

Satisfactory/Factorio Gauntlet

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v2.0a

Welcome, Jumper, to FICSIT Inc.

As a Pioneer, you will go to the planet Nauvis as part of Project Assembly. You will be assigned a Mission shortly, which you will accomplish by constructing automated resource extraction, processing, and construction equipment, and then creating logistic and power systems to feed and fuel that equipment. You may need to defend yourself and your factory from hostile natives, which you can do with the automated military equipment you will get the schematics for.

If at any point you die or lose all ability to progress towards mission completion, your contract is void and you will be terminated, receiving payment depending on achievement, as listed later in the document.

Your agent provided us with your information, but it seems she gave us a redacted version. Usually Miss Jumpchan sends us resumes with skill sections packed with supernatural abilities, but all we have of yours is completely compatible with real-world physics.

(This is a Gauntlet. Nails that stick up supernaturally high will be hammered down for this. No outside Items or Warehouse. If you die your chain doesn't end.)

The personnel budget is a bit tight right now, so your signing bonus is **+0 Construction Points**.

Drawbacks:

Fortunately, you have the opportunity to take on a more difficult or dangerous assignment in order to get Finance to give up some CP.

There is no limit on Drawbacks. However, once the sum from Wildlife, World, System, and Personal drawbacks reaches 2000CP, any CP gained past that will be worth half its face value. (Mission pay does not contribute and is not affected. It's tracked separately by Finance for various reasons.) Companions also automatically take the same Drawbacks, except for Personal Drawbacks.

Missions

See, you're going to have to provide some goods to get out of here. Select one {Level 1} Mission to take. You'll send the goods up via Space Elevator. Or Elevators, if you want to do it fast, since each elevator can only deliver 120 items per load, and can deliver once a minute.

{Level 1} Mapping Program (+100 CP)

We are expanding our operation to millions more planets. We will need 12,000,000 orbital probes to complete this operation. These orbital probes cannot be used for mapping Nauvis. Once you send stuff up, it is out of your control.

{Level 2} Map the Stars (+100 CP)

The Surveying Department's budget got approved, so we now need 120,000,000,000 orbital probes from you. This is 10,000 times the previous level.

{Level 3} Continuing Mission (+300 CP)

We're going to be needing a lot of these probes on an ongoing basis. You'll need to deliver 1,200,000 probes per minute for 500,000 minutes, which is most of a year. This is five times the previous level in total and will require 10,000 Space Elevators running simultaneously. If at any point production lapses, you will lose credit for half of the items delivered since the last lapse. Similarly, items delivered prior to reaching the target rate or during a lapse are counted for half credit, as are items in excess of the target rate.

{Level 1} Space Status: Unknown (+300 CP)

Requires The Elevator Is Out

Space is vast and unexplored. We intend to explore it. Therefore, we want you to assemble 2,000 arkships. This is a multi-phase process involving launching approximately 120,000 parts per arkship before constructing them. These include low-density adaptive-material plating and flexible frameworks, polymorphic computer networks, neutronium power cores, and an FTL system.

However, all of those project parts require precursor materials that can't form under the same planetary conditions as each other. Thus, instead of one infinite-plane planet, you instead get a potentially infinite selection of finite planets.

You'll need to locate, map, and travel to other planets, moons, and possibly even solar systems. Then you'll need to set up transportation using rockets, delivery cannons, and FTL spaceships, sending resources between planets, moons, asteroids, and orbital platforms in order to produce things in both micro- and normal-gravity environments.

{Level 2} Space Status: Unexplored (+200 CP)

We need a lot more arkships now, so we'll need 400,000,000 arkships instead. This is 200,000 times the level 1 requirement.

{Level 3} Space Status: Explored (+400 CP)

In order to have enough materiel for our new extra-large training cadres to use, we will need 400 arkships per minute for 15,000,000 minutes. This is fifteen times the total amount of arkships as the last and will require final part flow of 48,000,000 parts per minute for about 30 years.

If at any point production lapses, you will lose credit for half of the items delivered since the last lapse. Similarly, items delivered prior to reaching the target rate or during a lapse are counted for half credit, as are items in excess of the target rate.

Sample Platter (+200 CP)

Nauvis is rich in a variety of diverse flora and fauna. We've come to an agreement with nature preservationists that while you can pave over the entire planet if you want, you will need to send up a large number of biological samples. This will only take a single launch, but will need to have a single organ or carapace from at least 300 different vertebrate animal species and at least 300 samples from different kinds of plants.

If you took Space Status: Unknown, then you have to launch 300 different flora samples and 300 different fauna samples for every 20 life-bearing celestial bodies you visit.

Logistic Slack (+300 CP)

It has been decided that you will take up the slack in our logistics. This means you will need to provide miscellaneous materials, parts, or machines to orbital operations. This will usually be for a few thousand items. You'll have two hours from when you receive the request to when you have to send it up. You'll only get a few a day at most (an average of two a day) - some days you won't get any - but you'll have to fulfill 1,000 requests, and to end your mission must not miss any requests for 90 days.

If you take this with a Level 3 mission, you'll need to keep the full-speed production of the other mission going until you finish this one, and failing to fulfill a logistic mission will count as a lapse in your rate mission, causing you to lose credit for some of your main mission deliveries. The Lapse lasts for 24 hours or until you complete a request successfully.

Wildlife

You must take one, and only one difficulty setting.

Squatters (+0 CP)

Difficulty Setting

This planet has some interesting wildlife. They seem to be on top of all the resource deposits. Fortunately, there are only a few on each spot, and while they will attack anyone who gets too close, they'll really only nibble on infrastructure, disconnecting belts or power lines. There are no nests or worms defending them for this difficulty level.

(*Slightly more difficult than Satisfactory*)

Entrenched (+100 CP)

Difficulty Setting

The wildlife is concentrated around resource deposits, in groups of a few dozen, and is aggressive to anyone who gets close. They will pursue fleeing individuals for some distance, and destroy infrastructure they can see, but will otherwise remain at the nest site. They will rarely attempt to colonize a resource site that has been cleared out, but only with a token force.

Aggressive (+300 CP)

Difficulty Setting

The wildlife is everywhere, clustered in nests around the landscape. At least these nests aren't always over the nearest resource node. Multiple species share these nests, and some have dangerous plants that symbiotically assist in defense. These concentrated alien nests will periodically send out raiding parties to molest your infrastructure if disturbed by it or its attendant pollution.

If on an aggressive footing, each nest will also gradually evolve its animals into larger and more dangerous forms and sometimes spread out, forming new nests with which to harass you. Daughter nests inherit the evolution status of their parent nests, but the evolution of one nest does not otherwise affect the evolution of another. Evolution level does not does not reverse and the evolution of disparate nests will tend to follow the same path, if at different rates, proportional to how much threat and pollution they face. If all else fails, cutting and running to find a new place to start again may be an option.

(*Normal Factorio mode*)

Imperialist (+600 CP)

Difficulty Setting

Your arrival has sent the local wildlife into a panicked state. They are now breeding and growing in numbers at a rapid pace, with an increased hostility, sensitivity to disruption and pollution, as well as increased evolution and nest spread rate. If you don't go on the offensive, you'll be overrun eventually.

Devouring Swarm (~~+1000 CP~~ RESTRICTED)

Difficulty Setting

In cases where the phrase "ground is monsters, sea is monsters, everything is monster" is remotely close to accurate, we can't send in someone without sufficient firepower. And given that you obey physics, well, sending you in would just mean you die.

Behemoths (+100 CP/Special)

Now, you'll see a lot of big beasties. 'Hogs even larger than the Alphas, Spitters with horns wider than your truck, and so on. They are heavily armored and can kill an engineer easily. They are as large as the largest beasts the nests could evolve, but you'll see them from the start. Only some nests have them at the start. You also get double the CP from your Difficulty setting chosen just above.

Emergent Intelligence (+100/200/300/400 CP)

What's scarier than a horde of monsters? A smart, coordinated horde. The more monsters are facing you at once, the more effective their tactical ability is, and the more likely you are to go "clever girl" right before getting lit on fire. And there is no "leader" for you to take down. To dumb them down, you'll have to kill them all.

This is worth +100 CP on Squatters, +200 CP on Entrenched, +300 CP on Aggressive, +400 CP on Imperialist, and ~~+700~~ *RESTRICTED* difficulty level.

Touhou Fireballs (+300 CP)

Even the basic spitters are now capable of launching volleys of bullet-hell fireballs along curving preplanned paths that are very difficult to dodge. Remember to stop, drop, and roll.

Juggernaut Hogs (+300 CP)

You think your walls can stop a charging hog? Think again. These guys can smash down a couple layers of walls before stopping, and the Alphas (and Behemoths, if taken) will go through even more. And when they're crashing through your buildings and belts, they'll keep going even further.

In addition, at any given one random hog will be the Jetpack Hog. It's a Hog wearing a jetpack, and instead of charging at you normally, it instead performs a rocket suicide jump at you. I will drop the jetpack, though.

Crab Boss (+300 CP)

Sometimes, when you attack a nest of Flying Crabs, it turns out there's a boss nearby. This massive, groundbound enemy coordinates the action of the hundreds of Flying Crabs that accompany it, and is tough enough to shrug off most of your weapons. You'll have to attack its weak points for actual damage.

Raining Biters (+300+ CP)

Grants +100 CP for each Difficulty Setting past Squatters

While you might want to just clear a large space and put up walls to defend it, meteors will randomly drop on the world, each one depositing a nest of some kind of hostile creature when it impacts the ground. You'll never be able to keep a large area completely clear without a deep "defense in depth."

Waterproof (+200/400 CP)

Can only take with Difficulty of Aggressive or above

So, as it turns out, bodies of water are not an effective barrier for the wildlife's transit and attacks. Woops. Good luck, then. This gives +200 CP for Aggressive, + 400 CP for Imperialist, and ~~+800 CP~~ *RESTRICTED* for Devouring Swarm.

World

With Space Status: Unknown, these apply to all planets and moons, not just Nauvis.

In Darkest Night (+100 CP)

Remember when I said Nauvis was light enough during the night you could safely work? Well, I was thinking of a different planet when I said that. Nauvis is actually pitch-dark during the night, so you'll have to use your headlamp and you'll be visible for miles away. You can set up lights but those will also be highly visible.

Ribbonworld (+200 CP)

You're on a narrow world only about 200m across. Don't get knocked off the edge! Oh, and you can only build 400m into the void. All the water features are now only small ponds.

No Geothermal (+200 CP)

Geothermal power is cheap, produces very little pollution, requires no fuel or maintenance, and reduces the fuel needed for other power sources. Too bad Nauvis is geologically dead.

Marshland (+200 CP)

Too swampy to put down machines without a foundation or landfilling, too dry to actually block the wildlife, and it slows you down. Not to mention filled with mosquitos and other insects that attack you. Marshland: it's everywhere. (Well, not everywhere, but you can't go ten kilometers in a straight line without seeing some.)

Misty Morning (+200 CP)

Regardless of where you set up, you will sometimes get some thick fog that makes it difficult to see very far into the distance. A couple long segments of belt would reach past the point of visibility for you.

Cliff Level: 999 (+200 CP)

Nauvis's surface has a lot of vertical features. Small mesas and sinkholes and curving valleys are packed into the surface. While stunning, it's detrimental to your ability to travel across an area without ladders, or deal with the wildlife. While you can't get up these cliffs without a ladder or jetpack, any hostile wildlife will have the ability to climb vertical surfaces, if slower than walking flat. Meanwhile, your turrets will have trouble shooting almost straight up or with a cliff edge in the way.

Finite Resources (+400 CP)

So, all those deposits of useful materials around the world? Normally, they would have unlimited resources, but now you can only get so much from each one before it runs out forever. Don't throw away your ores! Or anything, for that matter!

System

AWESOME Shopping Experience (+100 CP)

So, you want to do things like send belts through walls without just opening a big gap, attach pipes to walls, make catwalks, or any of the other little details that make factories run a little smoother or look a lot better? Well, if you want those, you'll have to unlock them from FICSIT's AWESOME Shop.

To do this, you'll need AWESOME Tickets, which you get from an AWESOME sink after destroying excess resources in them. More processed and more expensive stuff is worth more points, but each ticket requires cubically more points to get. Progress is synced across all sinks,

so no trying to get more tickets that way. It would take days of disposing of the most complex items in order to unlock all the useful “cosmetics” required. And no, you can’t modify designs or constructions to work around this. You want to attach a belt to a wall? Two tickets. Ceiling lights? Three tickets. No exceptions.

Nothing restricted here is strictly needed to advance your factory, but it does make building and moving around your factory much easier.

If you took Grease Monkey, you also need to spend tickets for each type of machine or building you want to work with.

Full Power (+100 CP)

So it turns out that the regulators on your power generators are broken, so they’ll run at full speed the entire time and waste power. You can’t overclock or underclock them. And they’re less efficient as well, so you’ll get less energy from them. Plus, they also take forever to turn on and off now, so you’ll be wasting a lot of power.

Demolition Team (+100 CP)

When deconstructing stuff, you don’t get the resources back. You’ll get some of the raw resources back, but not anything processed, and not 100% of those, either.

Circuit Breaker (+200 CP)

Normally, your machines will slow down when power production drops below consumption. Not so with your setup. If consumption exceeds production, everything shuts down.

Can’t-ilever (+200/+400 CP)

In the Satisfactory game, you could build a floating base, or one allegedly supported by a few tiny pillars. Now you actually have to deal with gravity acting on every bit of your structure. Unsupported belts will fall apart and sag. Foundations that aren’t supported will fall. You’ll need scaffolding and support beams everywhere.

This is worth +400 CP if taken with *Cliff Level: 999*.

Archivist (+300 CP)

Requires Space Status: Unknown

Normal Factorio research is pretty easy. You, on the other hand, have an additional 20 science packs you need to make. Five sets of four, each with increasing complexity and requiring the earlier versions from each set. Each one requires large, complex setups, processing data cards, recycling junk and broken data cards, cooling supercomputers, and dealing with an escalating web of complexity for each layer. The final set, Deep Space Science, requires messing around with the state-shifting arcospheres in order to generate the data cards needed for the rest of the process.

This is the thing that needs a large, complex facility in order to function, and most of the machines required need to be in a vacuum and/or microgravity in order to function.

The Elevator Is Out (+300 CP)

You know how I said you build a base for an elevator, and we drop down a cable? Yeah, turns out all our cables are currently in a big knot. Yes, we fired the guy in charge of storing them. So you'll have to manually launch rockets for your products. Big rockets, that take several minutes each to be assembled in a silo, and have to be built and fueled for every 30 products you want to send up.

In addition, a space elevator anchor is relatively simple and cheap, and can be constructed much earlier than a rocket silo.

Anywhere else that says "Space Elevator" now refers to "Rocket Silo."

Lossy Refining (+300 CP)

Your first-order crafting recipes will have their material costs doubled. This does not apply to the refining of raw materials, nor second-or-higher-order crafting recipes that build on top of first-order crafting recipes, but note that the increased material costs in your first-order products will be felt in higher-order products too.

Not-So-Superconductors (+300 CP)

You know in video games where worries about power loss when pushing current down the wires isn't a thing? Or where you can pump a huge amount of power through a single wire? Yeah no, that isn't a thing for you. You're stuck dealing with the plain old real-life concerns that dictate the design of real-life power networks.

This also means that power poles can no longer fit an arbitrary number of connections on a single pole.

Robot Attrition (+300 CP)

Your flying logistics robots seem to be cursed. If you have a few dozen active at once, there doesn't seem to be any risk, but past that there's a chance of spontaneous explosions, midair collisions, or just plummeting out of the air. And there's more risks when operating logistics networks in space or on certain kinds of planets.

While you can use the research system to expand the limits before this curse starts kicking in, your best bets are just not using flying robots or building replacements.

Motorized Belts (+100/200/500 CP)

Some of this jump's technology would normally not need power, despite obviously doing work, such as conveyor belts. Now, all of that must be powered. Belts, splitters, mergers, storages, the space elevator, gun turrets and portable miners all now can and must be connected to power lines. Belt segments use power proportional to their length.

For 100 CP, belts, splitters, and mergers can be powered through connections to machines, so the main effect of this is that portable miners would have to be powered, slightly more power is used, and the space elevator requires some power to load.

For 200 CP, splitters and mergers now need to be powered directly, and belts can only be powered up to two segments away from something connected to a power line.

For 500 CP, each meter-long segment of a belt must have a direct connection to the power line. This level can only be taken with Not-So-Superconductors.

Excessive Grants (+400/600 CP)

The higher level requires One Bajillion Science Packs

Your tech research costs four times the materials, and each pack of materials takes four times as long to process. For +400 CP, only the speed debuff applies to the repeatable research enabled by "One Bajillion Science Packs," not the material debuff. For +600 CP the material debuff does apply, and it will continue to apply past the end of the Gauntlet, even when all other Drawbacks have expired.

Personal

Lazy Bastard (+100 CP)

For whatever reason, you will not personally craft anything unless it can only be hand-crafted, or it is a dire emergency. You may still have your assemblers craft items for you, and may still pick up and deploy buildings from your Builder, but you would rather deploy an assembly machine, configure it to craft your needed item(s) and wait, rather than craft them yourself. In addition, your Satisfactorio Builder can no longer place buildings from the ingredients to make them. You must precraft them in an appropriate machine.

Missing Battery (+200 CP)

So remember the fiat-backed infinite-charge battery for your Builder? Turns out I dropped it somewhere. I'll find it eventually, but in the meantime you'll need to power and recharge it normally. Take these three battery packs to start off with. Each will last for three or four hours of moderate work, or seven hours on standby, but take ten hours to recharge.

Fumblefingers (+200 CP)

You have a habit of pressing the wrong button on your Builder, and then randomly mashing buttons. You'll select deconstruct mode instead of construct, or open up the build menu instead of the inventory. Sometimes you deconstruct something that you weren't aiming for. It's never life-threatening, unless you're turret-creeping or aiming at the floor, but it's embarrassing and slows you down.

Luckily There Is Always EXTREME SCREAMING (+200 CP)

Cannot take without companions. If all but one person decide to take this, that last person takes this anyway.

So, your radio is broken, and cannot be fixed or replaced with another radio. Coordinating your actions with your companions is going to be a pain. You'll either have to trust each other to work independently, figure out some other way of communicating at a distance, like giant megaphones or flares, or have your entire factory collapse in a giant mess of miscommunication.

Real Life Needs (+300 CP)

The Video Game Needs perk does not prevent your normal needs with respect to eating, drinking, sleeping and going to the bathroom. You now have access to a recipe to craft an unappetizing sludge from biomass that will sustain you, but not heal your wounds, as well as a recipe to purify water for safe consumption.

Perks:

We have several benefits for new contractors, if you have the CP for them.

Pioneer Training (Free, Mandatory)

As a Pioneer, you are responsible for a wide variety of duties. As such, we've given you a basic course running you through how to use your new Items assigned to you.

In addition, all Pioneers have to meet certain health requirements. They are:

- Run a six-minute mile in 10 kilos of gear
- Lift 30 kilograms from the ground to overhead in Earth gravity without back strain
- Jump up on a one meter platform in Earth gravity without arm assistance
- Have 20/5 color vision
- Hearing threshold of below 10dB up to 8kHz
- A pass on our manual dexterity battery test
- No information processing disorders (dyslexia, dyscalculia, sensory hells, etc)
- Sufficient hyper-introversion capability to withstand decades of isolation without any sanity loss.
- Have no chronic or outstanding medical conditions

I'm happy to say that you meet all these requirements!

This also fiat-backs the technology we are going to give you soon, allowing any instances of it to work in the future.

Space! Onwards and Inwards (Space Status: Unknown, Mandatory)

By combining materials from different planets like vulcanite, vitamelange, naquium, holmium, cryonite, and others, you can create new technologies that you couldn't before. This includes things like FTL drives, lightning weaponry, metastable power-free antimatter storage, dimensional anchors, and paired pocket dimension inventories. These materials can also be used to enhance many of your other technologies including weapons, power generation, computers, transport systems, processing and assembly, defenses, and more.

It also includes biotechnology to enhance yourself, make your machines self-repairing, deploy your own loyal creatures in combat, and deploy bioweapons ranging from the minor spread-on-explosive-death bloatburst rounds to plague rockets that will completely remove a planet's biosphere in minutes.

Video Game Needs (Free/300 CP)

You don't need to eat, drink, sleep, or go to the bathroom. If you eat stuff or sleep, you'll heal. You don't age, scar, or get sick. You get this for free here, and can pay 300 CP to keep it.

Map Markers (100 CP)

Factories can grow a lot, and once that happens, you'll need to remember what everything is, where that random belt goes, and why you set things up the way you did. This is why you now have perfect memory, including the ability to send yourself reminders that you

automatically remember based on future conditions. Besides that, you can archive memories so you don't actually remember them, with only a note left to yourself.

Fiat Positioning System (100 CP)

You always know where you are, and you always know where this is in relation to everywhere else you've been. The exception to this is teleportation, if it takes you to a place where you have not been before, you will not be able to relate this to your positioning system of other locations until you get your bearings in relation to them.

Eyes of the Industrialist (200 CP)

While looking at pieces of an industrial or logistic system, you are able to tell facts about them. These facts include efficiency, purpose, owner, contents, what other pieces feed into them, what other pieces they feed, consumption rates of resources, and other similar statistics.

By limiting yourself to a single statistic about the parts, you may quickly skim over large numbers of different pieces and compare them in that statistic.

Traffic Monitor (200 CP)

As far as monitoring your new factory, look no further. This allows you to set "monitors" on transport routes - everything from belts to rocket paths - and stockpiles, and be alerted when things leave set conditions. In fact, this automatically happens when you build or reconfigure industrial systems. Knowing about how much of a material you need per time is enough to get a monitor set on a route, with the limits set to your approximate knowledge.

Monitors are "smart" and won't start setting off their alarms if another monitor upstream is already informing you about the root cause of the problem. You can also remove monitors or just suppress them, both individually and by groups.

Back Pay (200 CP)

So, you might be spending a lot of time here. You might be spending a lot of time under power-loss fiat in the future. After any case of power loss, you gain "training time" that can be spent to, you know, train. You gain all of the time spent under full fiat-based power loss, and half the time spent under partial fiat-based or in-universe power loss.

You can spend the training on any mundane skill you've used or trained before, or any supernatural power affected by the power loss. This does stack with training boosters. As a bonus, after this gauntlet you will receive not only the time from this gauntlet but any power-loss before this.

Crack Not Addictive Enough? Try Satisfactorio! (200 CP)

As long as you're working towards a goal, you won't get bored. Replacing all the belts in your factory with Mk. 3? Not a problem, you'll just do as much of the factory as you can until your resources are depleted... and then you'll pick up another project while waiting for materials to stockpile again. You can still get bored sitting around or being aimless. In addition, you're also more motivated to do things that will advance your goals while waiting.

Grease Monkey (300 CP)

You have a good sense of mechanical engineering, as well as some thermodynamics, electrical engineering, and programming knowledge. This is coupled with knowing a fair amount about FICSIT's technology, and having a copy of their design software suite on your tablet. You are not fixed to using the buildings and tools unlocked to you as black boxes.

This means you could do things like reshape buildings to fit certain layouts better or scale them up or down to a certain extent. Some buildings, like assemblers and chemical plants (pretty much everything that produces a recipe except furnaces), can be made cheaper to manufacture and run by specializing them into single-recipe variants. This also allows for making things like variants of inserters, splitters, and other bespoke logistics equipment variations for optimum efficiency in preplanned layouts.

Post-gauntlet, this applies to any sort of technology with relatively discrete and non-interconnected components. Messing around a Star Trek warp drive setup really wouldn't be helped by this since that has the very interconnected set of components that generate a complex field geometry, but something like a tricorder could get whatever form factor you want.

Factorissimo (300 CP)

You can make buildings that are bigger on the inside. The larger the building, the greater the ratio of inside-space to outside-space. A small warehouse could be the size of a large warehouse internally (~5x isotropic linear scaling,) while an arcology the size of an island would be the size of the entire island chain inside (~1000x isotropic linear scaling.) The main problem with these is that they have limited slots for input, output, entrances, and exits.. The expansion may be non-isotropic; that is it may be scaled by more in one direction than another. You may also do the reverse and create a building that is smaller inside than outside, or smaller in one direction and larger in another.

The interior and exterior sizes of these buildings are set during the design process, and are fixed for all buildings of the same type.

In addition, you can place these buildings inside each other, creating recursive expanded spaces.

You can pick one up with your Builder without breaking them. If you do this, any machinery inside is frozen in time, and any living being is ejected from space where the entrance was.

Mining Drill Go BRRRRRR (300 CP)

Your harvesting operations are most efficient. Whenever you harvest something, you harvest at twice the rate, and harvest twice as much as you otherwise would. This does stack with any mining productivity upgrades you gain.

Modular Interplay (400 CP)

Anyone can just shove some snail slime in a tube and shove it into a machine to make it faster, but you can do so much more. You can create modules that can be installed into a machine to make it faster, more energy-efficient, more material-efficient, or some other such improvements. While these benefits do come with trade-offs, years of working with and designing these modules will let you minimize and, much later, eliminate these downsides.

If you don't take this perk, you will not get Factorio-style machine enhancement modules as part of your "Satisfactorio Crafting" perk.

Shipment Specialist (400 CP)

In terms of getting items from point A to point B without a physical, fixed delivery mechanism between them (like pipes or belts) you're the boss. This includes things like trains, trucks, drones, interplanetary delivery cannons, and so on.

All you need to do is list possible dropoff places, possible pickup places, and the vehicles get to work. No modifications needed. Pickup and dropoff points can have conditions set on them, without needing to wire in any input data, and those just work. You can even make groups of pickup and dropoff points, so when you have a new source for a material or a new section of your factory needing a resource, just add it to a group (or groups) and it just works.

Your shipment units will be adaptive, setting their own schedules and changing them as needed by pickup and dropoff points. Vehicles will avoid collisions whenever physically possible, will always choose the fastest, safest, or most efficient path (your choice; rules can be made in a few ways) and will follow any local regulations (except those banning autonomous vehicles.) You can mentally view and manage your vehicles from anywhere, and manually override routes and rules temporarily or indefinitely. You can also manage pickup and dropoff points, as well as groups of those, exclusion zones for vehicles, and so on.

While operating under the effects of this Perk, vehicles do not need fuel or maintenance, their carrying capacity is increased by 50%, and they ignore the weight and mass of their cargo.

Mark Whatever (400 CP)

You want to make a Mark 7 belt? Sure thing. You can create improved versions of your technology just by adding rarer and/or more processed materials to the recipe. These will not be as materially efficient as substituting with more of the lower-mark technology, but will be more efficient in other ways, including space or energy-per-effect.

Life Insurance (500 CP)

If you really want to take no chances, then for a sizable sum we can arrange for a bit of life insurance.

Whenever you die, you can choose to wake up at any HUB, space survival shelter, rocket landing pad, or rocket crew capsule you've been to before. Simple as that.

Well, not that simple. You leave anything on your person behind, including the physical mass of a body, and get a new one on revive (though this does keep upgrades.) Aside from that, you can also use this as a fast-travel system, by being able to "die" at will. Just have some gear ready for when you get back.

Post-Gauntlet, this can also send you to any "home base" or safe transportation location.

System Engineer (600 CP)

A highly useful skill for someone about to build a huge industrial system, you are good with large systems.

First, you understand how to make systems modular and scalable. When a system is modular, it has minimal dependencies between sections, and connections and communications are standardized and elegant. A scalable system can have sections expanded without the need for major reworking.

You can hold incredibly complex systems in your head, not just in terms of remembering but also working on them as well. When you're evaluating or designing a system, the time scales linearly with the number and complexity of element types, not with interactions, relations, or required calculations. And commonalities between the different types of elements means less contribution to the sum.

One Bajillion Science Packs (700 CP)

You can use the research system from here to research small, incremental, quantitative improvements to one characteristic of a class of equipment, machine, or device, like +5% shooting speed for laser weapons, +2.5% top speed for ground craft, or +2% mining productivity. While this might not sound like much, you may research the same boost as many times as you wish. The benefit increases linearly, but the costs increase quadratically; the Nth level requires N^2 times the amount of each type of research materials needed for the first level of that particular boost.

In order to do this, you need to run science packs through your labs. In addition to needing most of the kinds of science (as only military technologies require military science packs) you also require space science. You get one space science pack from launching a single satellite with a rocket or space elevator. The first level of any boost requires one million space science, and some multiple of that for the other science packs.

If something would benefit in the same way from two different types of boosts, only the greatest boost matters. (For example, with +35% handheld weapon shooting speed and +15% bullet shooting speed, the boost is 35%.) You may share the benefits with your Companions and Followers. All users of this Perk on the same chain share the same set of boosts that have been

researched, as well as the increasing costs. This Perk can apply to anything the user designs, builds, or uses, and can be toggled or scaled down by the user.

Items:

All items aside from the Satisfactorio Builder start in the Builder's inventory.

Satisfactorio Builder (Free and Mandatory)

The buildy gun from Satisfactory. It can place down buildings and other artificial structures, either from parts or premade. It can deconstruct buildings and other artificial objects, either breaking them down or storing them whole. It can give orders to logistic or construction systems that you are authorized on (including the ones from this Gauntlet.) It can configure the settings of machines. It has an internal inventory that can be upgraded (to a limited extent until you leave the Gauntlet.)

Always fully charged, can be upgraded in other ways, automatically imports into similar handheld stuff, and syncs up with other inventory/storage Perks, Items, and items. If lost, stolen, or broken, it will respawn in an appropriate and safe place immediately, even during the Gauntlet.

Pioneer Kit (free)

All Pioneers get these suits. They're really more thick coveralls that attach to a helmet. They'll keep you dry from rain and sweat, let you hook all your gear to it, and protect you from minor scrapes and impacts. It self-repairs when you heal.

The helmet contains a powerful "radio" capable of establishing a two-way real-time connection with any telecommunications equipment in the same solar system.

It also fits under any sort of armor or spacesuit, while the equipment rigging can be detached and put on the outside of the bigger equipment.

This tablet contains our "ADA" VI assistant. It has several planning and blueprint tools onboard, to do things like figure out how many production buildings you need for a given rate of a product, keep track of production chains, and manage and edit your blueprints. It syncs to the Satisfactorio Builder so it knows what is in storage and the builder can use blueprints. It also can connect to the helmet radio, so you can send information to your fellow Pioneers.

You also have a hand chisel for slowly mining ores by hand.

Basic Weapons (Free)

It's standard policy to never send out a Pioneer unarmed, no matter how peaceful the environment seems. Thus, you get this Xeno-zapper - a handheld electric melee weapon - and a pistol with ten magazines. They're decently solid, and won't break easily.

Craft Bench (Free)

You start with a preconstructed craft bench, and a box containing only the most critical parts of the HUB. You must acquire resources to construct the HUB before continuing with your mission.

If you just take this, it locks out any of the Items listed below this one that you took until you complete the HUB, and you must upgrade the HUB to unlock many of the basic recipes like in the game.

Starting HUB (100 CP)

Includes "Craft Bench"

Instead of starting with a box containing only the most critical components of the HUB, you start with a prefab base in a box. Set it up anywhere, and as long as you empty it out you can move it around. This base has a craft bench, equipment workshop, a molecular analysis machine, an RTG that produces a small amount of power perpetually, and a spot for the research dropship to land. In addition, it has a rack with a few standard storage boxes and a bunk room big enough for all of you. You start with all recipes that you get from completing the HUB in-game unlocked.

Respawns monthly. In addition, you can keep this and drop it at your starting location in future Jumps, if you want.

Boom Box (50 CP)

This big, bulky, old-fashioned stereo can only play music off of tapes. It's big, it's heavy, and some people say it's completely unnecessary.

However, this boom box can use the "Turbo Bass" pulse, which can kill pests in a small area (and blast everything else around you back) and the "Hyper Subwoofer" sound, which greatly slows everyone around except the wielder.

Ammo Belt (No, The Other Kind) (50 CP)

This piece of clothing holds ammo. Specifically, a lot of ammo. Both of any given type and in the number of types. It will automatically reload weapons without any concern on your part, but with a thought you can cause it to switch between different ammo types for a given weapon. Note that this also includes thrown weapons like grenades, capsules, and nobelisks.

Craft Bench Gauntlet (50 CP)

This gauntlet syncs to the Satisfactorio Builder and can perform the functions of an assembly machine or furnace. It's very convenient when on the go.

(If you took the Missing Battery drawback, it requires fuel for the furnace function, and the assembly function requires electricity..)

Tool Chest (50 CP)

You receive a variant of the normal personal chest. This has more slots to fit more varieties of items, but only a few slots are full-sized. It's ideal for storing a variety of tools, or the small amounts of various gubbins you find around drop pods. In addition, you receive a blueprint to make copies. All copies of the Tool Chest share inventory - while the copies will not give additional space, that inventory can be accessed from anywhere. As long as at least one copy of the Tool Chest is placed in the world, any items stored in it will continue to exist.

It can be infused into a new tool chest if all instances are completely destroyed after a week.

FPS Map (100 CP)

Requires Fiat Positioning System

This map takes a form appropriate to the setting you are in (including a phone/tablet app.) You can use it to share the maps your Fiat Positioning System has generated with other people. You can also use it to copy maps into your FPS. Imported maps are corrected of accidental inaccuracies, but this will not correct intentional errors. Importing takes only a moment. You can also use this to copy parts of your FPS to other maps.

If lost or stolen, respawns immediately. If destroyed, it respawns in a day.

"Daisy Cutter" Chainsaw (100 CP)

This massive chainsaw is just light enough for it to actually be picked up by you, regardless of how strong you are. Pick it up, turn it on, and strike the ground with it, and it will harvest all plant life within 250 meters, putting the resultant materials in neat, processed stacks around you, or in the Satisfactorio Builder if there's room. Consumes one container of biofuel per use during the Gauntlet, but has no fuel requirement afterwards.

Respawns in a week, or can be infused into a normal chainsaw two weeks after it was crafted.

Powered Armor Mk. II (200 CP)

This suit of armor has a modular installation setup that allows you to install different sorts of technology, such as a jetpack, blade runners, shields, roboports, laser defense, and power systems. It has an integrated portable fusion reactor with thrice the output of the standard models, and a large internal power storage.

It is extremely durable, and will repair itself if it goes six hours without taking damage. During the Gauntlet, if destroyed, it can be infused into a new Mk. II armor that you've worn for a week. After the Gauntlet is over you can import this into one armor you already have into it for free, and respawns after a day.

You can fully kit out the armor before you start. (Infusion will not replace the upgrades installed in the new version.) Commonly used upgrades include: jetpack Mk. I, batteries Mk. I, Adaptive armor Mk. I, night vision goggles, energy shields Mk. I, blade runners, personal roboports, and chemical/biological or radiological protection seals.

If you took Space Status: Unknown, then at some point you'll need to upgrade it into a thruster suit. And you'll probably want to upgrade it further. Anyway, doing that will stick, but it

means during the gauntlet you'll need that higher tier of equipment to infuse this into if it gets lost or destroyed. On the plus side, when this is upgraded into a thruster suit it has a much higher life-support efficiency, and at the final tier of thruster suit it can support you indefinitely in space or CBRN-hazardous environments.

Spidertron (200 CP)

This many-legged machine is a capable assistant. It has remote maneuver control, autonomous path-finding, and can move across wide gaps and up and down cliffs. It mounts four rocket launchers for combat power, has space to sit in and manually control it, and most importantly can mount the same kinds of upgrades as the modular armor, powered armors, and thruster suits. This means it can have roboports to assist in building, shields and lasers for combat, or jetpacks and blade runners for mobility. Not as much upgrade capability as a powered armor, but still very useful. Comes with its remote control.

This individual one slowly restocks on basic rockets until its magazines are full, and starts with any Mk. I or markless gear like the Powered Armor Mk. II. It can be infused into a new spidertron that has been in service for two weeks. Post-gauntlet it has infinite ammo and respawns in 24 hours.

Guns, Lots of Guns (200 CP)

In case of more hostile situations, we can provide weapons to help a Pioneer survive until they get their factory going. This package has a Rebar gun, rifle, rocket launcher, and nobelisk detonator.

Each one will also slowly generate standard ammunition for themselves if you don't have any ammo on your person, up to a small stockpile. (So basic nobelisks, basic rebar, and so on.) You will also slowly replenish a couple of grenades, as well (though later you can turn that off.) You may infuse a new weapon after hanging onto it for a week. After the Gauntlet, weapons respawn in a week.

Post-gauntlet, all the handheld weapons gain infinite ammo and can each be imported into a separate weapon that you already have. Infinite ammo can be of any type that your factory can produce at least 100 rounds per minute, indefinitely. (This also means you also have infinite grenades and nobelisks, too.)

You also get a dozen gun turrets, and two laser turrets. Like the guns, they will never break except as the result of enemy action. The gun turrets have unlimited ammo, while the laser turrets have unlimited charge. If lost or broken, you may infuse an identical turret with these properties after it has sat in the open for a month. After the Gauntlet, turrets will respawn in a week.

Companions:

You can take up to eight companions. Each companion costs 50CP, up to 200CP maximum. This fee will be taken from all personal budgets. Companions decide how to spend their CP.

Alright Pioneer, we'll see you on the other side.

Rewards:

So, how did you do?

First, all Drawbacks are canceled, with the exception of the second level of Excessive Grants. The time component of that is removed, though.

Before Any Other Criteria

You get this freshly smelted copper ingot. No, there's nothing special about it. Give back all Items and Perks.

Space Elevator Built *XOR* All Technology Researched

You can keep Pioneer Training and the Satisfactorio Builder. If you took Space Status: Unknown, you can also keep Space! Onwards and Inwards. Nothing else. The Builder will keep any upgrades you applied to it, though.

Space Elevator Built *AND* All Technology Researched

This counts as sufficient effort towards your goals that you can keep all purchased Perks and Items.

Mission(s) Complete

So, you managed to complete your Mission? (All of them?) Great, keep all your Perks and Items. And you get to keep the factory you made. All the land you explored gets turned into an add-on for your Warehouse, accessible through a door inside the Warehouse.

Anything unexplored is just turned into a misty void, with a massive cliff at the edge. This boundary expands by 100 meters a year in all directions. The wildlife is now peaceful, and won't bother you, your Companions and Followers, or your infrastructure; alternatively, it may be selectively left behind if you find you've tired of the need to wipe out hives in order to expand. You can't take the wildlife out of the wild, though. You can still find Drop Pods and other materials out there.

You'll continue to find new deposits of materials as the land expands. All deposits are now infinite if you took Finite Resources, and for every deposit you depleted a new one will be added somewhere convenient for you. Any drawbacks you took which modified the world's biomes will not be retroactively removed for already-explored areas, but will not apply to future expansion (unless you want them to).

You can enter this land at any cluster of buildings you made, and can exit it from anywhere. You also can't die or get hurt or trapped here. Even if you didn't take Video Game Needs for future Jumps, it still applies in here.

You also get a mug labeled "employee of the planet."

With “Space Status: Unknown”

Each planet, moon, and asteroid that you built something on or around comes with you. The full disc of each one is now “explored” and they expand at a rate of 1km/year. Distances between celestial bodies are compressed by a factor of 12, to the point there are KSP-style spheres of influence to keep orbits normal. There are no longer random rocks in space, so spaceships no longer require shields or laser defences. Orbits still exist, still behave like planets are their original sizes, and are still reachable.

Your mug now says “employee of the galaxy.”

Conclusion

Now will you need a reference for your next job? (Continue)
Or are you retiring now? (Go home)

Notes:

-**Item Respawn**: Lost, destroyed, or stolen Items can respawn in the Warehouse or equivalent, or if the Warehouse is unavailable or undesirable they will respawn in a safe and appropriate place. Item Respawn is disabled during this Gauntlet. Items keep upgrades and tuning.

-**Item Infusion**: This is for replacing some of your items during the Gauntlet. Like Respawn, Items will keep their upgrades and tuning when infused into their non-Item versions.

-**Rocket Silo**: You still get this even if you don’t take the Drawback. Also, this is pretty beefy. Also the rocket is pretty big. Like, 600 meters tall big. Or 1000 meters with the fairing for the trusses. You’re launching a big rocket. Relax, these have perfect reliability.

-**Pollution**: Most of your machines produce pollution when in use, which is irrelevant on Squatters and Entrenched difficulty level. Power plants, leaving aside nuclear and geothermal, produce the most pollution, and this pollution spreads downwind. Smelters, furnaces, and foundries produce the second-most, and some of this pollution spreads with the wind. The rest spreads out from the machine. Manufacturing buildings produce some pollution, though all of this spreads out around the machine.

-**Technology and Research**: You use a combination of Factorio and Satisfactory tech. For instance, you have both the 1-to-3 splitters that Satisfactory uses and the 2-to-2 splitters of Factorio. You can make an Assembly Machine that has direct belt feeds, or one designed for inserter interaction instead. (Because seriously, the Factorio tech is so much smaller than Satisfactory. The Constructor has almost the same-sized footprint as the Factorio *rocket silo*. Assume your technology is Factorio-scale instead of Satisfactory-scale.) Belts are single-lane and about 40 cm wide, similar in usage to Satisfactory and similar in density to Factorio. (But they can make sharp 90 degree turns)

Your power poles use the Factorio system - sharply limited range, but no limit to connections and no worries about cable clipping.

The powered rails used by Satisfactory are now laid out like the more traditional rails used by Factorio, and the two are now compatible. Train designs have been updated accordingly.

You do start with coal power available.

Research works using a hybrid system. You craft science packs, shove them into science labs, and then you shove a hard drive into the HUB's dropship and send it up. It's more based on the Factorio side.

You can make more dropships and mounts for them, but those are endgame recipes.

There are more alternate recipes than in just the Satisfactory game. You don't need to unlock them all, but doing so will make your life much easier.

-**Space Elevator**: The "Space elevator" you build in the Gauntlet is just a base for the elevator. You get free cables in the reward world. You do get a blueprint/recipe for a cable, but it's very expensive and you'll need to launch it, instead of building it from the ground.

That is a technology available in-Gauntlet in the Space Status mission chain, though.

-**Nauvis, the world**: Nauvis does have an apparent horizon, but extends infinitely in all directions, and behaves like a perfectly flat surface when you put a square grid on it. Water features are only lakes. The resources are found in small patches big enough for a single miner, though these may be clustered.

-**Space Status & Distances/Speeds**: The planets and moons all have real-life surface areas. However, they are Discworlds when on the surface, the same way as Nauvis is. However, being in orbit, the planets and moons appear to be oblate spheroids, and orbits work correctly.

Distances are compressed and Factorio's rockets are kinda OP. You can get anywhere in the system in a day or so with cargo rockets or delivery cannons. Spaceships can be even faster than that. Interstellar distances are greatly compressed. In the reward mode, distances are even more compressed.

-**Can I Do <X>**: If <X> is something you could do in unmodded Factorio or Satisfactory, probably. The exceptions are Drawbacks, modules and beacons (*Modular Interplay*) and infinite research (*One Bajillion Science Packs*) because those have their own perks.

If <X> is some assumption that some part of the tech would actually work in a certain way, then fanwank responsibly. (Or that they would have technology like vehicle elevators and stuff, again fanwank responsibly.)

If <X> is some sort of modification to equipment or machines or vehicles, that depends on your knowledge. If you have the relevant skills to actually make the modification, or the new equipment, then you could do so. If not, you're out of luck.

-**Life Insurance**: Assuming that Companions do not perma-die via variant chain rules, this only costs 300 CP for them to purchase. This is needed because there are no respawns during the gauntlet otherwise.

Acknowledgements:

Mac Ibach, SB thread.

Changelog:

v2.0a

Missing line in Craft Bench Gauntlet

More notes

v2.0

Removed origins, re-ordered Perks, Items and Drawbacks.

Reduced missions to two trees and changed the rules

Reduced the value of many drawbacks, but increased the threshold for halving CP

Removed Tooling Dropped and Manual Configuration

Added AWESOME Shopping Experience and Archivist.

Removed Space Elevator Milestones from the notes. Changed the reward milestones to XOR/AND the second and third state due to this.

Added subsection on the rewards for Space Status: Unknown.

Removed The Endless Horizon, Wanderer’s Protection, Approximate Compass, Whether There’s Weather, Omni-fix, Failess Mode, Sum of its Parts

Renamed Satisfactorio Crafting to Pioneer Training, expanded the Perk

Shipment Specialist buffed.

Added Space! Onwards and Inwards, Life Insurance, Mining Drill Go BRRRRRR, System Engineer, Map Markers, Traffic Monitor, Grease Monkey

Removed Explorer, Handy Toolkit, Handy Workshop, Statistician's Glasses, Training Packets, Pattern Extension Chip,

Added Pioneer Kit, Spidertron, Ammo Belt (No, The Other Kind), Boom Box

Guns. Lots of Guns. no longer provides infinite ammo.

Basic Weapons and Tools is now Basic Weapons.

Powered Armor Mk. II now has notes on the Thruster Suit upgrade.

Added in notes a hint about buildings tending towards Factorio scale instead of Satisfactory scale.

v1.0.2

Companions can now decide on how to spend their CP.

v1.0.1:

Grammer, allowed you to delete all the wildlife at Mission Complete.

Added Lazy Bastard, Lossy Refining, and Excessive Grants drawbacks.

Added notes about the space elevator.

Nerfed One Bajillion Science Packs

Added notes to Back Pay about partial and in-universe effects.

v1.0:

Changed One Bajillion Science packs to prevent very hard soft-caps. Added toggle functionality.

Pattern extension card more flexible (changing patterns)

Removed Advanced HUB and buffed Starting HUB

Buffed Power Armor MKII to start with a full loadout.

Made the Satisfactorio Builder capable of controlling bots.

Notes on belts.

Notes on pollution.

v0.7.2:

Adjusted wildlife drawback pricing so more scale with difficulty.

Notes in “Mission Complete”

Removed Super-Interchangeable Parts

Shipment Specialist now 400 CP, buffed

Added Eyes of the Industrialist

Added Tool Chest

Added Luckily There Is Always EXTREME SCREAMING

One Bajillion Science Packs now can buff Companions and Followers.

v0.7.1:

Added “Sample Platter” mission

Three new System drawbacks (Motorized Belts, Not-So-Superconductors, and Can’t-ilever)

Two new Personal drawbacks (Fumblefingers and Real Life Needs)

One new World drawback (Cliff Level 999)

Moved Manual Configuration to System because it could be cheesed by teamwork.

Changes to Factorissimo (flexibility buff)

Clarifications to One Bajillion Science Packs

Changed some prices.

One new item (Pattern Extension Card)