

Kerbal Space Program - Bug #18266

The centers of mass and drag of the FL-C1000 Fuel Tank are dramatically off-center. Suggested fix inside.

03/29/2018 02:51 AM - SamHall

Status:	Closed	Start date:	03/29/2018
Severity:	Low	% Done:	100%
Assignee:			
Category:	Parts		
Target version:			
Version:	1.4.2	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Making History		

Description

Bug description:

The centers of mass and drag of the FL-C1000 Fuel Tank are located distinctly to the right of the tank's centerline. See attached screenshot A.

Suggested fix:

Change the .cfg lines that read

```
CoMOffset = 0.2, -1.0, 0.0  
CoPOffset = 0.25, 0.5, 0.0
```

to instead read

```
CoMOffset = 0.0, -1.0, 0.0  
CoPOffset = 0.0, 0.5, 0.0
```

See attached screenshot B.

History

#1 - 03/29/2018 08:07 AM - jclovis3

That most certainly explains the weird spiral spin they have coming off. I have to concur this seems to exist in my install as well.

#2 - 03/29/2018 09:52 AM - Tomator

The tank isn't conical so the offset may be desired; along Z axis and not X.

#3 - 03/29/2018 10:18 AM - Squelch

- Status changed from New to Being Worked On

- % Done changed from 0 to 30

#5 - 03/29/2018 06:29 PM - fourfa2

I believe there was a axis transposition error. The following:

```
@PART[Size1p5_Tank_05]:FINAL {  
@CoMOffset = 0.0, -1.0, 0.2  
@CoPOffset = 0.0, 0.5, 0.25  
}
```

Centers the CoM on the side-to-side axis, and also positions it in a logical place in depth. This simply swaps the values in the stock first and third fields. More discussion here:

<https://forum.kerbal-space-program.com/index.php?topic/172971-the-soyuz-side-booster-tank-has-an-error-in-its-config&tab=comments#comment-3338697>

#6 - 04/27/2018 04:05 AM - klesh

Still offset CoM in 1.4.3

#7 - 06/26/2018 10:10 AM - TriggerAu

- Status changed from *Being Worked On* to *Resolved*

- % Done changed from 30 to 100

This one is fixed in 1.4.4

#8 - 07/26/2018 09:32 PM - joshua.collins

- Status changed from *Resolved* to *Closed*

Files

screenshotA.png	1010 KB	03/29/2018	SamHall
screenshotB.png	1010 KB	03/29/2018	SamHall