

Multistage2015

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New Commands and options

Config File:

Launch Effects:

[FX_LAUNCH]

N= Number of particles in the effect (can be up to whatever you want)

Height = Height of the effects from the ground

Distance = Distance of the effects from the center of the array

Angle = Reference angle of the first effect (0 = along ship's X axis, 90 = along ship's y axis etc)

Pstream1 = name of the first particle

Pstream2 = name of the second particle

CutoffAltitude = height of the vehicle at which the effects stop, if 0 or not set the effects will stop as soon as the vehicle detaches from the ramp, other wise they will be linearly interpolated up to the cutoff altitude

Thanks to rcraig42 it is also possible to add reference values for isp and pressure for stages, so (for the time being only in the .ini file, not in the DMD) there are now two new items in [STAGE_X] section:

isp_sl = reference isp value

pressure_sl = reference pressure value

Guidance File:

XX=destroy() → delete the vehicle from the scenario, useful if you want to delete your vessel from a scenario after payload separation.

XX=explode() → makes the vehicle explode in a giant ball of fire (same as failure effect)... for whatever reason you may like and you want to call it manually

Scenario File:

CAMERA → when opening a scenario creates a camera vessel with high zoom resolution to follow your vehicle during ascent. Useful for enjoying launch from a different angle and to make more choreographic captured movies

HANGAR → creates the Hangar (see below)

CRAWLER → creates the Crawler (see below)

Camera Vessel

If you put “camera” in your scenario file, when you open your scenario you’ll find among the list of the ships available also the “MS_Camera” vessel. Jump in to see your rocket from there. Toggle the HUD ([H] or [CTRL]+[H] keys) to see also the aiming and some information about camera and the vehicle distance.

[CTRL]+[R] = input new reference vessel to follow

[ARROW UP] / [ARROW DOWN] = if vehicle close enough (camera aperture > 0.1°) zoom one step in or out.
Maximum 4 steps

Hangar Vessel

If you put the “hangar” word in your scenario file you’ll find your rocket attached to a crane into the Hangar. You can test anything you want about your rocket (even engines at full thrust) while attached to the crane.

Below a list of keys of the hangar. IMPORTANT NOTE: the modules are set so you can use those keys DIRECTLY from the Multistage vessel without changing the active vessel to the hangar, so you can move around and do anything you may need remaining “inside” the Multistage vessel.

[CTRL]+[L] = Toggle Hangar Lights

[SHIFT]+[UP] = Crane Up

[SHIFT]+[DOWN] = Crane Down

[SHIFT]+[LEFT] = Crane Left

[SHIFT]+[RIGHT] = Crane Right

[CTRL]+[SHIFT]+[UP] = Crane Forward

[CTRL]+[SHIFT]+[DOWN] = Crane Backward

[CTRL]+[D] = Drop the rocket and attach it to the pad if present (Note: attaching to the pad works only if the ctrl D command is thrown within the Multistage vessel, if done from the Hangar vessel it just drops the rocket. This behavior might change in the final release)

Crawler Vessel

If you put the “crawler” word in your scenario file you’ll find a crawler with an attached launch pad at the center of the hangar. You can drop the rocket on the Launchpad, take it to your preferred launch site, drop the launch pad and launch the rocket. This is a bit of an eye candy part of the addon, but I think it’s quite entertaining.

Control Keys for the crawler are:

[UP] = start moving forward

[DOWN] = start moving backward

[LEFT] = start rotating left

[RIGHT] = start rotating right

If any movement is on progress and any of the keys above is pressed the movement will stop

Crawls animations will stop if time acceleration is present

[CTRL]+[SHIFT]+[UP] = start raising the crawler (and if attached the Launchpad)

[CTRL]+[SHIFT]+[DOWN] = start lowering the crawler.

[CTRL]+[D] = Drops the Launchpad, works only if the crawler is lowered

[CTRL]+[G] = reattaching the Launchpad, works only if the crawler and the Launchpad are within 5 meters from each other.

[CTRL]+[L] = toggle crawler's lights

You can control speed, angular speed and which mesh to load for the launch pad changing the relevant values (Speed, AngSpeed and Pad_Mesh)

When the rocket is dropped on the Launchpad the height of the rocket can be adjusted by pressing (always inside the multistage vessel) :

[SHIFT]+[UP]/[DOWN] = move the rocket up or down on the pad.