

NASA robotic lander test will aid in future lander designs

October 31 2011, By Kim Newton

(PhysOrg.com) -- NASA will conduct a 100-foot robotic lander altitude test flight Friday, Nov. 4, to mature the technology needed to develop a new generation of small, smart, versatile robotic landers capable of achieving scientific and exploration goals on the surface of the moon, asteroids or other airless bodies.

The test will begin between 10:30 - 11 a.m. CDT and will air live on [NASA](#) Television's Education Channel and the agency's Website. The outdoor test will occur at the U.S. Army's Redstone Test Center on Redstone Arsenal in Huntsville, Ala., and is weather dependant.

The lander prototype will perform an autonomous hover test, flying up to 100 feet and then translate, or move sideways, to perform a controlled, safe landing 30 feet away from the [launch pad](#). The lander, dubbed Mighty Eagle, is fueled by 90 percent pure [hydrogen peroxide](#) and receives its commands from an onboard computer that activates its onboard [thrusters](#) to carry it to a controlled landing using a pre-programmed flight profile. This series of tests demonstrate the test article's capability to perform an autonomous descent and landing and are being used to checkout landing control algorithms for the next generation of lander missions.

Journalists can attend the test or participate in a media telecon 45 minutes after the altitude [test flight](#). Telecon participants will include Greg Chavers, lead systems engineer for the Robotic Lander Development Project at NASA's Marshall Space Flight Center in

Huntsville, Ala., and Julie Bassler, project manager for the Robotic Lander Development Project at Marshall. The project is managed by NASA's Science Mission Directorate in Washington.

To attend these events, reporters should contact Kim Newton, Marshall Public and Employee Communications Office at 256-544-0034 no later than 4 p.m. CDT Thursday, Nov. 3. Media representatives must report to the Redstone Visitor Center at Gate 9, Interstate 565 interchange at Rideout Road/Research Park Boulevard. Vehicles will be subjected to a security search at the gate. Journalists will need two photo identifications and proof of car insurance.

For NASA TV streaming video, downlink and scheduling information, visit: www.nasa.gov/ntv

The [test](#) also will be webcast live via Ustream at: www.ustream.tv/channel/nasa-msfc

Provided by JPL/NASA

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