Kerbal Space Program - Bug #6965

Ship destruction or strange effects on deployment to Launchpad when root part is outside the circle on VAB floor

02/14/2016 05:02 PM - Kasuha

Status:	Closed	Start date:	02/14/2016
Severity:	Low	% Done:	100%
Assignee:			
Category:	Physics		
Target version:	1.2.0		
Version:	1.0.5	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:			

Description

This happens time to time, e.g. when constructing missiles aimed at the Runway island, or when pre-pitching a really long ship for gravity turn.

When a ship is deployed on Launchpad with its root part outside the circle on the VAB floor, it is deployed at position corresponding to its VAB placement at first, but as soon as physics is started, it abruptly changes position or (more often) explodes.

If the root part is changed to any part inside the circle, even if the position of the ship does not change at all, it is deployed with no problems.

Reproduction steps:

- Enter VAB
- Load Kerbal X (or any other suitable ship)
- Move and/or rotate it so its root part is outside the circle
- Deploy it on launchpad
- Observe the behavior (see attached screenshots for examples)
- Revert to VAB
- Change root to a part that stays inside the circle
- Turn the ship the same way
- Deploy it on launchpad
- Observe the behavior

There are no noticable messages about it in the log. The destruction starts with the following (note: the screenshot is taken when the ship is already deployed on launchpad but still intact)

[LOG 17:39:27.846] SCREENSHOT!!

[LOG 17:39:28.868] [Kerbal X]: ground contact! - error: -4.715m

[LOG 17:39:28.869] Unpacking Kerbal X

[LOG 17:39:28.907] [00:00:00]: Structural failure on linkage between Rockomax X200-32 Fuel Tank and Rockomax X200-32 Fuel Tank.

[LOG 17:39:28.924] [00:00:00]: Structural failure on linkage between Hydraulic Detachment Manifold and Rockomax X200-32 Fuel Tank.

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History

#2 - 07/17/2016 09:44 AM - TriggerAu

- Status changed from New to Needs Clarification

#3 - 10/14/2016 02:45 AM - Squelch

- Status changed from Needs Clarification to Ready to Test
- Target version set to 1.2.0
- % Done changed from 0 to 80

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This should have been fixed in KSP 1.1.3.

Please retest in KSP 1.2

#4 - 10/15/2016 10:44 AM - Kasuha

Works for me in 1.2

#5 - 12/02/2016 08:29 AM - JPLRepo

- Status changed from Ready to Test to Closed
- % Done changed from 80 to 100

Files

screenshot17.png	1.97 MB	02/14/2016	Kasuha
screenshot18.png	1.47 MB	02/14/2016	Kasuha
screenshot19.png	1.47 MB	02/14/2016	Kasuha
screenshot20.png	2.02 MB	02/14/2016	Kasuha
screenshot21.png	1.46 MB	02/14/2016	Kasuha
screenshot22.png	1.62 MB	02/14/2016	Kasuha
output_log.txt	617 KB	02/14/2016	Kasuha
KSP.log	254 KB	02/14/2016	Kasuha

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