

Kerbal Space Program - Bug #3107

Timewarp Causes Fixed Velocity

09/18/2014 12:06 PM - GentlemanThief

Status: Closed	Start date: 09/18/2014
Severity: Normal	% Done: 100%
Assignee:	
Category: Physics	
Target version:	
Version: 0.24	Language: English (US)
Platform: Win32	Mod Related: No
Expansion:	

Description

I have recently begun encountering a very annoying bug wherein using timewarp sometimes causes the command module or drone core of a ship to become fixed. Nothing can change the part's speed, direction, or orientation; thrusters, reaction wheels, RCS, and even gravity have no effect. I'm not sure how to reproduce the bug, as it seems to occur at random, but once it strikes, it will then affect any vessel I switch to afterward. If I revert to a time before the initial timewarp that caused the bug simply causes it to occur the next time I warp time. Quitting the game and loading a save from before the bug happens seems to fix it, but it can still happen again later.

I am using some mods, but the bug has struck even when flying a ship made entirely of stock parts.

Mods:

- Docking Port Alignment Indicator
- Spaceplane Plus
- Hot Rockets
- Kerbal Attachment System
- Procedural Fairings
- Karbonite
- SCAN Sat

Related issues:

Related to Kerbal Space Program - Bug #2753: New kraken: all ships accelerate...

Closed

07/12/2014

History

#1 - 10/19/2014 11:48 PM - TruePikachu

General consensus has been to not open a report unless the issue has been confirmed on a 100% stock install (probably excluding some part mods, I'm not sure) - apparently, even things which seem completely unrelated can screw things up **cough*DebRefund*cough**

Anyway, I have a "confirmation" (KSP 0.25), but it is still a modded install, and some things are different:

- Revert to SPH seems to undo the bug for a time; a quick F5/F9 cycle might also work
- If the craft reaches 100,000 km, explosions occur (reproduced)
- If you try to EVA a Kerbal, their EVA packs don't have much of an effect. If you then switch back to the vessel, the Kerbal will appear to fall towards the parent body's CoM (I don't know if this is acceleration towards the CoM, or the vessel accelerating away from the CoM). This is very likely a related bug.

I have been able to reproduce the issue on the runway (<http://steamcommunity.com/sharedfiles/filedetails/?id=329263674>), with a combo of messing with time warp and gravity hacking; gravity is ON in the picture.

The part which remains fixed appears to be the root part; the first time I encountered this (and everything blew up), only my cargo bay remained, which was the root part.

The "related bug" I mentioned: at one point, I deployed an LV-N, and the fairings (which are NOT physicsless, unlike all the other ones) appeared to fall back to Kerbin. I do not know if this bug is really related or not.

I am on the Win32 version, though launching under x86-64, so the core bug would not be x64 exclusive, though some of the effects the OP listed might be.

Mods (only those in common are listed):

- Navyfish Docking Port Alignment Indicator (4.0, 6/29/14, KSP ???)
- "Spaceplanes Plus" (integrated into KSP)
- Kerbal Attachment System (0.4.9, 10/8/14, KSP 0.25)

- Procedural Fairings (3.10, 10/11/14, KSP 0.25)
- Karbonite (0.4.2, 10/7/14, KSP 0.25)
- SCANSat (8.0, 10/8/14, KSP 0.25)

Danny2462 *might* have encountered this in 0.24 (stock?), <http://youtu.be/kTg3vB8x3TY?t=9m15s> . I have only encountered this in the presence of time warp. Another video from Danny2462, which I don't have a link to, shows a Kerbal with an apparently low-functioning EVA pack; both of these glitches were caused by misuse of the Klaw, but there might be a common fundamental flaw. (DISCLAIMER: I am only reporting the gravity issue as possibly being related, not the destruction of Kerbin)

I'll see about getting this tested in 100% stock.

#2 - 10/20/2014 12:40 AM - TruePikachu

- Status changed from New to Need More Info

I was unable to reproduce on the runway in stock. However, I was then unable to reproduce either on the runway or above the atmosphere in modded, indicating an issue with the testing procedure. Right now, it is my belief that more information about circumstances is required; Danny2462 having been able to reproduce the effects in an almost stock game (I just remembered he has HyperEdit, something neither of us have) tells me that this is likely related to stock KSP.

Of mods which could cause this, KAS and PF are the most likely; I would think that if a mod is responsible for this, it would almost certainly be KAS. I don't believe Danny2462 uses KAS though.

Is there anything special internally which happens at 100km? In my three tests which were affected by the bug, I *always* got explosions at 100km, of the "structural failure between parts" kind.

#3 - 10/23/2014 03:16 AM - TruePikachu

Might be related to <http://forum.kerbalspaceprogram.com/threads/97844> - I was using the Klaw to..."dock"...with a ship at one point, but I don't know if it was in the same game session as either of my incidents (infinite-ascend-until-100K plane and the LV-N fairings). Even then, I can't think of a way for the issue to persist into another vessel, so the Klaw probably isn't the only factor.

#4 - 11/01/2014 04:17 AM - TruePikachu

http://www.reddit.com/r/KerbalSpaceProgram/comments/2kr6aw/strange_bug_ruining_my_first_eve_mission/

Almost certainly stock.

#5 - 11/06/2014 07:18 PM - gforce527

I seem to be having this problem as well. I run vanilla KSP on windows and I do not use any mods. It first occurred as I time warped a long nuclear engine burn with a ship that is built in 2 parts, connected with the advanced grabbing unit. Reloading the game did not solve it in this case, whenever I reloaded and attempted timewarp it would say my ship was under acceleration even though all engines were off. Staging view showed the ship to be bobbing out of control at the AGU connect point, I tried releasing with the intent of reconnecting but my upper stage just blew up. I restarted a new career and the bug came up again with just a plain rocket that I was using to clear the atmosphere - it is totally stuck and slowly accelerates away from kerbal.

#6 - 11/10/2014 10:37 PM - TruePikachu

Right now, I'm tempted to say there is a relation to all the Klaw issues; if I connect two Klaws together like so:

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I get the issue, and it persists across new crafts. I'm not sure as to the exact requirements for this, but it appears related to the various Klaw issues. Leading theory is that the issues deal with how the Klaw resolves what craft is the parent (and what part is the root).

Internally, how is the Klaw implemented, compared to docking ports? Does it just act as a port which doesn't require a matching part on the other craft? How are ambiguous or unexpected situations resolved? I once had an issue of my own where a function was inadvertently returning a bad (and sometimes "good", as in the data existed) value instead of complaining like it should have been:

<https://github.com/TruePikachu/unSIR0/commit/0c279056fa6d743905cf0b6bd6bb112441991bec> shows what I mean.

gforce: Try creating a new Career save without loading the old one

#7 - 11/28/2014 11:29 AM - Squelch

Trying to glean the salient points from this and the linked Reddit, it would appear that it is very similar to [#2753](#) and possibly a duplicate.

We need to distill a simple set of reproduction steps for this issue to be presented to the developers for attention.

#8 - 07/27/2015 08:13 PM - Squelch

- Platform Win32 added

- Platform deleted (Win64)

#9 - 07/17/2016 09:38 AM - TriggerAu

- Status changed from *Need More Info* to *Needs Clarification*

#10 - 08/09/2016 11:11 AM - TriggerAu

- Status changed from *Needs Clarification* to *Closed*

- % Done changed from 0 to 100

Closing this report out for now. If you find it is still occurring in the latest version of KSP please open a new report (and this one can be linked to it.) For best results, the wiki contains really useful info for when creating a report <http://bugs.kerbalspaceprogram.com/projects/ksp/wiki>.

You can also ask questions about the bug cleanup in the forum here:

<http://forum.kerbalspaceprogram.com/index.php?/topic/143980-time-to-clean-up-the-bug-tracker/> and tag @TriggerAu to get my attention