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Ad Astra's VX-100 test bed achieves record plasma performance.

Houston TX. USA. The VX-100, a new test bed for the VASIMR™ plasma engine, developed by Ad Astra Rocket Company, has achieved record performance in recent tests conducted at the company's Houston laboratory located at the NASA Johnson Space Center. The new test facility, which went into operation in late January of this year, began to yield reliable experimental data in early February. The experiment reproduces the conditions of a plasma rocket based on the VASIMR™ (Variable Specific Impulse Magnetoplasma Rocket) concept. The VASIMR™ plasma (a very hot gas) reaches temperatures similar to those in the interior of the sun.



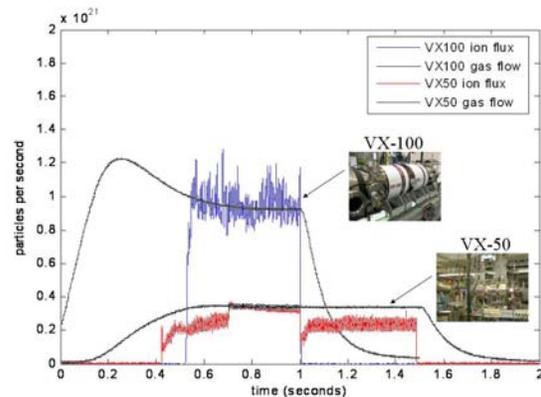
New VX-100 test bed assembly, operating at the Houston Facility

MAIN ACHIEVEMENT

In recent tests, the VX-100 device has been operated stably at up to 30kW, reproducing

the plasma output conditions of the VX-200 first stage. The VX-200 is a 200kW VASIMR™ engine prototype currently in its final design phase. The VX-200, expected to be completed in December of this year is considered by company officials to be the last step before construction of the VF-200 (for VASIMR™ flight) series of flight engines planned for space testing in 2011.

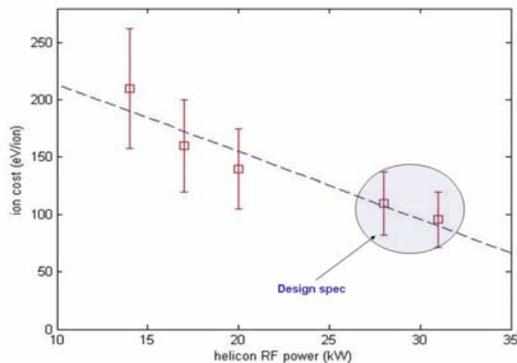
Plasma production in these tests has increased up to three times the previous company record, obtained on neon gas with an older test bed called the VX-50. The plasma output now equals that required for an engine operating under actual space flight conditions.



Comparing plasma production between VX-100 and VX-50

In these tests, the Houston team has also obtained an ionization cost below 100 eV/ion (electron volts per ion), also a company record. The ionization cost is a measure of the engine's plasma production efficiency

with values below 100 being required to ensure efficient operation. These results fulfill a major company milestone planned for July of 2007. Upcoming tests will focus on the VASIMR second stage where the plasma is accelerated by electro magnetic waves to speeds of 40 to 50km/sec to provide rocket thrust.



Ionization cost is now below 100 eV/ion

“This is a significant technical achievement that gives us confidence on the predictions of our research team” said Franklin R. Chang Díaz, Ad Astra’s Chairman and CEO “We are pleased with the pace of the development and very proud of our accomplishments so far this year” added Dr. Jared P. Squire, Ad Astra’s Director of Research.

THE COMPANY

Ad Astra Rocket Company is a privately-owned Delaware Corporation, established January 14, 2005 to commercialize the technology of the VASIMR™, a plasma propulsion system, originally developed by NASA, with potential to support an emerging in-space transportation market. The company has its main laboratory and corporate headquarters at the Johnson Space Center in Houston Texas, USA. Ad Astra also owns and operates Ad Astra Rocket Company, Costa Rica, a supporting research and development subsidiary in Guanacaste, Costa Rica.

COMPANY HISTORY

Ad Astra was founded by former NASA astronaut and rocket scientist Franklin R. Chang Díaz. Ad Astra has, through a

privatization agreement with NASA, an exclusive license to the original VASIMR™ patents. However, in the last year, Ad Astra has added major improvements to these patents in the form of new company-owned intellectual property.

THE TECHNOLOGY

Plasmas are electrically charged fluids that can be heated to these extreme temperatures by radio waves and controlled and guided by strong magnetic fields. The magnetic field also insulates the hot gas from any nearby structure; hence temperatures well beyond the melting point of materials can be achieved. In rocket propulsion, the higher the temperature of the exhaust gases, the higher their velocity and hence the higher their fuel efficiency. Plasma rockets feature exhaust velocities far above those achievable by their chemical cousins; so their fuel consumption is extremely low.