



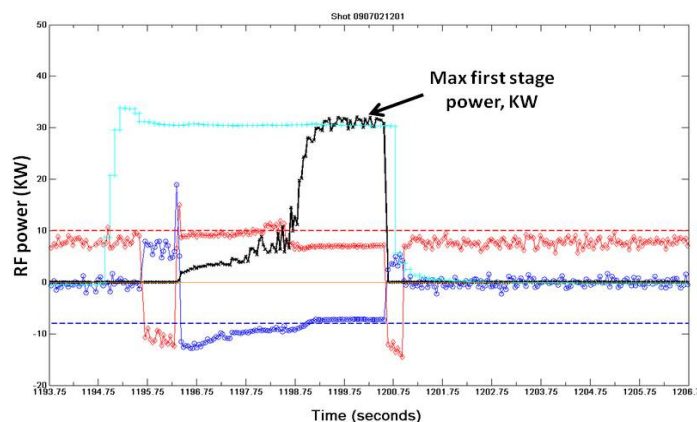
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PRESS RELEASE 020709, July 2, 2009

VX-200 demonstrates superconducting first stage at full power.

[Houston, TX. For immediate release] – Ad Astra Rocket Company has successfully demonstrated operation of its VX-200 plasma engine first stage at full power and under superconducting conditions in tests conducted today at the company’s Houston laboratory. This achievement is a key milestone in the engine’s development and the first time a superconducting plasma rocket has been operated at that power level.

Today’s tests build on the achievements of the VX-200i, the engine’s non-superconducting predecessor, which last fall underwent similar tests but under a greatly reduced set of requirements. A major difference between the two is the superconducting magnet, featured in the present system, which provides a ten-fold increase in the magnetic field and enables operation of the engine under conditions consistent with actual space flight.



Power trace (black) shows the RF coupled power to the VX-200 first stage.

The VX-200 superconducting magnet, the first of its kind, was delivered to Ad Astra’s Houston facility on February 10, 2009 by its manufacturer, Scientific Magnetics of Oxford, U.K. After successful acceptance tests, the superconductor was installed in the engine module, replacing the conventional magnet that had been used in the interim. This interim magnet, although incapable of reaching the strong magnetic fields required

for full rocket performance, enabled the integrated testing of the remaining engine sub-systems while the company awaited delivery of the superconductor. First plasma in full superconducting mode was achieved on June 24, 2009.

The successful first stage tests conducted today are critically important and are prerequisites to operational testing of the second stage of the engine. This activity is expected to commence on July 14, 2009, after the team completes a full analysis of the new data. The second stage is designed to inject up to 170 kW of additional power into the plasma for a total of 200 kW, the engine’s total rated power.

The present configuration achieves drastic increases in key rocket performance parameters over previous VX-200i results, including a 5-fold increase in propellant flow rate and an equivalent increase in the rate of plasma production with a ten-fold increase in the magnetic field, all consistent with the conditions required for space flight.

The VX-200 engine is the first flight-like prototype of the VASIMR[®] propulsion system, a new high-power plasma-based rocket, initially studied by NASA and now being developed privately by Ad Astra. VASIMR[®] engines could enable space operations far more efficiently than today’s chemical rockets and ultimately they could also greatly speed up robotic and human transit times for missions to Mars and beyond

ABOUT AD ASTRA

Ad Astra Rocket Company is a privately-owned corporation established January 14, 2005 to commercialize the technology of the VASIMR[®] engine in support of an emerging in-space transportation market. The company has its main laboratory and corporate headquarters at 141 W. Bay Area Boulevard in Webster, Texas, USA. Ad Astra also owns and operates Ad Astra Rocket Company, Costa Rica, a supporting research and development subsidiary in Guanacaste, Costa Rica.