

## Kerbal Space Program - Bug #3326

### Planes collide with buildings when flying near the KSC.

10/08/2014 02:25 PM - SoulWager

<b>Status:</b>	Closed	<b>Start date:</b>	10/08/2014
<b>Severity:</b>	Normal	<b>% Done:</b>	100%
<b>Assignee:</b>			
<b>Category:</b>	Buildings		
<b>Target version:</b>			
<b>Version:</b>	0.25	<b>Language:</b>	English (US)
<b>Platform:</b>	Any	<b>Mod Related:</b>	No
<b>Expansion:</b>			

#### Description

So far it's happened to me twice, once at 20.5km altitude, once at just over 12km altitude. Both times it occurred just after passing over the mountains west of KSC.

I was using KER and Trajectories, I'll try to reproduce without mods tomorrow. I also saw it happen on DasValdez's stream, but he was using these two mods as well.

In my case it was the large delta wing colliding with the launchpad, in DasValdez's case it was a Structural Wing Type A colliding with the VAB.

Reproduce by flying down to KSC from orbit, without overshooting.

Video(temporary): <http://www.twitch.tv/dasvaldez/b/575914563?t=324m30s>

Video: <http://www.twitch.tv/soulwager/c/5259004>

relevant log sections:

[LOG 12:56:25.813] Camera Mode: AUTO

[LOG 12:56:42.889] [PlanetariumCamera]: Focus: Kerbin

[LOG 12:56:42.897] Maneuver Mode enabled

[ERR 12:56:42.904] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.

[ERR 12:56:42.904] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.

[ERR 12:56:43.147] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.

[ERR 12:56:43.147] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.

[ERR 12:56:47.183] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.

[ERR 12:56:47.183] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.

[ERR 12:56:47.813] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.

[ERR 12:56:47.813] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.

[ERR 12:56:48.080] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.

[ERR 12:56:48.080] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.

[LOG 12:56:49.005] Camera Mode: AUTO

[LOG 12:56:49.967] Active Vessel is in atmosphere. Cannot save.

[LOG 12:56:52.975] [Progress Node Reached]: KSC Landing

[LOG 12:56:52.976] [Progress Node Complete]: KSC Landing

[LOG 12:56:54.961] deltaWing collided into Fuel Tank - relative velocity: 1367.992 - no impact momentum (no RB)  
[LOG 12:56:54.962] deltaWing Exploded!! - blast awesomeness: 0.1  
[LOG 12:56:54.964] [deltaWing]: Deactivated  
[LOG 12:56:54.976] [05:08:48]: Delta Wing collided into Launch Pad.  
[LOG 12:56:54.994] 1 explosions created.  
[LOG 12:56:58.523] Game Paused!

The one from my video:

[LOG 13:02:22.508] Camera Mode: AUTO  
[LOG 13:02:24.071] Active Vessel is in atmosphere. Cannot save.  
[LOG 13:02:27.637] Game Paused!  
[LOG 13:02:28.240] Game Unpaused!  
[LOG 13:02:34.203] [PlanetariumCamera]: Focus: Rescue SSTO 1  
[LOG 13:02:34.214] Maneuver Mode enabled  
[ERR 13:02:34.219] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.  
  
[ERR 13:02:34.219] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.  
  
[ERR 13:02:35.011] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.  
  
[ERR 13:02:35.011] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.  
  
[ERR 13:02:36.449] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.  
  
[ERR 13:02:36.449] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.  
  
[ERR 13:02:37.695] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.  
  
[ERR 13:02:37.695] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.  
  
[ERR 13:02:38.827] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.  
  
[ERR 13:02:38.827] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.  
  
[ERR 13:02:40.361] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.  
  
[ERR 13:02:40.361] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.  
  
[ERR 13:02:41.613] Mesh.vertices is too small. The supplied vertex array has less vertices than are referenced by the triangles array.  
  
[ERR 13:02:41.613] Mesh.colors is out of bounds. The supplied array needs to be the same size as the Mesh.vertices array.  
  
[LOG 13:02:42.220] Camera Mode: AUTO  
[LOG 13:02:45.812] deltaWing collided into Fuel Tank - relative velocity: 515.4707 - no impact momentum (no RB)  
[LOG 13:02:45.812] deltaWing Exploded!! - blast awesomeness: 0.1  
[LOG 13:02:45.813] [deltaWing]: Deactivated  
[LOG 13:02:45.818] [05:09:13]: Delta Wing collided into Launch Pad.  
[LOG 13:02:45.837] 1 explosions created.  
[LOG 13:02:48.582] Game Paused!

#### Related issues:

Related to Kerbal Space Program - Bug #4028: Landed Craft Crashing into the T...	<b>Moot</b>	<b>02/04/2015</b>
Has duplicate Kerbal Space Program - Bug #3414: Spaceplane collides with KSC ...	<b>Duplicate</b>	<b>11/02/2014</b>

#### History

**#1 - 10/08/2014 03:03 PM - RexKramer**

- *File Collision with Runway.rtf added*
- *Status changed from New to Confirmed*
- *% Done changed from 0 to 10*

Confirmed, on a un-modded installation. I had a similar event happen, while over the runway at low altitude.

I attached a portion of the log file at the time.

1. The first interesting item in the log was deltaWing collided into fuel tank. That was the first collision recorded.
2. The next collision recorded was deltaWing collided with launch pad, although the vessel was not near the launchpad at the time.

Note: In my case, there was a piece of debris floating about 2km offshore.

**#2 - 10/08/2014 03:05 PM - RexKramer**

I think this is very similar to #3309.

**#3 - 10/10/2014 02:30 AM - MalfunctionM1Ke**

- *File 2014-10-10\_00002.jpg added*
- *File 2014-10-10\_00003.jpg added*

Also Spacecrafts.

My Minmus ship collided into the Launchpad on while almost reaching its apoapsis above Minmus' Orbit. This happened on Win32.

See Pictures attached

**#4 - 01/19/2015 06:03 PM - boolybooly**

- *File screenshot260.png added*

This has happened to me as well and a couple of K-Prize challenge missioners reported likewise, collisions with launchpad while on approach to the 090 runway. My F3 report showed small delta wing colliding while about 2km out and 1km altitude see screeny.

**#5 - 01/21/2015 02:33 PM - boolybooly**

OK I just had the weirdest experience with this. I brought a badly balanced space plane in to land tail first, (engines are so heavy you have to put the wings right at the back and I didnt) and on a 270 approach but backwards all 4 of the small deltas collided with the Tier 3 launch pad in turn at irregular intervals about 2km out from the KSC.

With the wings evened up it was still just possible to crash land, lost the engine, but the craft chassis with three small gear bays was intact and it fell onto its wheels whereupon the craft was dragged by an unaccountable force towards the shore as though down the slope but it would not steer and would not brake as the force was too strong. So I raised the undercarriage and the friction caused the craft to reluctantly come to rest on the gentle slope about 100-200m from the shore whereupon the force acted on it again and dragged it, as though by an invisible tentacle in playful mood, across the terrain in the direction of the slope with forces displayed far exceeding the physics of the craft's situation. It would move then stop and then move again, all with gear retracted as though something about the turning of Kerbin or the game tick was making it move periodically.

Something went really wrong there. I did manage to recover what was left of the craft during the stopped phase and switched to sandpit mode and took a wheeled buggy out to test the slope in that location and it was perfectly able to resist the slope with brakes on so there was a kraken like force at play on the first craft which reminds me a bit of the bugs we used to see when returning to KSC terrain after a long flight to a great distance from Kerbin and the terrain would be jagged like a concertina, this craft had been out to just inside Mun orbit.

I will see if I can replicate, just thought I would add it in case others have the same kind of experience.

**#6 - 01/22/2015 12:02 PM - boolybooly**

- *File screenshot296.png added*

OK I am updating again because I would like to suggest giving this bug priority "urgent". Its happening nearly every mission for me now. Uploading another screeny from another spaceplane mission which hit the launch pad as it was landing on the runway. Its not safe to land at KSC runway at the moment.

Since spaceplanes are a prominent feature in the new update and a valuable tool for getting missions done in career mode and cannot be used as intended with this bug present I think it is fair to say it is urgent that this gets fixed.

**#7 - 01/22/2015 08:32 PM - Squelch**

This has been acknowledged as happening occasionally. The cause is unknown, and any attempt to reproduce by others has proved fruitless. All we

know is that it does happen, and that it is elusive.

To be able to identify the causes, we need to have game logs and reproduction steps. The logs may show how the problem manifested, and do need to be the complete log. What happens prior to the problem is also very important, so an account of what actions were performed in the run up to the event would be useful.

If you have a save game that can demonstrate this between game sessions/restarts, then it would be very useful.

Please feel free to attach the logs and saves.

#### #8 - 03/24/2015 09:57 AM - boolybooly

```
[LOG 15:34:02.717] Camera Mode: AUTO
[LOG 15:36:30.289] Active Vessel is in atmosphere. Cannot save.
[LOG 15:37:00.484] Active Vessel is in atmosphere. Cannot save.
[LOG 15:37:30.635] Active Vessel is in atmosphere. Cannot save.
[LOG 15:38:00.854] Active Vessel is in atmosphere. Cannot save.
[LOG 15:38:20.611] [PlanetariumCamera]: Focus: Kerbin
[LOG 15:38:20.618] Maneuver Mode enabled
[LOG 15:38:31.007] Active Vessel is in atmosphere. Cannot save.
[LOG 15:39:01.171] Active Vessel is in atmosphere. Cannot save.
[LOG 15:39:24.332] Camera Mode: AUTO
[LOG 15:39:30.294] [PlanetariumCamera]: Focus: Kerbin
[LOG 15:39:30.301] Maneuver Mode enabled
[LOG 15:39:31.952] Active Vessel is in atmosphere. Cannot save.
[LOG 15:39:32.479] Camera Mode: AUTO
[LOG 15:40:02.139] Active Vessel is in atmosphere. Cannot save.
[LOG 15:40:32.282] Active Vessel is in atmosphere. Cannot save.
[LOG 15:41:02.544] Active Vessel is in atmosphere. Cannot save.
[LOG 15:41:15.360] deltaWing collided into Fuel Tank - relative velocity: 140.0589 - no impact momentum (no RB)
[LOG 15:41:15.361] deltaWing Exploded!! - blast awesomeness: 0.1
[LOG 15:41:15.377] [solarPanels5]: Deactivated
[LOG 15:41:15.382] [deltaWing]: Deactivated
[LOG 15:41:15.388] [01:17:23]: Delta Wing collided into Launch Pad.
[LOG 15:41:15.402] 1 explosions created.
[EXC 15:41:18.771] NullReferenceException
SpriteMesh.CreateMesh ()
SpriteMesh.get_mesh ()
SpriteRoot.Delete ()
SpriteBase.Delete ()
UIListItemContainer.Delete ()
UIScrollList.RemoveItem (Int32 index, Boolean destroy, Boolean doEasing)
UIScrollList.RemoveItem (IUIListObject item, Boolean destroy, Boolean doEasing)
UIScrollList.RemoveItem (IUIListObject item, Boolean destroy)
ApplicationLauncher.RemoveApplication (.ApplicationLauncherButton button)
ResourceDisplay.OnDestroy ()
```

This was the log from a space plane after reentry to Kerbin from a Kerbol orbit via Kerbin escape orbit and atmo braking, overshot KSC, turned and made a high retrograde in atmo approach intending to drop and turn, some 2000+m over KSC this happened again. For me it always seems to be small delta or delta wings, and it is always space planes possibly because the planes make horizontal approaches and I tend to use deltas. I AltF4d after the collision.

NB initial collision is between parts, delta wing and fuel tank see bold, no visible cause or explanation for that, just happens when coming close to KSC, but delta wing collision with launch pad happens after the delta wing has exploded and been deactivated. The launchpad was about 2 km away at the time.

#### #9 - 07/20/2015 12:18 AM - Agnar

- File quicksave.sfs added

Here's a quicksave that repeatedly produces this bug. It's a shuttle descending to the runway, but it's really low to the ground, so be careful if you do try it out, you have to pitch up practically immediately. The right wing strake collides with the launchpad, according to the log, while rolling down the runway.

#### #10 - 07/20/2015 12:26 AM - Agnar

Edit: sorry, I seem to have uploaded the wrong save file. I can't take down the last one, can I? I'll try to find the right one now.

Edit 2: alright, I really messed up. Had the save file that seemed to reproduce this bug though restarts, but I overwrote it and uploaded the one that came after. I don't have a copy anymore. If someone could delete my two messages, that would be great.

Sorry again to spam.

#### #11 - 07/20/2015 11:25 AM - Squelch

I will hazard a guess that your quicksave did reproduce this behaviour while in the same game session, but disappeared when you had restarted KSP? This is a characteristic of the problem, so any attempts to recreate it on other machines, or even on the same machine but different game sessions proves fruitless.

Your report does confirm that a variation of the original problem still exists, although we believed we had identified the root cause. I suspect that there is a trigger for this at some point during the flight, and some action or event is leaving the game in an indeterminate state. If we can establish a pattern of behaviour or sequence of events during the flight, we might be able to build a full reproduction for analysis.

I have seen this occur during a streamed video, but unfortunately it was only a clip of the actual collision, not what happened prior.

Would you care to outline your flight prior to this happening? Regardless, a copy of your log for the session would be of help too.

#### #12 - 07/27/2015 02:44 PM - Squelch

- Related to Bug #4028: Landed Craft Crashing into the Terrain added

#### #13 - 08/11/2015 11:37 PM - darthmelak

Just had this bug 20 mins ago, (I strongly suppose its this bug, I didnt even know that the mission log could be viewed outside crashes) I was descending with my SSTO towards the runway, then roughly 15-18 km away at about 4km ASL my wings flew off. I quicksaved just 20 seconds before, so I got to repeat it a good 7-8 times before ALT-F4 in the hopes of restarting KSP will save my previous 1-1,5 hours work and crew from dying.

Reloading solved the issue and landed without problem afterwards.

The craft is a LF SSTO, with 2 delta wings on the back, winglets on the front, mk2 cockpit, mk2 crew cabin.

It felt like the wing loss was bound to a timer, the plane was gliding stable @4km, 70m/s with about 10° descent after quickload, and I tried different maneuvers, starting engines to accelerate, increasing descent, dropping the nose and starting engines, all my tries ended with the wings blowing off after about the same time after load.

So in the hopes of helping track down the bug heres my mission profile:

Takeoff, ~6min burn to orbit,

Rescued a Kelbal from LKO, (multiple orbit changes, time warps),

then docked with refueling station (again multiple orbit changes, time warps),

refueled, then undocked and went for the Mun

after setting the maneuver node and warping to it, quicksaved and did the burn to Mun encounter, time warped, then before insertion burn quickloaded to before Mun burn, and did it again,

rescued a Kelbal from Mun orbit, did a brake to get "suborbital orbit on moon" for one of the passengers, recircularized the orbit, then left Mun SOI to transfer to Minmus orbit

did a Minmus encounter, braked to orbit around Minmus for other passenger, then immediately left Minmus SOI to return to Kerbin.

To return I burned till 20km periapsis, quicksaved and timewarped to pe with KAC, did the entry, then after reaching safe altitude and speed (700 m/s @20km), noticed I overshot KSC, so quickloaded back to ap, changed pe to 40km, to try and circularize the orbit so I could land at KSC.

The aerobraking went good, reduced the ap to 270km and I didnt need any maneuvers to get a prefect KSC landing trajectory, so I started the entry and got to the disappearing wings state in the end.

So there were lots of time warping, both wth auto timewarp and with Kerbal Alarm Clock - there was even a maximum time acceleration warp before reaching Minmus, and around the Mun i got the "cannot click the orbit to set maneuver node " bug, so switched to the Space Center and back to the craft to fix it.

Thats about it.

#### #14 - 02/01/2016 11:08 PM - Kirk

- File KSP.log added

- File quicksave.zip added

I just had this problem as well, I've attached my log and quicksave for good measure.

Interestingly, I sometimes had this way, way out from KSP (perhaps even over the desert continent). Small delta wings and wing strakes were the culprits this time.

Mission profile... I had used an SSTO to bring a small ship into orbit. I accelerated the small ship into a Mun fly by trajectory and then I exited KSP. A

day layer I timewarped the little ship into the Mun Sol, flew by it, and went back. Then I aerobraked the small ship a bit and burned its orbit back to somewhat circular around Kerbin. Then I switched to the SSTO, rendezvoused with the small ship, and redocked it into the cargo bay. Then I reentered the SSTO, and I got the bug, and almost every time I quickloaded after that. I had it not happen, only once, when I came down over the desert continent and attempted to land there instead.

The final time, I crashed, and KSP hung (had to force close). Might not be related.

#### #15 - 02/08/2016 09:24 AM - Kasuha

I'm having this problem regularly, recently in my Career save. I found it extremely hard to reproduce but it happens all the time when I don't try and just play - the problem is that it takes a long time and there is a lot happening. Typical scenario where it happens to me: undock my tourist bus from Minmus station, fly it to Kerbin, aerobrake, rendezvous and dock with station in Kerbin orbit. Transfer tourists to SSTO docked to the station, undock the SSTO, deorbit it and land on Runway - 50% of the time individual wing parts start crashing into launchpad or even other KSC buildings (had this happen with VAB recently) on approach to the runway. The launchpad can even get destroyed by it and I need to repair it afterwards.

Restart of the game and restore from quicksave gets rid of the problem, repeated approach is then fine.

My theory is that this problem is somehow related to docking. My tourist transport consists of two parts (tug and habitable module) and I keep to dock and redock them in various ways. The game seems to have issues in complex docking scenarios (letters stand for different ships, "-" is docking connection:

A + B -> A-B  
A-B + C -> A-B-C  
A-B-C -> A + B-C  
D + B-C -> D-B-C  
D-B-C -> D-B + C

Ship names get regularly lost in this process, I need to rename them all the time if I want them to keep their names. I'm planning to report the names issue separately sometime when I get over to make a reproducible scenario.

This whole issue might be also another side effect of [#6010](#)

#### #16 - 06/08/2016 10:42 PM - bewing

Have not been able to duplicate this bug in 1.1.2.

#### #17 - 07/17/2016 09:55 AM - TriggerAu

- Status changed from Confirmed to Needs Clarification

- % Done changed from 10 to 0

#### #18 - 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

#### Files

Collision with Runway.rtf	37.4 KB	10/08/2014	RexKramer
2014-10-10_00002.jpg	265 KB	10/10/2014	MalfuctionM1Ke
2014-10-10_00003.jpg	174 KB	10/10/2014	MalfuctionM1Ke
screenshot260.png	1.31 MB	01/19/2015	boolybooly
screenshot296.png	2.31 MB	01/22/2015	boolybooly
quicksave.sfs	248 KB	07/20/2015	Agnar
KSP.log	240 KB	02/01/2016	Kirk
quicksave.zip	418 KB	02/01/2016	Kirk