

Abstract Submitted
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Reentry Experiment SAT-X¹ MAURICE WOODS, CASEY KUHN, MOTOAKI HONDA, ROBERT SHIELY, AARON ADAMSON, JORDAN AKEN, ROBERT WALCH, CYNTHIA GALOVICH, MATTHEW SEMAK, University of Northern Colorado — The challenge of *reentering* the Earth's atmosphere is not new. For years, NASA has successfully designed vessels that have endured the harsh process of reentry. However, in most cases, this is made possible only through the act of over-engineering; designing to withstand conditions far beyond what is expected to be encountered. Though this method has been effective, there would be benefit in knowing more precisely what to expect upon atmospheric reentry. The University of Northern Colorado Reentry Experiment SAT-X project, launched from Wallops Island, Virginia on July 21, 2011, was designed to shed light on the reentry process by collecting motion data for a capsule ejected from a rocket. Moreover, a secondary objective was to test the capability of the prototype capsule to serve as a platform for future reentry experiments. The mission and preliminary results from the launch will be described.

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