

Kerbal Space Program - Bug #743

Large RCS Tank, Large ASAS, and Large Stack Separator have Size 1 attachment nodes

05/31/2013 02:07 AM - Tiron

Status:	Closed	Start date:	05/31/2013
Severity:	Low	% Done:	100%
Assignee:			
Category:	Parts		
Target version:			
Version:	0.20	Language:	English (US)
Platform:	Any	Mod Related:	No
Expansion:			

Description

Whilst building a rocket the other day, I went to place a large RCS tank, when it occurred to me that the attachment node balls seemed...rather small. Further checking revealed they were in fact showing up as size 1 nodes rather than size 2... which has interesting implications about the fact that its joints hold like they were made of wet tissue paper.

Looking into the CFG file revealed that the node_attach_top and node_attach_bottom were missing the ", 2" on the end that seems to set the nodes to size 2 (Since adding it changed it to what appeared to be a size 2 node). While checking other parts to verify that the extra ", 2" on the end was universal to large parts, I discovered that the large ASAS and large Stack Separator also lack it...and also appear to have size 1 nodes.

The Mk 2 lander can has a size 1 node on top only (The bottom node is size 2), set in the config file with a ", 1" rather than more normal method of just leaving that whole field off, so I'm not sure if that's deliberate or not.

All four of these parts are also missing the 'node_attach' line most size 2 parts seem to have. I'm not sure what the significance is of that, but since most of the large size parts seem to have the first field on 'node attach' as '1.25', and most small size parts lack the line entirely, my hunch is that it has to do with the connection strength increase a few versions back, but I'm really not sure.

I didn't check every large parts' config file, but I did check most of them and these four are the only ones I've seen that didn't have both nodes set to size 2.

My theory is that when the parts were added, the config file was copied from the existing smaller version and updating the attachment nodes section got missed out, somehow.

History

#1 - 05/31/2013 02:11 AM - Tiron

Forgot to mention, first noticed this in 19.1, and it's still present in 0.20, 0.20.1, and 0.20.2.

#2 - 05/31/2013 04:45 AM - Tiron

- File 220200_screenshots_2013-05-31_00006.jpg added

- File 220200_screenshots_2013-05-31_00005.jpg added

Did some Testing.

On a large ASAS unit, held up by four launch clamps radially connected, with fuel tanks hanging below, using struts to stabilize the inter-tank connections (they started breaking LONG before the large ASAS's connection did, so that's been beefed up anyway!)

with the default, size 1 nodes, it seemed to be able to support a maximum load of: 20 struts, 19 Jumbo-64 fuel tanks, 14 TT-38K radial decouplers, and a single FL-T400. Adding an FL-200 to this caused the joint between the large ASAS and the top Jumbo-64 to snap instantly three times out of four.

After changing the node to size two through the .cfg file, reloading the new file, and detaching and reattaching the joint in question, it was able to (barely) support an additional 4 jumbo-64 fuel tanks as well as 4 additional TT-38k radial decouplers. Adding an FL-T200 to that also caused it to break. The joints were "stretching" under the extreme weight, and the resulting bouncing caused the joint to break after around 5 seconds

I've included some screenshots I took of the setup I was using.

#3 - 05/23/2014 11:41 PM - Kron

I recently noticed a bit of wobble with the large ASAS unit (0.23.5). In the part file there is no node size specified, so it's probably defaulting to a size 1 node.

#4 - 11/30/2014 01:59 PM - RexKramer

- Platform Any added
- Platform deleted (Windows)

In 0.25, the large RCS appears to have large attach nodes. The large SAS and large separator still have small attach nodes. The MK2 lander can still has a small node on top with a large node on the bottom.

Changed platform to Any.

#5 - 11/30/2014 02:06 PM - RexKramer

- Status changed from New to Confirmed
- % Done changed from 0 to 10

#6 - 07/08/2015 02:37 PM - RexKramer

- Status changed from Confirmed to Resolved
- % Done changed from 10 to 100

The attach nodes for these parts appear to have been fixed as of 1.0.4.

#7 - 07/17/2016 09:17 AM - TriggerAu

- Status changed from Resolved to Closed

Files

220200_screenshots_2013-05-31_00006.jpg	131 KB	05/31/2013	Tiron
220200_screenshots_2013-05-31_00005.jpg	146 KB	05/31/2013	Tiron