Simplified Model for iLIDS IDD

Statement of Use

The NASA Docking System (NDS) Project has provided simplified volumetric models for use by potential hosts vehicles to assess vehicle integration. It should be noted that the JSC-65795 NDS Interface Definition Document (IDD) takes precedence over this simplified model. The simplified model serves as a graphical representation only. It is therefore important to state that dimensions and tolerances are to be taken from the IDD document and supersede any measurements derived from the provided simplified model geometry.

Models Provided

The models provided are native to the PTC Pro-ENGINEER Wildfire 4.0 CAD system. The assembly model contains a part family for the active (-301) and passive (-302) configurations. The model is a simple mechanism allowing for translation of the Soft Capture System (SCS) along the central axis. This can be manually dragged into position, set through a variety of snapshots, or regenerated to a desired translation distance.

Additional exports in the STEP (.STP) and Parasolid (.XT) formats have been generated for the following configurations: -301 with SCS stowed, -301 with the SCS fully extended and -302 with the SCS stowed.

Mass Properties are assigned in the Pro-E models by file. Exported models do not have mass assigned and will require setup on import.

In addition, a faceted surface (.STL) envelope created from the master design models is included for general use and is massless.

The following files are included:

TBD *(will be filled out on model export)*

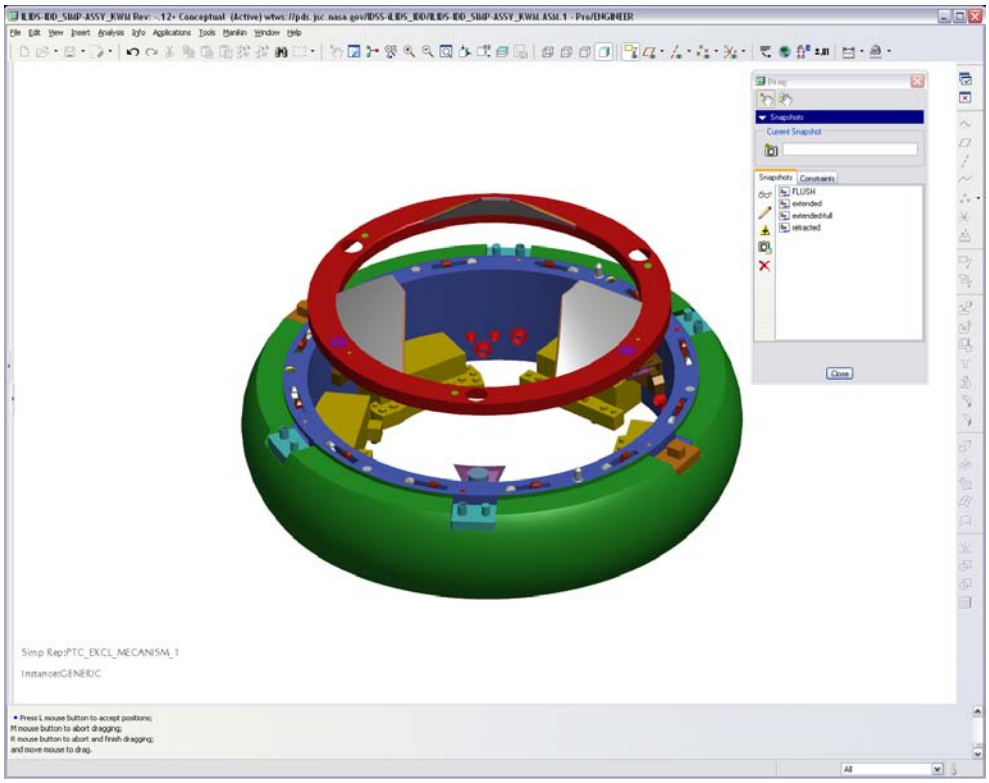

Figure 1 Positioning SCS with the Drag/Snapshot tool

Imagery:

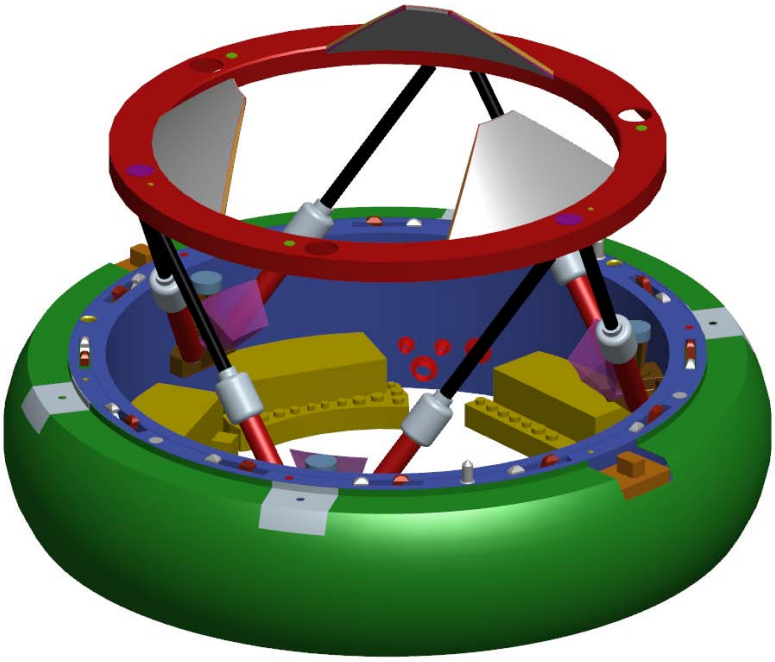

Figure 2 -301 SCS Extended

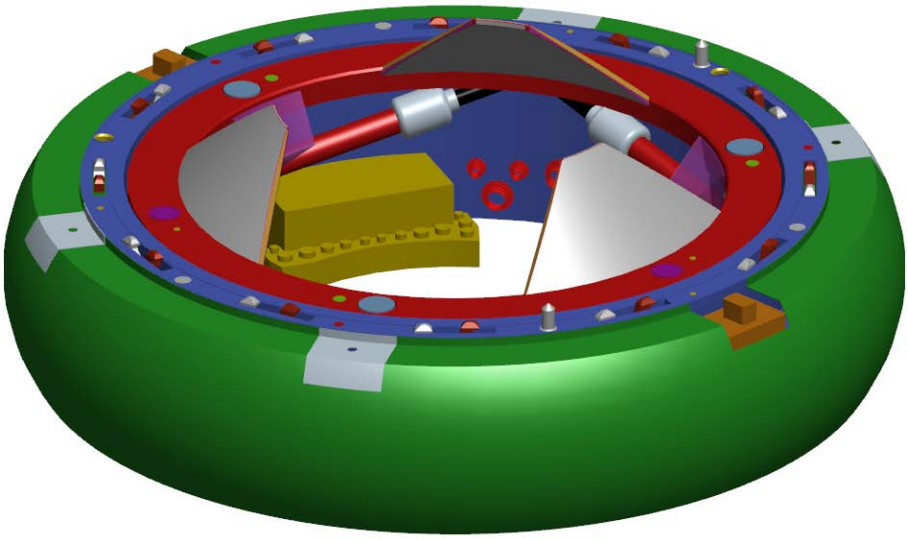

Figure 3 -301 SCS Stowed

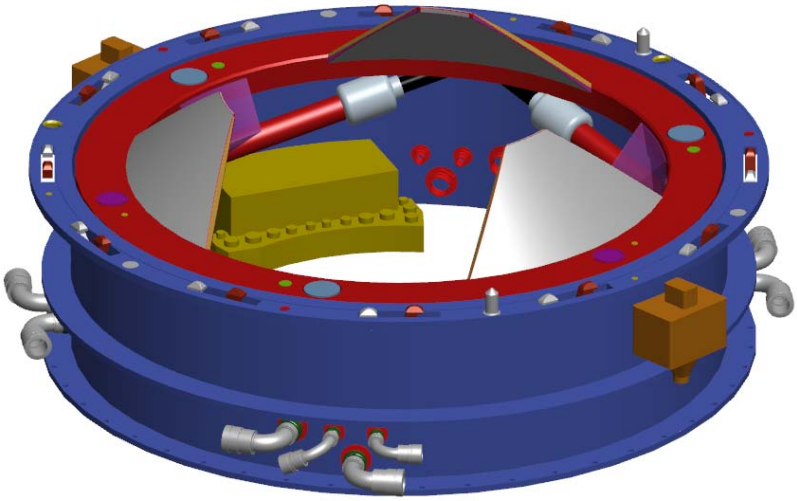

Figure 4 -301 SCS Stowed, MMOD shield not shown

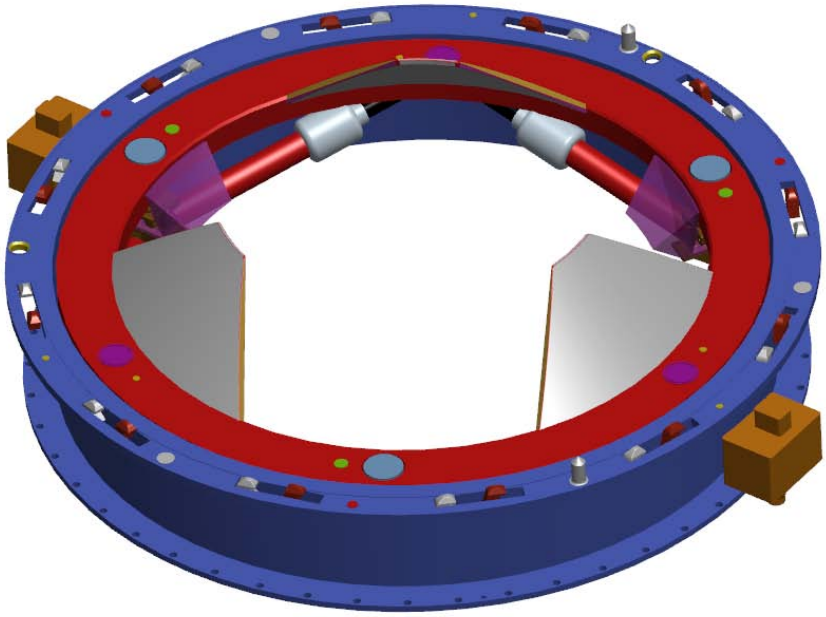

Figure 5 -302 SCS Stowed (No MMOD provided)