" who dreams up this corporate linguistic soup?

We need an independent foreign policy

We need to bow out of Five Eyes and our current PM's WEF/NATO affiliations and become a beacon of peace for us and for the world

Everything people such as myself bother to pen will be ignored and it will be on your shoulders you assist in the destruction of Papatūānuku together with space

You all need to watch The Day the Earth Stood Still

There will be consequences that reach into your progeny's existence

Of course you are about business so get on with assisting chemical farmers transition to creating regenerative healthy soil for our mokopuna

First detail requiring action is a clear statement of independence from ALL nuclear armed nations

If MBIE can achieve this goal we will all be closer to peaceful coexistence

It's a big job but why not choose to use your salaries and contracts to DO GOOD IN YOUR LIFETIME

Use your power for peace
Peace Movement Aotearoa wrote:

The 'Developing the Aotearoa New Zealand Aerospace Strategy' consultation document seeks feedback on the content of five areas: Overview of the Aerospace Strategy; A strategy for building our aerospace sector; Building strong foundations (Three Pillars); Goals for the 2030 Future State; and Pathway to the 2030 Future State.

While there are multiple references throughout the document to economic development, economic benefits, "productivity" and "the global aerospace economy", there is not a single reference to three crucial areas that must be the basis for the developing NZ aerospace industry:

i) Peaceful uses of space: there is no reference to NZ's commitment to peaceful uses of space, both generally as a member of the international community and specifically as a member of the Committee on the Peaceful Uses of Outer Space since 2016. The Committee was established in 1959 "to govern the exploration and use of space for the benefit of all humanity: for peace, security and development" and to promote "international cooperation in the peaceful uses of outer space".

ii) Disarmament obligations: there is no reference at all to NZ's domestic or international disarmament obligations, which is a particular concern with regard to prohibited weapons, including nuclear, biological and chemical weapons, as well as cluster munitions and other weapon systems with inhumane and indiscriminate effects that are prohibited by NZ law. Related to this, there is no reference in the draft Strategy to NZ's obligations under humanitarian and human rights law.

iii) Disarmament policy: there is no reference to NZ's disarmament policy, which includes both a commitment "to show leadership in the development of new rules, norms and standards around the use of outer space", and a commitment to "new international law to ban and regulate autonomous weapons systems" (also known as killer robots) - this is particularly pertinent to this Strategy given the references to "autonomous aerial vehicles", to "safely integrate all forms of autonomous aerial vehicles" and, disturbingly, "significant work has already been undertaken to establish New Zealand's leadership in this area, which we will progress further for 2030".

It is absolutely crucial that the new Aerospace Strategy includes meaningful references to each of these areas to ensure that aerospace companies based in Aotearoa do not develop - or contribute to the development of - any technologies, aircraft or spacecraft that are contrary to any of NZ's obligations and commitments to ensure that space is only used for peaceful purposes.

I'm having my say separate from your computer generated submission form

Please don't try to squeeze my submission into your formula

If you wish for further correspondence utilise my email

I would really like to know what qualifications those who dreamed up this survey actually have

Here is some background reading for you to assist in decision making

For information only

I do not support in any way the exploitation of our whenua for this climate-destructive abuse of our whenua

Our whenua is our source of nourishment and that should be GOAL 2022-2030 for MBIE

NOURISH OUR WHENUA

Quit counting using GDP

Choose a route for peace

The Daily Blog

Read The Other Side Of The Story [endless wars from space](#)

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and

The Daily Blog

Read The Other Side Of The Story

Rocket Lab: Helping the US wage endless wars from space

By
[John Minto](#)

October 25, 2022
1598



It's clear local mana whenua were misled by Rocket Lab founder Peter Beck when iwi land at Mahia Peninsula was leased to launch satellites into space.

At the time Peter Beck was clear Rocket Lab would be used for civilian purposes only and would not take up military contracts, despite this being a particularly lucrative path to take.

Fast forward a few years and we find Beck has abandoned any principles he may have had and his company is now majority owned by the US military and is launching satellites for US military purposes.

The government has to sign off on each launch to make sure it is in line with what's acceptable to this country but it's clearly a rubber stamp process conducted by Stuart Nash.

Any assurances from Peter Beck or Economic and Regional Development Minister Stuart Nash, who signs off on the launches for the government, that Rocket Lab's work is for the betterment of mankind are not credible.

Peter Beck sets up straw man arguments saying claims of Rocket Lab weaponizing space are "[misinformation](#)" and the company would "not deal in weapons". "We're certainly not going to launch weapons or anything that damages the environment or goes and hurts people," he [told Newshub last year](#).

What nonsense. These are "straw-man" arguments. No-one has claimed the rockets contain weapons but what is absolutely clear is that the US military launches rockets for military purposes and this is what is happening at Mahia.

The [NZ Herald reported last year](#) on the capabilities of "Gunsmoke-J satellites", which have been launched from Mahia for the US military, saying:

The other is the "Gunsmoke-J" satellite being launched for the US Army's Space and Missile Defence Command (SMDC).

Gunsmoke-J is a prototype for a possible series of nano-satellites that will collect targeting data "in direct support of Army combat operations" according to a US Army [fact sheet](#) and a US Department of Defence budget [document](#).

Green MP and party spokesperson for *security and intelligence*, Teanau Tuiono, [is right to speak out](#):

"Weaponising space is not in our national interest and goes against our international commitments to ensuring peace in space,"

"The government should put in place clear rules that stop our whenua being used to launch rockets on behalf of foreign militaries"

and

"We should not be a launching pad for satellites for America's military and intelligence agencies," Green Party security and intelligence spokesman Teanau Tuiono said.

Rocket Lab is donkey deep with US strategies for "full spectrum dominance of the planet – including space. In doing so Beck and the government have [made Mahia a target for conventional or even tactical nuclear weapons](#) if hostilities break out between the US and another world power.

It's ironic that the [government provided start-up funds](#) for Beck to get Rocket Lab off the ground only for Aotearoa New Zealand to find the company has put us to bed with a foreign military and made us target for conventional or nuclear attack.

Mana whenua in Mahia are right to be concerned – and so should the rest of us.

The government is "consulting" at the moment on these issues in their Space Policy Review.

ROCKET LAB

Behind The Hype
Warren Thomson

Introduction

Rocket Lab (RL), which has launched 31 space flights from its Mahia Peninsula launch site on the North Island’s east coast, has been supported by the NZ government and lauded by the business community. The story of a gallant little “NZ” company, pioneering space technology and bringing jobs to this country has spread widely across the media, but criticisms are starting to mount.

Recently, RL spokeswoman Morgan Bailey said the company believes Russia’s war on Ukraine “may have made Kiwis more reconciled to its role in launching military-related surveillance satellites” (*Stuff*, 16/8/22, <https://www.stuff.co.nz/business/129576034/rocket-lab-thinks-war-on-ukraine-has-softened-hostility-to-its-military-ties>) suggesting the company is becoming somewhat defensive.

This article looks at the facts about RL which need to be much more widely known: what the launches are really for, how the company misleads people about its activities, who owns the company (confession – we don’t really know). We consider things the Government doesn’t want to think about when it rubber-stamps launch agreements, and RL’s potential for very negative environmental impacts, as well as the potential for Mahia to become a nuclear target.

The Latest Rocket Lab Launches

The evidence is clear: seven of ten launches (at the time of writing) from Mahia in 2021-22 have been for military or military/ intelligence purposes.

	Date	Client	Probable Use
2022			
	4-Aug	NRO	Military/intelligence
	13-Jul	NRO	Military/intelligence
	28-Jun	NASA	
	2-May	Rideshare	
	2-Apr	BlackSky	Military/intelligence
	20-Feb	Synspective	
2021			
	9-Dec	BlackSky	Military/intelligence
	18-Nov	BlackSky	Military/intelligence
	29-Jul	US Space Force	Military/intelligence
	15-May	BlackSky	Military/intelligence
	22-Mar	Rideshare	
	20-Jan	OHB Group	

NRO = National Reconnaissance Office, which operates US spy satellites

Rocket Lab Disinformation

Rocket Lab has such a history of disinformation that anything announced by the company needs to be regarded with a great degree of scepticism. Right back in the beginning of his entrepreneurial journey Peter Beck (RL Chief Executive Officer) announced that he wasn’t interested in working with the military, and the company would not go down that track. Now, of course, a major part of the RL business is with American (and Australian) military and intelligence organisations.

Even more damning is the fact that, when the company first approached Mahia residents about the proposed launch site, the whole emphasis was on non-military purposes for the rockets. Some locals are bitter about being lied to; especially when it was not initially known that large areas of their sea and coastal areas would be shut down for days when a launch was due.

Rocket Lab told the *Spinoff* that an early launch - Instant Eyes - was intended for use by “first responders requiring real-time situational awareness in scenarios such as forest fires and search and rescue operations”. However, the *Spinoff* reports that marketing materials from the time refer to its applications for “tactical missions” and “covert use” and include images of US soldiers. Rocket Lab’s own Website compared it to other intelligence, surveillance and reconnaissance tools for the battlefield, such as the Pointer, Raven or Predator – all drones used by the US military (*Spinoff*, 20/11/18).

In 2015 Beck told *Stuff* that “Rocket Lab and Lockheed Martin had worked together on collaborative research, the details of which were commercially sensitive. Its investment in Rocket Lab would go towards the Electron

(rocket)development as well as other ‘strategic joint programmes’” (*Stuff*, “Rocket Lab Teams With US Giant Lockheed”, 2/3/15). In a statement to the *Spinoff*, (*Spinoff Business*, 20/11/ 18) Rocket Lab said that it had *no joint strategic projects with Lockheed Martin*, although Lockheed Martin Space Systems made “a minority investment” in the company in 2015.

Lockheed Martin would not be interested in the Electron rocket programme as a weapons platform, Beck has said. "It's just a totally ineffective vehicle for that sort of thing. It's designed to put satellites into orbit, not deliver weapon systems" (*ibid.*). Given the fact that a number of the satellites are for military targeting or locating purposes, the distinction with “weapons systems” seems at best disingenuous, and at worst, an outright lie.

Rocket Lab has separately launched satellites directly for the US Air Force, Space Force and National Reconnaissance Office as well as one for the Mexican military

(<https://www.stuff.co.nz/business/114387492/rocket-labs-secret-payload-owned-by-mexican-defence-agency>)

over the past four years. They included one that US Defense documents indicated was designed to assist in accurately directing ground fire (<https://www.stuff.co.nz/business/124623320/rocket-lab-passes-100satellite-milestone-after-successful-launch>) against small moving targets, for example in battlefield situations (Tom Pullar-Strecker, *Stuff*, 16/8/22).

When Gunsmoke-J was launched in 2021, Beck dismissed its function as a military targeting satellite. "It was about the size of a loaf of bread and it was to test various communications. You can spin whichever way you want to spin on any of this stuff" (*Newshub* 8/7/21). Compare his comment with that of TriSept CEO, Rob Spicer: “This leading-edge mission for the Army’s Space and Missile Defense Command will orbit aboard a satellite smaller than a loaf of bread, but will have a huge impact on milestone developments in *warfighter capabilities* on the battlefield and beyond”.

TriSept was the company which prepared and deployed the satellite on the RL rocket (see “US Army Selects TriSept To Integrate And Deploy Gunsmoke-J CubeSat”; *Satellitetoday* Website, 22/10/20, and “The Gunsmoke-J science and technology effort will provide new and advanced capabilities to tactical warfighters in a satellite about the size of a loaf of bread” (US Army Website, 8/7/21).

Rocket Lab And Lockheed Martin

Rocket Lab's listing on the NASDAQ in 2021 valued the company at \$NZ7 billion, of which Beck has about a 12% share (*Newshub*, 26/8/21). Khosla Ventures is currently the largest shareholder, with 18% of shares outstanding. With 15% and 12% of the shares outstanding respectively, Deer Management Company and Peter Beck are the second and third largest shareholders, respectively. Beck is also Chairman of the Board (*Yahoo Finance*, 6/10/22). There is a significant number of investors with small holdings, but around 35% of the company is difficult to identify.

Wikipedia says that Khosla has been a key investor since 2013 and mentions a number of other groups that have funded the company. Interestingly for New Zealanders, our Crown agency Callaghan Innovation was reported to have \$NZ15 million invested in RL by May 2017. And *Wikipedia* also states that “Lockheed Martin (LM) became a strategic investor in 2015”. Lockheed Martin is one of the biggest, if not the biggest, weapons manufacturers in the world, including of nuclear weapons.

This theme is repeated by a *NZ Herald* article which says: “Now, Rocket Lab – domiciled in the US, but keeping a new assembly plant and a 400-strong team in Auckland ... is a bona fide, globally recognised player in the world's space scene, *with backing from major investors like Lockheed Martin*” (Jamie Morton, “Meet NZ's Newest Professor”, *NZ Herald*, 3/9/19).

The issue of how much investment LM has in RL is a very tricky one. A CNN business listing of RL shareholding lists LM holdings at less than 2% (*CNN Business*, 10 /9/22). The size of Lockheed Martin’s stake in the company is not public, in part because Rocket Lab USA is incorporated in Delaware, which requires minimal disclosure by companies (*Spinoff*, 20/11/18).

Rocket Lab’s involvement with Lockheed Martin began more than ten years ago. By November 2010, Rocket Lab was supplying Lockheed Martin with thermal plastic products to protect metal on Patriot missiles in high temperatures (RL media release, in *Spinoff*, 20/11/18). It says that Lockheed Martin Space Systems made a minority investment in the company in 2015.

In March 2015 *Stuff* reported: “New Zealand's Rocket Lab has secured financial backing from US aerospace giant Lockheed Martin ... Its investment in Rocket Lab would go towards the Electron development as well as other ‘strategic joint programmes’” (“Rocket Lab Teams With US Giant Lockheed”, *Stuff*, 2/3/15).

On July 27, 2022, Rocket Lab USA, Inc. announced that its solar cell assemblies will power three Lockheed Martin Next Gen OPIR GEO (NGG) satellites for the United States Space Force (USSF). Specifically, this RL announcement states: “The NGG programme will deliver resilient global missile warning capabilities to counter emerging missile

and counter-space threats and is part of the latest evolution of the USSF's missile warning system ..." (RL Website, PR emphasis).

The Emerging Engineering Website (2/8/22) notes the satellites cost \$US4.9 billion and are to be launched in 2025, and will be operated by the US Space Force to "provide early warning of any incoming ballistic or tactical missile launch from anywhere in the world. It's part of the US's increased militarisation of space" following the publication of the US Space Force's statement of military doctrine in 2020.

The same page has the following comment: "We are excited to continue *our long-term partnership with Lockheed Martin* (PR emphasis) by powering the Next Gen OPIR GEO satellites", said Brad Clevenger, Rocket Lab's Vice President & General Manager, Space Systems Power Solutions. "These satellites *are critical to the mission needs of the United States Space Force and our national security*, and we are proud to be supporting their production on an aggressive schedule," (RL Website, 27/7/22). It may be hard to define LM's financial stake in RL. But of "the long-term partnership", and military purpose, there is no doubt.

Another dodgy ownership issue was raised by the *Spinoff* (20/11/18) revealing Rocket Lab's link with the Central Intelligence Agency's venture capital firm. This was publicised in 2016 by US investigative journalism site the *Intercept* but not widely reported by the New Zealand media. Although it operates independently, (CIA) In-Q-Tel invests on behalf of the CIA and the broader US intelligence community in companies whose products may have national security applications (*Spinoff*, *ibid.*). Also, the *Intercept* shows that Rocket Lab CEO Peter Beck spoke at a summit of In-Q-Tel portfolio companies in February 2016.

Govt. Support For RL

It's [against New Zealand law](#) to help "any person to manufacture, acquire, possess, or have control over any nuclear explosive device", and any launch has to be in New Zealand's national interest - what that means exactly is left to the Minister for Economic Development. RL launches cannot be tied to nuclear devices.

And the question of "national interest" does not arise when the Government sees our national interest as supporting American militarism. NZ investigative journalist Ollie Neas (see *Spinoff* article) has commented that New Zealand officials: "now see Rocket Lab's military launches as a *"tangible contribution to the broader Five Eyes intelligence network"*, in the words of a heavily redacted briefing.

NZ's entry to the space race has been dramatic. Until 2016 and 2018, respectively, New Zealand and Australia did not even have their own space agencies. "Arguably Rocket Lab was the motivating factor for the New Zealand government, which quickly put regulations in place in order to allow the firm to launch rockets from Mahia Peninsula. Wellington has since then provided various support mechanisms to the industry, and numerous space firms are emerging. New Zealand focuses on regulatory reform to help firms do business as they please..." (Keynote speaker: NZ Asia Institute/University of Auckland Business School Seminar: Space Industry Development in the Asia-Pacific, 1/9/22).

In an interview with the *Bit* website, the Green Party's Security and Intelligence spokesperson, Teanau Tuiono, said: "Unfortunately our outer space legislation has so many gaps and grey areas that foreign military powers are literally launching rockets through it". The Government says payloads with the "intended end use of harming, interfering with, or destroying other spacecraft, or space systems on Earth" are banned, as are those "with the intended end use of supporting or enabling specific defence, security or intelligence operations that are contrary to Government policy" or likely to cause "serious or irreversible harm to the environment" (*Bit*, 22/7/21).

Ministers use "contrary to Government policy" as an escape clause and blithely ignore an increasing number of scientific studies suggesting too many flights will cause significant environmental damage (see below).

Government policy has been to closely ally this country with the United States, for example, signing the Washington-promoted Artemis Accords for exploration of space. BlackSky satellites (launched by RL in April 2022) are likely to be seen in Wellington as assisting in monitoring nuclear power plants in Ukraine rather than supporting the Pentagon's expanding militarisation of space.

In reality, NZ Ministers okay RL launches with no proper oversight. "The NZ spy agencies, the GCSB and the SIS, assess 'national security' and 'national interest' in relation to RL operations. *But no definitions or guidelines have been set for this assessment*" (Inspector-General of Intelligence and Security, review of GCSB and SIS assessments under the Outer Space and High-altitude Activities Act 2017, 20/4/21).

So, our spy agencies blandly assure the Government that the launches are not threats to "national security" and the Government buries any issues related to our nuclear free policy or other issues (PR has no information on whether this glaring deficiency – lack of properly defined assessment - has been amended recently).

Potential Target?

With all three* of its launch pads online, Rocket Lab anticipates being able to handle as many as 130 missions per year (*TechCrunch Website*,19/6/20). The important point made, is that it could bring turnaround time down to just days, providing cheaper and efficient responsive launch capabilities that small satellite commercial customers, and, notably, national defence agencies, are increasingly seeking in order to build in network redundancy. **Rocket Lab has two launch pads at Mahia Peninsula and one in the US. Ed.*

Chillingly, when Rocket Lab said it had won a contract to supply components for an upgrade to the US military's missile defence system in August 2022, it announced: "The NGG programme will deliver *resilient* global missile warning capabilities to counter emerging missile and counter-space threats and is part of the latest evolution of the USSF's missile warning system... a demonstration of responsive space... " (*NZ Herald*, 4/8/22).

In other words, Mahia puts this country at the forefront of the system which is supposed to respond to attacks on various US military/intelligence systems by ensuring "resilience"- response capability. Given that Russia has more than 1,500 deployed strategic nuclear warheads, including around 800 on submarines -the likelihood that the Kremlin can find a couple to lob in this direction to prevent the Pentagon utilising its "resilient" systems in a war situation seems quite high.

RL And Space Pollution

As mentioned above, an American techie Website suggested that by 2021, RL using all three of its launch pads, would be able to handle as many as 130 missions per year (*TechCrunch Website*,19/6/20). While we are expected to admire the productivity of the company, attention needs to be given to an aspect of rocket launches that has received very little attention from the non-cognoscenti, (and notably ignored by NZ Space Agency and the Government), namely the damaging effects of rocket launches on the environment.

While different rockets have quite different impacts, this aspect of the topic needs much more attention.

Amongst other scientists, the USgovernment's National Oceanic and Atmospheric Administration (NOAA) has begun to focus on this. Some typical examples of recent reputable research examples are given below.

Rockets produce "not-inconsiderable amounts of CO₂", and "can spew exhaust that depletes the ozone layer through chemical reactions" (World Economic Forum/NASA, 23/7/21). "Coming increase in rocket launches will damage ozone, alter climate, study (from the US National Oceanic and Atmospheric Administration) finds", ([Space.com](https://www.space.com/28/6/22), 28/6/22).

An academic investigation from the University of Colorado, in Boulder (27/6/22), which also involved NOAA researchers, concluded: "Emissions from spaceflight activities play an increasing role in the background stratospheric aerosol population. Rockets used by the global launch industry emit black carbon particles directly into the stratosphere where they accumulate, absorb solar radiation, and warm the surrounding air".

"We model the climate response of the stratosphere to an annual, black carbon emission source from rocket launches. We show that the rocket black carbon increases stratospheric temperatures and changes the global circulation, both of which cause a reduction in the total ozone column, mainly in the northern high latitudes. Our results show that the stratosphere is sensitive to relatively modest black carbon injections".

We must anticipate that increasing the number of Rocket Lab launches will mean "... increases (to)stratospheric temperatures and changes (in)global circulation" with impact on the ozone layer and potentially increase climate change. We certainly cannot rely on RL and its spin-doctor CEO to safeguard our planet. The *Guardian*(24/1/20) reported how astrophysicists had been angered by the company's cavalier attitude when it launched a satellite in 2018 that Beck said "would be brightest object in the night sky for nine months" and "was designed to be seen around the globe". Astronomers labelled it "space junk".

Close Down Mahia

While the *American* company, Rocket Lab, soars into the business headlines, and excites space techies, behind the jet stream, the wider implications of launches of military/intelligence satellites from Mahia need to be examined. RL operations need to be looked at in terms of exactly what is being sent up into space, and how Peter Beck has sought to deflect attention from his Pentagon assists.

How do the payloads fit with a proclaimed "fiercely independent foreign policy" and the spirit of nuclear free Aotearoa/NZ? Do Mahia launches make this country a potential target? Environmental factors, including local impacts,have to be given much more attention. There is a strong case to shut down the Mahia launch padsnow.

<https://www.mbie.govt.nz/have-your-say/aotearoa-new-zealand-aerospace-strategy/>

