

JUMP POINT

ISSUE: 08 01



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FROM THE COCKPIT

GREETINGS, CITIZENS!

Happy New Year! I hope everyone within range of this transmission had an excellent holiday. Speaking for myself, I had a great rest and feel like I've come back roaring and ready to go. During the break I traveled north for a few days to visit my in-laws and, in the process, ran into another *Star Citizen* supporter while wandering around, well, a bus museum... I went to a bus museum. But the great thing about happening across a fellow space captain in meatspace is that you immediately have a shared world to be excited about, even if you've never met before. We chatted about spaceships and mechanics and hopes for what's coming next and, as we parted ways, he wished me a "happy 2950". How great that the world we've been building is so tangible that you can speak as if you're living in the 30th century without ever stopping for a beat. So I will pass that on to all of you: happy 2950!

Now on to **Jump Point!** First out of the launch tubes for January is our second visual dictionary. This time we're looking at some of the RAREST ships in *Star Citizen*. That's not to say the most valuable or the most powerful... these are the ones that will show up in more limited numbers because they represent specific events or promotions that have happened over the years. They range from the true captured Vanduul Scythes from the very start of crowd funding, to the pirate ships that could be earned through a special Swarm mode competition. I started thinking about this feature in the first place because I thought it would be neat to see all of the special

skinned ships lined up together in the magazine and ended up incredibly satisfied to be reminded about all the interesting ways such special ships have come together over the years. I hope you enjoy this one! (The most valuable ship, of course, is the one working to keep you separated from the vacuum and pirates!)

For January's interview, we were lucky enough to sit down with some of the developers behind the recent work on *Star Citizen's* melee combat. Whether you're sawing your way through a Mars outpost or freezing a diving suit with a wrench (man, games are weird!), you're familiar with melee first person combat mechanics... and now you can find out how we're doing it on *Star Citizen!* Meanwhile, the Narrative Team is selling fine leather jackets. Or at least microTech Cold-Weather Jackets, which you'll be receiving in digital form as your monthly subscriber item. And what better way to celebrate your new jacket than with a Galactapedia entry on the world itself? Plus, we have a new Portfolio on Gemini, one of *Star Citizen's* many weapons manufacturers (I would wager that everyone reading this has fired a LH86 ballistic pistol at some point in their starfaring career to date).

That's it for January, but there'll be a lot more to look forward to in the truly futuristic-sounding year ahead. Until then, we'll see you... through the **Jump Point!**

Ben

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MELEE COMBAT

'Melee' - the element of first-person combat where players battle with direct-impact weapons, such as knives, fists, swords, clubs, and the like. It's a separate challenge from developing a system for fighting with ranged weapons, like guns and missiles. In the early days of FPS games, melee combat was treated as an afterthought, a sort of last-minute reprieve for players who couldn't manage to conserve their ammunition. The original Doom changed that when it handed players a chainsaw; from that moment, developers strove to find interesting ways to incorporate more direct personal combat that went beyond shooting one another. Now, Star Citizen is launching its first dedicated melee system to expand the existing first-person gameplay. Several of the developers behind the update were kind enough to take time out of their busy schedules to explain what went into the system and what we can look forward to in the future.

BEGIN TRANSMISSION →

JUMP POINT (JP): Please start by letting us know your name, title, and what you've been working on for *Star Citizen*.

JJ: Jonny Jacevicius, Senior FPS Systems Designer. I've been working on multiple facets of the game like player status, weapons, body dragging, personal inner thought, player inventory, and *Theaters of War*.

RT: Richard Tyrer, Lead FPS Systems Designer. My role encompasses everything to do with character gameplay. So (along with the things

JJ mentioned), the multi-tool, armor, animation speed ups, hazards, physical damage, and much more.

JL: Jens Lind, Lead FPS Programmer. Since I started six years ago I've worked on a wide range of features. In the last few years, my team and I have been heavily involved in *Star Marine*, weapons handling, and player traversal. Most recently, we've been working on FPS mining, extreme weather gameplay, and close combat.

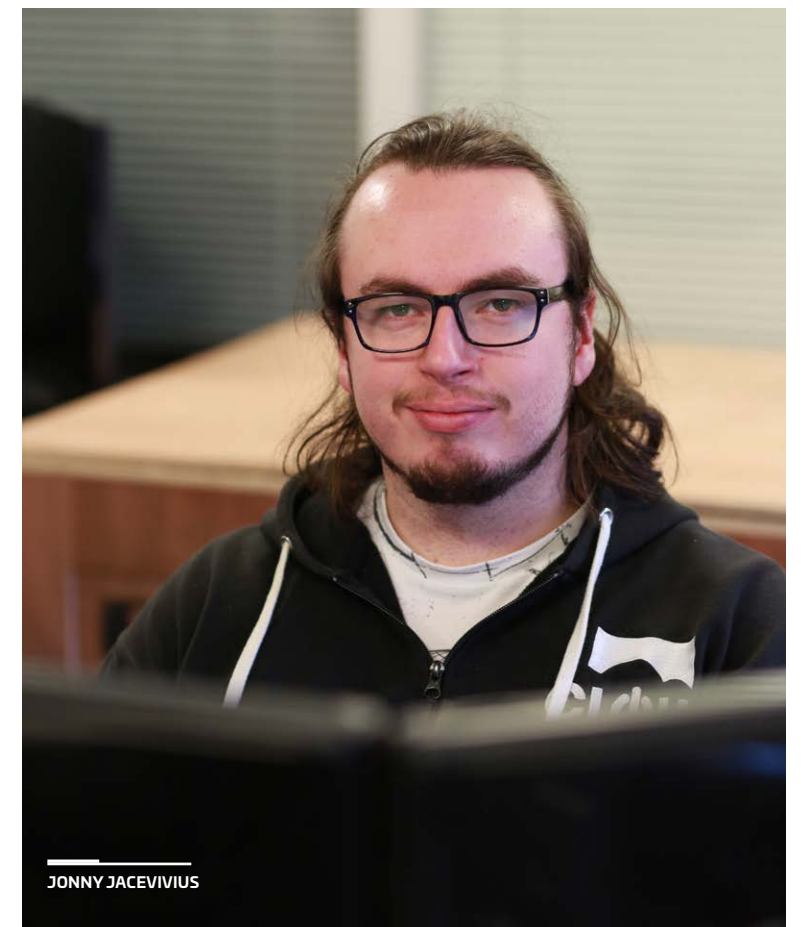
CE: Christopher Edwards, Embedded Actor & Weapons QA Tester.

JP: Give us a high-level description of the new melee system. What is it and what does it mean for how *Star Citizen* is played?

JJ: While we developed the melee system for several reasons, it will primarily give players an up-close combat option they've never had before. Unarmed combat also presents players with new non-lethal options too. So, if they're in an area where weapons are prohibited, they can still settle their differences.

RT: *Star Citizen* is a sandbox MMO and it's up to us to provide the tools for players to play the game how they want – stealth is a major option that melee permits.

JL: It also expands on the existing mechanic with a larger range of offensive and defensive moves and a more balanced integration into the player health and stamina systems. I think it adds a level of



complexity and skill with interesting risk/reward considerations. I think the biggest impact comes from takedowns, which allow you to immediately incapacitate an opponent.

JP: What were your inspirations for the new melee combat system? What kind of research went into planning this update?

JJ: We compared the melee systems from a lot of different games and genres, from mainstream shooters to medieval combat simulators, to find out what kind of feel we wanted and how we could achieve it.

RT: This involved not only playing the games to get a sense of feeling, but video capture, frame analysis, and research into how the communities of those games utilize the tools they're given.

JL: From a technical side, we looked at conference presentations and read post-mortems from games that feature close combat, specifically focusing on games where melee was a key feature.

JP: How will players control the new melee attacks?

JJ: The controls vary based on whether players are using a gamepad or mouse and keyboard, but ultimately it should be intuitive and picked up quickly. Left-click (or trigger) attacks with the left arm, and right-click

(or trigger) attacks with the right. Holding performs a heavy attack and holding both buttons blocks with both arms.

JP: What is the difference between a light and heavy attack?

JJ: Light attacks are quicker, making it easier to catch your opponent off-guard or work around their block, but as a trade-off, they do less damage. Heavy attacks are slower, more telegraphed, and will tire you quicker. But, if they connect (especially the head), they really hurt your opponent.

JL: Technically, a light attack can be played in combination with motion, allowing the player to change direction and speed while punching. A heavy attack replaces base motion, so the player is more locked in. This makes the setup and implementations different.

JP: What are combination attacks?

JJ: Combination attacks are varieties of light and heavy attacks. As blocking is directional for the defender, it rewards the attacker by making their next attack a bit more unpredictable and therefore harder to defend against. Combination attacks also deal heavier damage than their regular light/heavy counterparts. In addition, they provide more visual interest and a better flow to the combat.



JP: Tell us about the blocking and dodging aspects. How do they protect the player using them and how do they otherwise impact them?

JJ: When fighting unarmed, stun damage is an important factor to consider; if you get hit in the body and head a lot, you'll end up getting dazed and eventually knocked out. Blocking helps you get your arms in the way of your vitals, though you'll need to aim your block in the direction of incoming attacks or they may slip by. Dodging is also useful if you don't want to risk missing your block. However, dodge too often and you'll quickly become tired. When being attacked with a weapon, dodging is your best option, or your arms will take considerable damage!

RT: Simply, blocking is predominantly for unarmed attacks – dodging is more to avoid knife attacks.

JP: What impact does melee combat have on stamina when compared to ranged weaponry?

JJ: When firing a weapon, the only physical action the player has to do is pull the trigger and counter the recoil, so there's very little stamina cost. Compare that to melee combat, where you're dashing around and swinging your fists, and stamina is something you'll very much have to take into account if you plan on winning a fight. Run your stamina too low and you may find you can't dodge or attack, and you may even drop your block.

JP: Is there a benefit to choosing melee combat over existing weapons or is it more of a last-ditch/situational thing?

JJ: Well, you've heard the phrase "bringing a knife to a gunfight". In life or death combat situations, getting up close to someone with a gun trained on you will be very risky and incredibly difficult. That said, in the future, you'll only be able to carry a finite amount of ammunition, so if you find yourself without, melee may be your best shot. The one thing it is particularly good for is takedowns – quietly knocking out or killing an unaware enemy.

RT: When we bring the physical inventory to the game, it will bring with it the preparation side of combat. This means that you will have to decide what to take with you on your adventures as you'll have a limited inventory capacity. Do you fill your backpack with grenades and ammo or prioritize food, drink, and healing supplies? What about space for loot? With these decisions, there may come a time when you're glad you have your trusty knife!

JP: What is a takedown?

JJ: A takedown is a melee interaction that allows you to instantly kill or knockout someone if you take them unawares. With AI, this can be from any direction if they're unaware of you. You can catch other players off-guard, but can only perform a takedown on them directly from behind.

JL: Technically, the takedown is a cooperative animation where the two actors perform an action together. There are several procedural solutions running to handle the horizontal and vertical offset between the attacker and victim. For example, to ensure the knee always connects with the head for maximum visual impact.



JP: What are character states and how do they play into this system?

JJ: The main character state to consider here is unconsciousness. This occurs when your stun damage exceeds max, at which point you will blackout, fall to the floor, and begin to recover.

RT: The character has many states, such as unarmed, pistol, stocked (holding a rifle), and unconsciousness. Within the melee system, we also take into account player status, which covers things like being dazed and concussed. As the character takes punches, the screen will start to blur to simulate that they are becoming concussed.

JP: Tell us about the new melee weapons premiering with this system.

JJ: What most people don't realize is that, in some cases, they've been carrying a combat knife around in their loadout for a long time, potentially years! The military combat knife was a good starting point as it's a common, close-quarters weapon with good versatility – it can slash, stab, and be used for takedowns.

RT: The knife also provides the foundation for us to add a lot more melee weapons in the future, as we developed the system in a generic way. This means we can deliver a lot of new content (combos, attacks, weapons) without the need for additional codework.

JP: How does melee combat work with the law and order system? Are players able to engage in this kind of fighting in zones where they can't carry weapons?

JJ: Right now, players should only be able to fight unarmed in Grim HEX. However, once we have more robust security that can react appropriately to this kind of situation, we'll allow melee combat (amongst other things) in armistice zones.

JP: What's next for melee combat? Is the system complete or will there be additions as we move forward?

JJ: We can't promise anything, but we'd like to expand on the melee combat system with more attacks, different fighting styles, and additional weapons.

JL: We definitely want to have close-combat available in EVA. We'd also like to experiment with additional controls, like locking on to an opponent, and improve procedural solutions to make everything line up and connect better.

JP: Will the addition of melee combat impact other systems in development? Will any of this work assist in, for instance, mining or salvage?



JJ: Some of the systems that were developed for melee combat, like stun damage and knockouts, will be used across the entire game. For example, stun damage features heavily in a new damage type we're working on that will tie into bounty hunting and player status. There are also systems it's also helped us improve. For example, we were already developing the force reactions system and seeing it in use with melee highlighted some aspects that we could improve.

RT: Force reactions were designed in parallel with the melee system and, when it's released, will enhance the visual feedback for unarmed combat, as stun damage modifies the incoming force of attacks. This will simulate that the first punch in a boxing match might be shrugged off, but the same punch in the tenth round might cause the defender to stagger as they have built up a lot of 'stun'.

JP: Will we see additional elements built around the melee combat system?

Organized boxing matches and the like?

JJ: As always, the *Star Citizen* community doesn't disappoint - I've already watched our players organize boxing matches themselves! We're currently looking at and prototyping scenarios that use the unarmed melee system, but no promises on when these will arrive! Just be aware that it's on the radar and some melee-centric content will arrive at some point.

JP: How was this new system tested? What different situations did you take into account?

CE: Testing for the close-combat system started the same way that all new features are tested - by just pressing buttons and seeing what the result would be. After an hour or so of punching enemies in a test level, I would create a video in first and third-person view to show the programmers, animators, and designers the current state. After a few

months of back and forth refinement, I would then run two games and bring each player to an area to test how punching looks person-to-person and how the takedowns look from different perspectives. Again, these would be shown to all stakeholders for refinement. I had to consider variables like whether the player was in EVA, on stairs, or falling from different heights.

JL: A lot of dummy players were harmed in the making of this system!

JP: Did you run into any unusual bugs during testing?

CE: One of the more unusual bugs that I came across was when performing an unconscious kill on a player, which is where the player will stomp onto their opponent. The first few times that I started testing this, the player's head would roll into their chest and pop back out of place at the end of the animation.

JP: Do you have any special messages for the players who will be engaging in melee combat? What would you like to see them experience?

JJ: Hopefully you guys enjoy it and be sure to leave us plenty of feedback on Spectrum. Let us know what you think!

RT: This is just the beginning for melee and we have a lot of cool plans for the future. In the meantime, let us know your thoughts and, hopefully, we can work together to create a really robust system.

JL: Knives only elimination matches in *Star Marine*!

END TRANSMISSION ←

VISUAL DICTIONARY: RARE SHIPS

For this Visual Dictionary, we've put together a collection of the rarest ships in the galaxy. While you can be certain that every spaceship in the 'verse will someday have a story behind it, these eleven variants already have some lore behind them. Whether they were only available for a limited time in recognition of a special event or were something players had to earn access to, these are the extra-unique variants that tell a tale from the moment they show up on sensors. We've categorized them by working, fighting, alien, and ultralight, while the final pair is still in concept.

ORIGIN 600i - EXECUTIVE EDITION

The 600i in any format is certainly not a common ship: it's one of the most exclusive luxury spacecraft produced by Origin Jumpworks and it certainly carries with it the sense of success. From its sleek exterior to its top-of-the-line components and engineering, the 600i is a spacecraft flown by the 30th century's equivalent of jet-setters. Multiple variants of the 600i were developed, including a standard touring model and an explorer variant that will allow future discoveries to take place with a little more class. The 600i

was revealed in a concept promotion in August 2017 and was quickly put into development, going flyable in *Star Citizen* Alpha 3.2 in June of the following year. So given the 600i's incredible luxury credentials, what about the rarest variant, the Executive Edition? This special version of the 600i features a black and gold livery and is available only to Legatus-Navium-ranked supporters - currently the highest rank of the Concierge program. It will be available in-game in an upcoming release.



3x S5 Behring Laser Cannon

Proprietary GLAX hull plating

2x CF-227 Badger Laser Repeater

4x 3 Arrester III Missiles

PERFORMANCE

Length:	91.5 meters
Mass:	1,576,792 kg
Speed:	135 m/s
Yaw/Pitch/Roll:	30/30/50 dps

ARGO MOLE - CARBON EDITION

The ARGO MOLE Carbon Edition, a special variant of the recently-launched multi-crew mining ship, is one of the latest additions to *Star Citizen's* menagerie. The MOLE (derived from the acronym Multi-Operator Laser Extractor) is a role-focused ship intended to close the game between the single-person Prospector and the massive Orion mining platform. The MOLE encourages players to work together for a bigger payday when mining rather than trying to take on the task themselves. The design was first shown at CitizenCon 2949 during a panel discussing ship development;

a few days later it was revealed in-engine as part of the annual Intergalactic Aerospace Expo (IAE). The MOLE went on sale at the end of the year with a straight-to-flyable launch in *Star Citizen* Alpha 3.8. For the initial promotion, two special versions were made available for the first time: the Carbon Edition and Talus Edition. Where the standard MOLE launched with a familiar ARGO orange scheme, the Talus Edition was presented in grey and the Carbon Edition in striking black. The Carbon scheme also designates the ship as part of the Concierge program.



Independently controlled articulated extraction stations

3x S2 Mining Lasers

PERFORMANCE

Length: 38.5 meters
 Speed: 128 m/s
 Yaw/Pitch/Roll: 25/25/50 dps

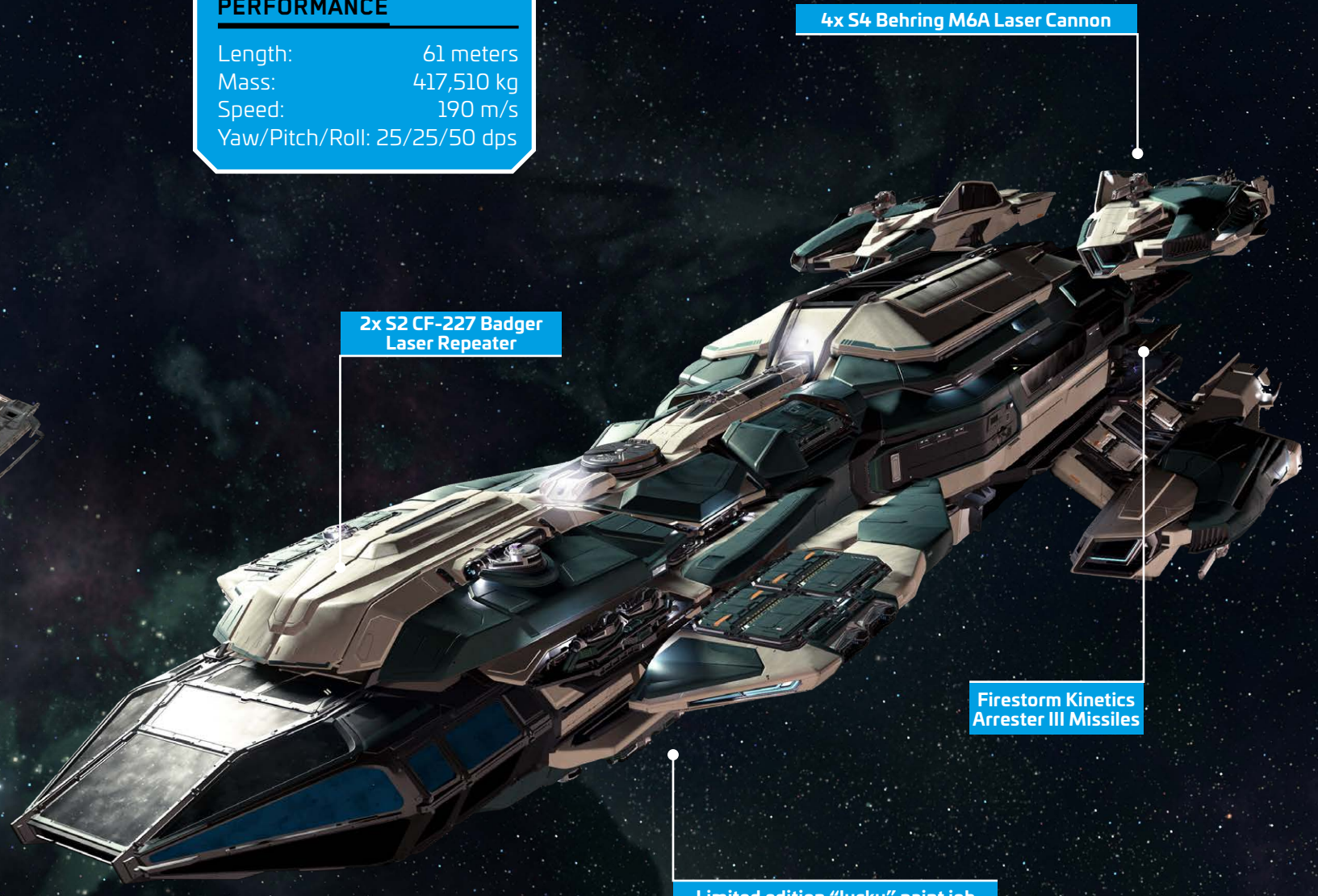
RSI CONSTELLATION PHOENIX EMERALD

It's... GREEN! The Constellation Phoenix Emerald does double duty, being a limited edition of a limited edition. The original Constellation Phoenix was one of *Star Citizen's* first luxury oriented spacecraft. It was revealed in late 2014 alongside the Taurus, Andromeda, and Aquila production models and is said to be a conversion that Roberts Space Industries produces in smaller numbers than the rest. Originally a development of Ryan Church's original Constellation Mk. III, the Phoenix was billed

as the galaxy's original party ship with luxury fittings, a special snub craft, and even a hot tub. The Emerald took the design one step further in March 2018 as part of an event celebrating Saint Patrick's Day. The ship featured a you-can't-miss-it green paint scheme alongside all the luxurious amenities of the standard Phoenix, including both a P-72 Archimedes and Lynx Rover. The Phoenix Emerald went live in late 2018 with *Star Citizen* Alpha 3.3.

PERFORMANCE

Length: 61 meters
 Mass: 417,510 kg
 Speed: 190 m/s
 Yaw/Pitch/Roll: 25/25/50 dps



4x S4 Behring M6A Laser Cannon

2x S2 CF-227 Badger Laser Repeater

Firestorm Kinetics Arrester III Missiles

Limited edition "lucky" paint job

ANVIL HORNET F7C-M HEARTSEEKER

If you've been here from the start, there's a good chance the Hornet was the first *Star Citizen* spacecraft you ever saw; it made its debut when the project was first announced in October 2012 as Chris Roberts demoed a fully functional military version in combat with the Vanduul. When the crowdfunding campaign first launched, Anvil's Hornet was presented as the military counterpart of the MISC Freelancer civilian cargo ship, with packages offered at the same price for each ship. Many players chose the Hornet and it was one

of the first to be made available in the Hangar Module and *Arena Commander*. Variants were released in 2013, including the Tracker hunter, Ghost stealth ship, and the Super Hornet (the closest civilian-manufactured equivalent to the UEEN's F7A). The Heartseeker is a limited variant of the Super Hornet released for Valentine's Day in 2019, featuring a special gun loadout that included four laser cannons and a tasteful paint scheme with red stripes on the leading edges of the wings and distinctive heart-themed nose art.

AEGIS DYNAMICS GLADIUS (PIRATE VERSION)

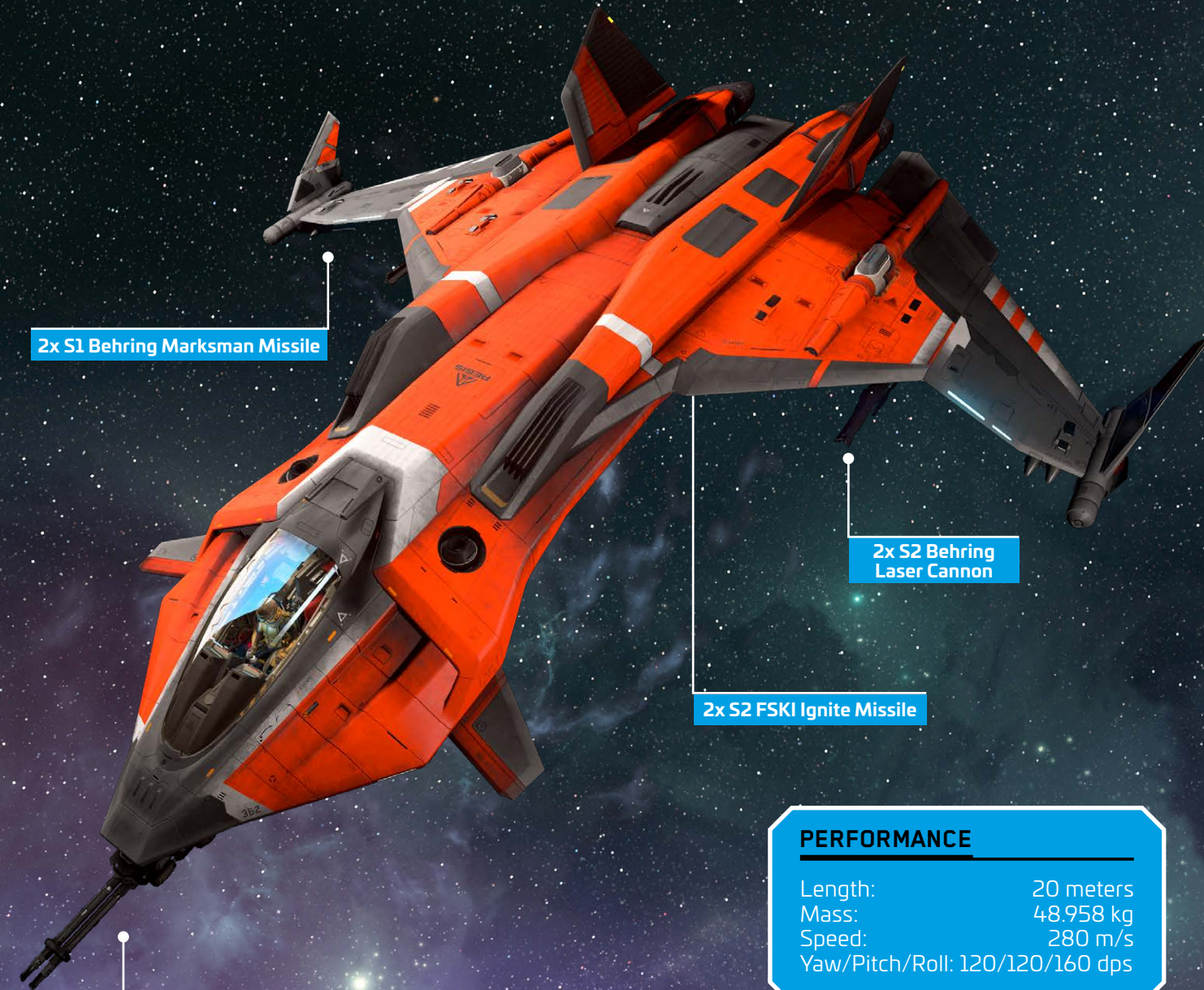
The Gladius is a military-derived fighter first developed as a concept ship for both *Squadron 42* and *Star Citizen* in 2014. The Gladius was first imagined as the 'little brother' of the Hornet; a lighter and faster spacecraft that was intended more as a light dogfighter and interceptor. The Gladius was also said to be much older and in the process of being replaced by the Hornet and the brand-new Lightning on the front lines, which allowed players access to surplus models. The so-called Pirate Gladius

is a distinctive red-liveried version that became flyable in *Star Citizen* Alpha 3.7 in 2019. There was just one complication: players needed to first unlock the ability to purchase it by completing a newly-revamped Pirate Swarm game mode. So when you come across an all-red Gladius flying around Stanton, be extra cautious: the pilot isn't holding out for a Hornet... they're more than likely a highly skilled dogfighter!



PERFORMANCE

Length: 25.5 meters
 Mass: 78,466 kg
 Speed: 230 m/s
 Yaw/Pitch/Roll: 90/90/130 dps



PERFORMANCE

Length: 20 meters
 Mass: 48,958 kg
 Speed: 280 m/s
 Yaw/Pitch/Roll: 120/120/160 dps

AEGIS DYNAMICS HAMMERHEAD 2949 BEST IN SHOW

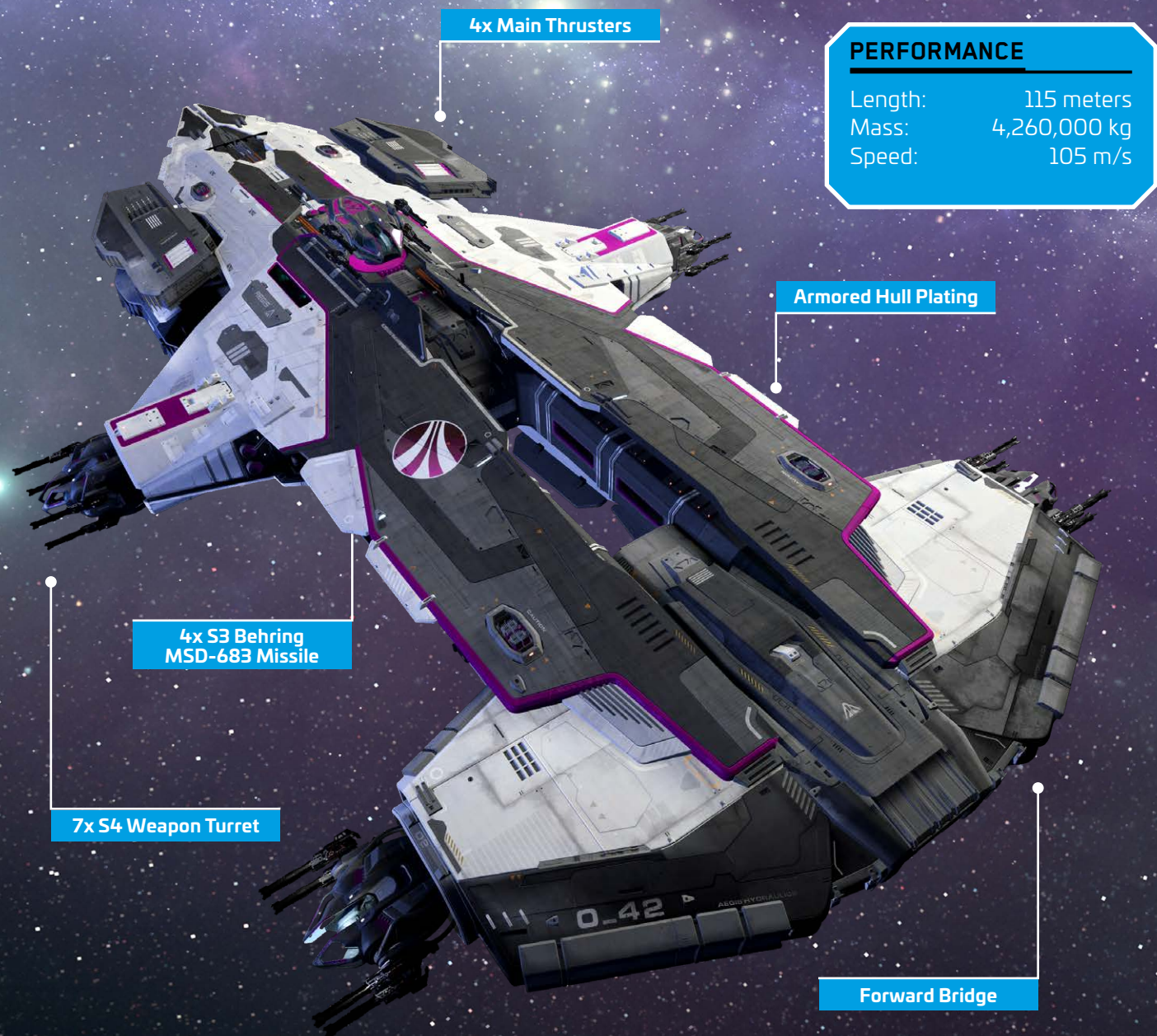
The Hammerhead is a large, powerful gunship that was first presented in November 2017 during the IAE. A multi-crew ship with a fearsome array of weapons, it's built for taking down more maneuverable enemy fighters and has a long history of service to the United Empire of Earth (UEE). To call it a ship that comes in 'guns blazing' wouldn't do justice to quite how many guns it carries. The Hammerhead became flyable with the launch of *Star Citizen* Alpha 3.3 in October 2018. The 2949 IAE offered

up special editions of four ships that had been named 'Best in Show' at the event. The ships (Reclaimer, Cutlass, Caterpillar, and Hammerhead) were each awarded a special schematic hangar flare item and a unique light-grey and black paint scheme with pink detailing. Each one of these ships indicates that the crew took part in the expo... but the Hammerhead is certainly the scariest of the set to run into in unpatrolled space!

ESPERIA VANDUUL BLADE

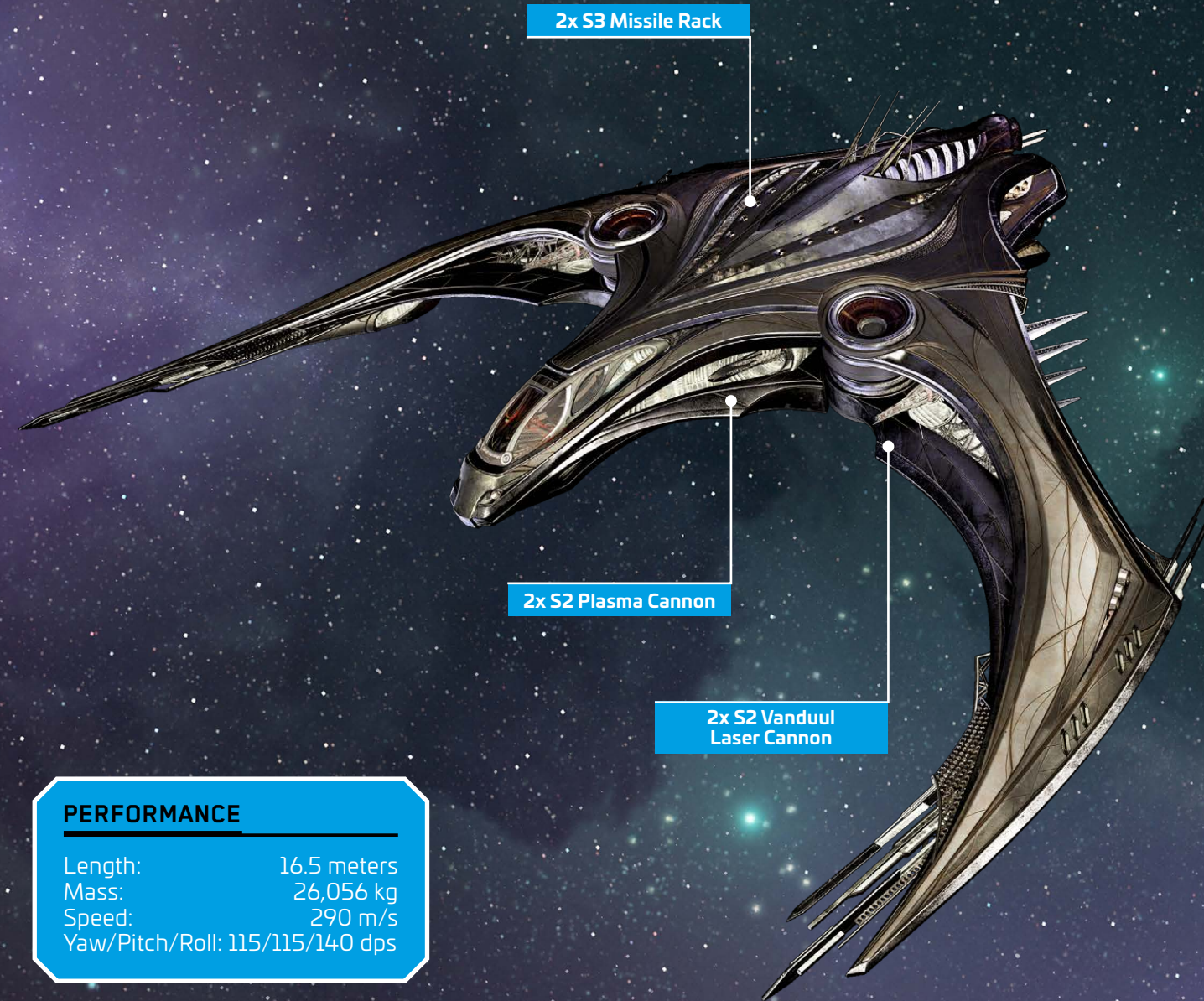
The Vanduul Blade is the alien equivalent of the UEE's Gladius light fighter; a smaller, more maneuverable take on the Scythe that fills out the order of battle in both *Squadron 42* and *Star Citizen*. The Blade was first presented as a concept ship in March 2016 alongside the reveal of a set of classified UEE documentation on the Vanduul fighter force. But unlike the initial Scythe launch, there was an added layer of fiction to the Blade: the models being

constructed for players were not captured or otherwise purchased from the Vanduul. Instead, they were produced by Esperia, a new company in the game's mythos charged with duplicating alien ships for human use. As a result of its unusual origin, the Blade has rarely reappeared since its initial launch and so remains less common than the better known Esperia Glaive. The Blade moved to flight-ready status as of June 2018 with the launch of *Star Citizen* Alpha 3.2.



PERFORMANCE

Length:	115 meters
Mass:	4,260,000 kg
Speed:	105 m/s



PERFORMANCE

Length:	16.5 meters
Mass:	26,056 kg
Speed:	290 m/s
Yaw/Pitch/Roll:	115/115/140 dps

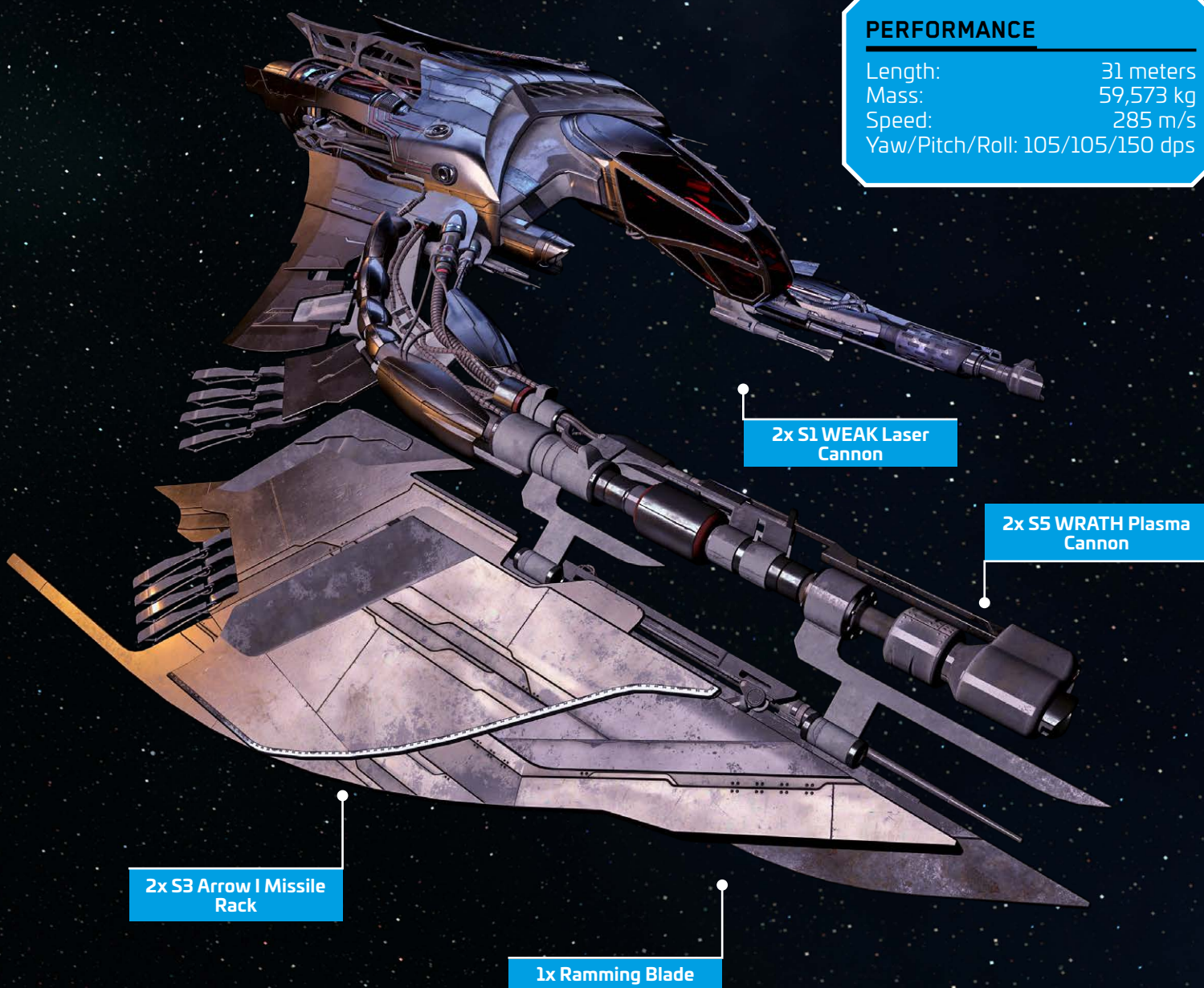
VANDUUL SCYTHER (CAPTURED)

If the Hornet is the UEE's premiere dogfighter, the Vanduul Scythe is its alien counterpart. In fact, the two ships have been paired together from the very start when the Jim-Martin-designed Scythe appeared in the October 2012 trailer for *Star Citizen* and *Squadron 42*. In addition to being one of the first ships implemented in the game, the Scythe was also the basis for a great deal of later development of the Vanduul lore and aesthetic, with elements like the asymmetrical blade entrancing developers and players alike from day one. During *Star Citizen*'s original

crowdfunding campaign, a limited number of Scythes captured by the UEE were made available to supporters. Later, replicas constructed by Esperia were offered at various points, but only a very limited number of the Scythes flown by humans are the original article rather than an exact copy made for UEE aggressor training purposes. The Scythe became flyable in June 2015 with an update to *Arena Commander*. If you happen on an original Scythe while exploring the 'verse, it's a ship that has been around since the very beginning!

PERFORMANCE

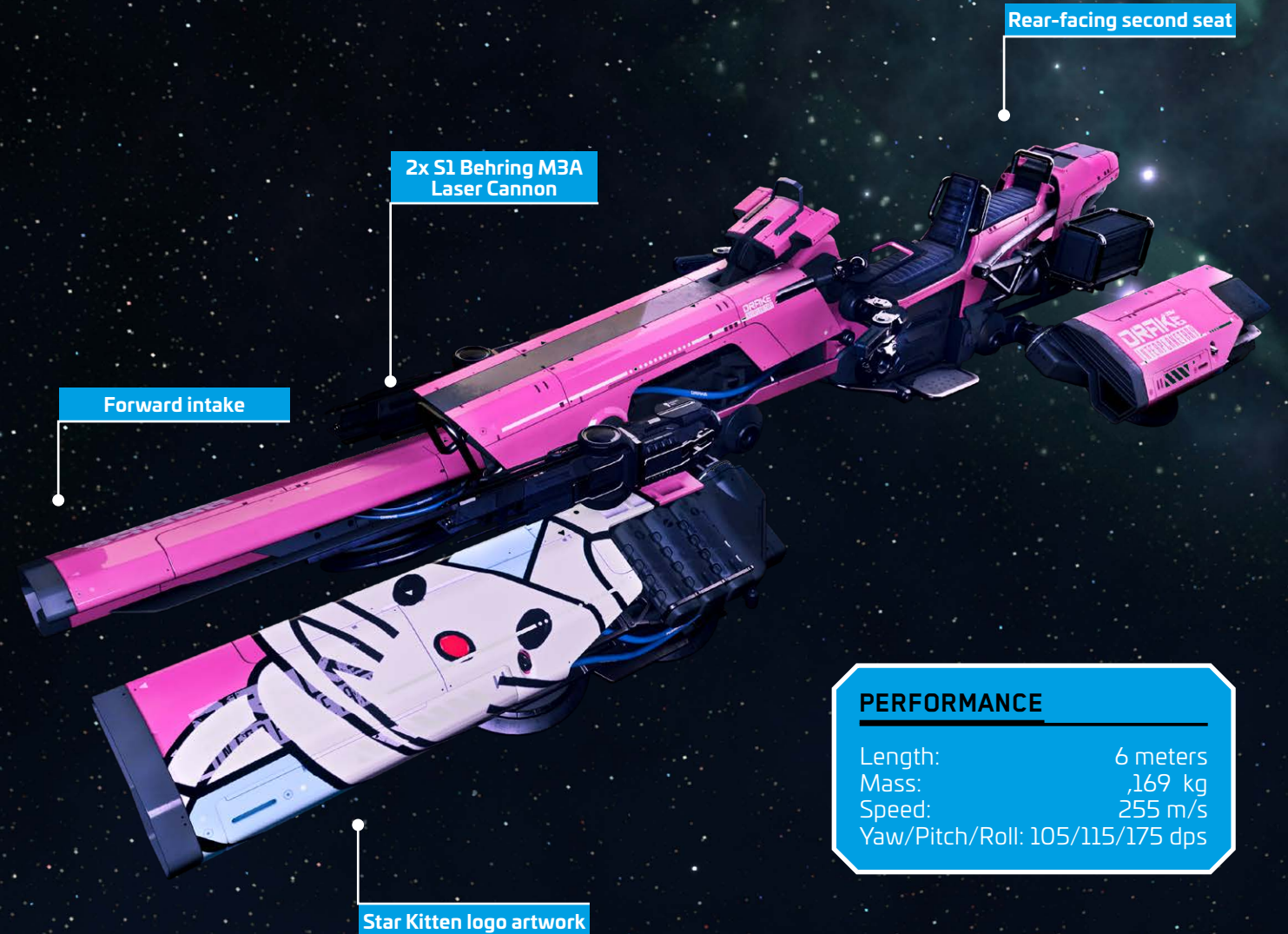
Length: 31 meters
 Mass: 59,573 kg
 Speed: 285 m/s
 Yaw/Pitch/Roll: 105/105/150 dps



DRAGONFLY STAR KITTEN EDITION

The Drake Dragonfly is *Star Citizen*'s original open-canopy ultralight; a futuristic space motorcycle designed for operating both in space and on planetary surfaces (though it's unable to make the transition from one to the other itself). The Dragonfly launched as a concept ship in June 2016 and quickly proved to be one of the most popular ship types yet revealed, giving rise to the development of competing space bikes from other companies in the 'verse. Players could see the potential of a small, fast vehicle with exceptional visibility,

from racing victories to joining teams of coordinated pirates. The Dragonfly became flyable in *Star Citizen* Alpha 3.1 after becoming a favorite way to introduce the game's newly-revealed planetary environments in demo presentations. In 2017, a limited-edition Dragonfly featuring Star Kitten was released as a reward for players who referred a certain number of new players. The result is a ship that stands out on the horizon (it's bright pink!) but which exists in much lower numbers than the standard black or yellowjacket versions.



PERFORMANCE

Length: 6 meters
 Mass: 1,169 kg
 Speed: 255 m/s
 Yaw/Pitch/Roll: 105/115/175 dps

ANVIL F8C LIGHTNING EXECUTIVE EDITION

The Anvil F8A Lightning is the military's peak fighter design and the equivalent of the F-35 Lightning II to the Hornet's F/A-18. The existence of the Lightning was revealed early on in discussions of *Squadron 42*, where it was first imagined as a notch above the Hornet and available only to elite fighter pilots. Despite this early discussion, very little has been revealed since about the specifics of the ship. Imagery released to date shows an ultra-high-tech

design that's distinctly military, but no numbers for weapons or maneuverability have been published. A limited number of F7C Lightning Executive Editions, a civilian modification, have been released as part of the 2018 revamp of the Concierge program for players holding the Praetorian title. The Executive Edition will feature a gold and metallic design scheme and, when flyable, is sure to impress.



PERFORMANCE

Length:	CLASSIFIED
Mass:	CLASSIFIED
Speed:	CLASSIFIED
Yaw/Pitch/Roll:	CLASSIFIED

ORIGIN X1 VELOCITY

The Drake Dragonfly kicked off the development of a number of ultralight vehicles, including the Apoa Nox and Tumbriel Ranger. In September 2017, Origin offered their take on the open-canopy vehicle: the X1. Sleek and rounded, it looks more at home amidst the extreme luxury of the 600i and 890 Jump than its rugged competitors. The X1 has been adapted into two further variants, the X1 Force combat edition and the X1 Velocity racing ship. For

the racing variant, designers imagined how to tune an already tiny craft into something dedicated only to speed. This ultimately meant removing all of the Velocity's weaponry and imagining an even lighter chassis built with a special composite material to give it a push over its companion models. The X1 Velocity is still in concept, but you can bet that when it becomes flyable it'll give those Dragonfly racers a run for their credits!



PERFORMANCE

Length:	5.5 meters
Mass:	1,528 kg
Speed:	IN CONCEPT
Yaw/Pitch/Roll:	IN CONCEPT



GALACTAPEDIA: microTech

microTech (Stanton IV) is the fourth and farthest planet from the sun in the Stanton system, United Empire of Earth (UEE). Located at the outer edge of the system's habitable zone, microTech is mostly ice, with some cold-to-temperate areas of tundra. It was purchased from the UEE by the corporation microTech in the mid-2800s. Its capital, New Babbage, is home to many corporations and startups and is a major center for technological innovation.

ENVIRONMENT

Most of microTech is covered in mountains and ice sheets and subject to strong blizzards and ice storms. There are very few liquid bodies of water. Multiple temperate tundra zones exist in areas associated with deep geothermal activity. Camping expeditions and hikes in these greener biomes are popular vacation activities among microTech's full-time population. Cold-hardy plants such as evergreens, wildflowers, grasses, and lichen grow there throughout the year.

Thawort, a lichen that grows on microTech and other worlds with arctic climates, is the subject of research for several pharmaceutical startups based in New Babbage. Its antiseptic and antibacterial properties have shown promise in the lab, though the properties are only present in wild-collected specimens. Research to replicate these traits in artificial conditions is ongoing.

HISTORY

Discovered in 2851, Stanton IV is a super-Earth, and one of four planets in the Stanton system's habitable zone. Full development of the system would have taken funds not readily available to the government at the time. After beginning initial terraforming, the UEE announced the decision in 2865 to sell it and its sibling planets to private interests in order help pay down its debts and provide a boost to the downturned economy.

An early terraforming error resulted in a climate far colder and harsher than initial projections had indicated, leading to multiple debates on the UEE Senate floor regarding the government's ability to sell Stanton IV. However, it was thanks to this error that founder and then-CEO of microTech Magnus Tobin purchased it as the new headquarters for microTech. Tobin sold off land his company had been using for server farms in the

leadup to this acquisition. According to a contemporary press release, the "reliably frigid" climate of Stanton IV was ideal for keeping their expansive network of servers cool. Tobin personally oversaw the construction of New Babbage, the primary landing zone and now-headquarters of microTech at large.

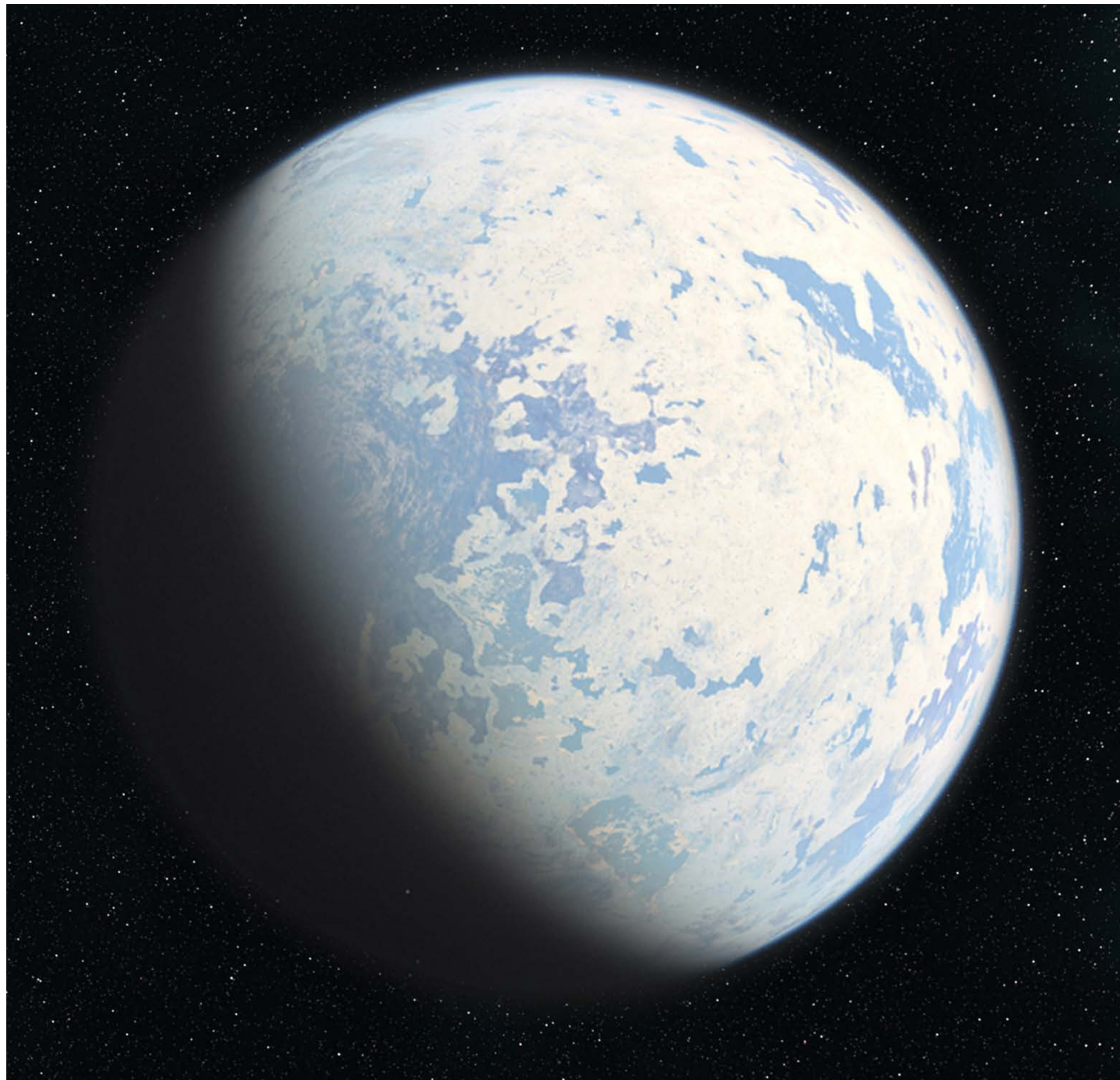
CORPORATE GOVERNANCE

Planetary governance is conducted by specialized divisions of the microTech corporation. Population-sustaining departments such as water infrastructure and waste management exist alongside economic ones such as taxation, business licensing, and import/export. Former elected officials or government workers are typically hired for these roles, though those from the private-sector are not barred from selection. microTech upgraded their corporate security force to perform police actions where necessary. Wherever possible, microTech utilizes technology and custom microTech-designed systems and software to automate much of the day-to-day operations, including the enforcement of local laws. As immigration to microTech increases, leaders within microTech have debated the implementation of an eventual population cap.

CULTURE

The city of New Babbage was designed to support the creativity of the highly-skilled workforce needed to drive microTech's future innovation. Areas like the Commons were constructed as creative workspaces, dedicated to providing areas for programmers and engineers to relax, network, and plan. The city's robust nightlife provides an outlet for the workforce's high-pressure crunch times and higher-than-average salaries, and visiting financiers and venture capitalists make regular use of the high-end bars. Inhabitants also like to escape the confines of the city to take part in outdoor cold weather activities.

Bleeding-edge technology is a common sight on microTech. Not only due to the company itself, but also the presence of other established tech companies alongside a constantly-cycling roster of startups. Residents who don't keep abreast of the latest advances are generally seen as somewhat gauche by their peers, though this outlook varies. Members of the upper-classes of the UEE frequent the markets to secure the newest tech before it hits the market.





January 3, 2667 was an uncommonly warm night when New Junction police received a comm claiming that shots were fired at a bar popular with off-world haulers. Officers responding to the call rushed inside to find an enraptured audience watching Polli Dalal discharging a weapon at a block of ballistic gelatin covered by heavy armor. Several smoking holes in the armor leading to the shredded gel underneath indicated the only victim in the establishment. The police quickly charged Polli with violating the armistice zone and confiscated a weapon the incident report described as a “custom-made, unregistered hand cannon.” When questioned about why she would live-fire a weapon in public, she replied with a simple statement: “to make some money.” Polli quickly paid off her fine and returned to the bar to pick up a list from the bartender. On it were the names of patrons that had made a down payment for one of her homemade weapons. These became the first official orders for Gemini weapons.

Gemini started with a simple mission to provide affordable and effective ballistic weapons to the masses, an area of the marketplace they felt was increasingly underserved during the mid to late 27th century. In the decades following the Second Tevarin War, the weapons market exploded thanks to the myriad of technological advances made during the sprawling conflict, and as increasingly advanced weapon technology became more available to the public, manufacturers became embroiled in an arms race to explore more unique weapons that delivered energy, chemical, or distortion damage. As a result, traditional ballistic weapons with their limited ammunition capacities were viewed as antique tech and fell out of favor. A hyperbolic United/Tribune article from 2665 even wondered when “standard bullets would only exist in museums”. While no one truly believed that ballistic weapons would vanish, the quality gap between brands was more drastic than ever as several mid-market manufacturers went out of business. In 2666, famed bounty hunter

Amado ‘Mad Dog’ Baugh admitted to only using ballistic weapons from earlier decades, complaining that anything modern was “either so cheap it’d melt your hand or so expensive it’d cost an arm and a leg.”

Polli Dalal also noticed the trend. Having grown up in the slums of New Junction, she understood the importance of affordable yet reliable weapons to one’s personal safety. Polli and Clem, the mastermind of the ‘custom made hand cannon’, frequently found themselves in dangerous situations and in need of protection. Partly due to Polli’s penchant for mischief, but primarily because Clem, the weapon maker, was Tevarin.

THE ODD COUPLE

Clem knew nothing of his roots, only that his family participated in the Tevarin cultural purge before fleeing to New Junction. Though the Tevarin

Wars were long over, the slum’s Human residents shunned the family. After their house burned down under suspicious circumstances, Clem was the lone survivor and struggled to live on the street. That’s when he met Polli, who hated going home to her abusive and alcoholic parents. The two became inseparable. They moved into an abandoned shack and, to survive, pulled petty crimes using Clem as a distraction. To protect himself and Polli, Clem became obsessed with weapons and led to the creation of Gemini’s first official weapon: the unregistered hand cannon.

Polli and Clem used the down payments from the buyers at the bar to manufacture their first run of guns. Polli used this success and growing word of mouth to attract investors and expand the company’s operations. Direct and demanding, one early investor said that “Polli essentially willed the company into existence.” She remained the face of the company, but to hide the fact that Clem was a Tevarin, claimed her ‘brother’ was



the brains behind the guns. In case anyone got too curious, Polli spun a tale that Clem suffered from a crippling social anxiety disorder and even called the company Gemini to lean into the notion that they were siblings.

Thanks to their heightened stopping power, Gemini weapons quickly found a clientele. Though only sold in Corel, the weapons appeared across the Empire thanks to the constant flow of haulers coming through the system. Decades of steady growth eventually allowed Gemini to open manufacturing plants in other systems, including Idris and Terra, and launch their first empire-wide marketing campaign. Gemini still uses the slogan Polli picked, "The only line of defense you need."

WINDS OF CHANGE

In 2751, Clem and Polli retired and turned over control to a handpicked collective of their most trusted executives who continued to keep Clem's role in its success a secret. It wasn't until the early 29th century, after the fall of the xenophobic Messer regime, that Gemini disclosed to the wider public that the company's co-founder and main weapon designer had been Tevarin. This revelation turned out to be perfectly timed and revitalized a brand that consumers had come to consider a bit bland and outdated, and led to record profits in 2812.

The company continued to respect Clem's vision and legacy, but knew it needed to update and adapt his designs for the modern marketplace. The new model of the R97 ballistic shotgun maintained Clem's unique under

barrel reload design but gave the weapon two distinct fire modes. While materials and manufacturing processes may have changed, Gemini's ballistic weapons retained the sleek look and reliable performance that made the brand famous.

Current CEO Hui Batiste maintains this balancing act of respecting Gemini's past while reimagining its future. Batiste has undertaken several bold initiatives to keep the company solvent and relevant. His first executive action moved the company's headquarters from Corel to Stanton to reduce production costs. Then he led a reimagining of the company's marketing campaign so it would appeal to a more affluent audience. Their latest ads feature sataball star Elsie Heselton extolling the power and speed of Gemini weapons while aboard an 890 Jump. Batiste even broadened the company's product line to an area once believed to be off limits - energy weapons. In 2947, he acquired energy weapon start-up Octa with the intention of integrating their technology into Gemini weapons.

With ads aimed at the elite and a production expansion into the energy weapon market, some Gemini purists believe that Batiste's changes have gone too far. They even argue that Clem and Polli would have trouble recognizing the company they founded. Despite these minor controversies, Batiste's actions have elevated Gemini's profile and market into their most consistent growth rate in centuries. It may not be the same company Clem and Polli founded centuries ago, but it still delivers on their initial promise to make affordable and effective weapons for all.

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