Rascal: A Demonstration of Rendezvous and Proximity Operations within a Small Spacecraft Architecture

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The Rascal mission consists of the demonstration of rendezvous and proximity operations within small spacecraft architecture. Spacecraft RPO missions are defined as those that demonstrate the performance of orbital maneuvers near and around resident space objects (RSO), such as rocket bodies, orbital debris, or other spacecraft, while a small spacecraft architecture is defined as one that utilizes a standard satellite configuration and size that allow for rapid development and launch vehicle integration. These types of demonstrations have been recently highlighted by NASA and the Department of Defense as key areas of interest in the future development of intelligent spacecraft systems. As such, the Rascal mission is critical to the further refinement and understanding of spacecraft RPO capabilities within the ever-changing small spacecraft landscape.

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