

# General Hypersonics Flies Reusable Launch System with Two Mach 4+ Launches in 90 Minutes

*Rocket-free reusable Mach 4+ launches and 90-minute relaunchs open path to affordable, repeatable and scalable hypersonic and suborbital missions*

SPOKANE, WA, UNITED STATES, June 5, 2026 /EINPresswire.com/ --

HyperSciences, Inc., doing business as General Hypersonics, successfully conducted two launches exceeding Mach 4 from the same reusable launch system, with the second launch occurring approximately 90 minutes after the first. The achievement sets another ram-accelerated [mass-to-velocity milestone](#) and advances the company's goal of making high-cadence hypersonic and suborbital launch operations affordable and repeatable. The flights were conducted under the company's U.S. Department of Defense Phase II Small Business Innovation Research (SBIR) contract, awarded in 2025.



HyperLab - Hypersonic Flight Testing Center

Mach 4 (about 3,100 mph) is more than four times the speed of sound, while hypersonic flight is generally defined as Mach 5 and above. At Mach 4, a vehicle could theoretically travel across the continental United States in less than an hour, illustrating the significance of sustained high-speed flight.

The demonstration highlights a fundamentally different approach to flight testing: the ability to rapidly reset, reload and relaunch the same reusable system multiple times per day. As government and commercial organizations seek more affordable access to high-speed testing and more responsive paths to space, higher launch cadence has the potential to accelerate technology development, expand testing capacity and reduce costs.

While many high-speed and hypersonic test programs rely on complex launch infrastructure, including carrier aircrafts and rocket boosters, and specialized ranges and extensive mission planning, General Hypersonics completed both launches from the same reusable platform in approximately 90 minutes. Both launches were conducted using manual loading procedures, with automated loading systems currently under development to further improve turnaround times and increase launch cadence.

"What changes the conversation is this: we took a reusable launch system beyond Mach 4 twice before lunch," said Mark Russell, founder and chief executive officer of General Hypersonics. "Most launch systems are designed around a single mission. We're building a system designed to launch again and again. That's what ultimately enables more affordable testing, faster technology development and a practical path toward responsive access to space."



General Hypersonics Ram Accelerator at HyperLab

Funded through private investment and government contracts and grants, the company's ram accelerator technology accelerates payloads through a reusable launch tube powered by clean combustible gases — eliminating the need for a first-stage rocket booster and toxic propellants. Designed to reload quickly, launch frequently and operate from fixed or mobile sites on land or at sea, the platform is being developed and tested at HyperLab, General Hypersonics' reusable open-air launch facility.

“

What changes the conversation is this: we took a reusable launch system beyond Mach 4 twice before lunch. We're building a system designed to launch again and again.”

*Mark Russell, CEO General Hypersonics*

Today's record builds on a series of firsts: the company's ongoing DoD contract with earlier Mach 3 flight milestones, onboard electronics carried successfully through the tube, and clean payload separation. It also follows the company's selection earlier this year as a prime

awardee on the Missile Defense Agency's SHIELD IDIQ contract vehicle, and a NASA Phase I vertical launch that proved the system's scalability toward space. The company is actively engaging government, commercial and research customers seeking affordable access to repeatable high-speed flight-testing environments.

With Mach 4 repeatability now demonstrated, General Hypersonics is turning its focus to increasing automation, expanding flight operations and moving beyond high-speed testing into routine suborbital flight operations.

"Our goal isn't simply to go faster," Russell said. "It's to make high-speed flight and access to space more routine. The next step is demonstrating that we can move from repeatable Mach 4 launches to repeatable suborbital operations. What's ahead is our 10-in-10 campaign — 10 launches to suborbital space in 10 days. If we can achieve that, it changes what's possible for hypersonic testing, scientific missions, and responsive access to space."



Mark Russell, CEO, Flight Testing for NASA at Spaceport America, NM

For [investor](#) and partnership inquiries, contact [investors@generalhypersonics.com](mailto:investors@generalhypersonics.com).

Mark Russell  
HyperSciences dba General Hypersonics  
+1 509-994-8577

[email us here](#)

Visit us on social media:

[LinkedIn](#)

[Facebook](#)

[YouTube](#)

[X](#)

[Other](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/917485905>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2026 Newsmatics Inc. All Right Reserved.