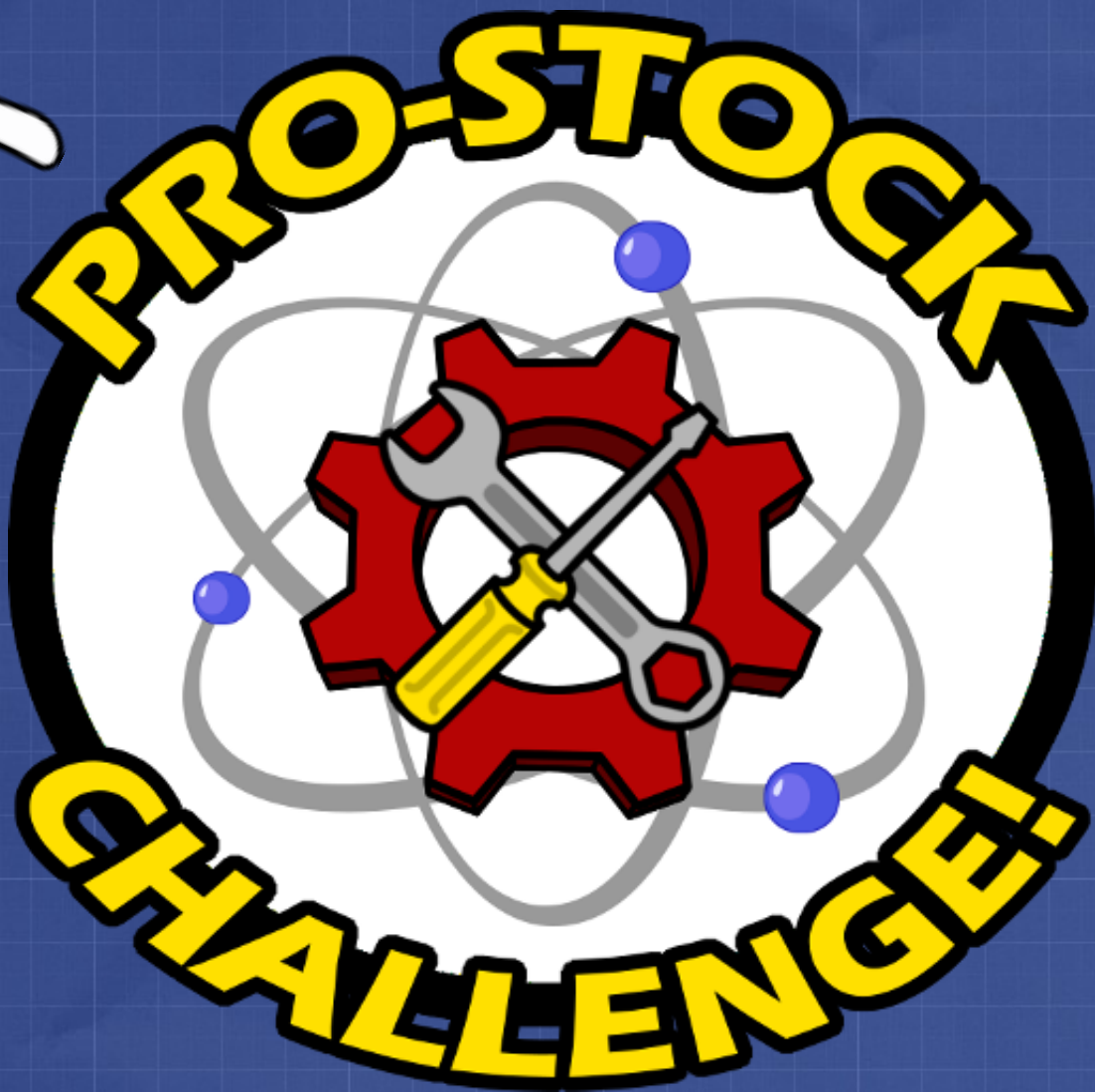


Iss Not Compilcated!

Untech Engineering Manual #222

History and Evolution of Pro-Stock Designs



**Untied
Technologies**

The Pro-Stock Challenge

So. You think your space program has the Right Stuff?

No, I mean REALLY... Does your space program have the right flippin' stuff!

Well, if you think you do; that's GREAT!!! Your challenge is to:

Unlock the entire Tech Tree using nothing but your own "Pro-Stock" hangar of craft and subassemblies

Victory Condition

Your 4 starting Kerbals must survive the ordeal. As for any of your other brave recruits? Meh, some sacrifices may be required in the grand name of space exploration and science. ...and to achieve the greater glory for all Kerbal-dom ...and to boldly munch snacks where no Kerbal has munched snacks before! <zoom, zoom> <queue soundtrack> But their death shall not be in vain; for we will name the next piece of space junk we launch (or try to launch) into orbit after them. <sniff, sniff> ...as a lasting memorial to their supreme sacrifice. <dramatic tear> In the process, the entire Tech Tree will be unlocked. So, it's all good! <big smiles>

Your Main Goals

- Minimize:** Time Required to Unlock the Tech Tree
- Minimize:** Total Number of Pro-Stock Craft and Subassemblies
- Maximize:** Credits Upon Completion
- Maximize:** Reputation Upon Completion
- Limitation:** The 4 Kerbals you start with must survive!

So what's a "Pro-Stock" craft?

As you know, the game comes with a certain hangar full of "Stock" craft that no self-respecting space program administrator would ever bother to look at in the hopes of actually learning something valuable. So in light of the perceived worthlessness of such "Stock" abominations... We're gonna just toss em all out and make our own. <bigger smiles>

"Pro-Stock" is a craft or subassembly design that you have thoroughly vetted and deemed worthy to put in a place of high honor and future reference for the next career you decide to kickoff

<brief pause while asking, "Alexa, what is vetted mean?">

Yes, your thoroughly vetted designs are such a triumph and asset to the development of your early space program that you will no doubt be using them over and over again to unlock the mysteries of science and look wide-eyed into a bright and hopeful tomorrow! ...more likely, if your SSD crashes or save game corrupts you can maybe get back to your bling-bling career fleet a little quicker next time? Anyway, that's the idea, it's your own optimized, specialized, hangar of "Pro-Stock" elite designs that you can enable with a checkbox setting at the start of any new career to conquer the tech tree as fast as possible.

Rewards and Eternal Lasting Glory!

Really now, an optimized hangar of "Pro-Stock" craft and subassemblies is a pretty cool reward in and of itself. Do you not agree? Actually though, the real reward would be granted to whomever you should choose to share such brilliant designs with!

However, in the further interest of shameless self-promotion and colorful (but annoying) signature decor... Your name and scores will be posted to the highly esteemed "Pro-Stock Leaderboard" bestowing upon you all applicable bragging rights and privileges including a nifty "Pro-Stock" badge to proudly display for all the forum to longingly gaze upon until they purposefully seek you out in order to continually bask in your enduring splendor with faint hopes to study in the shadow of the Master.

...or to hide your annoying signature; one of the two.

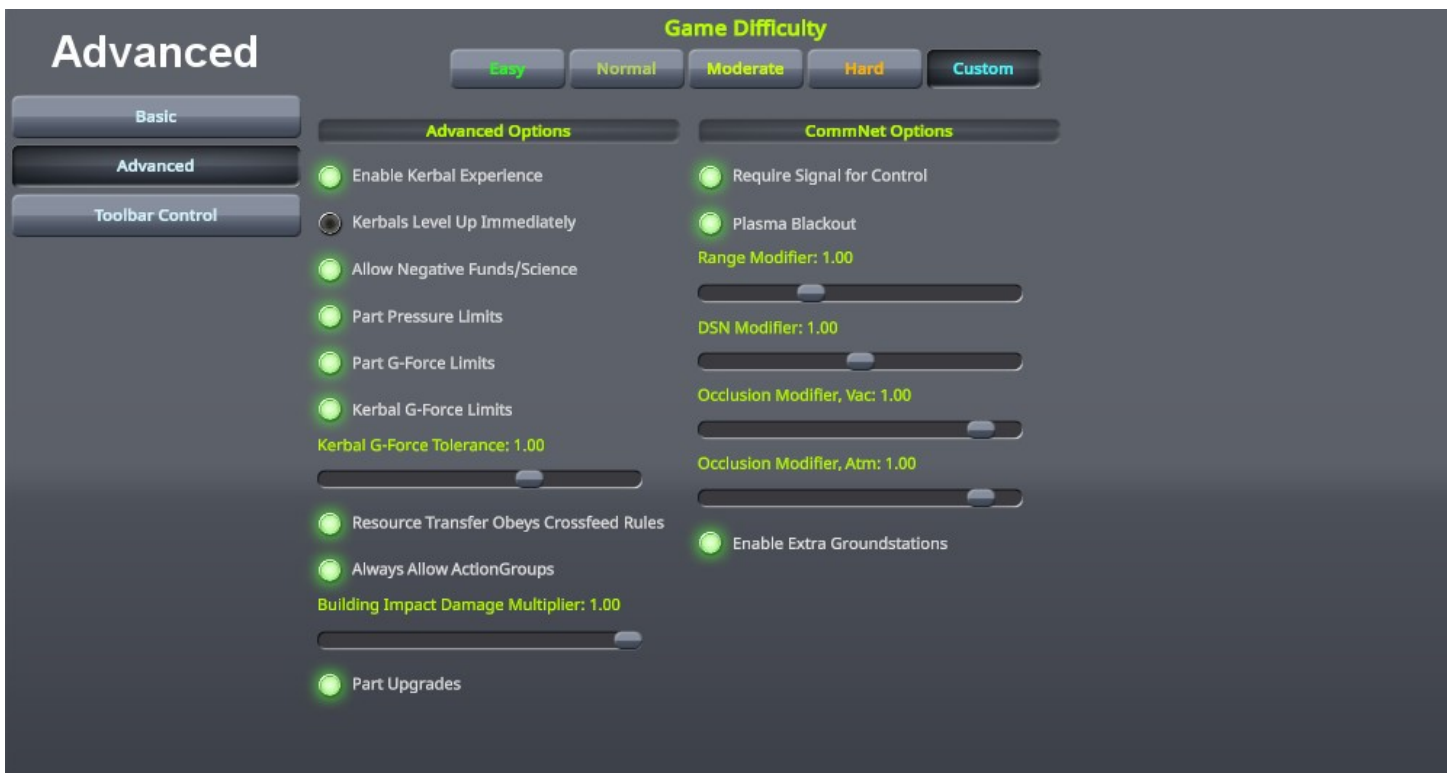
Setup:

- Remove all default "Stock" craft from the KSP root "Ships/SPH" and "Ships/VAB" directories
- Add your Pro-Stock craft to the root "Ships/SPH" and "Ships/VAB" directories
- Start new career with Basic and Advanced game difficulty settings as shown below
- In your new save game, add your Pro-Stock subassemblies to the correct folder

In Basic settings, stick to a standard 1.0 multiplier for every slider. Allow a few QOL settings (Reverting Flights, Quickloading) because you know you'd just be saving the game anyway. Include stock vessels should be obvious. Other launchsites are a good thing and we are starting with all zeros for Funds, Science, and Rep.



Advanced settings; the 1.0 multipliers again. Always allow action groups is fine since you probably build them in sandbox anyway and the action groups will just work for prebuilt craft regardless of what we choose here. Might as well have it available.



An Additional Important Detail or Two

Allowed:

- You can only use your unlocked Pro-Stock designs
- BG and MH DLC parts are allowed to be used in your Pro-Stock designs
- You may ONLY add “Science Parts” to your Pro-Stock designs
- While a “Part Test Mission” is active, “Test Parts” are magically considered “Science Parts”
- You may add Pro-Stock Subassemblies to any Pro-Stock craft at design time, but they have to connect without the addition of Non-Science Parts
- Pit Tuning is allowed

Pit Tuning:

- Tuning adjustments are allowed at design time in the SPH or VAB
- You may adjust quantities of liquid fuels and other consumables
- You may adjust engine size and/or thrust
- Any other “right-click” part settings you may wish to tweak on your Pro-Stock craft
- Deployable equipment may be added or removed from containers
- Existing fairings may be freely edited as needed (but you can’t add one)

Prohibited:

- You cannot add “Non-Science Parts” to your Pro-Stock design
- You cannot remove ANY parts from your Pro-Stock design
- Craft file text script editing of ANY type is prohibited
- Containers that hold science and equipment are not “Science Parts”
- Antenna and relays are not “Science Parts”
- A “Science Part” is a “Science Part” it produces: Science
- Only exception is when a part gains “Ohhh Sciencey!” while a Part Test Mission is active

Mods:

- **Mod Rule #1: If it makes the challenge harder, then fine... Go ahead!**
- **Custom parts or mods that change default part settings are generally not allowed**
- **KAS/KIS parts are OK** (EVA part welding follows the same Pro-Stock rules though, only science parts)
- **Mods are OK if related to: User Interface, Graphics, Aerodynamics, Display Info, Realism, etc.**
- **Mods are NOT OK if changing: the tech tree, strategies, contract and/or science payouts**
- **If in doubt, refer back to Mod Rule #1**

Completion:

When you unlock the last Tech Tree node, post the following:

- Career Year-Day of completion
- Number of Pro-Stock designs in the SPH
- Number of Pro-Stock designs in the VAB
- Number of Pro-Stock designs in Subassemblies
- Credit balance at completion
- Reputation at completion
- Which Tech Tree node was last to be unlocked?

Sponsors:

(optional)

Anything put into orbit at the request of a corporate sponsor should be named for that sponsor. As I play career games I look very fondly upon my orbital installations that share the names of multiple contract mission sponsors.

Memorial:

(optional)

If a poor Kerbal should happen to meet their demise, the next unsponsored orbital installation should be named in memory of our dear friend(s) who made the ultimate sacrifice. This seems to help me personally get over the guilt and tragedy. ...boldly forging ahead without having to load up a save game 3 missions ago!

Unimportant Stuff

Part Clipping:

Use your own discretion, but try to be somewhat reasonable while still having fun with your craft designs. I tend to frown on things like blatant stacking of: engines, fuel tanks, passenger and crew cabins, machinery, storage space, etc... just to gain extra fuel or power.

However, do what you need to do to make your designs look decent and be fun. Sometimes you can't help it with fuel-filled wings clipping into a tank or robotic pistons clipping into something. Alternatively, I typically look at empty nosecones and fuselage parts as "Open Space" where I am free to fill them with whatever other part(s) I want. Ultimately, these designs are for your own use anyway so have fun.

Progression:

I suspect that people will want to start playing the challenge before they have a fully vetted "Pro-Stock" hangar of craft ready to go. In which case, feel free to post pictures and links to your favorite "Pro-Stock" designs as you play it thru and build-up your hangar. I don't have my "Pro-Stock" hangar done yet, so I have to put myself in this category. ...maybe perpetually?

Considerations:

- In theory, if you have completed the tech tree in a career game, you have already built the craft to complete the challenge at some point. So why is it difficult now?
- If at any point, you use the "Revert" option due to some blatant design or staging flaw... Can you really say the design was fully vetted. That's not "Pro" GO FIX IT!
- Could two Pro-Stock craft or subassemblies working together eliminate the need for a third design?
- You might need some carefully crafted subassemblies to successfully deploy different stations and relays
- Choose carefully when you accept and complete Part Test Missions they are "Magical" while they are active
- Accepting missions with no intention of completion could (at times) be a valid strategy!
- Should my Pro-Stock craft include equipment test mounts?
- Should my Pro-Stock designs ever include Science parts?
- Time Acceleration Optimization - Can I plan and manage multiple missions within the same timeframe?
- How long before a given Pro-Stock Craft really becomes obsolete?
- Do I need to pay for access to every unlocked part?
- Can I find other creative ways to optimize recovery costs?
- Can I accelerate or multiply science research?
- Could different Active Strategies help?
- If you actually created a separate directory to store the original stock craft the game came with:
Hang your head for a moment in personal shame! (but rest assured; I did the same thing)

Do you have what it takes to earn the coveted:

“Pro-Stock Badge-O-Gold”

