

Kerbal Space Program - Bug #1991

[Race Condition?] Incorrect Camera View when Switching Vessels from Map

12/19/2013 11:24 PM - toadicus

Status:	Closed	Start date:	12/19/2013
Severity:	Normal	% Done:	100%
Assignee:			
Category:	Controls and UI		
Target version:			
Version:	0.23	Language:	English (US)
Platform:	Any	Mod Related:	No
Expansion:			

**Description**

When switching from one vessel to another via the map (but not when switching to a vessel from the Tracking Station), a `NullReferenceException` is thrown and results in an incorrectly oriented view (the camera is zoomed all the way out). This exception is fired at least once, and probably twice for most manned vessels.

Traces from output\_log.txt:

@[HighLogic]: ===== Scene Change : From FLIGHT to FLIGHT =====

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

`NullReferenceException: Object reference not set to an instance of an object`  
`at FlightGlobals.getStaticPressure (Double altitude, .CelestialBody body) [0x00000] in <filename unknown>:0`

`at FlightGlobals.getStaticPressure () [0x00000] in <filename unknown>;:0`

`at InternalAtmosphereDepth.OnUpdate () [0x00000] in <filename unknown>;:0`

`at InternalProp.OnUpdate () [0x00000] in <filename unknown>;:0`

`at InternalModel.OnUpdate () [0x00000] in <filename unknown>;:0`

`at Part.InternalOnUpdate () [0x00000] in <filename unknown>;:0`

`at Part.Update () [0x00000] in <filename unknown>;:0`

(Filename: Line: -1)

[PlanetariumCamera]: Focus: Mun

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

UnloadTime: 6.115859 ms  
Unloading 2 Unused Serialized files (Serialized files now loaded: 0 / Dirty serialized files: 0)

Unloading 321 unused Assets to reduce memory usage. Loaded Objects now: 70112.  
Total: 69.868431 ms (FindLiveObjects: 3.465739 ms CreateObjectMapping: 2.346693 ms MarkObjects: 62.774784 ms  
DeleteObjects: 0.879092 ms)

Camera Mode: AUTO

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

`NullReferenceException: Object reference not set to an instance of an object`  
`at FlightGlobals.getStaticPressure (Double altitude, .CelestialBody body) [0x00000] in <filename unknown>:0`

`at FlightCamera.GetAutoModeForVessel (.Vessel v) [0x00000] in <filename unknown>;:0`

```
at FlightCamera.setMode (Modes m) [0x00000] in <filename unknown>;:0
at FlightCamera.setModeImmediate (Modes m) [0x00000] in <filename unknown>;:0
at MapView.exitMapView () [0x00000] in <filename unknown>;:0
at MapView.ExitMapView () [0x00000] in <filename unknown>;:0
at FlightUIModeController.SetMode (FlightUIMode mode) [0x00000] in <filename unknown>;:0
at FlightUIModeController.Start () [0x00000] in <filename unknown>;:0

(Filename: Line: -1)

----- initializing flight mode... -----

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

Target vessel index: 1 vessel count: 6

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[FLIGHT GLOBALS]: Switching To Vessel Kerbal 2 -----

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

setting new dominant body: the Mun
FlightGlobals.mainBody: the Mun

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

Camera Mode: AUTO

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

stage manager resuming...

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

all systems started

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[asasmodule1-2]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[RCSTank1-2]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[fuelTank4-2]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[liquidEngine1-2]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[winglet3]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[winglet3]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)
```

[winglet3]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[RCSBlock]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[RCSBlock]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[RCSBlock]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[RCSBlock]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[solarPanels5]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

[solarPanels5]: Activated (forced)

(Filename: C:/BuildAgent/work/ea95e74f6e5f192d/Runtime/ExportGenerated/StandalonePlayer/UnityEngineDebug.cpp Line: 54)

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[solarPanels5]: Activated (forced)

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[PlanetariumCamera]: Focus: Kerbal 2@

From a quick examination of the API assembly, it looks like `FlightGlobals.getStaticPressure(double, CelestialBody)` is being called with a null `Body` reference before `FlightGlobals.currentMainBody` is assigned.

Steps to reproduce:

1. Put a vessel in orbit of Mun
2. Put a second vessel in orbit of Mun
3. Switch from one vessel to the other via the map view

It probably works for all bodies and in all starting positions, but I haven't tested otherwise. I have duplicated this bug in Windows 8 64-bit and Linux x64.

## History

### #1 - 01/09/2014 12:58 AM - TruePikachu

I'll check this issue out in my copy. **Loading**

For the meantime, a workaround would be to only switch ships from the flight center.

I was just unable to reproduce, Win7x64. I loaded to some launch pad debris, and map switched to a satellite that was near Kerbin, on an escape trajectory. No crash, no NPE on the debug.

Have you duplicated it with separate games on Windows and Linux, or with a copied save file? If the latter, it might be something more or less specific to the save.

### #2 - 01/12/2014 02:03 AM - TruePikachu

- Status changed from New to Confirmed

- % Done changed from 0 to 10

I recently confirmed this, using two ships in orbit around Mun, and both controllable.

**#3 - 07/17/2016 09:25 AM - TriggerAu**

- *Status changed from Confirmed to Needs Clarification*
- *% Done changed from 10 to 0*

**#4 - 11/11/2016 01:09 PM - sal\_vager**

- *Status changed from Needs Clarification to Ready to Test*
- *% Done changed from 0 to 80*

This appears to have been fixed.

**#5 - 12/03/2016 08:01 PM - JPLRepo**

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