**Robotic Lunar Landers For Science And Exploration.** B. A. Cohen[1], J. A. Bassler[1], B. J. Morse[2], and C. L. B. Reed[2]. [1]NASA Marshall Space Flight Center, Huntsville AL 35812 (Barbara.A.Cohen@nasa.gov); [2]The Johns Hopkins University Applied Physics Laboratory, Laurel MD 20723.

NASA Marshall Space Flight Center and The Johns Hopkins University Applied Physics Laboratory have been conducting mission studies and performing risk reduction activities for NASA's robotic lunar lander flight projects. In 2005, the Robotic Lunar Exploration Program Mission #2 (RLEP-2) was selected as an ESMD precursor robotic lander mission to demonstrate precision landing and determine if there was water ice at the lunar poles; however, this project was canceled. Since 2008, the team has been supporting SMD designing small lunar robotic landers for science missions, primarily to establish anchor nodes of the International Lunar Network (ILN), a network of lunar geophysical nodes. Additional mission studies have been conducted to support other objectives of the lunar science community. This paper describes the current status of the MSFC/APL robotic lunar mission studies and risk reduction efforts including high pressure propulsion system testing, structure and mechanism development and testing, long cycle time battery testing, combined GN&C and avionics testing, and two autonomous lander test articles.