

World's 1st carbon-neutral biofuel-powered space launch service



blushiftaerospace.com Brunswick ME   

[Hardware](#) [Technology](#) [Infrastructure](#) [Aerospace](#) [Space](#)

Highlights

- 1 🚀 First rocket company to use non-toxic, nearly carbon-neutral, bio-derived fuel
- 2 💰 bluShift is offering the first dedicated rocket launch service for small satellites
- 3 📈 bluShift is part of a rapidly growing, \$28B+ market opportunity for launching small satellites
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- 4 💰 Projected revenues of over \$400M over 10 years (not guaranteed)
- 5 🌐 Will have the only private launch site in US to access #1 orbit for tiny satellites
- 6 🏆 Paying Customers are already onboard!
- 7 📈 Over \$1M raised to date!

Our Team

 Sascha Deri CEO



I co-founded one of the first online solar distribution and light manufacturing companies, which has grown to over \$35M in sales. In 2014 I founded bluShift to reduce the cost and wait time of small satellite launch services in an earth-friendly way.

In 2013, I discovered a new bio-derived substance that worked better than traditional petroleum fuels for rockets. We want to see more commercial space companies use Earth-friendly fuels to power our curiosity and ambitions to space.



David Hayrikyan Chief Technology Officer

Joining bluShift Aerospace shortly after its inception, David is currently leading the engineering team to achieve the upcoming suborbital launch of Starless Rogue.



Luke Saindon Lead Mechanical Engineer

A former Applied Thermal Sciences intern at NASA's Marshall Space Flight Center, at bluShift Luke is responsible for performance testing, oxidizer system design, and simulation development.



Gerard Desjardins Lead Propulsion Test Engineer

Gerard Desjardins comes to bluShift from Pratt & Whitney, where he worked in jet engine structural analysis and jet engine repair design. At bluShift, Gerard is responsible for all things related to propulsion.



Aaron Woodall Aerospace Assembly Technician

Aaron comes to bluShift from Boeing, where he was mechanical team lead for Boeing's 777-9 flight test airplanes, which are successfully flying today.



Douglas Staniszewski Electro/Mechanical Assembly Intern

As former faculty of the Aviation Program at the University of Maine at Augusta, Doug brings experience in UAS quadcopter and fixed wing design, assembly, and maintenance, photogrammetry, mapping and drone flight procedures, and FAA procedures.



Skyler Lazelle Astronautics/Operational Engineer

Skyler comes to bluShift from the U.S. Air and Space Forces, and brings a background in space operations and astronautical engineering. His space career goes back to 2009, and he has worked on systems from low earth orbit to geosynchronous orbit.



Lindsay Becker Chief of Staff

Lindsay joins us from an operations and marketing background, with specific skills in storytelling and brand voice development. She has worked with hundreds of clients to tell their stories through video and photography in her 10 years in the field.



Bonny Ethridge Human Resources

Eight years of experience as Sascha's Executive Assistant, Office Manager, Human Resources and Benefits Manager and Sales Administration as well as her 30+ years experience in Customer Service.



Ben Farmer Business Development

Ben has been the top-performing technical sales rep for Sascha's solar company. He brings 25 years of experience to bluShift's sales force and has already landed the company a major contract.



Seth Lockman Communications Director

Seth brings 12 years of experience in science communication and 10 years in digital marketing to the bluShift team. He founded and co-hosted the first nonprofit radio show to join NASA's Museum & Informal Education Alliance.



Betta Stothart Public Relations Consultant

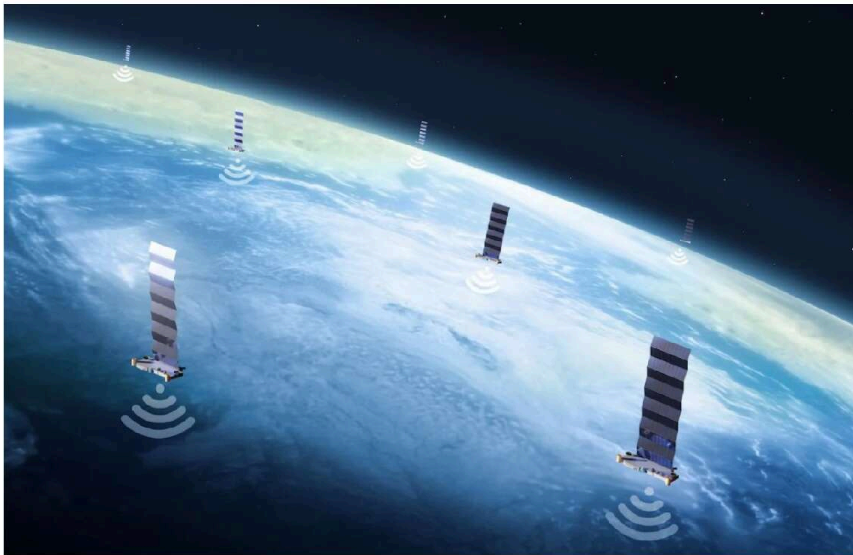
Writer, editor, and public relations consultant with over 30 years in Maine's business landscape, recognized by the Maine Public Relations Counsel with a Golden Arrow Award.

Pitch

Why invest in a sustainable rocket launch company?

Well, have you used your phone today for gps directions or to check the weather?

As you may know, services like these are made possible because of hundreds, if not thousands of satellites about your head today.



However, the vehicles used to launch these satellites into orbit are enormous and polluting the very planet we are fighting to protect and learn more about. And it's only going to get worse as rocket launches are expected to grow more than ten fold in the next 10 years. That's a lot of extra greenhouse gases.



The pollution caused by rocket launches

Emissions from rocket launches could affect Earth's weather systems

Increasing numbers of space launches will put more black carbon high in the atmosphere, where it can trap heat from the sun

NewScientist article from June 15, 2022

Rocket Launches Could Be Polluting Our Atmosphere in New and Unexpected Ways

Rocket exhaust could have a "significant cumulative effect" on the atmosphere, the climate, and human health, according to new research.

Gizmodo Article from May 18, 2022

Pollution from SpaceX, Blue Origin, Virgin Galactic's rockets could harm human health as well as Earth's climate, study says

Business Insider Article from May 19, 2022

Electronics are shrinking, which has brought a revolution and explosive growth of a new industry of small satellites, called microsats and nanosats. They provide many of the same services as the large ones, just more compact, less expensive and closer to Earth.



See the problem?

Huge rockets + tiny satellites = tiny satellites don't go where and when they want to go to space

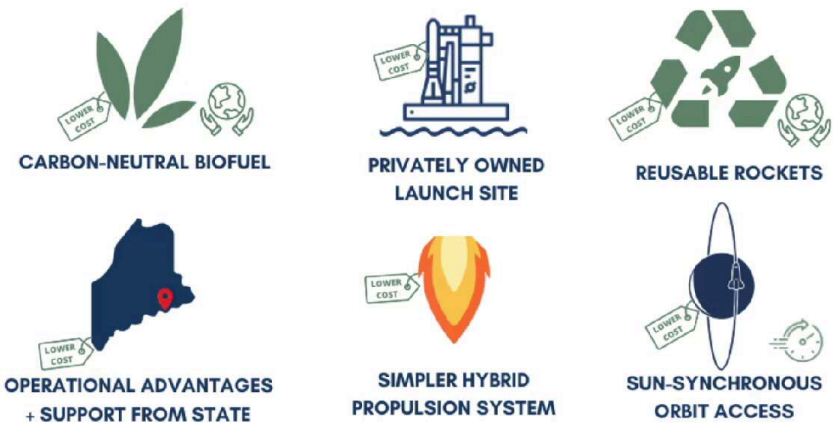
Basically, these small satellite customers receive no priority. They're riding coach class to space. And we have a better way.

At bluShift, we launch small payloads to space. Think of us as a delivery service

to space, except instead of boxes and groceries, we're dropping off small electronics that could provide broadband internet to remote areas of the world, or global Earth imaging that is helping track climate change.

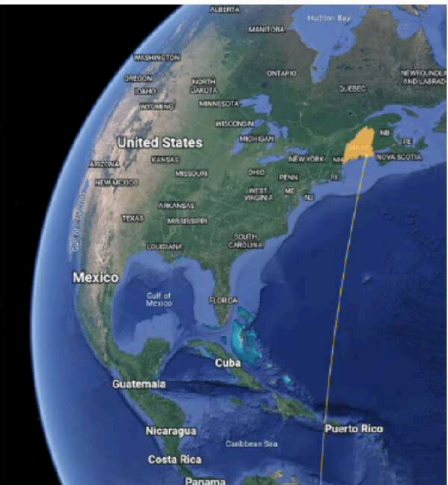


We have so many clear advantages over our competition.



We will be the go-to green launch provider for small payload customers.

Our future sea-based launch platform will be the only launch site on the entire East Coast that will put these tiny satellites directly into the number one most desired orbit - called sun-synchronous orbit. And we will do it for 25x less than the traditional spaceports and get customer's satellites this highly desired orbit 12x faster than rockets launching from Cape Canaveral or Wallops launch sites.





And as the world witnessed..

On January 31, 2021 bluShift made world history as the first company to commercially launch a rocket using a non-toxic, carbon neutral biofuel.



Our launch and progress since has been covered by major national and international news outlets like the BBC, Space.com, Forbes and soon, CNN Business.

Revolutionizing space launch to be more Earth-friendly is core to our vision.

Not only is our fuel non-toxic and carbon neutral, but our rockets are reusable and our test site, offices and future manufacturing site are powered by renewable energy.

We have developed a technical, geographical and go-to-market approach that enables us to meet our customer’s major pain points at a cost advantage.

All of this is possible because of our incredible team.

TEAM

We have a team of 20 people who have passed up job opportunities at Blue Origin, Boeing, Pratt + Whitney and have instead come to work with us.

FEATURED

TEAM

MEMBERS





Sascha Deri
CEO – Founder
23+ Yrs Renewable Energy Executive
Co-founded altE, a renewable energy co. with \$35M in annual revenue



David Hayrikyan

CTO

14+ Yrs in Aerospace Engineering and Medical Manufacturing
Founded MACABitech, a design, development and machining co.



Lindsay Becker

Chief of Staff

7+ Yrs in Operations, 5+ Yrs in Marketing
Operations Manager, Executive Producer, Videographer, Storyteller



Luke Saindon

Lead Mechanical Engineer

10+ Yrs in Aerospace Engineering
PE, Applied Thermal Sciences internship with NASA Marshall Space
Flight Center



Gerard Desjardins

Lead Propulsion Test Engineer

7+ Yrs Mechanical + Aerospace Engineering
Pratt & Whitney, Colorado Space Grant Consortium



Aaron Woodall

Aerospace Assembly Technician

4+ Yrs in Aerospace Engineering, Previously Google
Boeing Manager, Google Program Manager

ADVISORS



Matt Parker

Former SpaceX / Rocket Lab Propulsion Test Engineer

15+ Yrs Aerospace Engineering



Richard Clark

Financial Advisor

30+ Yrs as CFO/COO; Strategic Advisor



Randy Walther

CFO / CPA

15+ Yrs as VP of Finance



William Readdy

Investor

Retired Shuttle Astronaut



Dr. Gregory Falco

Investor

Space Security Expert; Assistant Prof. at John Hopkins University



Matt Hoffner

Entrepreneurial Advisor, Investor

Maine Technology Institute Entrepreneur in Residence

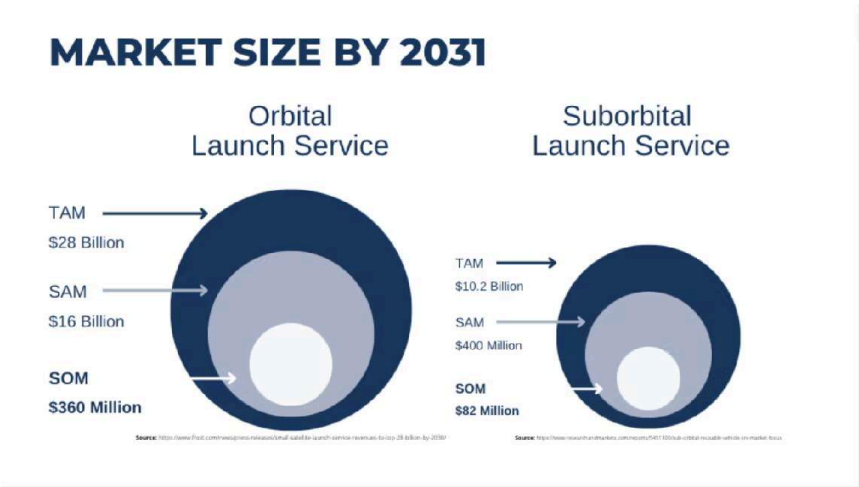


Jeff Spaulding

Startup Business Attorney

Partner at Eaton Peabody

The small satellite launch industry is projected to grow to nearly \$30 billion dollars over the next ten years. And each of our launches is expected to produce between \$1-4 million dollars in revenue (depending on the service).



Our business strategy will drive a combined Serviceable Obtainable Market of nearly a half a Billion dollars over the next 10 years.

CUSTOMERS

Who is paying for these launches?

The target customers for our primary service fall in a wide range of commercial customers, from communications providers, earth imaging service companies as well as researchers.

Our target customers for our secondary service are primarily civil and academic researchers looking to test things out in zero gravity.

One of our customers, MaxIQ Space:





And we already have POs and LOIs valued at \$9.5M dollars.

FINANCIALS

Revenue starts flowing in next year, and we’ve modeled our growth over the next 10 years. Our secondary launch service will generate revenue early and steadily into the future, while our primary brings exponential growth, resulting in over \$100M in revenue in year 10.



The values in this graph are forward-looking projections and not guaranteed.

COMPETITION

Suborbital

Our suborbital competitors are really not addressing some of the major pain points that our future customers have identified, such as longer time in zero gravity and wanting a safer, more sustainable launch partner.

	BlueShift	Blue Origin	Virgin Galactic	Up Aerospace
Sustainable Biofuel	✓	✗	✗	✗
Low Acceleration to Space	✓	✓	✓	✗
6+ Minutes Zero Gravity	✓	✗	✗	✗
Dedicated Launch Site	✓	✓	✗	✗

Orbital

No one else is offering a service with a sustainable fuel and no one is providing a truly dedicated launch service.

		Rocket Lab	Astra	Virgin Orbit	Firefly	Relativity	abl
Sustainable Biofuel	✓	✗	✗	✗	✗	✗	✗
Dedicated Service	✓	✗	✗	✗	✗	✗	✗
Geographic Advantage	✓	✓	✗	✗	✗	✗	✗
Private Launch Site	✓	✓	✗	✗	✗	✗	✗
Small Payload Capacity	100kg	300 kg	150kg	500 kg	1000 kg	1250 kg	1350 kg

Another huge differentiator between us and our competitors is that we’ve been able to accomplish so much more with far less capital.

Early on, NASA provided us with grant funding to develop our hybrid rocket engine further, and we intend on applying for more federal funding in the near term.

	2020	2021	2022	2023	2024	2025
Pre-Seed \$500K		◆				
1st Commercial Launch		◆				
Seed Crowdfunding \$1.07M			◆			
Full-scale engine testing						
Seed Venture \$6.5M						
Build + Launch Suborbital Rocket						
NASA Flight Opps Qualifying Launch						
\$15M Series A						
Build + Launch Orbital Rocket						
\$48M Series B						
NASA Venture Qualifying Orbital Launch						
Nanosat Launch Services						

This slide contains forward-looking events that cannot be guaranteed.

FOUNDER



My name is Sascha Deri and I founded bluShift Aerospace in 2014. I am a seasoned entrepreneur, having previously founded an energy storage company and a solar company that has 50 employees and \$35M+ dollars in annual revenue.

As a child, my passion was always space, and as I grew up, I developed a true appreciation and love for our planet. I always knew I would start my own space company, and with the booming New Space economy, now is the time to do it.

I discovered our biofuel while visiting my brother's organic farm in Maine. I actually saw a solid substance on the windowsill that I believed could be used as a fuel. When I tested it out, it worked! And it worked better than the petroleum alternative. And that's the same fuel we use today in our rocket engine tests.



ENGINE TEST FOOTAGE



What Investors Like You Have Already Made Possible

Thanks to our first successful crowd equity funding campaign here on Wefunder, we raised \$1M from over 1,000 people across the planet. And it was because of our investors we have achieved so much:

- Scaled up our MAREVL prototype to its final full size for testing
- Built our largest engine test stand yet to support, increasing our testing capability, safety and cool factor
- Successfully secured a coastal site for launch that gives us the unique

advantage to access that #1 orbit for nano and micro satellites

- Secured Purchase Orders and Letters of Intent for launches valued at \$9.5M from customers
- Have initiated FAA the licensing process of our next launch vehicle, Starless Rogue, and private marine-based launch site
- Performed three initial tests with our full-size engine (see above video)

What We're Going to Do Next

With this next round of funding from investors like you we will finish the tuning of our heavy test engine. We will optimize its performance in preparation for light-weighting the engine and integrating it into the full Starless Rogue suborbital launch vehicle, which will be funded by an upcoming Seed Round.

And as we have always done - we will share with you, our investors, live video feeds of our engine tests. You'll see our successes, our challenges, our failures but most of all you will see the perseverance, innovativeness and hard-working nature of the bluShift team.

We will make the future of Space Launch more Earth Friendly.