

Fixing the Rocket Motor Bottleneck with Safer, Scalable Propulsion



blushiftaerospace.com Brunswick, ME  

Technology

B2B

Hardware

Manufacturing

Transportation

Highlights

VC-Backed

Raised \$250K or more from a venture firm

Repeat Founder

Started a prior company with \$2M+ in funding or revenue

Regular Updates

Founders have a strong track record of investor updates.

1

Pentagon-Linked Traction: Hypersonics subcontract with priced follow-on options.

2

100x CapEx Edge: <\$15k modular production cells vs. ~\$1.5M legacy systems.

3

\$2M Funding Leverage: State-based patient loan selected, partly forgivable.

Featured Investors



Phillip Lachman [in](#)

Follow

Invested \$15,000 [i](#)

"bluShift is marching toward a major value inflection point later this year with their certification launch"



Late Stage Capital

Follow

Invested \$500,000 [i](#)



Qingtian Zhou

Follow

Invested \$5,000 [i](#)

Applied economist and quantitative strategist
qzhou.org

"The Pentagon Missile Defense Agency has explicitly identified solid rocket motor producibility as a primary schedule risk for advanced homeland defense systems, while legacy prime contractors remain constrained by expensive, explosive 1980s technology that requires hazardous munitions handling. The bluShift team bypasses this physical constraint with its MAREVL hybrid engine, utilizing an inert, bio-derived fuel that slashes manufacturing costs by 50% and eliminates the need for specialized logistics infrastructure"



MTI

Follow

Invested \$250,000 [i](#)



Burak Sezen
Syndicate Lead

Follow

<https://www.linkedin.com/in/burak-sezen-1b28763/>

"I've backed bluShift as lead investor since 2021, and I believe in them more today than ever. This is a technically excellent team that keeps delivering — 275+ engine tests, 20,000+ lbs of thrust, and a throttleable MAREVL engine running on non-toxic biofuel that's about ten times cheaper to build than legacy solid motors. With the U.S. facing a serious rocket-propulsion supply gap, that edge is landing at exactly the right moment, already winning Air Force and defense interest. Great team, great timing, real mission. I'm proud to lead this round."

& 43 more

Team



Sascha Deri CEO

Sascha co-founded one of the first online solar distribution and light-manufacturing companies, growing it to more than \$35M in sales. In 2014, he founded bluShift to reduce the cost and wait time of launch services in an earth-friendly way.



Chat with Sascha



David Hayrikyan Chief Technology Officer

A BU engineer David leverages his MACABltech founder experience to drive bluShift's engineering. He leads the advanced modeling and design of the MAREVL propulsion system, while managing critical ITAR and CFR450 regulatory compliance.



Seabren Reeves CFO

Seabren brings two decades of financial engineering to bluShift. A Babson MBA and patent holder, his career spans Fortune 100 tech leadership and fractional CFO roles for high-growth ventures, focusing on lean operations and investor-ready modeling.



Luke Saindon Lead Mechanical Engineer

Brings experience from NASA Marshall and the defense sector to bluShift. A foundational team member since 2016, this UMaine BSME specializes in thermodynamic modeling, hybrid propulsion, and MATLAB vehicle optimization.



Gerard Desjardins Lead Propulsion Test Engineer

Brings years of experience from Pratt & Whitney and deep expertise in Mil-Spec composites, Gerard knows high-stress systems. As Lead Propulsion Test Engineer, he drives the structural analysis, safe testing, and manufacturing of the MAREVL engine.





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.



Ben Lemieux Mechanical Engineer

A core team member since 2019, he specializes in hybrid propulsion, optimizing the oxidizer fluid systems for the MAREVL engine and our next-generation launch vehicles.

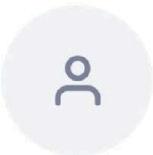


Bonny Ethridge Human Resources

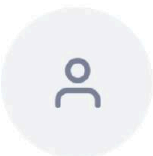
The operational anchor of bluShift, Bonny leverages 30+ years of experience, including 22 in manufacturing and 8 working directly alongside the CEO. She manages all HR, benefits, and administration to keep the engineering team moving.



Sascha Deri

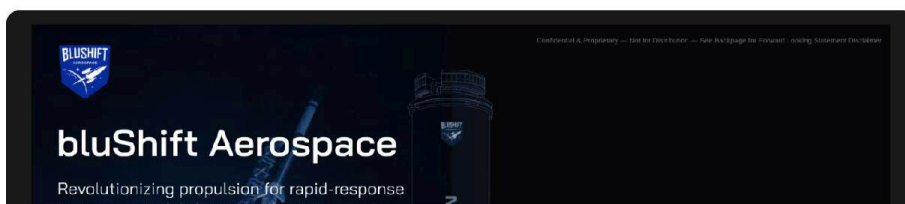


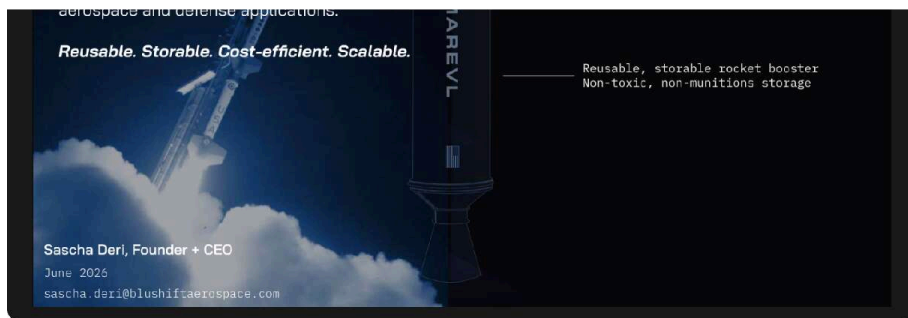
Matt Stein Engineer



Volodymyr Nabesnyy Engineer

Pitch Deck





Memo

The Engine for America's Hypersonic Future

bluShift is developing throttleable, non-explosive hybrid rocket engines to help solve America's solid rocket motor supply crunch with defense traction, 275+ engine tests, and \$2M in matched non-dilutive capital selected.

Why bluShift

Solid rocket motor supply is constrained, hypersonic testing demand is growing, and legacy manufacturing infrastructure is slow and expensive to expand. bluShift's hybrid approach is designed to solve the manufacturing and logistics side of the problem, *not just the propulsion problem*.

The Opportunity

High-Leverage Entry into Defense Tech

bluShift Aerospace is developing a safer, scalable hybrid rocket propulsion platform to help relieve a critical national security bottleneck: the shortage of affordable rocket motor capacity for defense and hypersonic testing.

We offer investors a unique and exciting "catalyst" opportunity:

We've been selected for \$2M in non-dilutive funding contingent on this raise.



The Times Record

Posted February 13

Updated February 18



Katie Langley



Staff Writer

A \$2 million Maine Technology Institute award announced by Gov. Janet Mills last week will enable the company to start buying the infrastructure needed to produce and test the engines, Deri said.

Your investment doesn't just fund operations, it directly unlocks additional capital to scale our manufacturing.

bluShift has secured a propulsion subcontract vehicle with a U.S.-based hypersonics prime supporting Pentagon work, including base requirements and priced options that, if exercised, are anticipated to exceed \$3M.

The Problem: Pentagon's Supply Chain Crisis

Defense Business Report

PENTAGON

With the boom for solid rocket motors for missiles, a perilous crunch in the supply chain

To increase munitions stockpiles, the US military needs more solid rocket motors. Deep into the supply chain, there are still problems, executives told Breaking Defense.

By Valerie Insinna on January 12, 2026 3:00 pm

The U.S. military is facing a "perilous crunch" in the supply chain for rocket motors. Legacy primes utilize 1980s technology that is expensive, explosive, dangerous to transport and store. This slows down testing and drives up costs for critical hypersonic and defensive programs.

Solid Rocket Motors today are

expensive, dangerous & logistical nightmares

Expensive  High unit costs & requires munitions-rated storage & transport	Hazardous & Toxic  Explosive, requires munitions rated storage & transport	Manuf. Challenge  Explosive propellant processing drives cost	Complex Logistics  Slows testing, deployment and increases total costs
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The Solution

Introducing MAREVL
The 21st Century Booster



50% Lower Cost, Safer, Non-Explosive

Easier to Manufacture, Low Cost Logistics

We have developed a non-toxic, bio-derived fuel-powered hybrid rocket engine that drastically reduces logistics and costs.

- **50% Lower Cost:** Simple, inert fuel removes the need for expensive explosive handling which 10x's manufacturing costs.
- **Logistics Ready:** Our fuel is non-explosive and storable for 10+ years, meaning it can be deployed anywhere without specialized (\$) infrastructure.
- **Performance:** Unlocked by a proprietary, throttleable design that legacy solid rocket motors cannot match.



Commercial Traction & Defense Validation



Efficiently powered by \$6.7M in private capital and non-dilutive

contracts from NASA, US Air Force and the US Space Force, our technology has graduated from the lab to the field.

Trade secret high-performance, low cost, US-sourced fuel

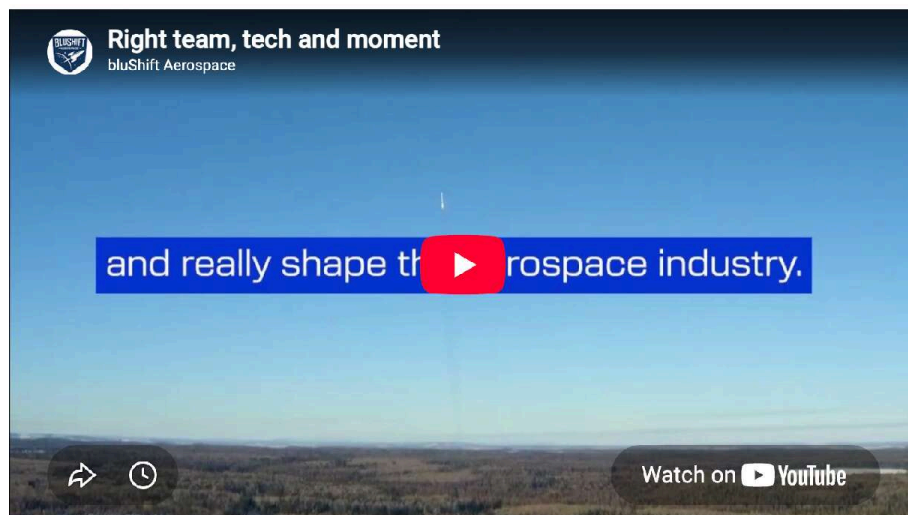
Patent pending turbopump-free oxidizer pressurizing system

Two Patents to be filed after completion of round

FAA Commercial launch license in progress

Over 275+ Engine Tests

Successful and Historical Prototype Launch in 2021



Location

Based at the former Brunswick Naval Air Station now host to a number of aerospace companies in Brunswick, Maine (30 minutes from Portland). Location provides ample real estate to expand manufacturing cost-effectively.



Strategic MDA Sub-Contract

We are the propulsion sub-contractor for a US-based hypersonics prime on a program supporting the Missile Defense Agency (MDA). We have secured the contract vehicle, which includes base requirements and priced options. We anticipate these options, once exercised, will value the contract at over \$3M for vehicle integration and delivery.

- **Customer Pipeline:** Beyond our immediate defense work, we are cultivating a pipeline of Tier 1-3 opportunities with the Air

are cultivating a pipeline of R&D opportunities with the Air Force and NASA, valued at several millions in potential contracts.

- **Proven Tech:** We have completed over 275 engine tests and achieved a successful suborbital launch in 2021.



Our Next Step - capturing a "Multiplier" Effect

Our next round is structured to maximize capital efficiency.

Unlocks \$2M in Non-Dilutive Capital

bluShift has been selected by the **Maine Technology Institute (MTI)** for a [\\$2M "Patient Loan"](#) (forgivable under certain conditions).

This round is designed to maximize leverage: private capital helps unlock selected non-dilutive funding for equipment, manufacturing expansion, and test infrastructure.



Use of Funds

Capital will be used 40% engine engineering, testing and test infrastructure improvements, 10% manufacturing and infrastructure, 25% on government and commercial business development & marketing, 13% working capital, 5.1% regulatory compliance, 6.9% in crowd funding platform fees.

Efforts will be focused on the complete development of our MAREVL engine for hypersonic and suborbital use and kick-off fulfillment our sub-contract obligations with Specter Aerospace and prepare for first revenue operations scheduled for the next year and after completion of the fundraising round including initial investment in production facilities and machinery.

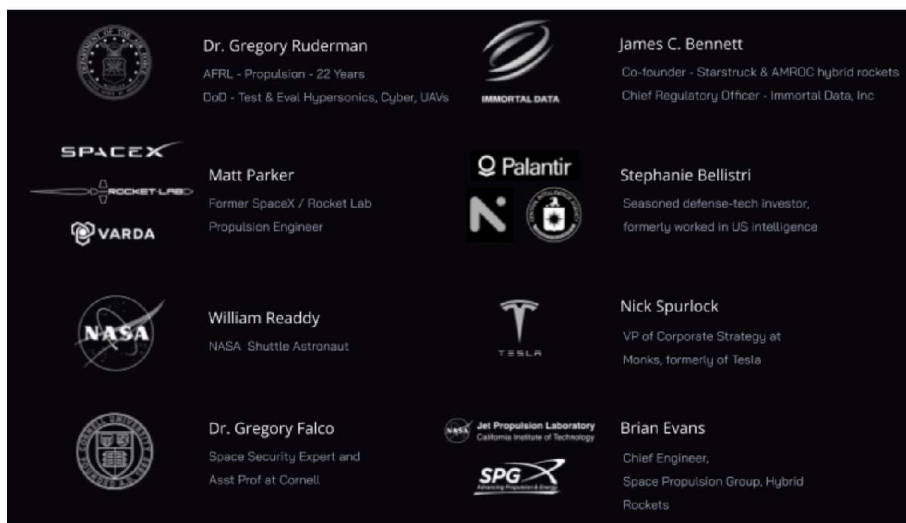


Next 12 Months

- Complete next MAREVL engine build and test cycle
- Support hypersonic partner integration work
- Advance FAA commercial launch licensing
- Expand manufacturing tooling and test infrastructure
- Prepare for initial revenue operations
- Begin scaling toward repeatable production

Board of Advisors

bluShift is fortunate to have put together a strong set of advisors with hands on experience in low-cost spaceports, the co-founder of the original sea-based launch company, hybrid rockets, hypersonics and defense.



The Vision

We are starting by powering the test vehicles that refine America's hypersonic capabilities. But our roadmap extends to suborbital research and on-orbit satellite propulsion. We are building the safe, scalable propulsion layer for the next century of aerospace defense and commercial opportunities.

