Apollo Command Service Module – OBJ version
Additional information for end users:

1- Check all unzipped files are present

After downloading the ZIP file and opening it please check that all OBJ files and texture maps have extracted okay.

The ZIP should contain the following:

26 OBJ files

26 MTL files

113 texture maps (PSD format)

2 - Download PDF Reference Guide (SaturnApollo.lwo_promotional1.pdf)

If you haven't already done so, make sure you download the free Saturn Apollo Reference Guide PDF (found under Product ID 435413) – this provides useful information for animation and includes all relevant stats as well as a full list of the texture maps, LWS file preset positions and a step by step breakdown of the Apollo 8 mission.

3 - Download PDF for using Lightwave Discovery Edition (SaturnApollo.lwo_promotional16.pdf)

Also to be found under parent Product ID 435413, this document contains information on how to download the free Lightwave Discovery Edition application in order to view the original model. It contains simple tutorials on cross-referring this model to the OBJ (or 3ds) version to assist in placing and aligning texture maps and ensuring RGB colours for the geometry are correct.

4 - Download Associated Product file (ApolloCSM_lwo_Recolour_Parts.zip)

These are the actual Lightwave files used to export to the 3ds and obj formats. They will be required to match with the exact RGB colours of the exported geometry in order to confirm correct surface material names (which have been truncated during export). This is explained in more detail in the Lightwave Discovery Edition PDF listed above.

5 – LWS file included*

*This information refers to the original Lightwave model – ApolloCSM.lwo.zip

NB: It is strongly recommended you also download this as an additional aid to placing and aligning texture maps - the PDF mentioned above includes step by step instructions for this process.

There is a single LW Scene file for the Command Service Module. This scene is designed to bring all objects together and hold the basic parent/child relationships. Please refer to the SaturnApollo Reference Guide for each CSM decal and parts configuration through from Apollo 8 to 17.

6 – Optimising RAM usage**

**This also refers to the original Lightwave model, but is likely to remain equally applicable to settings in other 3D applications.

If you only have the recommended minimum of 2 GB of RAM it's a good idea to knock the Open GL texture resolutions down to 64 x 64 (Display Options and Preferences in Modeler and Layout respectively). Otherwise the excess load on memory to draw the textures is liable to lock up or crash your system when attempting to pan and zoom or render a scene. This model (and all accompanying textures) has been produced and throughly tested on a 5 year old XP Professional Windows PC running with a 3.0 GHz Pentium 4 processor, 2 GB of RAM and 256 MB of Graphics memory. Renders up to 1,200 x 10,000 pixels have been achieved by pushing the hardware to its limit. Animations employing additional particle emitters and hypervoxels have also been possible with the above. A newer faster system build will of course offer faster render times and more flexibility.

7 - Further information

Nearly 2 years of research and development have gone into producing this 3D model, and these brief notes and the accompanying Reference Guide do not claim to be exhaustive in their detail. If you require additional information please contact me via the TurboSquid helpdesk and I will do my best to assist.

Stuart Howes