



PROJECT SHATTERSTAR



VOLUME 1 OF GUIDE TO THE ONI-VERSE

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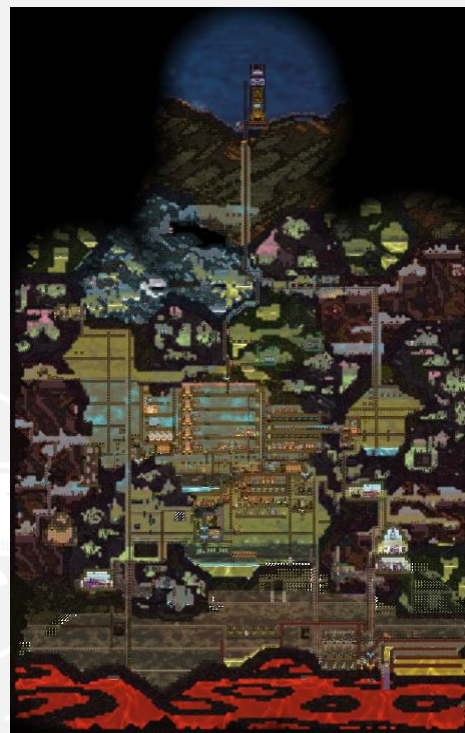
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OUT!

By-
the stormfather

CHAPTER 8 : One Small Step For Dupe.....







Cycle 215 (Main Planet)



Cycle 305 (Main Planet)

This chapter we make landfall on Chernobyl via rocket, a giant leap for dupe-kind indeed. This is only the beginning though. We have lots more to explore and colonize, for which preparation must begin now.

Highlights :

-  We set up a temporary base on Chernobyl
-  We set up a tube network on Neo Terra
-  We build a new explorer rocket
-  We make a bunch of improvements and repairs`

<https://linktr.ee/Stormfather>



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Disclaimer-

Oxygen Not Included is a sandbox game limited only by the player's imagination. I can assure you that no player (including me) has figured out the 'right' way to play the game.... No matter how many hours they may have put into the game.

That's because there is no right way. What you do depends on what you want to achieve. Some love building ridiculous and elaborate builds, while others are more efficient and practical. Both are perfectly acceptable ways to play. What matters is that you enjoy what you do.

The following document is a guide and not a gospel. Like every other player, I have my unique style of play. What I intend to do is to share my playstyle and start a conversation with the community. This document will take you through a real and typical game, showcasing my approach to things. The playthrough will not be perfect. But it will be enlightening and entertaining. I hope my readers will use this series to modify their own unique style rather than copy mine.

Feel free to skip, ignore or modify any of the recommendations given in the series.

All Game art has been taken from the game files and is the property of Klei (if that wasn't obvious enough). I've used them only to make the document more engaging.

While this guide is quite simple, It's not meant to spoon-feed you. You may have to do a bit of additional research if you are a new player, and I'm happy to answer any specific questions.

The easiest way to find me is on Reddit. My handle u/Storm-Father. Please feel free to drop me a message or tag me in a post.

The series will use the following mods. These are quality-of-life mods and do not affect core gameplay

- | | |
|---------------------------|--|
| ● Wounded go to Med bed | ● Geyser Calculated Average Output tooltip |
| ● Per-planetoid materials | ● Critter Inventory |
| ● Blueprints fixed | ● Queue for Sinks |
| ● Pliers fixed | ● FreeCamera |
| ● Bigger Building Menu | ● MaterialColor |
| ● No 'Long Commutes' | ● Show industrial Machinery Tag |
| ● Suppress Notifications | |

Game Coordinates – 'SNDST-C-360860549-0'

The Sweet Dreams Update will apply from Chapter 9



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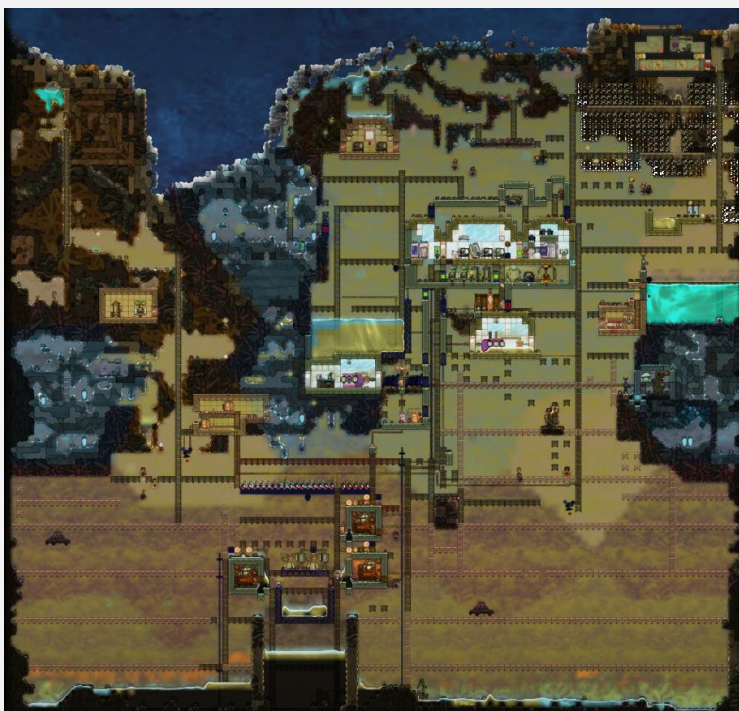
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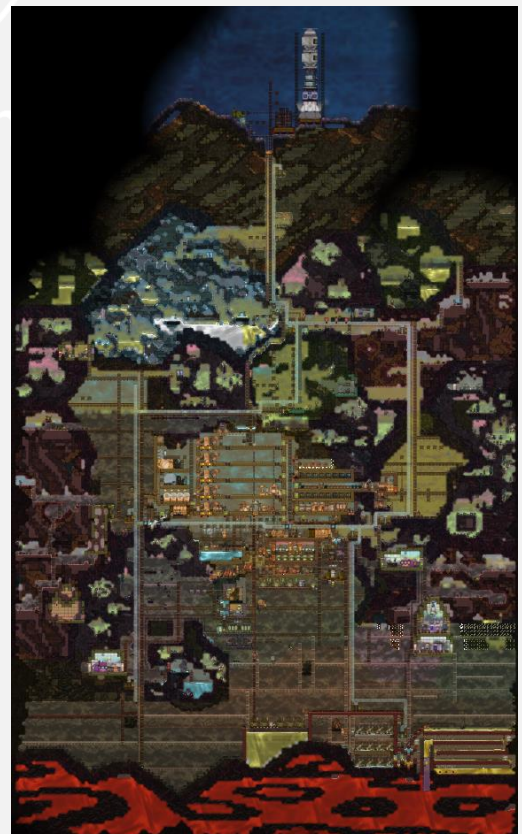
The Starmap



Petra



Neo Terra



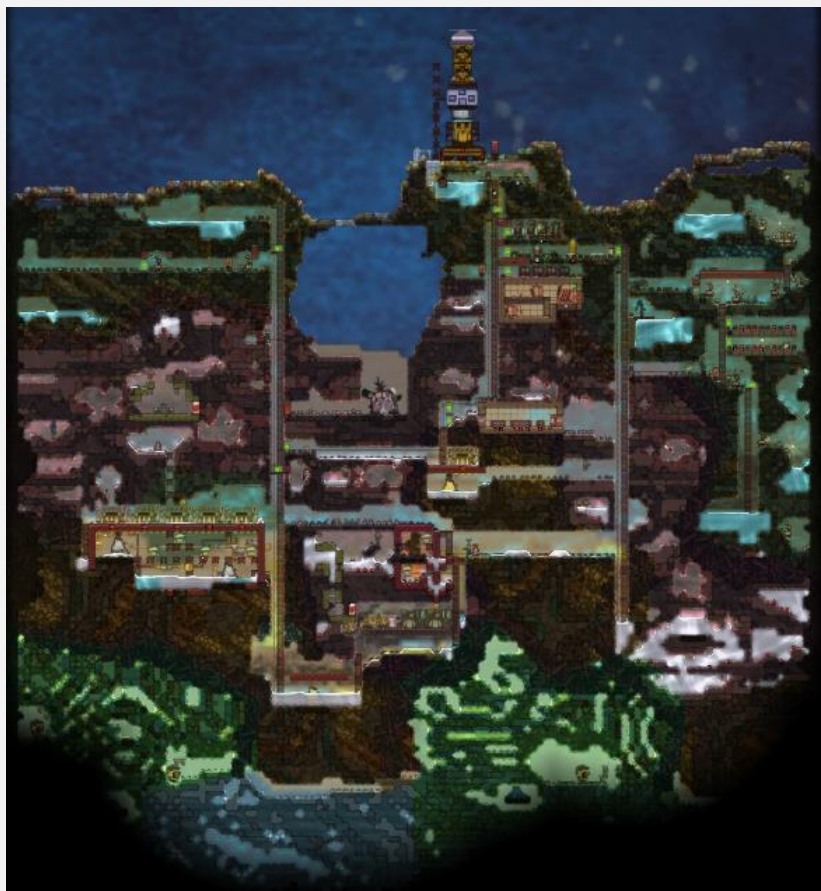


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Chernobyl

1) Rocketman

We launched our first rocket into space this chapter, marking a pretty large departure from my standard playstyle. Since I got into the game back when spaced out wasn't a thing, My instinct has always been to sort out my home planet first and treat space exploration as some sort of endgame ritual. But in its current avatar with the Spaced-Out style asteroid system, essential materials are scattered across the stars and space competence has to become more of a mid-game phenomenon.

Also, even in previous games of spaced out, my first rocket has always been a CO2 rocket or a sugar rocket (I prefer the sugar rocket). But this time I opted to jump the queue and go straight for a rocket with a small petroleum engine. I went this way because I had an abundance of petroleum and setting up a petroleum pipeline to the surface was something I would have done sooner or later anyway.

My point is, use whatever rocket platform makes the most sense to you. Just understand that there are advantages and disadvantages to each. For example, the small petroleum engine has greater power and allows for more modules... but on the flip side, it does take more planning to set up properly.



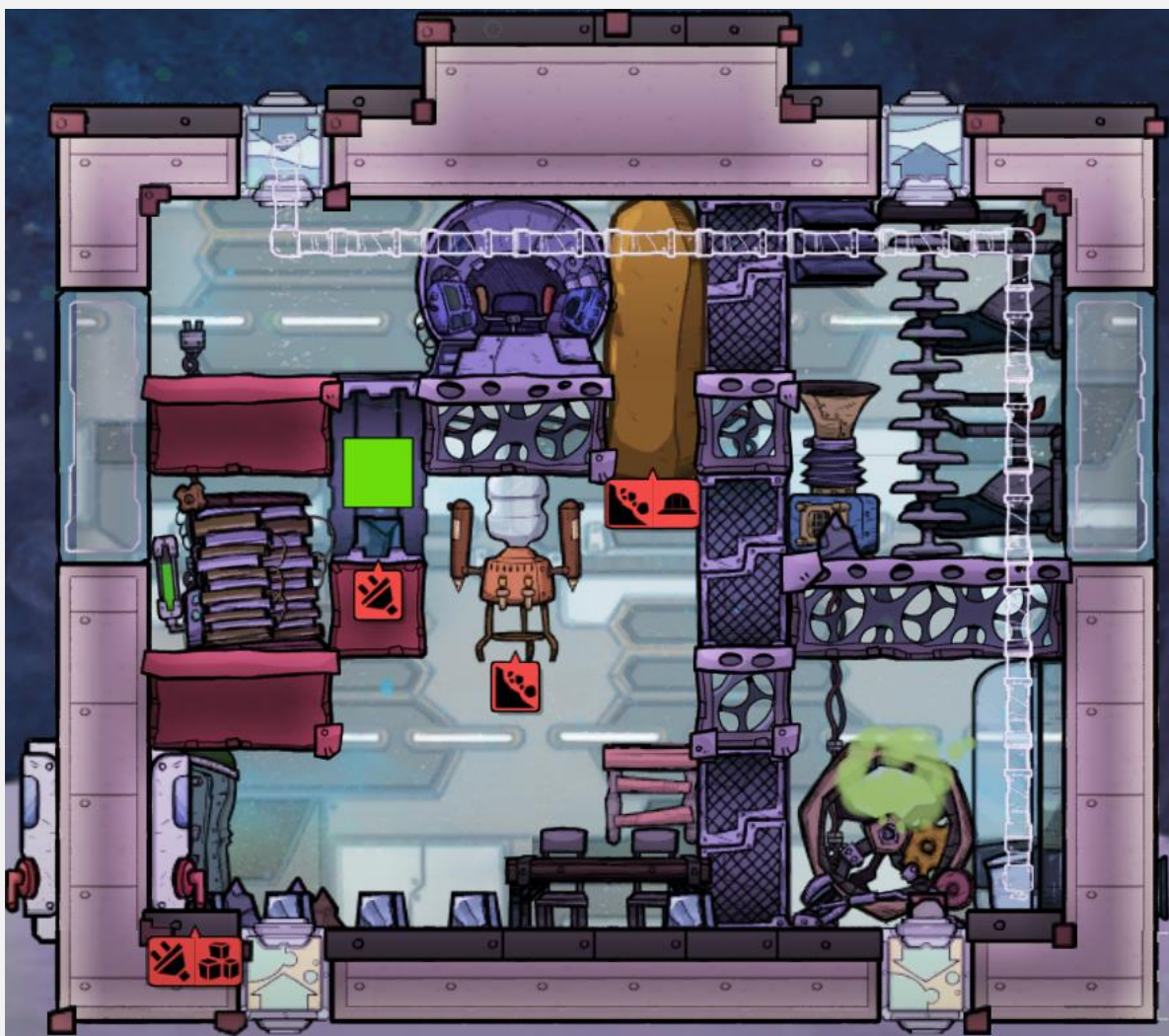
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The rocket in itself is very simple. As a general rule, it's important to keep the rocket's use case in mind when planning a rocket's modules or internal layout. Here, the rocket is simply to take dupes to a planet that is less than half a cycle away, for the engine it has. So dupes would not really even need beds, food or even a mess table to make the journey. Heck, they could even survive without an oxygen supply if their atmosuits were at max oxygen supply.



However, I'll need some food reserves to sustain my duplicants on the new planet, and I may end up using my rocket as a home base instead of building one on the planet itself... so I ended up with a more overbuilt setup, which is still very simple and easy to build.

The rocket has a manual generator and battery to provide oxygen. Rockets have their own special type of toilets that only take in water but don't have an output. You can add a hand sanitizer, but I've found it to not be too useful.



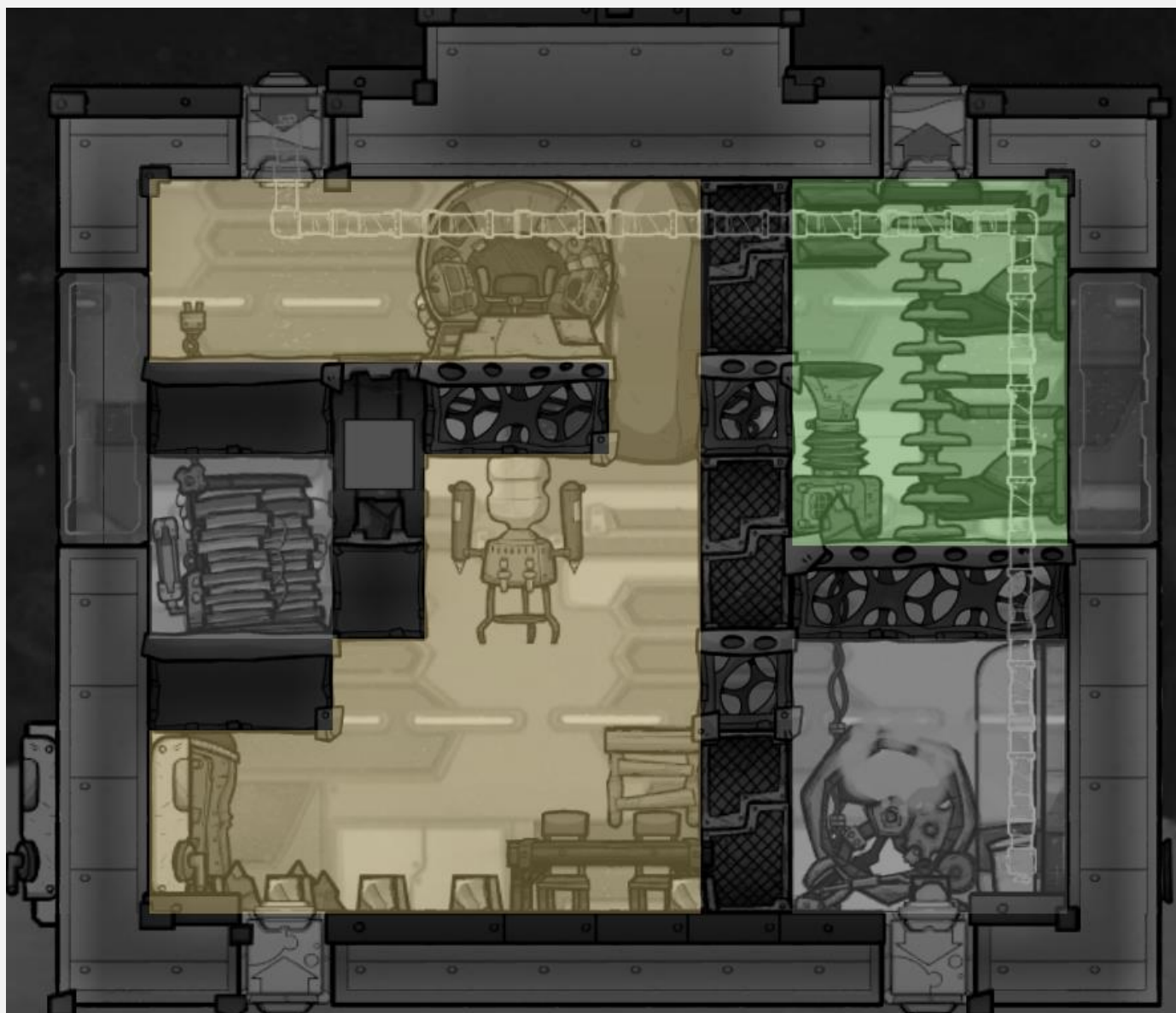
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You will notice though, that we have a barracks and a great hall, which is great for morale. You'll notice that the sculpture and the water fountain are both seemingly floating in mid-air and are inoperable, but they still contribute to room bonuses. Some might consider this cheating, but I find it to be a great hack for rocket building. You can build whatever building you like and then deconstruct the tiles under them if you just want them for room bonuses and not for any actual utility.

You'll also notice that the rocket currently does not have a way to deal with waste CO2. That's a problem for another day.



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On the external side, we have an engine (which has liquid fuel storage built into it), a solid oxidizer tank, and 2 trailblazer modules (which are essential for making landfall on a new planet). With 2 duplicants loaded in, we set course for the planet Chernobyl.



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2) Meet the trailblazers -



Colonizing a new planet from space is simple in ONI – put your dupes in small pods and launch them onto the planet's surface. The game does have automated rovers that can be sent instead, but they have their limitations, such as the fact that they can't build rocket platforms and they don't last forever. Besides, launching dupes from low-orbit ODST-style (shoutout to all 'Halo' fans) is just more fun, and pretty safe if done correctly.



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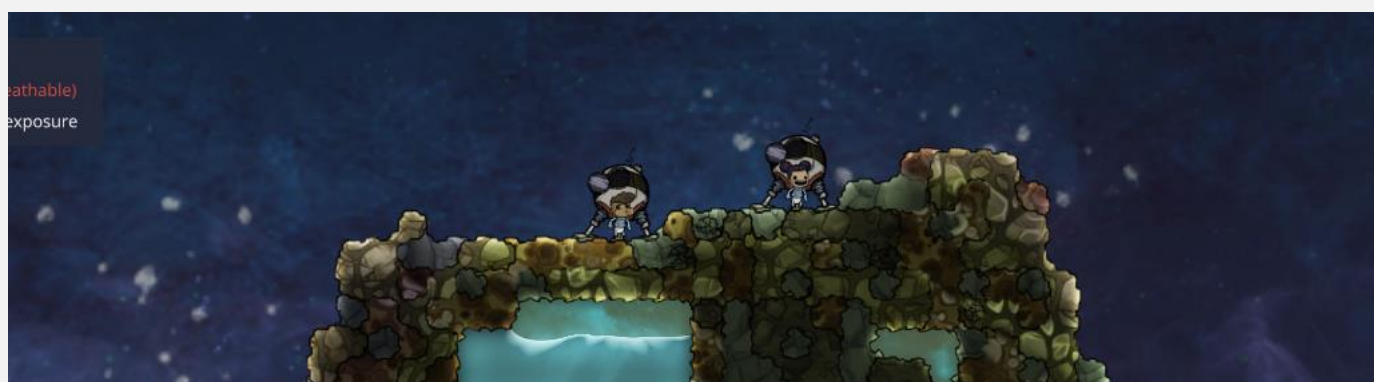
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The reason we need Trailblazers is that we need a rocket platform to land a rocket on the planet, meaning something or someone has to build one for us. We not only need a dupe on the surface but also need the refined metal required to make a rocket platform.

While this is by no means the only viable way, I find the best way to make a rocket platform is to use 2 trailblazer modules. This gives us 2 duplicants to work with. In addition, trailblazer modules are made of 400Kg of refined metal, meaning that deconstructing 2 modules will give us 800 Kg which is what a rocket platform needs. So you launch 2 dupes onto the planet, build the platform and land the rocket. Once you have a rocket on the planet, you'll have access to whatever supplies your rocket has in it. **Just make sure both trailblazer modules are made of the same refined metal.**



Just a few things to keep in mind though. Trailblazer modules are dangerous. The surface has no oxygen, for one thing. You can launch your duplicants without atmosuits but I find that to be VERY risky and I would not recommend it. Note that in the above screenshot my dupes are wearing atmosuits, but there is currently a graphical bug that makes it look like they aren't.

How do they have atmosuits when my rocket does not have atmosuit docks? We'll you can assign suits by duplicants manually, where they will pick up suits off the ground and wear them. Just make sure that these suits have been docked and filled with oxygen before you drop them off inside the rocket though... empty suits will not help you.

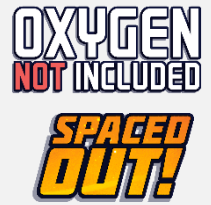
Also, keep an eye on the durability if you have duplicants come into the rocket wearing atmosuits and have them take it off once inside the rocket. Sometimes these suits will drop as 'worn atmosuits' which will be useless for trailblazing. If you're particularly paranoid, keep a spare suit.



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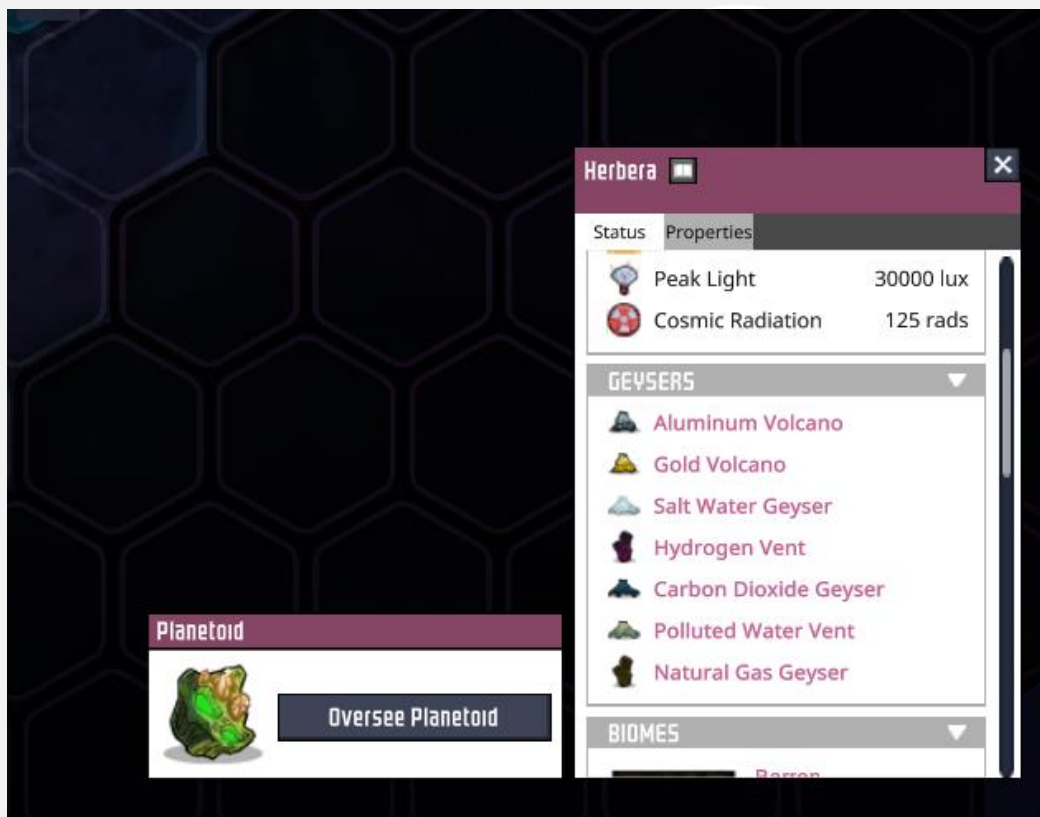


But the sequence is pretty straightforward and applies to all future planets you want to colonize –

- Land 2 trailblazers
- Deconstruct the modules
- Build a rocket platform
- Land the rocket
- Build ladders to access the rocket

3) Terraforming Chernobyl –

We spent about 60 cycles on the planet of Chernobyl, and we've dug around a bit. My time on this rock hasn't been as efficient as I would like, but It's been good enough for the stage of the game we're at. We ended up getting another 2 duplicants on the planet to speed up progress.



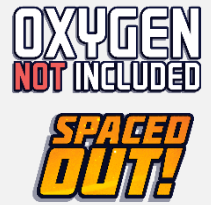
First of all, always click on any new object on the star map. It gives you an excellent idea of what the entity has in it. Chernobyl (Or Herbera as it's supposed to be called) has a bunch of geysers and biomes on it, that are listed here The peak light also tells us that



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Solar panels are a viable option for power. I have no glass so I can't do that, but there are alternates.

I know for a fact that the planet has hydrogen and Natural Gas geysers somewhere on it, so tapping those will sort my energy needs in the mid-term (Manual generators are the way to go in the short term). I can also see that there are gold and aluminium volcanos, which will help with my refined metal shortage. I can also see that the planetoid has no Iron, meaning that my steel production plans will need to wait even longer.

The biomes tell me that we have uranium on the planet, which is good to know. We also have favourable temperatures to grow food there, with several seeds available on the planet... though algae for oxygen production may be in short supply,

Always check your planet before you start your journey so that you're able to ensure you have everything that you need to set up a base.





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The full planet has been explored, and all volcanos have been opened up, meaning that we now have a constant supply of gold and aluminium for the rest of the game. Gold volcanos are the mildest of all volcanos, so I've not really bothered taming them. Aluminium on the other hand is a very harsh volcano that outputs a lot of heat per cycle. While I do not have the resources (ie steel) to make proper tamers, I've enclosed them and put steam generators for heat deletion. I also added some auto sweepers and rails, but the buildings overheated and I've disabled them. The aluminium will continue to collect in the tamer, and I'll take it out sometime later when I can. The concept of using steam turbines for heat deletion is a core mechanic of the game for ONI and I suggest you look it up if you're not very clear on the concept.

For energy, we've tamed the natural gas and built a system very similar to the one on Neo Terra.





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4) Bare Necessities –

Let's discuss the bare necessities of our duplicants on Chernobyl – food, oxygen and morale.



For food, we plant a bunch of mealwood. All my duplicants have lower morale needs as compared to Neo Terra, to ensure that they don't get stressed out.

Importing and storing higher-quality food from the main planet is more trouble than it's worth at the moment, so I'm happy with this setup. Temperatures are good and there is plenty of dirt on the map.

For morale, we have our usual setup of rooms. We have a barracks, a great hall, a latrine (We will build plumbed bathrooms at some point) and 3 nature reserves.



Oxygen though is another matter. Atmosuits require a lot of infrastructure behind them. You need refined metals to make them, reed fibre to maintain them, and fresh piped oxygen to run them. Refined metal is available in plenty and I can import some reed from the main planet, but piped oxygen is a problem. Unlike Petra, I don't have teleporters here to instantly transport materials from one planet to another. I also have not yet set up a renewable source of water, and a sustained source of cooling, both of



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which are prerequisites to building a Rodriguez, in my opinion. I can make a piped oxygen setup with oxygen diffusers, but those are not as clean and I'm not fond of them.

So for now, I've added diffusers all over the map to keep oxygen levels to acceptable levels. I also have a water lock at the entrance of the planet, that locks the gases in, but allows duplicants free access to the rocket.



On an unrelated note, I store my food in a vacuum to take advantage of the sterile atmosphere. Since the food is only refrigerated and not frozen, it still spoils, but much slower.

Unfortunately, this means here my duplicants are prone to skin irritation due to pockets of hydrogen and chlorine, are constantly out of breath, and have soggy feet all the time. But they got the job done. **By cycle 279, all 4 duplicants on the planet had packed up and left for Neo Terra.** Will send rockets back and forth if I ever need more gold.

5) Life on Petra –

Though we technically have a presence on 3 planets, most of our game still revolves around the main planet of Neo Terra. Petra, for example, now only has 1 duplicant on it.

Petra's role is simple- Supply crude oil and lead to Neo Terra. One duplicant can easily do this job, while also having enough time to do a bunch of digging around the place.

There are only 2 major changes from the last time we took a look at Petra. One is that we've tapped into the natural gas geyser and added it to the existing natural gas network. At the moment we do not have an infinite storage set up yet, but we'll do that soon enough. The geyser is currently dormant but will be active in about 15 cycles. At the moment Petra is facing a pretty major shortage of natural gas, as the waste gas produced by the oil wells has not been enough to sustain the planet. Luckily, we have a backup of coal power in place.

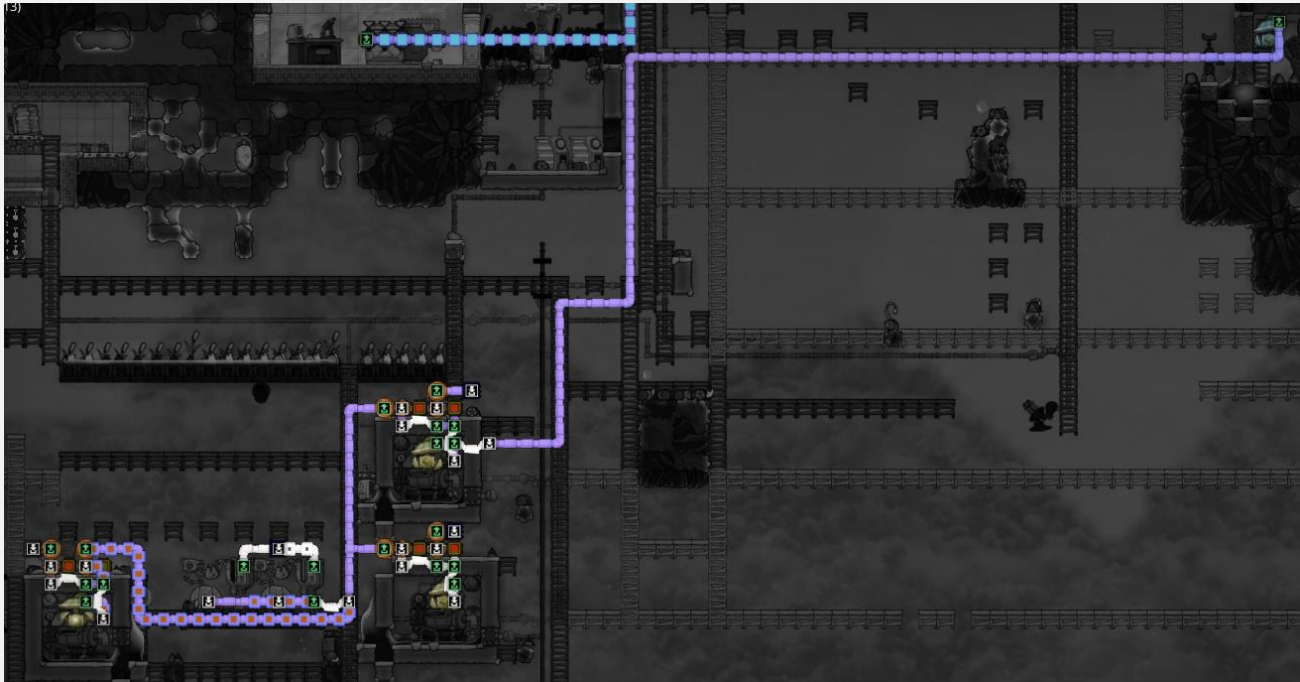


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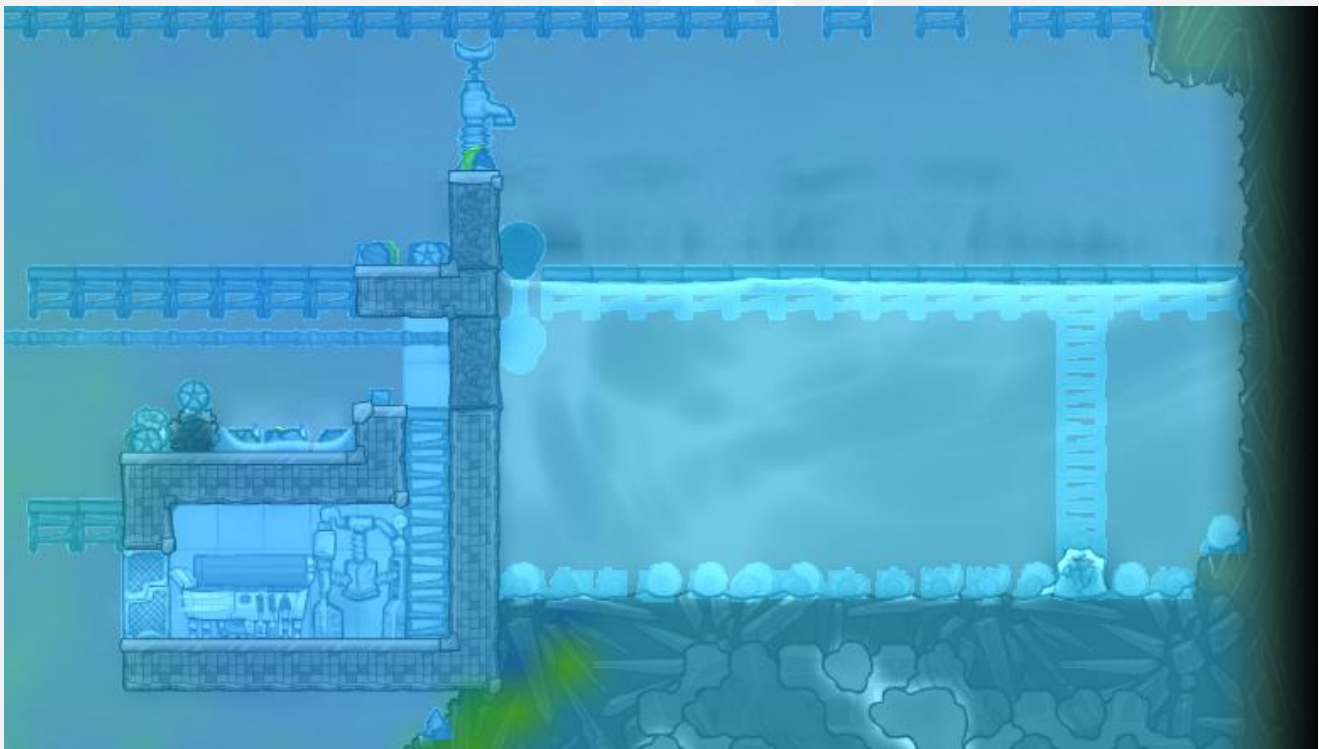


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Just want to take a moment here to emphasise how important backups are, especially for critical systems. If Petra runs out of power, the flow of crude stops, which not only stops the production of petroleum but also breaks the boiler on Neo Terra. This is the price of an interconnected system – If one thing breaks, everything does.





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The other is that we are almost done collecting all our ethanol into a common pool. Ethanol has some uses, but has a low boiling point and is practically useless as a gas. So best to collect and store it in a place that doesn't get too hot.

6) Taking the tube-



The tube network is a system that if implemented correctly, greatly reduces duplicant travel time. Think of it like a metro system, minus the tickets and queues. With transport currently occupying 50% of our duplicants time, this upgrade will increase our working efficiency greatly.

I did say 'if implemented correctly' though. Because the tube network is not magic. For one thing, it takes a lot of power. Every dupe that enters the tube consumes 10kJ while exiting the tube is free. So never set up a tube network unless you have the power infrastructure to back it up. I have 5 petroleum generators and a few natural gas generators on top of that, so power is not an issue for me.

The second issue is pathing. Dupes actually get pretty fast as they level up in athletics. In fact, a maxed-out duplicant can climb a plastic ladder faster than a dupe can travel in a tube (all duplicants in tubes travel at the same speed, irrespective of their stats). Now, a duplicant will take whatever path is the fastest for them. So if you do not set up the entry and exit points for your network correctly, you'll find that your duplicants may ignore the tube altogether and just climb instead.

Where dupes are slower on foot and are transitioning from one ladder system to another. If, for example, your dupe has to get from one end of the map to another where the path is not a straight line and involves moving from one ladder to a platform to a ladder and so forth, a tube network would help.



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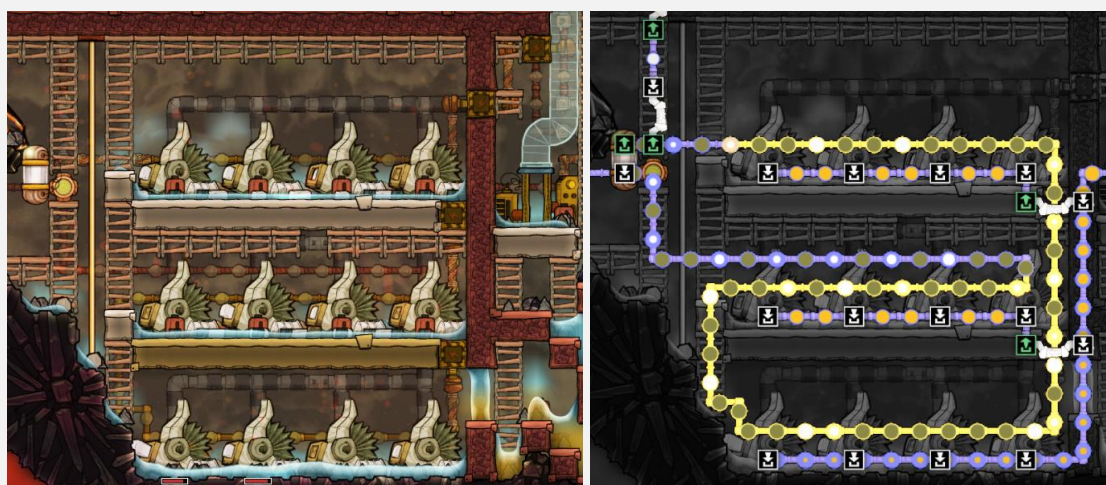
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So what I like to do is have a single interconnected network for the whole planet, to cut down on any transition time. Here you can see that I have a tube that runs through my base to connect the left and right sides of the network, which greatly cuts down on time.

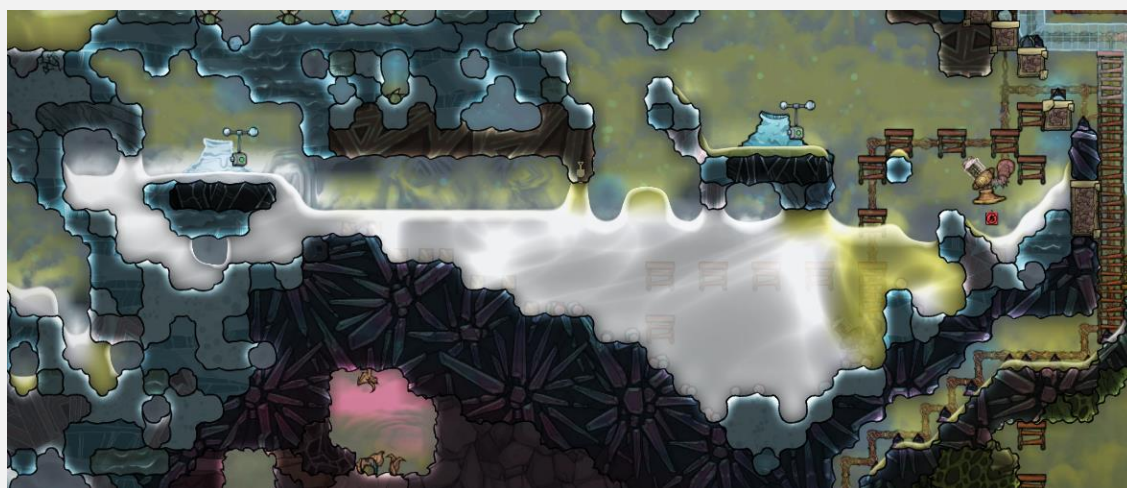
I also add a significant number of entry points. Since the tube uses power only when used, there is no penalty for creating as many stations as possible (assuming you have the refined metal for it).

7) Plastic cooling and saltwater refining

If you remember from previous chapters, our old Plastic setup was a bit of a mess. 75% of the presses had overheated and we didn't have the steel to make a proper steam room like I usually do.



We still don't have the steel, but we do have plenty of cold water and we're going to use it. We have 2 vents, salt water and polluted water, both of which are cold and will be used for cooling. We take a pipe from the geyser and divert it to the plastic press box, with an infinite loop that circulates the water till it reaches 90 degrees. If you want information on infinite loops, then check out my Academy Not Included series.





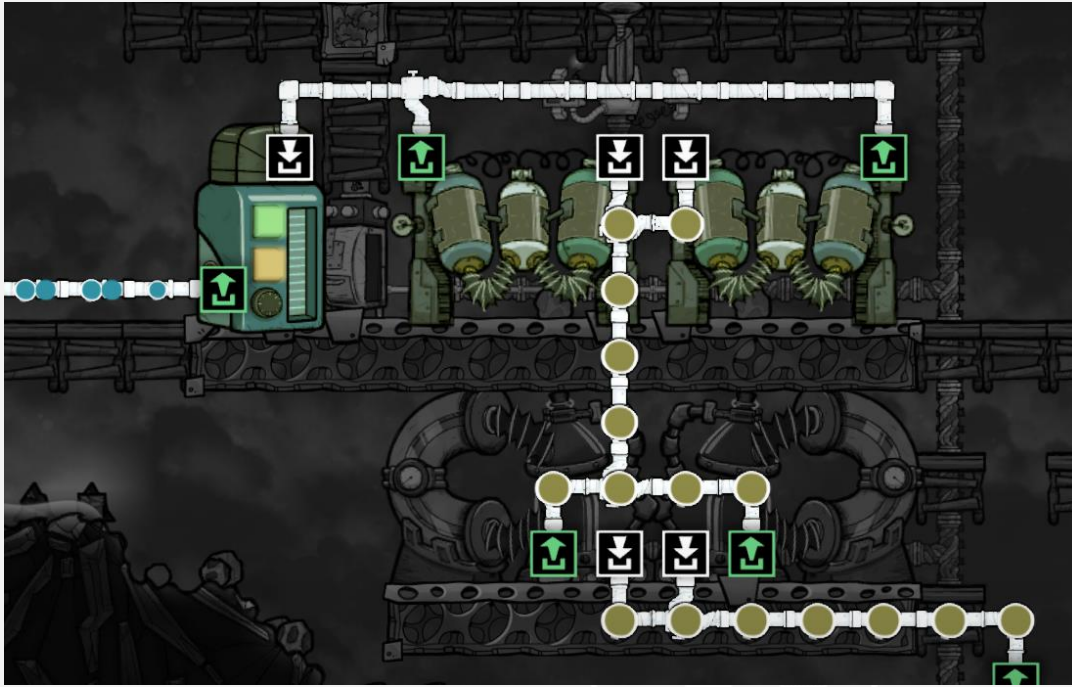
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A side effect of the modifications is that the output of the cooling loops now has both salt water and polluted water. We now have 2 sets of refiners, one for saltwater and sieves for polluted water. These buildings do not get damaged when the wrong kind of water flows through them, so it's a fairly simple loop.



The automation ensures the buildings only run when required, while also maintaining a strategic reserve of water if required.

8) Base Check –

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Our main base was getting overpressured with oxygen, which happens sometimes due to ONIs gas vent mechanics and pockets of CO2 gas, so we added atmosensors and some basic automation to make sure that didn't happen again.





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We also had a bit of an issue with our petroleum boiler. In my effort to make it compact, I didn't make it foolproof. Looks like a small amount of petroleum spilt over to the left of the petroleum pit, and fell straight into the lava, flashing into sour gas. Once there is gas in the boiler, the whole system begins to overheat, which is obviously a problem. Fortunately, we caught the problem early enough and put a few gas pumps to work. We also sealed off the heat spike so that this doesn't happen again.

Apart from that, there has been a bunch of digging and reorienting, as required.

The following tech was researched –

- Transit Tubes
- Space Power
- Renaissance Art Technology
- Bioengineering
- Radbolt Containment
- Advanced Caffeination
- Improved Hydrocarbon Propulsion Technology

9) Comparison To The StormFather's Guide to the Galaxy-



Our gameplay has begun to converge in a way with SGG at this point. Apart from that at this time, we have petroleum, plastic and stable water and oxygen in both playthroughs.

We did have glass in SGG though, which we haven't bothered making this time due to the lack of a steam room, but we might have to make one going forward.

And let's not forget the fact that we have a presence of 3 planets this time, which is no easy feat. All in all, things have gone pretty well.



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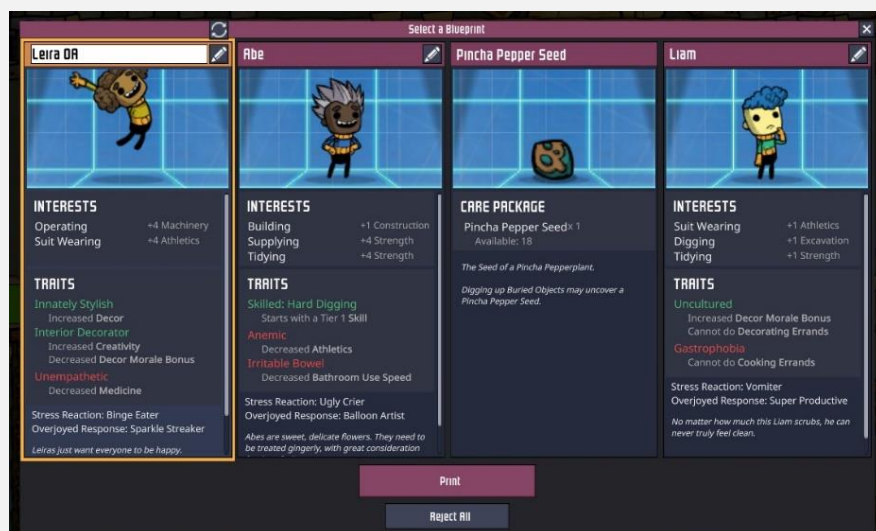


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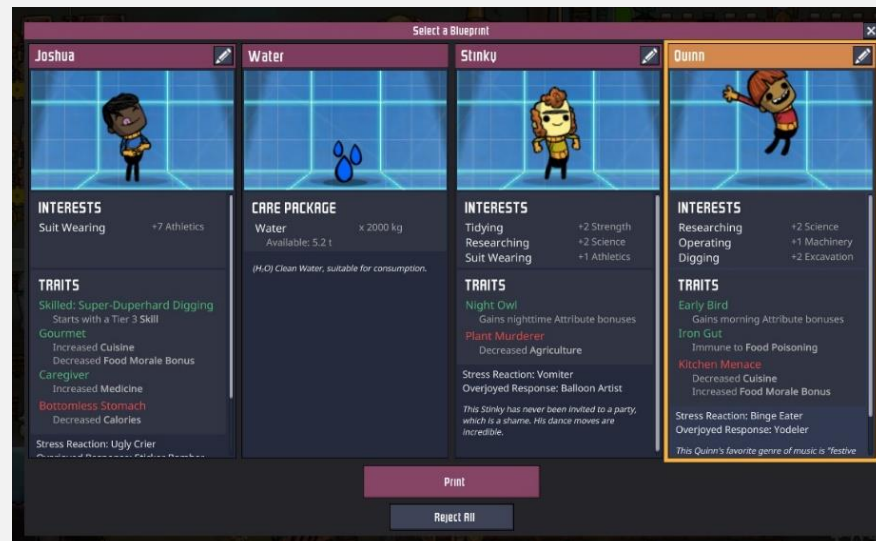


10) Meet the duplicants-

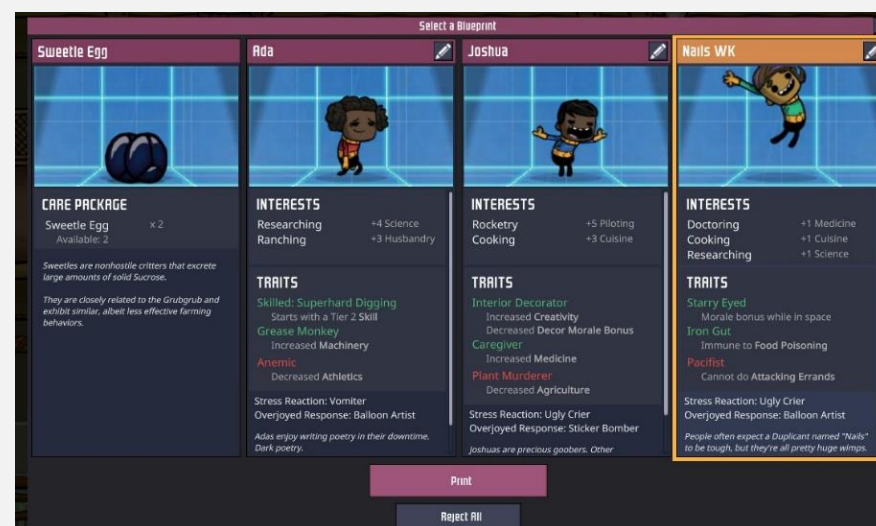
We've picked up 3 more duplicants this chapter, bringing the total up to 16.



The decreased décor morale bonus isn't ideal, but the operating and suit wearing is something I can work with.



Quinn seems to be a new character that's been added to the game. In this case, they have reasonable interests and their Kitchen Menace trait is actually a good thing.



Starry eyed will come in handy in the really late game. The rest of their traits are reasonable



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Author's Note –

Thank you for taking the time to check out Project Shatterstar. I hope this helps you to up your game. Each episode will be updated when necessary, so do keep an eye on the change history.

This series is a labour of love and an attempt to create quality written content. It does take up a lot of effort, though, so If you do like the work, please share and recommend it actively. You can also support me directly if you are willing and able.

There is always scope for improvement and new perspectives, so I encourage you to reach out to me if you have any specific thoughts on the work, be it good, bad or ugly. Reddit is the best way to get a hold of me. Do follow me there to keep up to date with the latest on what I do.

Check out the 'Stormfather's Guide to the Galaxy' and 'Academy Not Included', both of which are series that I built on Reddit. SGG is now scrapped, thanks to some complications when Spaced Out came out of Beta. But ANI will continue in some form or another.

Reddit is also the perfect place to point out any errors in the file. Due credit will be given to those who find errors or provide feedback that is incorporated into the file.

To check out any past or future work, or to support or follow me, do check out the following link-

<https://linktr.ee/Stormfather>

Until next time



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Change History –

Date	Version	Change	Credits
11 th Oct '22	0	New Release	-



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