# Kerbal Space Program - Feedback #3890

## Difficulty, progression, and balance feedback

12/23/2014 02:25 PM - SoulWager

Status:	Needs Clarification		
Severity:	Normal		
Assignee:			
Category:	Gameplay		
Target version:			
Version:	0.90	Language:	English (US)
Platform:	Any	Mod Related:	No

Expansion:

#### **Description**

First, what I think the intended demographic for each difficulty should be:

Easy should explain things more, maybe incorporate the tutorials into this mode, and trigger them as the relevant contract types are accepted, assume no understanding of orbits or physics.

Normal difficulty should be balanced to teach new players the ropes by trial and error, assuming a basic understanding of what orbits are, and high school level physics.

Moderate difficulty should assume the player has played KSP before, but is designing ships based on experience, rather than on kerbal engineer, a ?v map, and a transfer window calendar. (this difficulty should get harder if those types of tools are incorporated into the stock game)

Hard mode should assume the player has planned the missions and calculated the performance of the rockets, and has a good chance of mission success on the first try.

[difficulty +]: fixed difficulties will never be precise enough, so you need some rubber banding, this should be focused on making more challenging missions more desirable to attempt, and more readily available on harder difficulties.

Progression curve: There's already something like this, where each exploration mission unlocks more exploration missions. This is basically your best guess at what the player at [current difficulty setting] is able to attempt with their current tech/facility/funds.

Contract availability: Putting difficult contracts behind a facility upgrade or prior achievement is good for new players, but it slows down the difficulty ramp too much for experienced players. I think there should be two ways to unlock a contract, by progression, and by reputation(ambition). The reputation missions are above the standard progression curve, but would also reward more reputation on completion. If you have a high reputation, you get offered contracts further above your progression curve. Contracts below your reputation curve should give a lot of money, but less reputation (requires fixing strategy balance,) 1,2,3 star contracts: 1 star contracts are below your progression curve, they should pay a lot of funds, but not much reputation or science (it's grind, no need to have too much of it). 2 star contracts would be basically on curve, and the base reward would be proportional to the time it's expected to take to complete the mission, plus the approximate minimum cost of a vehicle capable of completing it. 3 star contracts would start a bit above your progression curve, and go far above your progression curve if you have a lot of reputation, these would give several times more reputation than an on-curve contract.

It would also be a good idea to reduce the number of contracts you can accept at once, until you reach the point where you only take contracts you think you can complete in the next couple flights. This probably means making mission control tier 2 allow  $4\sim5$  contracts, and make tier 3 a lot more expensive. The idea is to offer more contracts than can be accepted. I'd like to have access to Dres and Eeloo missions before going to Jool, for example. Once you get your reputation above some threshold, you should be offered all the remaining planet exploration missions. You also shouldn't be offered a moon's exploration mission until after you've accepted(but not necessarily completed) the contract for the planet that moon orbits. As an alternative, 3 star contracts could have a range of possible rewards, depending on how far you progress between accepting and completing them.

We need a way to track player skill besides what difficulty was selected, the obvious way to do this is to make reputation matter. Make reputation rewards for a contract depend on prior accomplishment/progression. If someone can get into orbit on the starting funds and parts, they should have an incentive to pick "escape the atmosphere" and "orbit Kerbin" over the "launch a craft" and "reach 5000m" as their first two contracts. This could be a vastly increased reputation reward, that would unlock "Explore Minmus" in addition to "Explore the Mun".

Similarly, completing a mission without a facility upgrade that makes that mission much easier should also carry a large reputation reward, like exploring Duna without upgrading the tracking station for patched conics. Another example would be the tracking station seeing asteroids at level 2, but only being able to track them at level 3, so asteroid redirect contracts would become available at tracking level 2 by reputation, or tracking level 3 by progression.

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Facility upgrades: I think some facilities should be cheaper in hard, and different facilities should be more expensive in hard. A hard difficulty setting should be designed to make individual missions more challenging, not slow down the overall pace of the game with grind. For example, the tracking center should be basically free after you reach orbit in normal and moderate difficulty, but should be more difficult to get in hard mode(perhaps a reasonable expense after a mun and minmus mission). Basic progression, like R&D facility should be proportional to contract rewards.

Kerbal XP: not much incentive to bring multiple kerbals right now. I think facilities should be cheaper to upgrade as you level up kerbals with skills relevant to that facility, like a scientist for R&D, or an engineer for the VAB. This should be a big enough discount to warrant bringing extra kerbals along on difficult missions.

Strategies: Outsourced R&D is still overpowered, though somewhat hidden by the facility upgrade costs. I'd like to see strategies balanced so that each one is useful in at least one situation.

Essentially, I don't want hard mode to be grinding a lot, I want it to be something where you run into situations that make people say "You're insane for attempting that, and awesome for succeeding."

#### History

### #1 - 07/17/2016 09:27 AM - TriggerAu

- Status changed from New to Needs Clarification

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