

Definitions

(Continued)

Final Approach—Latter portion of approach following 10-m stationkeep and preceding Free-Flyer Capture stationkeep or direct mating.

Free-Flyer Capture—ASTRO capture of NextSat/CSC by using the manipulator system (arm) to grapple NextSat/CSC at the grapple fixture. Free-Flyer Capture includes acquire, target track, servo, approach, and grapple.

Mated—End-point of the Direct Capture and Mating process or Free-Flyer Capture and Berthing process, following Retraction, at which point the active and passive capture mechanism halves become rigidly attached and reach full preload.

NextSat/CSC Interface Point—Aft-most (-x-axis) point along the centerline of the passive capture mechanism on the NextSat/CSC spacecraft. This location is used as a reference for measuring spacecraft relative separation and stationkeeping distances, and lies on the surface of the passive half of the OECS. When mated, this location is coincident with the ASTRO Interface Point.

Pass Plan—Command and control scripts executed by the ground that contain all the commands in the correct sequence to complete the objectives of the pass.

Prox Abort—Contingency response commanded by the Mission Manager Flight Segment or Ground Segment. Prox Abort mode will cause ASTRO to separate from NextSat to a safe distance, then target a stationkeep hold at a safe position on the V-bar.

Proximity Operations—Mission phase during which ASTRO and NextSat operate in close orbital formation; i.e., within POI or 120 m.

Release—Release of NextSat/CSC by the manipulator system (arm) at the grapple fixture.

Rendezvous—Mission phase preceding proximity operations during which the ASTRO approaches the NextSat using a series of planned, targeted maneuvers; results in the vehicles operating within POI or 120 m.

Retraction—The part of the Direct Capture and Mating or Free-Flyer Capture and Berthing process following CM Capture in which the capture mechanism stroke draws the two vehicles together.

Separated—The event at the end of separation at which point ASTRO departs the separation corridor.

Separation—Proximity operations phase during which ASTRO flies in a corridor with a positive opening rate away from NextSat/CSC.