

News Release

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Draper Signs Agreement to Provide GN&C for Stratolaunch's Hypersonic Vehicle



CAMBRIDGE, MA—Precision guidance and navigation is critical to success and safety in spaceflight. Today, as Stratolaunch builds its next generation vehicle for hypersonic flight test, it will be guided by flight software developed by Draper.

“As with Draper’s past contributions to the U.S. space program, Draper’s engineers are proud to develop a key component of Stratolaunch’s hypersonic vehicle—guidance, navigation and control (GN&C) software,” said Neil Adams, Draper’s director of space systems. “Stratolaunch’s

vehicles will travel through the Earth’s atmosphere at speeds of more than 3,800 miles per hour. Stratolaunch presents an opportunity to put Draper’s flight software into a hypersonic flight envelope—one with a slender, low-drag form that can enable sustained maneuvering flight in the atmosphere.”

Stratolaunch builds, tests and operates hypersonic vehicles—those that can travel at least five times the speed of sound, or Mach 5. Draper’s flight software will be used on Talon-A, a fully reusable, autonomous, liquid rocket-powered Mach 6-class hypersonic vehicle.

Under the multi-year contract, Draper will design, develop and deliver a guidance, navigation and control system for the Stratolaunch reusable hypersonic vehicle. The vehicle is designed for use by government, including the Department of Defense, the commercial sector and academia, which will contract for payload capacity for space or earth applications.

Draper’s work on the Stratolaunch vehicle builds on its legacy of support to NASA, which began with Draper’s design of the Apollo Guidance Computer, and has continued with programs including the International Space Station (ISS) and the Space Shuttle. Draper has been a leader in hypersonics for decades, and has provided system evaluations, capabilities including guidance, navigation and control and hypersonic flight test support for its U.S. government customers.

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At Draper, we believe exciting things happen when new capabilities are imagined and created. Whether formulating a concept and developing each component to achieve a field-ready prototype or combining existing technologies in new ways, Draper engineers apply multidisciplinary approaches that deliver new capabilities to customers. As a not-for-profit engineering innovation company, Draper focuses on the design, development and deployment of advanced technological solutions for the world's most challenging and important problems. We provide engineering solutions directly to government, industry and academia; work on teams as prime contractor or subcontractor; and participate as a collaborator in consortia. We provide unbiased assessments of technology or systems designed or recommended by other organizations—custom designed, as well as commercial-off-the-shelf.

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