

Kerbal Space Program - Bug #3929

Loading a craft with missing parts or otherwise corrupt craft, will lead to unexpected game behaviour

01/03/2015 09:57 AM - Squelch

Status:	Closed	Start date:	01/03/2015
Severity:	Normal	% Done:	100%
Assignee:			
Category:	Gameplay		
Target version:			
Version:	0.90	Language:	English (US)
Platform:	Any	Mod Related:	No
Expansion:			

Description

Loading a craft into the editor that may have missing parts (missing mod) or otherwise corrupt craft file will lead to unexpected behaviour rendering the game unplayable.

Reproduction Steps:

1. Start a sandbox game and enter VAB.
2. Place a Mk1 pod, name and save this as a new craft.
3. Verify this craft can be loaded into the editor.
4. Open the .craft file, and edit the part name (eg. mk1pod -> mk1-1pod - example craft attached)
5. Open the load craft dialog in the editor again and select the previously saved, but modified craft.
6. Observe the warning about missing parts (mk1-1pod) and dismiss this message.
7. Attempt to do various tasks in the editor or return to KSC to continue game.

Expected behaviour:

KSP should fail to load any corrupt or invalid .craft file.
Attempting to load such a file should be handled gracefully.

Results:

A message appears informing the player which parts are missing.
Dismissing the message returns the player to an empty editor.
Any number of problems can then be seen while trying to use menus or gui elements.
Returning to KSC (where possible) may leave only some gui elements functioning.

Observations:

While there is a warning of missing parts embedded into the craft loading dialog, this does not prevent the craft from being loaded, and is not prominent enough.
The missing parts message comes after the craft has attempted to be loaded, and after the damage has been done.
The resulting behaviour appears to be random, and can vary from minor issues in the editor, to a complete failure to operate any gui element or menu.
Only a game restart will restore the game to the correct state.

The problems manifested by this issue may be subtle and could go undiscovered or even lead to bug reports in other areas. Quite often the KSC buildings cannot be entered, or parts behave badly in the editor.

Conjecture: It may be possible that a corrupt craft file, that does have correctly named parts and therefore does not spawn the missing parts warning, could also cause other issues. This needs testing and verification.

Related issues:

Related to Kerbal Space Program - Bug #3944: Clampotron causes accelerometer,...	Not a Bug	01/05/2015
Has duplicate Kerbal Space Program - Bug #3987: Loading a craft with missing ...	Duplicate	01/24/2015

History

#1 - 01/03/2015 10:02 AM - Squelch

- File *Broken Arrow.craft* added

A simple example corrupt .craft

#2 - 01/03/2015 10:14 AM - Squelch

Logs added for completeness.

#3 - 01/03/2015 10:16 AM - Squelch

- File *KSP.log* added

- File *output_log.txt* added

#4 - 01/04/2015 06:59 AM - Squelch

There are safeguards in place that prevent corrupt craft from being loaded from within a savegame and the same "Locked or invalid parts" warning is given. The game reverts to a safe state and simply removes the offending craft. This same safeguard appears not to be working when loading a craft in the editor.

Attempting to load the craft directly to the launchpad (from KSC) does not appear to adversely affect the game, but a NullRef is thrown for every attempt.

#5 - 01/04/2015 07:10 AM - PixelClef

- Status changed from *New* to *Confirmed*

- % Done changed from 0 to 10

- Platform *OSX* added

OS: Mac OS X 10.10.1

KSP: 0.90.0.705

I can recreate this issue exactly as described. There seems to be an attempt to abort, based on this message in the log:

```
[Error]: Ship file error!
```

In addition to recreating the error, I can also confirm that attempting to load the craft directly to the pad does not trigger the unstable state, but rather KSP rejects the attempt to load the craft.

Note: the purpose of editing the craft file is not to simulate file corruption, but rather the presence of a mod part that the user doesn't have installed. Possible scenarios for creating this condition are:

1. downloading a craft from the internet
2. loading a craft with a mod part after disabling that mod

#6 - 01/04/2015 09:55 AM - unseeingwhale

- Platform *Linux* added

On Linux I got the warning and the blank editor. Then I proceeded to exit the SPH I could press escape but then I didn't have the ability to interact with the GUI.

#7 - 01/04/2015 10:51 AM - Squelch

- Platform *Any* added

- Platform *deleted (Linux, OSX, Windows)*

To rule out the root part being the cause, a simple multi-part vessel was created (Mk1pod and solidbooster) with the booster having been the one edited. Exactly the same results were observed.

#8 - 01/04/2015 10:59 AM - Squelch

- Category changed from *Gameplay* to *81*

Category changed to editor as the unexpected behaviour is seen after attempting to load from there, but it's worth noting the NRE's thrown when attempting a direct load (from KSC launchpad)

Further observations are:

The warnings and handling of a craft with missing parts is different for the three situations cited so far.

1. Editor - A missing parts dialog is shown, but does not prevent the subsequent odd behaviour.
2. A craft embedded in a savegame - The missing parts dialog is shown, but the offending craft is removed and the game reverts to a safe state.
3. Direct load from KSC - No feedback or dialog is shown, and a single NRE for each attempt is recorded in the log.

#9 - 07/20/2015 11:36 PM - Squelch

- Status changed from *Confirmed* to *Resolved*

- % Done changed from 10 to 100

This behaviour has now been resolved.

#10 - 07/17/2016 09:19 AM - TriggerAu

- Status changed from *Resolved* to *Closed*

Files

Broken Arrow.craft	4.6 KB	01/03/2015	Squelch
KSP.log	142 KB	01/03/2015	Squelch
output_log.txt	318 KB	01/03/2015	Squelch