

Kerbal Space Program - Bug #24752

Duna rescue contracts become Solar rescue because they get flung by Ike.

01/30/2020 12:46 AM - Dunbaratu

Status:	New	Start date:	01/30/2020
Severity:	Low	% Done:	0%
Assignee:			
Category:	Gameplay		
Target version:			
Version:	1.8.1	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Core Game		

Description

When the game spawns a derelict ship in orbit of Duna for a rescue contract, it can spawn that ship in an orbit that intersects Ike's sphere of influence and thus get flung by Ike's gravity assist out into solar orbit, away from Duna so it becomes a contract requiring far more delta-V to achieve than it would have if it had still been around Duna.

This was raised once as an issue in this tracker as ID [#16082](#) but that issue was closed with the claim the user should know enough to realize the contract would do this and it should be "chalked up to experience". But I've never been able to tell how to see what the orbit of the contract will end up being until **after** I've accepted the contract. Before I accept it, all I know is "the orbit will be around the body called _, and given how much money its worth it's probably not a simple equatorial low orbit contract." But **which** particular orbit it will have I don't know yet. To know it will get flung by Ike I'd need a more concrete picture of the orbit **before** taking the contract. If I can't get my hands on that information through the player's UI, I disagree with the claim that the player should be able to know it's going to happen.

Also, it never happened with for example a Kerbin rescue contract getting flung by the Mun. It must be the case that somewhere in the game there are config numbers for making these contracts that defines allowed ranges of orbit parameters. I suspect the config for Duna's contracts is configured with numbers that allow orbits that touch it's moon's sphere of influence. Since I haven't seen this happen with rescue contracts around other bodies, I'd assume it's an exception for Duna and its relatively close moon Ike, and thus not a thing a player could be expected to think is "as intended" behavior. It's not the way things work elsewhere in the game.

History

#1 - 01/30/2020 01:23 AM - Dunbaratu

- Description updated

#2 - 01/30/2020 01:26 AM - Dunbaratu

- Description updated

#3 - 01/30/2020 05:44 AM - Anth12

I have never had a rescue mission move from its original orbit, and I agree if it just happens to be flung into solar orbit I would consider it a bug because it was never intended to do so.

The Kerbal scientists involved would have accounted for this issue if it was in reality and mentioned it in the contract which I strongly suspect they didn't

If you can get a quicksave or a persistent file I will confirm the bug once I have investigated the issue
Doesn't mean that Squad will do anything about it though

#4 - 07/27/2020 09:28 PM - Whoop_whoop_pull_up

Can confirm that I've had this happen as well, again with a Duna rescue becoming a Kerbol rescue due to gravitational slingshotting by Ike.

Also, I suspect that it probably *is* perfectly possible for this to happen with the offending body being the Mun or Minmus, if the rescuee-to-be spawns onto the right (or wrong) orbit - it's just that those rescuees-to-be tend to get rescued long before they ever encounter either of Kerbin's natural satellites.