# Target Spacecraft Overview

The target spacecraft’s purpose is to serve as a platform that the primary spacecraft can identify and calculate the relative distance and angle between the two spacecraft. There are several requirements that the secondary spacecraft has to meet in order for the mission to be successful that have been place on it by Boeing’s Advanced Space and Intelligence Systems (AS&IS) organization and Space Systems Research Lab. The secondary spacecraft must have a minimum lifetime of two weeks. It shall conform to the 3U CubeSat Design Specification so it can integrate into a 6U dispenser with the primary spacecraft. The secondary spacecraft shall remain conjoined to the primary spacecraft prior to launch integration until at least one month after launch vehicle separation. The secondary will remain in a powered off state until separation. It will separate from the primary spacecraft upon command from the ground. There will be navigation aids on the secondary spacecraft as specified in the RCL-O-ADC1 ADC Overview document.