

Kerbal Space Program - Bug #26939

Trajectory changing while rotating ship

12/27/2020 06:49 PM - Anonymous

Status:	Resolved	Start date:	12/27/2020
Severity:	Low	% Done:	100%
Assignee:			
Category:	Physics		
Target version:	1.11.1		
Version:	1.11.0	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Core Game		

Description

Craft with small parts (<30kg mass but not so small that their mass is centered on the ship) act as if they accelerate when rotating.

In the attached savefile, start the small probe rotating:

- + its intercept with Duna changes by distances larger than the orbital radius of Ike,
- + the small triangle above the altimeter is orange, indicating the craft is under acceleration so no quick-saving.

Reported at

<https://forum.kerbal-space-program.com/index.php?/topic/198991-111-trajectory-changing-while-rotating-ship/#comment-3899539>

Related to [#26898](#)

Workaround from that issue works here as well (beware possible side effects regarding dropping parts during EVA constructions, speculated at that thread) editing 'hPhysics.cfg' to change the line with 'partRBMassMin' to ~~partRBMassMin = 0.005~~

Some mods have lighter parts that can be independent rigid bodies, specifically the GP-004 grip pad from Breaking Ground used in some examples posted above. So for games including these parts, a lower minimum

```
partRBMassMin = 0.002
```

History

#1 - 12/27/2020 10:26 PM - VoidSquid

Shouldn't this be listed as for KSP 1.11.0 instead of 1.10.1?

#2 - 12/29/2020 06:09 PM - Anonymous

- Description updated

- Version changed from 1.10.1 to 1.11.0

#5 - 01/15/2021 07:57 PM - Anonymous

- Description updated

#6 - 01/29/2021 01:40 PM - victorr

- Status changed from New to Ready to Test

- Target version set to 1.11.1

- % Done changed from 0 to 80

We've made some changes in the latest version of the game and would like some feedback on this issue. Thanks.

#7 - 04/19/2021 04:11 PM - Anonymous

The change to `partRBMassMin = 0.002` solves the problem for the examples in the original report, but as noted at the related bug [#26898](#) there are a few parts in the DLCs lighter than 2kg that have `physicsSignificance = 1`. Rebuilding the example with, for example, a "Tiny Nosecone" restores the symptom.

#8 - 08/12/2021 02:11 PM - Technicalfool

- Status changed from Ready to Test to Resolved

- % Done changed from 80 to 100

Setting this issue to resolved. If any more related bugs have crept in, please report them as usual.

Files

probe.jpg	35.2 KB	12/27/2020	Anonymous
imbalanced.sfs	164 KB	12/27/2020	Anonymous