



Velcro Saturns

Version 1.11

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Thanks to:

TomPA, for releasing some excellent Saturn V meshes to the community.

Daver, for the original CVEL Saturns project.

Missleman01, for the original "Early Saturns" project.

And, above all, many thanks go to Martin Schweiger, for actually developing the simulator I used to daydream about in astrodynamics classes!

<http://www.orbitersim.com>

Unpacking:

Use Winzip to put each subfolder in its matching Orbiter folder.

Included are some scenarios for my [Dyna-Soar](#) add-on that put the X-20 atop some Saturns. Those are in the /Scenarios/Dyna-Soar/Alternate Boosters folder, which you can delete if you don't have my Dyna-Soar add-on.

Also, some scenarios for my [Orion](#) add-on will appear in the /Scenarios/Orion folder. Delete that if you don't have the Orion add-on.

Velcro Saturns requires the [Velcro Rockets](#) add-on for the base code, as well as a few parts like SRM's, etc. Install Velcro Rockets first.

Introduction:

Welcome to the Velcro Saturns add-on!

Velcro Saturns is partly responsible for the existence of the Velcro Rockets add-on in the first place, as the bewildering array of proposed Saturn variants meant that the custom-coded approach I'd taken to Titan variants in my CVEL Titans add-on would simply not be up to the task. Another way was required...here it is.

Velcro Saturns uses the Velcro Rockets code to make a number of Saturn stages (historical and otherwise), and scenarios that assemble them together to make launch vehicles (historical and, mostly, otherwise). The primary emphasis is on an all-purpose cargo carrier to orbit, although the attachment provisions will let you launch missions with AMSO or NASSP, as well.

Also included are the very early Saturn launches. This add-on effectively duplicates the launches of Missleman01's groundbreaking "Early Saturns" add-on, though it does not include the launch complex.

These Saturn variants effectively replace Daver's many CVEL Saturn launchers.

Velcro Saturns Operation:

Since the code is from Velcro Rockets, keys will be the same:

Keys:

O – Autopilot toggle on/off

J – Jettisons the next payload

U – Enter a new launch azimuth

Known issues:

The same as with Velcro Rockets.

The Saturn C-3 AMSO scenario employs the GETDOCKINGPORTS construct to enable you to dock the stages together to fly to the moon. Alas, the Apollo CSM and LM had enough weight growth that a dual-launch of Saturn C-3's isn't really up to the task.

Version history:**V1.11**

Fixed the Boosted Skylab Launch scenario

V1.1

Added MINPITCH parameter to several scenarios to work properly with Velcro Rockets 1.1 autopilot.

V1.02

Bugfix: updated Saturn V / Probe scenario to correct probe mass

Bugfix: Switched CSM / LM order in Saturn V AMSO scenario for AMSO 1.17

Added Saturn C-3a scenario – a dual launch that's possible to accomplish!

Added Apollo CSM and LM Descent Stage as Velcro stages.

V1.01

Bugfix: correct scenario for Skylab launch.

Bugfix: included Saturn-lb fins mesh.

V1.0

First public release!

V0.91

Updated beta with two-launch Saturn C-3 scenario; docking works.

V0.9

Mostly-final beta release. Saturns broken out into separate project.