HEI // ALMAGEST DIVISION

Gameplay System Proposal: Reputation and Shipyards

A survival construction and progression proposal for Space Engineers 2, focused on controlled blueprint deployment, shipyard-based large-grid production, faction reputation, resource logistics, and ship-loss value.

Document Type: Concept Proposal
System Focus: Survival construction, server performance, faction progression, resource logistics, and combat economy
Prepared For: Space Engineers 2 gameplay feedback

Proposal Overview

One of the biggest issues on Space Engineers servers was the use of large-scale 3D printers. Producing very large ships required huge numbers of welders, pistons, projectors, conveyors, and supporting infrastructure, which often created significant server lag.

This also affected combat balance. Because ships could be printed repeatedly, players often relied on cheap gun bricks, weapon spam, and disposable grids rather than building ships with meaningful armor continuity, structure, or long-term value. If a ship could be quickly printed and thrown away, the cost of losing it became much lower.

In Space Engineers 2, this issue could become even more important. With the unified grid system, the number of usable blocks on a single grid has grown significantly. At the same time, the new fracture system may limit the effectiveness of using certain blocks as armor in the same way players did in Space Engineers 1, such as using gyroscopes or other dense blocks as improvised protection.

Because of this, a more resource-friendly and server-friendly way to produce ships could be beneficial for the future of the game.

Proposed Solution: Controlled Grid Pasting

The core idea is to allow players to paste full grids in survival, but with strict limitations.

At first, this may sound like creative mode abuse. A player could theoretically paste capital ships over and over again. However, this could be balanced through mass, volume, block, and reputation limitations.

For example, players could only paste small grids locally up to a certain mass limit, such as 30,000 kg. This would allow small utility ships, drones, scouts, or light fighters to be deployed without requiring large printer setups.

There could also be block restrictions. Certain advanced or high-value blocks, such as reactors, jump drives, large weapons, or other late-game systems, might not be pasted fully built. Instead, these blocks could still require manual welding, resources, or additional assembly steps. This would prevent players from instantly producing fully combat-ready ships with no additional effort.

> **Core Rule**
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> Small ships can be deployed locally under a strict mass limit. Larger ships require shipyard access, faction standing, build time, resources, and cost.

Shipyards for Larger Ships

For larger ships, players would need to use dedicated shipyards.

A shipyard could be a station-based block or facility that produces a projected ship over time. This would function similarly in concept to old nanite-building mods in Space Engineers 1, but without requiring hundreds of physical welders. Keen could design the system in a more performance-friendly way, where ships are assembled through a controlled build process rather than through massive lag-heavy printer arrays.

This system would not replace manual shipbuilding. Players could still build ships by hand, use projectors, or construct traditional printer systems if they wanted to. The shipyard system would simply provide a cleaner alternative that reduces the need for enormous welding arrays, especially on servers where large printers can become a performance issue.

This would create a clear distinction: small ships could be pasted locally by the player, manually built, or printed normally, while larger ships could be produced through a dedicated shipyard if the player has the reputation,

resources, and access required.

This would allow large-grid production to remain possible without forcing players or servers to rely entirely on massive 3D printer systems.

Player-Built Shipyards

Shipyards could also be buildable by players, but only after earning the required faction reputation and providing the necessary resources.

This would allow advanced players or factions to create their own shipbuilding infrastructure without making faction stations irrelevant. A player-built shipyard could still require a faction license, reputation unlock, or shipyard authorization before it can be constructed or activated.

Shipyards could come in different block sizes, with each size supporting different ship classes. A smaller shipyard block might only support small-grid or light large-grid ships, while larger shipyard blocks could support corvettes, industrial ships, or capital-class grids.

This would let shipyards scale naturally with progression. Players would not immediately gain access to full capital ship production. Instead, they would expand their shipbuilding capability over time by unlocking larger shipyard blocks, improving their faction standing, and investing more resources into infrastructure.

To keep faction shipyards valuable, player-built shipyards could use the same faction reputation system but at a higher cost. For example, using a private shipyard could cost double the faction coins compared to using an official faction-controlled shipyard. This would give players the convenience of building from their own base while preserving the value of major faction stations.

Reputation-Gated Shipyards

Shipyards should not be available everywhere. Official shipyards could be limited to two or three major locations throughout the system.

To access them, players would need to build reputation with the faction that controls each shipyard. This could be done by completing missions, contracts, trade jobs, combat assignments, or other faction-related objectives.

As players earn reputation, they could unlock access to more advanced shipyard services. This would give factions more long-term value and give players a reason to engage with the mission and reputation systems beyond simple rewards.

Reputation could also determine what size of shipyard service the player can access. Early reputation tiers might allow only small-grid or light large-grid production, while higher reputation tiers could unlock larger ship classes, faster build times, better pricing, or permission to construct private shipyard blocks.

Faction Coins and Shipyard Cost

The shipyard system could also use a faction currency or shipyard token system.

Players could earn faction coins by completing missions for a faction. These coins would then be consumed when producing ships above the local-paste limit.

For example, ships under 30,000 kg could be pasted locally and would not cost any faction coins. Ships above 30,000 kg would require a shipyard. Shipyard production could cost 1 faction coin per 1,000,000 kg of ship mass.

Private or player-built shipyards could use the same system, but at a higher rate. For example, a private shipyard could cost 2 faction coins per 1,000,000 kg of ship mass. This would make private shipyards useful and convenient without making official faction shipyards irrelevant.

This would make larger ships progressively more expensive without making the system overly punishing. A small large-grid ship would still be accessible, but very large warships or capital ships would require meaningful investment, faction progression, and planning.

> **Suggested Cost Model**
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> Local paste under 30,000 kg: no faction coin cost. Official shipyard: 1 faction coin per 1,000,000 kg. Private shipyard: 2 faction coins per 1,000,000 kg.

Local paste limit	Ships under 30,000 kg could be pasted locally and would not cost faction coins.
Official shipyard	Ships above 30,000 kg require shipyard access. Suggested cost: 1 faction coin per 1,000,000 kg.
Private shipyard	Player-built shipyards could use the same system at a higher rate, such as 2 faction coins per 1,000,000 kg.
Materials	Faction stations could sell resources for credits or accept player-supplied materials. Private shipyards could pull from local storage and request assembler production.

Shipyard Resources and Production

Shipyards should still require real materials to produce ships.

At faction-controlled shipyard stations, players could either buy the required resources with credits or load their own materials into the station local cargo system. This would give players two options: pay more for convenience, or reduce the credit cost by supplying their own refined materials and components.

For player-built shipyards, the block could connect directly to the player conveyor, cargo, refinery, and assembler network. When a ship is queued for construction, the shipyard could "call" for the required components from the connected production system.

If the components already exist in storage, the shipyard would pull them from cargo. If they do not exist, the shipyard could request production from connected assemblers until the required parts are available.

This would make shipyards feel like part of the existing engineering and logistics system rather than a detached menu-based feature.

This would also preserve the survival loop. Players would still need mining, refining, component production, cargo storage, power, and infrastructure. The shipyard would not create ships for free. It would simply organize and automate the final assembly process in a more server-friendly way.

Combat Balance and Ship Value

This concept depends heavily on how the final combat system is implemented.

If Keen adds an easier way to build and replace ships, then ship loss could become less meaningful. If players can quickly produce and lose ships with very little consequence, combat may become more disposable instead of more engaging. This is why Keen would need to account for ship value when designing any shipyard or automated construction system.

My armor proposal is one possible way to solve this. If ships are more durable, more structurally meaningful, and harder to reduce into disposable weapon platforms, then losing a ship matters more. Armor continuity, internal protection, and better damage behavior would all help make ships feel like real investments rather than

temporary grids.

The goal is not to make ship production instant or consequence-free. The goal is to make shipbuilding more accessible, especially for new players, while still preserving the importance of ownership, survival progression, and combat loss.

If a ship takes time, resources, faction access, and reputation to produce, even through an automated shipyard, then it still feels meaningful. Players would not need to rely on lag-heavy printer setups, but they would still care about what they build and what they lose.

Balance Benefits

- It would reduce the need for massive welding printers, improving server performance.
- It would make ship loss matter more by adding a real cost to replacing large ships.
- It would reduce disposable weapon spam and encourage better ship design.
- It would give factions, missions, and reputation more gameplay value.
- It would allow players to produce ships without relying entirely on awkward or lag-heavy printer setups.
- It would preserve manual building and traditional printers rather than replacing them.
- It would give advanced players a long-term infrastructure goal through player-built shipyards.
- It would make faction reputation more important by tying it to shipyard access, private shipyard permissions, and large-ship production.
- It would still preserve survival progression by limiting what can be pasted locally and requiring shipyards, resources, and production infrastructure for larger builds.

Even if the armor system remains mostly unchanged, this system could still improve balance. It would make ship production more controlled, more performance-friendly, and more connected to progression. However, the system would be much stronger if paired with an improved armor and damage model that makes individual ships more meaningful in combat.

Final Thought

A reputation-based shipyard system would give Space Engineers 2 a cleaner and more scalable way to handle ship production. Small ships could still be deployed quickly by players, while larger ships would require faction access, resources, time, and shipyard infrastructure.

This system would not remove the existing survival building loop. Players could still build ships manually, use projectors, or create traditional printers. The shipyard would simply provide another option: a more organized, scalable, and server-friendly way to produce ships when the build becomes too large for practical manual assembly or printer infrastructure.

The ideal version of this system would not remove the cost of ship loss. Instead, it would move that cost away from server-heavy printer infrastructure and into reputation, faction access, resources, build time, component production, and better combat balance.

This would preserve the creativity of building and blueprinting while reducing the server problems caused by massive 3D printers. It would also make large ships feel more valuable and meaningful in survival, rather than disposable grids that can be endlessly printed and thrown into combat.

> **Design Intent**
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> The goal is not to remove the cost of ship loss. The goal is to move that cost away from server-heavy printer infrastructure and into faction access, resources, component production, build time, shipyard permissions, and better combat balance.