Kerbal Space Program - Bug #22883

Kerbal G-Forces calculated from craft center of mass, not kerbal location

06/14/2019 09:20 AM - Ruedii

Status: Confirmed Start date: 06/14/2019

Severity: Low % Done: 10%

Assignee: just_jim
Category: Physics

Target version:

Version: 1.7.2 Language: English (US)

Platform: Linux, Windows Mod Related: No

Expansion: Breaking Ground, Core Game

Description

When Goofing off with the rotors from Breaking Ground, I made a few amusement rides. Who hasn't thought of doing it.

I was hoping to make my kerbals pass out from G-Forces but I ran into an interesting bug:

It seems the G-Forces for kerbals aren't calculated from where the Kerbals are but from where the center of mass is.

This means that the centrifugal force of a rotating rotor with the kerbal command pods on the side, create no Kerbal G-Forces.

To replicate the behavior:

- 1. Create a nice little centrifuge with a heavy duty rotor in the center, mounted to the ground with launch clamps, with two pods off to the side.
- 2. Switch Command to one of the two side pods.
- 3. Spin up the Centrifuge to about 200RPM (Higher than that will often result in it tearing itself apart)
- 4. Note that neither G-Forces, nor kerbal G-Forces increase.

Expected behavior:

G-Forces should be read properly and the kerbal in the command pod should pass out.

History

#1 - 07/19/2019 03:40 PM - Ruedii

- File Spinner Test 2.craft added

I Finally got around to making a really nice example craft. (Something I would be proud to post.) Sorry about the wait.

I also wanted to make sure the bug was not fixed in the rollout fixes before bothering with the additional time and effort.

#2 - 10/28/2019 09:29 PM - just_jim

- Status changed from New to Confirmed
- % Done changed from 0 to 10
- Platform Windows added

Nice test craft. And yes, the Kerbal's are apparently not registering any G-forces.

#4 - 10/28/2019 09:30 PM - just_jim

- Assignee set to just_jim

#5 - 03/04/2020 06:34 PM - just_jim

- Severity changed from Normal to Low

Files

 Spinner Test 2.craft
 40.2 KB
 07/19/2019
 Ruedii

04/09/2024 1/1