

DYSON SPHERE PROGRAM JUMPCHAIN

Version 1.4
By Jalinth

Welcome to the Dyson Sphere Program. You have been selected by COSMO to construct a Dyson Sphere in order to send power home to Sol, and power the production of materials needed to maintain the massive Center Brain complex in Sol. To do so, you will construct an interstellar factory complex across dozens of planets.

In this universe everything is on a smaller scale. Planets are smaller, orbits are closer, and distances are shorter. This means it takes much less time and materials to actually build a Dyson sphere.

By default, you are stuck here until you ship 4,000 Universe Matrices to Sol, paying off the "debt" of creating your Icarus mecha and proving that your factory complex is successful. If you take a Threat Level above "Peaceful Mode," you may end your stay after 10 Earth years instead. You may also remain in this world for a significantly longer period of time, if you wish.

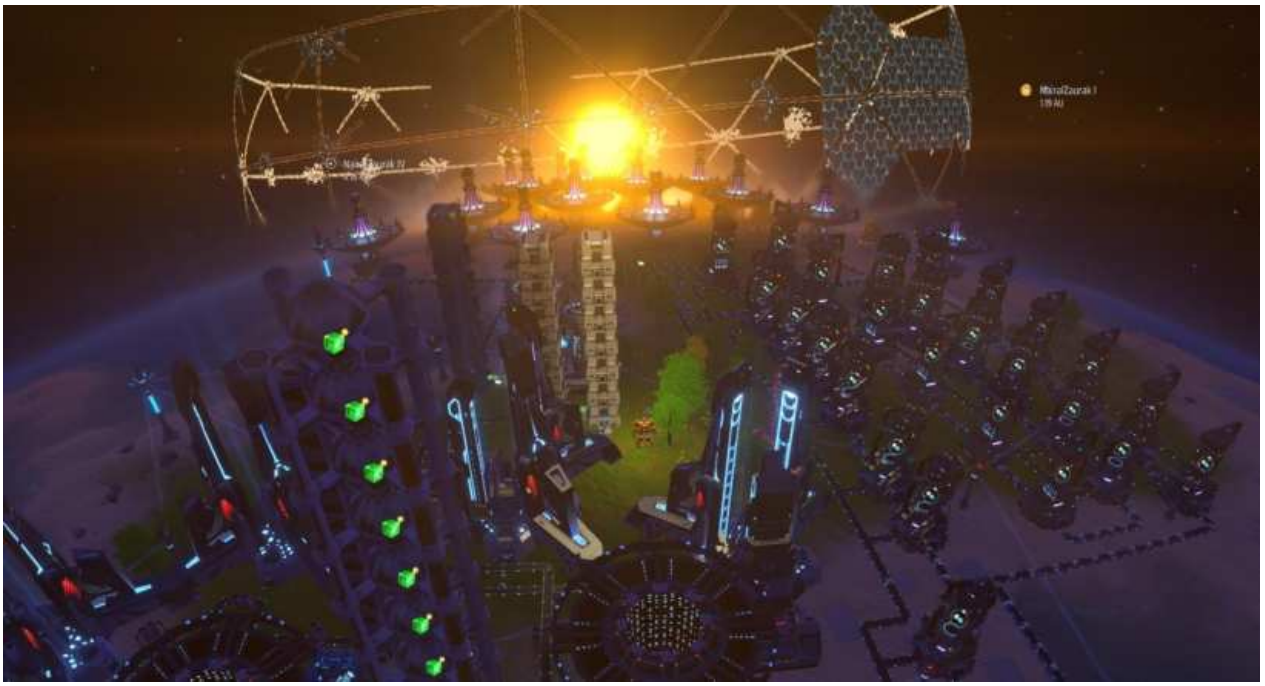
Center Brain has allocated **+1000 COSMO Points** for your deployment.

IDENTITY

You may either enter this jump as a Drop-In, with no history in this world and no new memories, or you may enter as a Native, with a history and memories of that history. In this world Natives are former residents of Sol's Center Brain complex. Either way Center Brain thinks you're one of their COSMO agents and can provide information support.

Your body may either be an Icarus light construction mecha or a human placed within the Icarus. Considering your history as an infomorph, age and gender are freely selected. (And considering you get to play with the coolest toys here, making yourself older won't give you any material benefits. At most you might become more mature with more memories.)

You start the Jump upon Icarus wake-up just before landing on the starting planet. This is a temperate planet, rich in iron and copper and with notable deposits of oil and coal. It only has limited amounts of silicon and titanium, though. Barring Drawbacks there will be 64 systems reachable in the star cluster.



GENERAL PERKS

All **(Free)** perks are optional. One Perk at each price level (100, 200, 400, 600 cp) can be discounted by half, with 100 cp perks discounted to free.

Industrial Mecha Pilot (Free)
You are fully trained in how to operate all of Icarus' systems and all the tech used by the Dyson Sphere Program. This applies equally if you use a human form or a mecha form for this jump. If you use a human form, you are capable of inputting commands to Icarus as fast as you can think them.

Environmentally Safe (Free, this Jump only)
In-game, Icarus is capable of wading into lava, crashing into planets at interplanetary cruising speed, and flying next to black holes. During this jump, this applies to you. The environment can not damage you, and you can't damage the environment (or your factory) by ramming into stuff.
If you purchase the **Stellar Export** Item, this perk applies while you are within your star cluster.

Industrial Engineer (100 cp) - When you have a production goal, you know exactly what you will need to fulfil it. With minimal effort you will be able to determine exactly how many raw materials will be needed and what each intermediate step will require to get to your end goal.
This will also allow you to quickly recognize when new circumstances or technologies change these stages and you will be able to update your plans just as quickly as you created them.
These plans can have whatever margin of safety you want in them, from relying on everything working perfectly to having factors of safety that make disaster planners tell you to take a step back and calm down. This also allows you to set up this extra capacity with avoiding overflows or backups in mind.

Efficient Layouts (100 cp) - You have an eye for terrain. Working out the most efficient way to use it is second nature to you. Once you know what you are building, it will be placed in the best possible position. Where others might have a chaotic mess of spaghetti, you have an optimally laid out factory or military base. This perk does not help you figure out what to build, only how to lay it out and connect it. Roads, conveyor belts, and pathways are the bulk of this perk. You also understand how to adjust your designs to create something very compact or easily expandable, or somewhere inbetween.

A Star to Guide Her By (100 cp) - Mass-produced structures are difficult to identify without tagging each one individually, meaning it's very easy to get lost inside your factories. Likewise, without a massive telescope stars in the sky are just coloured dots. However, you can distinguish between identical landmarks without any form of tagging, map information, or other external aid. You can tell the difference between the logistics tower where computer chips are exported from and the one that imports the materials needed to fabricate strange matter just by seeing the tops of them over the horizon. Likewise, every star in the sky might as well be labelled for you.

Proactive Troubleshooting (200 cp) - You have a sixth sense for troubleshooting production line problems. You can almost instantly figure out where disruptions are and what caused them. It also gives you a good idea of how to start fixing them. You are also able to predict critical disruptions to your factories, ones that will shut down multiple sections of your factory, in advance. The timing of this depends on the distance between you and the part of the factory that is the source of this disruption.
If this is triggered due to hostile actions, you will know where the attack hit but this does not give you additional information about the attacker.

Packrat (200 cp) - Any stationary storage you have can hold twice as much as it should otherwise. This will not seem strange to anyone. This applies to storage, not cargo capacity of transportation. A warehouse or cargo hold on a space station is fine; the cargo bay of a freighter will not benefit.

Bulk Shipping (200 cp) - All of your cargo transportation systems have their throughput doubled. For more discrete methods like freighters or logistics drones, this doubles their capacity. (This also applies to Icarus.) For more continuous methods like belts, this is done by doubling their speed.

COSMO Agent (Free/200 cp) - You are immune to boredom and loneliness. You can always find enjoyment and satisfaction from logistics work. Your body will maintain itself without exercise, food, or water although you can still be injured. You can spend 10 years in an industrial mecha and be no less healthy than when you started.
This is free for your duration in this jump but costs 200 CP to keep. This may be discounted.

Rich Harvest (400 cp) - Your resource harvesting operations are far more fruitful than they should be. Any resources harvested by you or someone/something under your control will decrease at half the rate it would otherwise. For example, if there is 100 trillion tons of iron ore in a vein, you will be able to pull 200 trillion tons out of the vein before it depletes. This will not seem strange to anyone.

Rapid Harvesting (400 cp) - Your speed at harvesting resources is double of what it would otherwise be. An automatic miner that would normally produce 100 kilograms of raw iron per second could instead produce 200 kg/s. With both harvesting perks you would be able to mine 200 tons of ore from a 100 ton vein in the same amount of time it would normally take to mine 100 tons. This will not seem strange to anyone.

Failsafe Tech (400 cp) - Your hardware won't fail without outside interference and will always fail safely unless you otherwise want it to. Your skyscraper of Mk II storage bins filled with antimatter is perfectly stable. If it were to be attacked, the antimatter will be safely destroyed rather than making an earth-shattering kaboom unless you explicitly make them volatile.
-Failproof Tech (+200 cp or +100 cp when discounted)
An optional upgrade to the **Failsafe Tech** perk renders your equipment immune to all forms of supernatural corruption and technological subversion. Your gear can get blown up but it cannot be turned against you. You need not fear from demonic position or nanite infestation.

Extraordinary Engineer (600 cp) - You solve practical problems. You can create new applications of existing knowledge quickly and easily. Some examples of things you can do include making stackable assemblers, pipes to carry liquid long distances, turn the em-rail ejector into an anti-ship railgun, or make your logistic drones into automated bombers. When you are doing this kind of “kitbashing” design, you can be “on time,” “under budget,” and have a design that will function just as well as the designs the components were taken from. Your design process is twice as fast if you’re using or adapting existing components, and you learn much more from any simulations you run or prototypes you build.

System Overseer (600 cp) - You have a big brain, capable of overseeing projects and complexes that are measured in AU or even lightyears. You are capable of monitoring your entire factory, however many millions or billions or even trillions of telemetry-producing hardware, in real time (neglecting lightspeed lag, of course.) You not only perceive this information down to the individual sensor but also collate and analyze this data, letting you track statistics. Your command output rate isn't limited either. You can reconfigure machines and systems instantly across your entire factory.
In addition to that, you also have the ability to run an engineering project in the background while doing all that. Whether you want to modify some of your equipment for a new purpose or are running calculations to make sure your Dyson sphere is stable, you don't need to neglect your infrastructure for that.
While useful in case of hostile forces, this is not designed to act as a command and control system for military forces. The most important aspect is the lack of unlimited external sensation. While processing the data from unlimited internal sources of data is easy, external sensors do not scale as easily and so you can't see an entire planet in maximum resolution from this alone. Location telemetry is something you can infinitely perceive, so at least you can avoid collisions between units if called into military service.

Evolutionary, not Revolutionary Science (600 cp) - You are highly skilled at the unglamorous side of scientific research, as are anyone working for you. The methodical and rigorous repeated testing required to make advances. This will not help much with making fundamental breakthroughs, but rather increase the speed and reliability of iterative improvements. On average research projects will take 75% of the normal time to complete. You are fastidious when it comes to experimentation. If it is possible for you to cleanly and correctly set up a single run of an experiment, you will.

ITEMS

Discount to one item at each price point (100, 200, 400, 600 cp). The first purchase of discounted 100 cp items is free. You can use a higher tier discount on a lower tier item.



Icarus Light Industrial Mecha (Free) -
Icarus can run off of almost any energy source, including chemical, nuclear, and antimatter energy sources. Energy is stored in the “mecha core,” which is also trickle-charged by a perpetual-energy “core power gen.”
Icarus uses a pocket dimension storage capable of holding a large amount of materials and structures. A replicator is capable of performing some types of manufacturing within the storage itself. A deconstruction beam retrieves materials and can pick up entire buildings. Construction drones place buildings down directly, while the pocket dimension can interface directly with the pocket dimensions of other buildings to transfer stored items.
When fully upgraded, Icarus is fully capable of going from walking on land, to orbit, and then FTL to another star system, then landing on another planet, no ship required. Icarus can be upgraded to a potentially infinite level using universe matrices during the jump, but post-jump only the first ten levels of each upgrade will work.
This can either be a vehicle or an alt-form. Regardless of which form of Icarus you take you will be able to treat it as an existing giant robot for the purposes of importing into other items in future jumps.

Welcome Package (Free) - Center Brain dispatches Icarus units to distant star clusters inside of capsules, which are designed to be deconstructed on-site. This capsule gives you a few hydrogen fuel rods, and a small amount of simple materials to begin construction.
At the start of each future jump you receive a small package of minorly useful and valuable items related to the setting. It's just enough to get you started. EX: Fallout might get a pouch of bottle caps, 3 days of food/water, and a 10mm pistol with a couple magazines.

Soundtrack (Free) - You receive a copy of the soundtrack to the game, available in whatever forms of media you want. It is compatible with all soundtrack perks you have.

Blueprints (100 cp/600 cp) - These are sets of better blueprints that you don't need to research. A machine using these blueprints can produce the object in only half the time, and therefore use half the power. They will still need the normal amount of raw materials. If this faster speed will cause a blockage then you can set them to a lower rate, while retaining the lower power consumption per item.
You may purchase a single category of blueprints with each purchase. If you apply a discount to your first purchase, additional blueprints are 100 cp for two categories. Alternatively, you may purchase all 8 blueprint categories for a bulk cost of 600 cp, or 300 cp if you use the appropriate discount.

-Logistics & Storage
-Production
-Power Generation & Storage
-Mining
-Power Transmission + Science Labs
-Dyson Sphere Components
-Vehicles
-Intermediate Products and Consumables

Mecha Upgrade Kit (100 cp) - Normally you can research a variety of upgrades for Icarus. If you wish to start with a time- and resource-saving set of upgrades, this is the package for you. Icarus has been already upgraded to the maximum extent possible without the use of additional Universe Matrices. Your walking speed goes from 21.6 kph to 58kph. You can fly at 360 kph at Earth sea level, and use your reactionless "sail" drive in space at 180AU/hour. By using single-use space warpers you can travel at 0.854ly/hour until your mecha core runs out of energy. You have 9 construction drones that can do 4 tasks before needing to return to Icarus.
This also allows you to keep 15 rounds of universe-matrix-level upgrades to Icarus instead of 10.

FTL Comms (200 cp) - Most Icarus units rely on Center Brain's hardware for FTL communications, having only a small paired transceiver onboard and leaving the expensive stuff back in Sol. You have your own integrated peer-to-peer FTL comm unit installed. This provides a 50 light year range for real-time text/video calling between any Icarus units, such as your companions or Proxybot. Time and effort will allow you to expand this tech to other units.

Unlimited Energy Core (200 cp) - Your energy core always has enough in it to run all of Icarus' systems at full efficiency. This will not allow you to provide limitless power to your power grid. Don't forget to pack your space warpers, it's still a long way between stars. This perk is disabled for the duration of the jump by the Brownouts drawback.

Omni-Fabricator (200 cp)
Your mecha is equipped with an improved fabricator system that is also able to refine and process chemicals, separate isotopes, and act as a miniature particle collider. This grants significant flexibility when operating out of resupply range, as the fabricator will be able to create any product made with Center Brain's technology given the raw resources and sufficient time. Potentially a lot of time, especially if a supply of power has not been secured. The Omni-Fabricator is also significantly easier to upgrade with new fabrication technologies that you encounter in your journeys.

Daedalus Heavy Combat Engineering Mecha (400 cp) - This replaces your Icarus vehicle/form with the Daedalus. The Daedalus is larger than the Icarus, significantly more durable, and armed. While the standard armaments are a single railgun and point-defence lasers, the Daedalus is designed to be upgraded in the field with better weapons. It also has a bay for repair drones to keep it going or repair allies and structures.
In addition, Daedalus units contain fabrication patterns for some military hardware. This includes not only turrets but also things like repair drone kennels.
The combat abilities of Daedalus are notably inferior to the Major danger level drawback enemies.

Proxybot (400 cp) - This is an automated Icarus style mecha that you can remotely operate or give the basic VI simple instructions to carry out. The VI is not capable of creativity or problem solving. It will follow your instructions exactly and request further instructions in the event of a problem. The Proxybot has a light speed limited communications system that you can pass instructions to it with. Any upgrades to Icarus purchased here or applied via the tech tree will automatically be applied to Proxybot to the same 10 repeatable tech limit. If you have the Daedalus upgrade, Proxybot will be armed and loaded with software to enable it to shoot accurately. However, you'll still need to micromanage it if you want it to take on anything actually threatening.
Blueprints for constructing additional Proxybots have been provided. However, building a new mecha core and energy circuit requires Universe Matrices. Therefore, the final step in fabrication is to add those, allowing you to deploy Proxybots dependent on a local wireless power network for a significantly lower cost.

Stellar Export (200/600 cp) - Take some of this world with you. For 200 cp, you can take one star system out at the end of the jump (chosen at the end.) You may choose to upscale this system to be real-scale (as per the **Real Distance** drawback), but this will not give you more infrastructure. It will extend power and belts across longer distances, but the number of machines present will not increase. This will also not increase the total area of solar sails present around the star.
This can be held in a pocket dimension or placed in a jump at the start of a jump. Resources are refreshed at the start of each Jump and each decade post-Chain. If in a pocket dimension, your Logistic Vessels and other spaceships can use space warpers to exit and enter as requested. By default no hostiles will come along. If you want your pocket dimension to be a war zone, you can toggle them active on a per-jump basis.
For 600 cp, you can take the entire star cluster, with the same rules about scaling and refreshing materials.
For 200cp (100 CP if Stellar Export is discounted) your stellar cluster will develop veins of resources native to new universes you visit, as well as ones from previous jumps that you have samples of. The abundance of each new material will be roughly proportional to how common they are in the setting they originate from. These veins refresh in the same way as the ones native to DSP do.
This item can not be taken by Companions.

COMPANIONS

Multi-Icarus Project (100/200/300 cp) - Import 4/8/all companions with 600 cp each. Each gets all the freebies the jumper gets and can follow the same discount pattern. Perks like **Rich Harvest** and **Rapid Harvesting** do not stack when multiple people have them.

Infomorph Advisors (Free) - You may import as many of your previous companions as you want, if they are willing to spend the Jump as an infomorph. They receive the free Perks (and may keep **COSMO Agent** if the Jumper or a Multi-Icarus Project companion has paid to keep it) and get **Welcome Package** at the end of the Jump. As infomorphs they may transfer between the different Icarus units present, provided the bandwidth between their current and destination units is high enough.



DRAWBACKS

Take as many as you think you can survive. Companions from the Multi-Icarus Project earn half the points the Jumper does from drawbacks.

Extended Stay (0 cp) - Not enough time to build all of your Dyson Spheres? You can leave any time after you complete the mission.

Real Distances (+100 cp) - The game is compressed in scale. This will expand things to real scale, making transportation take far longer. Logistics is more complicated as orbital traffic concerns become more pronounced. Your dyson spheres will be truly massive, needing a vastly larger number of components to build. As a consolation the amount of raw materials will increase proportionally so that you will still be able to build your dyson spheres. This can be extra resources on planets or asteroids as you see fit. Make sure you don't forget your extra space warpers at home!

Real Resources (+100 cp) - Raw materials are no longer in easy to get at veins on the surface. You will need to spend time/effort locating them and extracting them will face realistic challenges.

Real Production (+100 cp) - Production is no longer abstracted. No longer can a single type of gear be used for everything, and you can't just take an iron and a copper plate to make some universal electronics. Logistics just got more complicated.

Real Hazards (+100 cp) - Taking dives into lava or flying into a blackhole is now potentially lethal. Icarus is still tough, but getting careless will kill you. Don't lithobreak at full interplanetary speeds anymore.

Real World (+600 cp) - Everything is set to realistic. Gives a slight bit of extra points to turn all the options on including things that are not covered by the other "Real X" drawbacks. Can not be taken with any of the other "Real X" drawbacks.

New Milestone: Got This Far In The Jumpdoc (+100 cp) - Center Brain keeps calling to talk at you. And it's never anything useful. How to do things that you've already done, usually dozens of times. Advice that isn't relevant to your situation. Calling you a genius for performing incredibly simple tasks. Is Center Brain suffering from a malware attack, or are they being sarcastic?
Expect to have them call at least once every 24 hours. And no, you can't hang up on them.

Reduced Resources (+100 cp) - The star cluster is much less promising than Center Brain originally believed. All mineral veins have half of the resources they otherwise would. Taking Rich Harvest along with this drawback effectively means you have the normal amount of resources available. If you take Stellar Export this drawback falls away after the jump.

Wading Pool (+200 cp) - The star cluster is much smaller than most, with only 32 stars instead of the normal 64. The cluster will expand to 64 post jump if you took the 600 cp level for **Stellar Export**.

Brownouts (+200 cp) - You almost always are having problems with power for Icarus. Fuels in your mecha provide power at half the rate and half the amount they should. Your mecha core's generator is also impaired. Any other energy pools you might have are likewise refilled at half the rate, even if you aren't just using Icarus as your body. (Your biological metabolism counts for this if it's more than a standard 100-watt-average human one.)

Welcome to the Actual Universe (+100/300 CP)
Your prior perks and powers will be sealed away. For 100 CP, you may retain powers and perks that come from being a machine or are otherwise not based on magic. For 300 CP, all prior perks and powers are sealed.

Compact Pod (+100/300 CP)
You're being sent to your target star cluster in a very compact pod. It doesn't have space for you to pack a lot of extras. For 100 CP, all magically-based items are locked down so that you cannot interact with them. For 300 CP, all your previous items are sealed off. Your warehouse is also frozen at this point. You can still put items into it if you want, but can't interact with anything placed inside it or otherwise remove anything.



Hostile Forces (varies) -
You are no longer alone in the Star Cluster and they are not happy with your presence. This Drawback has its threat and CP provided determined by the Danger Level and Activity Level.

You must only take one from each subcategory.

Danger Level
Peaceful Mode (+0 cp)
Must take "Sedentary" Activity Level
Your star cluster contains no hostile forces, and none will arrive during your stay here. However, in exchange for taking this you do not get any of Center Brain's military technology to research. You are still able to purchase the Daedalus class upgrade.

Minor (+100 cp) - Hostiles are not really dangerous to Icarus. They can wreck infrastructure if not dealt with. On this level it is likely dangerous wildlife rather than an intelligent enemy. This level can not be taken with the Invasion activity level.

Moderate (+200 cp) - While more destructive and cunning than at "minor," these hostiles are only a threat to an overconfident Icarus. Even a sufficiently overconfident and outnumbered Daedalus can be taken down by this force.

Major (+300 cp) - At this level the hostiles are a clear and deadly threat. Expect something like a hostile civilization's military or maybe Berserker-like automated weapons. In terms of firepower-per-mass, an armed combat support unit would be a match for a fully-kitted out Daedalus. Frontline units would obviously be a greater threat.

Activity Level
Sedentary (+0 cp) - Hostiles sit around their homes and only attack if provoked. Even then they do not roam far from their home, and only coordinate within their own individual groups. Limited to planetary surfaces and not on every planet. At this level the enemy won't expand or renew its forces.

Active (+200 cp) - If they become aware they will go out of their way to destroy anything of yours. Most planets will have at least a small number of enemies and they will slowly expand their area of operations. If you leave them alone long enough they will eventually cover entire planets and start launching potentially effective attacks on your Dyson Spheres.

Invasion (+300 cp) - Not only are they very active, they also have reinforcements. While initially it will take some time for reinforcements to arrive, the more of their forces you defeat the more they will send in each wave. Expect to see what happens when a few hundred star systems turn their production entirely to producing war machines before the end of the Jump.

END

After you complete the ‘mission complete’ upload to Center Brain, die, or finish your ten years you have the normal options. If you die your only option is to Go Home. If you have decided to a truly ridiculous degree of time sinking you will fail to jump as if you died if you are unable to complete your mission before the heat death of the universe.

Go Home
Stay Here
Keep Jumping



NOTES

There are plenty of perfectly safe jumps out there, so one more won't hurt. May as well keep to what makes me love DSP so much, the stress free industrial planning. Without any drawbacks you should be able to finish the jump in a few days at most. I'd suggest sticking around long enough to unlock all of the repeatable tech.

I am considering scenarios but have no good ideas for them at this time. I am focusing on making the core of the jump first.

If you are unsure of how something from one of my jumpdocs works consider the following four interpretations:
Interpretation A is a good solid perk that is useful but not an auto-take for every build.
Interpretation B is really kinda pointless and mostly useless.
Interpretation C is so amazing that you'll take the perk in every chain you ever do.
Interpretation D is a hidden trap that will make you regret ever taking it.

In general I**nterpretation A** is the correct one, while **Interpretation D** is always wrong. You can apply similar logic to any drawbacks. If a drawback could be read either as a reasonable challenge or instant chainfail go for the first possibility. Be harsher in the interpretation of a 600cp drawback and more forgiving for a 100cp drawback. If you feel a drawback is mispriced, please let me know on the General Jumpchain thread on Spacebattles.

Jumpers shouldn't have much trouble incorporating space-warper drives into their other tech. You'll probably need some intelligence or engineering perks but it's quite doable.

Industrial Engineer - *This is not an R&D perk, it applies to things you already know how to build. With game levels of realism this doesn't do much that can't be done with a spreadsheet or even just some math given the consistent output levels. In more realistic settings, or this one with drawbacks the perk becomes more valuable.

Efficient Planning - *If you want to build a non-optimal selection of factories this will allow you to use them to their maximum potential but won't deal with the fact you don't have enough smelters to feed your assemblers.

Hostile Forces - This was written before the canon enemies were detailed. Once there is more information I plan to update the doc. If I don't, take the drawback at whatever level you feel accurately represents the canon enemies if you want to face them.

If you are using this jump with a supplement jump, the Hostile Forces drawbacks will not reduce any dangers added by the supplement.

If you want to abuse the extended stay option you can. The star cluster will probably get pretty darn boring by that point but you do you. There is a hard limit of the jump ending with the heat death of the universe. If you want to jump to last longer I suggest you look at the 18 days jump. If you are going to be doing massive time sinks in this jump or later ones, be aware that nothing purchased here will prevent the stars from eventually dying. They might

reset every jump, but if you take long enough in a jump they will come to an end. The systems will be fine after the following jump starts but it might be annoying to have to rebuild everything.

FTL Speeds - The speeds in the game are a slightly complicated matter. This is due to scale compression meaning there are a small number of AU in each Light Year. 1 AU = 40 km. 1 ly = 60 AU (= 2400 km). Planets have a 400m diameter. These are the distances that will apply during the jump without drawbacks.

The speeds listed in the Mecha Upgrade Kit

These are the default speeds for using Space Warpers, if you base the speed off of AU/s and use real world AU to lightyear ratios.

Without repeatable techs	= 15AU/s	= 7485 c	= 0.854 ly/h
With the normal max of 10 levels	= 30AU/s	= 14,970 c	= 1.708 ly/h
With the upgraded 15 levels	= 45AU/s	= 22,455 c	= 2.562 ly/h

If you are using the Real Distances drawback or are post jump you can use the higher speeds below. They are based on the displayed LY/s speeds in game. It's up to you if that will be too broken for your chain.

Without repeatable techs	= 0.25 LY/s	= 7.89×10^6 c	= 900 ly/h
With the normal max of 10 levels	= 0.5 LY/s	= 1.58×10^7 c	= 1,800 LY/hour
With the upgraded 15 levels	= 0.75 LY/s	= 2.37×10^7 c	= 2,700 LY/hour

SPECIAL THANKS

ltmauve and Ovid for their suggestions. ltmauve re-wrote at least half of my perks, making this a far better document.

CHANGE LOG

1.0 - Initial release. Jun 30, 2022
1.1 - Minor corrections. Expanded notes section. Changed FTL speeds of Space Warpers. Jul 13, 2022
1.2 - More minor corrections, mostly layout. Included the option for asteroids to be a thing if you use ‘Real Distance’. Jul 17, 2022
1.3 - Even more minor corrections. Added note about supplement jumps. Added some images. Other than the logo all the images are taken from my own screenshots. Jul 27, 2022
1.4 - Notes on how to interpret perks and drawbacks expanded. Added details about maximum time and jump. Added a new failure condition of not completing your mission before the heat death of the universe. Added upgrade to Stellar Export. Added a note that you can import Icarus into other jump's giant robots when that jump allows. Added Failproof Tech upgrade to Failsafe Tech perk. Apr 5, 2023

These are the items in each category. If there are any new items released before this jump is updated, place them into whatever category you feel most reasonable.

-Logistics & Storage
- Conveyor Belts (Mk.I/Mk.II/Mk.III)
- Sorters (Mk.I/Mk.II/Mk.III)
- Splitter
- Automatic Piler
- Traffic Monitor
- Storage (Mk.I/Mk.II)
- Storage Tank
- Logistics Distributor
- Planetary Logistics Station
- Interstellar Logistics Station

-Production
- Arc Smelter/Plane Smelter
- Assembling Machines (Mk.I/Mk.II/Mk.III)
- Oil Refinery
- Chemical Plant/Quantum Chemical Plant
- Fractionator
- Miniature Particle Collider
- Spray Coater

-Power Generation & Storage -
- Wind Turbine
- Solar Panel
- Geothermal Power Plant
- Thermal Power
- Mini Fusion Power Plant
- Artificial Star
- Accumulator

-Mining
- Mining Machine
- Advanced Mining Machine
- Water Pump
- Oil Extractor
- Orbital Collector

-Power Transmission + Science Lab
- Tesla Tower
- Wireless Power Tower
- Satellite Substation
- Energy Exchanger
- Matrix Lab

-Dyson Sphere
- EM-Rail Ejector
- Ray Receiver
- Vertical Launching Silo
- Solar Sail
- Dyson Sphere Component

-Vehicles
    Logistics Bot
    Logistics Drone
    Logistics Vessel
    Small Carrier Rocket
-Intermediate Products and Consumables
    All the components to build other items from Stone Bricks to Strange matter and Quantum Chips. This also includes the fuel sources and the matrices.