

Kerbal Space Program - Bug #19376

Structural Tubes from M.H. missing config, causing drag

07/08/2018 03:05 AM - Anonymous

Status:	Resolved	Start date:	07/08/2018
Severity:	Normal	% Done:	100%
Assignee:	just_jim		
Category:	Parts		
Target version:	1.10.0		
Version:	1.4.4	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Making History		

Description

Rockets using the structural tubes tend to have high drag. Specifically the trailing surface of the part front of the tube and the leading surface of the part behind the tube, show large drag forces. In the attached craft files, the new 'structural tube' acts aerodynamically like a thin gilder. We would prefer it act like the old 'structural fuselage' but a stack with the new MH tube has much higher drag than the stack with the old tube. attached craft pulls strongly the right where one would expect it to be balanced.

The structural tubes are hollow, and hollow parts generally get custom DRAG_CUBE configurations to show the aero model that they are filling the gap between their neighboring stages.

History

#1 - 07/08/2018 03:21 AM - Anonymous

- File *tubes2.craft* added

#2 - 07/10/2018 04:30 PM - diomedea

- Category changed from *Physics* to *Parts*
- Status changed from *New* to *Confirmed*
- Severity changed from *Low* to *Normal*
- % Done changed from *0* to *10*

#4 - 08/04/2018 01:46 PM - raptor9_ksp

This bug is still present in 1.4.5.

#5 - 09/23/2018 05:58 AM - Anonymous

- File *structuralTubes.cfg* added

Attached a module-manager patch to insert the missing DRAG_CUBE entries for the structural tubes. This corrects the shape of the tube for purposes of calculating drag on the trailing side of the part in front, and the leading side of the part behind, the structural tube. (After this patch, contents of the tubes are still exposed to airflow; see [#18126](#) for a patch to change that.)

#6 - 10/20/2018 03:04 PM - dok_377

k-ohara5a5a@oco.net wrote:

Attached a module-manager patch to insert the missing DRAG_CUBE entries for the structural tubes. This corrects the shape of the tube for purposes of calculating drag on the trailing side of the part in front, and the leading side of the part behind, the structural tube. (After this patch, contents of the tubes are still exposed to airflow; see [#18126](#) for a patch to change that.)

You are the man. Thank you.

#7 - 12/08/2018 06:51 AM - Anonymous

- Subject changed from *hollow parts from M.H. missing config, causing drag* to *Structural Tubes from M.H. missing config, causing drag*

The required custom drag configuration were mentioned in a forum post

<https://forum.kerbalspaceprogram.com/index.php?/topic/172232-16x-missinghistory-v172-handy-parts-to-complement-making-history/&do=findComm>

[ent&comment=3321974](#)

and they match those that I supplied, plus they have an extra 'default' entry.

So probably the configurations existed in version 1.4.0, but were removed for some reason.

#8 - 04/07/2020 05:59 PM - just_jim

- Assignee set to just_jim

#9 - 07/03/2020 11:00 AM - just_jim

- Status changed from Confirmed to Being Worked On

- % Done changed from 10 to 30

#10 - 07/03/2020 11:01 AM - just_jim

- Status changed from Being Worked On to Ready to Test

- Target version set to 1.10.0

- % Done changed from 30 to 80

This should be working now in 1.10

#11 - 07/06/2020 05:10 AM - Anonymous

- Status changed from Ready to Test to Resolved

- % Done changed from 80 to 100

#12 - 01/17/2021 04:47 PM - mamaligadoc

- Tracker changed from Bug to Feedback

- Subject changed from Structural Tubes from M.H. missing config, causing drag to Buy Online Decadron in UK/GB | next day no prescription | overnight without prescription

- Description updated

- Category changed from Parts to Aerodynamics

- Start date deleted (07/08/2018)

#13 - 01/17/2021 07:17 PM - Anonymous

- Subject changed from Buy Online Decadron in UK/GB | next day no prescription | overnight without prescription to cleared vandalised post

- Description updated

#14 - 01/18/2021 07:21 AM - ManeTI

- Tracker changed from Feedback to Bug

- Subject changed from cleared vandalised post to Structural Tubes from M.H. missing config, causing drag

- Description updated

- Category changed from Aerodynamics to Parts

- Start date set to 07/08/2018

- % Done set to 100

Files

tubes.craft	16.1 KB	07/08/2018	Anonymous
TubesAerodynamics.jpg	49.1 KB	07/08/2018	Anonymous
tubes2.craft	18 KB	07/08/2018	Anonymous
structuralTubes.cfg	3.52 KB	09/23/2018	Anonymous