

## Kerbal Space Program - Bug #18568

### Inflatable airlock IVA scenery has insane texture and/or geometry problem

04/16/2018 08:11 PM - SamHall

<b>Status:</b>	Updated	<b>Start date:</b>	04/16/2018
<b>Severity:</b>	Low	<b>% Done:</b>	10%
<b>Assignee:</b>			
<b>Category:</b>	Parts		
<b>Target version:</b>			
<b>Version:</b>	1.4.2	<b>Language:</b>	English (US)
<b>Platform:</b>	Windows	<b>Mod Related:</b>	No
<b>Expansion:</b>	Making History		

#### Description

IVA scene on the inflatable airlock has got crazy flickering bands of transparency dancing around on its interior surfaces. It kinda looks like you've put duplicate copies of the overlay mask mesh in the scene and they're Z-fighting with the visible scenery mesh somehow? Just gonna let the screenshots speak for themselves.

#### History

##### #1 - 04/17/2018 11:33 PM - Squelch

- Status changed from New to Need More Info

The pictures certainly look bad, but I have not been able to reproduce this.

Could you supply your settings.cfg and a copy of output\_log.txt so we can compare the hardware a graphics settings please?

##### #2 - 04/18/2018 02:37 AM - jclovis3

I would suggest a copy of your save game or craft file too. It looks like you may have 2 overlapping parts, possibly from a radial attachment where they were placed overlapping.

##### #3 - 04/18/2018 04:48 PM - SamHall

- File requested files.zip added

- File screenshot3.png added

Squelch wrote:

The pictures certainly look bad, but I have not been able to reproduce this.

Could you supply your settings.cfg and a copy of output\_log.txt so we can compare the hardware a graphics settings please?

Okay, I'm attaching those plus the savegame and craft files. While you're looking at that i'm gonna make a new IVA scene in unity and try changing things at random to see if i can work out what's causing this bug by trial-and-error.

P.S. Also I've just noticed the overlay mask on the airlock isn't working at all. See screenshot3.png ; Jeb is in that airlock and the "overlay mask" button is turned on, but nothing at all is visible of the interior. The mask's mesh isn't COMPLETELY encapsulating the whole scene is it?

##### #4 - 04/18/2018 06:44 PM - jclovis3

- File Inside looking down at feet is OK.png added

- File Inside looking up is OK.png added

That internal overlay problem might be connected to the problem where by the portrait is black, if for example, the portrait is derived from data constructed by the overlay. From the internal views however, I see no problems with Z-fighting and my photos are pretty static (with your craft file loaded in sandbox mode). The only (potentially relevant) differences I see in your and my config files are listed below but I think either the screen resolution, full view vs. windowed, or anti-aliasing option might be the key differences. As I can't replicate your hardware configuration, I can only attempt to test the soft changes.

Setting my anti-aliasing to 0 didn't cause a problem. When I switched to windowed view (still 1360 x 768), the cursor was off from which buttons sensed a hover (more so near the bottom), so I may have to file that under another bug report. After finding no graphical glitches in the way you mention, I then switched to 1152 x 864 to match your configuration and this fixed the mouse alignment problem but again, no Z-fighting problems.

Lastly, I opened up your IVA TEST save file under these changes and still saw no problems like you describe.

So if your graphics card or display is suffering from aliasing than you might want to try adjusting your anti-aliasing (though I admit, I've never seen an issue where this setting was relevant). Depending on your memory configuration, you may need to reduce some of your graphic qualities in other areas.

I'm running on a desktop with the following:  
AMD FX-8350 (8x Logical Processors, 4 GHz base speed)  
32 GB RAM  
NVIDIA GeForce GTX 980  
DirectX 12.

#### My File

CAMERA\_FX\_EXTERNAL = 0.28125  
CAMERA\_FX\_INTERNAL = 0.325  
SCREEN\_RESOLUTION\_WIDTH = 1360  
SCREEN\_RESOLUTION\_HEIGHT = 768  
FULLSCREEN = True  
ANTI\_ALIASING = 8  
TEXTURE\_QUALITY = 0

#### Your File

CAMERA\_FX\_EXTERNAL = 1  
CAMERA\_FX\_INTERNAL = 1  
SCREEN\_RESOLUTION\_WIDTH = 1152  
SCREEN\_RESOLUTION\_HEIGHT = 864  
FULLSCREEN = False  
ANTI\_ALIASING = 0  
TEXTURE\_QUALITY = 1

#### #5 - 04/18/2018 09:28 PM - SamHall

- File screenshot27.png added
- File screenshot28.png added
- File screenshot29.png added

Okay I figured it out; the Z-fighting is caused by the fact that the overlay mesh ("Mask") and the visible mesh ("Sock") are the exact same size and shape vertex-for-vertex aside from the little raised gray discs at the top and bottom of the visible mesh. You ideally want your overlay mask to be just a bit BIGGER than the internal scenery; most people do this by using the part's external geometry as a basis for the mask rather than its internals.

Reshaping "Sock" in blender to be very slightly smaller than "Mask" put a stop to the Z-fighting issue, and cutting a couple windows in "Mask" made the overlay work again. Plus it fixed the blank black portrait, which I assume was caused by the portrait camera being slightly outside of and obstructed by the mask.

#### #6 - 08/01/2019 12:31 AM - chris.fulton

- Status changed from Need More Info to Updated
- % Done changed from 0 to 10

#### #7 - 08/06/2019 12:56 AM - chris.fulton

Flickering textures are still present inside the inflatable airlock in Internal View.

#### Files

screenshot2.png	782 KB	04/16/2018	SamHall
screenshot1.png	907 KB	04/16/2018	SamHall
when_the_drugs_hit_too_hard_and_jeb_has_to_concentrate_on_not_510k.jpg	510 KB	04/16/2018	SamHall
requested files.zip	52.5 KB	04/18/2018	SamHall
screenshot3.png	1000 KB	04/18/2018	SamHall
Inside looking down at feet is OK.png	998 KB	04/18/2018	jcloviss3
Inside looking up is OK.png	725 KB	04/18/2018	jcloviss3
screenshot27.png	845 KB	04/18/2018	SamHall
screenshot28.png	910 KB	04/18/2018	SamHall
screenshot29.png	935 KB	04/18/2018	SamHall