

A ROBERTS SPACE INDUSTRIES PUBLICATION ISSUE 05.12

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GREETINGS, CITIZENS!

Another month, another Jump Point. And this month another milestone, both for me and for this venerable publication -five years of chronicling the development of Star Citizen and Squadron 42. It's trite to say it, but true: this would not have been possible without your backing, both

monetary and morale.

For those of you who've been paying attention since the beginning, we've used the same template for JP five years running. That's gonna change, along with some of the content. We're going to revamp the look and focus more on development, sharing the Star Citizen story with you.

We're still sorting out exactly what new features we'll be including in the new and revised JP, so I'm not going to make any promises here that I end up not keeping, but I think you'll like the result. In fact, while we're on the subject, we're aware of suggestions that some of you have made in the Jump Point Feedback subscriber thread. Some are feasible, some are not, and we'll certainly be taking those suggestions into account. But if you have any more suggestions, please be sure to drop a note there - you might come up with something that we are overlooking.

Meanwhile, speaking of promises, back to the final issue of 2017. A long time ago, in a 'verse not all that far away, I promised a third WIP article on the Idris. After slipping it for a couple of months, I finally said that we would publish it ... soonish. Well, as the title of this issue declares, Soonish is Now. Check out the Idris in this month's WIP.

Also check out Idris (the system) in this month's Galactic Guide. Yes, the ship and the system are connected. Read the article to find out how.

We're also got a Portfolio article on Chemline Solutions, and a complete-in-this-issue short story by Will Weissbaum for the final Chronicles of 2017.

Back on the topic of "new," our Behind the Scenes discussion this issue has a new format. and highlights the work that everyone at CIG has put into getting 3.0 ready to go. Be sure to see what they have to say.

And finally, another December means another appearance by the lamp. As we do each year, the lamp and I wish you Happy Lampidays, and as always, a sincere Thank You! for all your support.

Hold on, it's gonna be a wild ride!

David.Ladyman@cloudimperiumgames.com

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Idris: 3.0



Forty-six months ago (February 2014) we ran a Work In Progress article on the Idris.

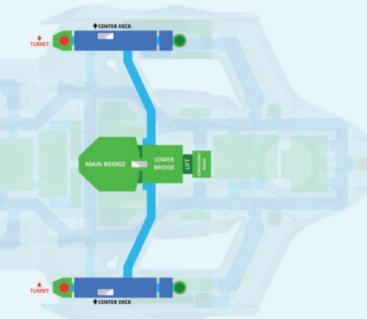
It turned out one issue wasn't sufficient to cover it, especially after it was assigned a lead role in *Squadron 42* and grew from a corvette to a frigate. So we ran a second WIP article the next month, covering that conversion and the new work that Foundry 42 had been doing on it.

But it still wasn't finished, and so we promised a third WIP

article on it ... soonish. It turns out that "soonish" (in this case) was almost four years. Who knew?

If you've been keeping track, you know that we are always working to make our ships (and everything else in the game) better and better, so it's a pretty good bet that there will be more work done on the Idris as the game continues to progress. But what we've got here and now is (a) pretty close to what it'll look like when you can board one yourself and (b) pretty neat. We think you'll enjoy it.



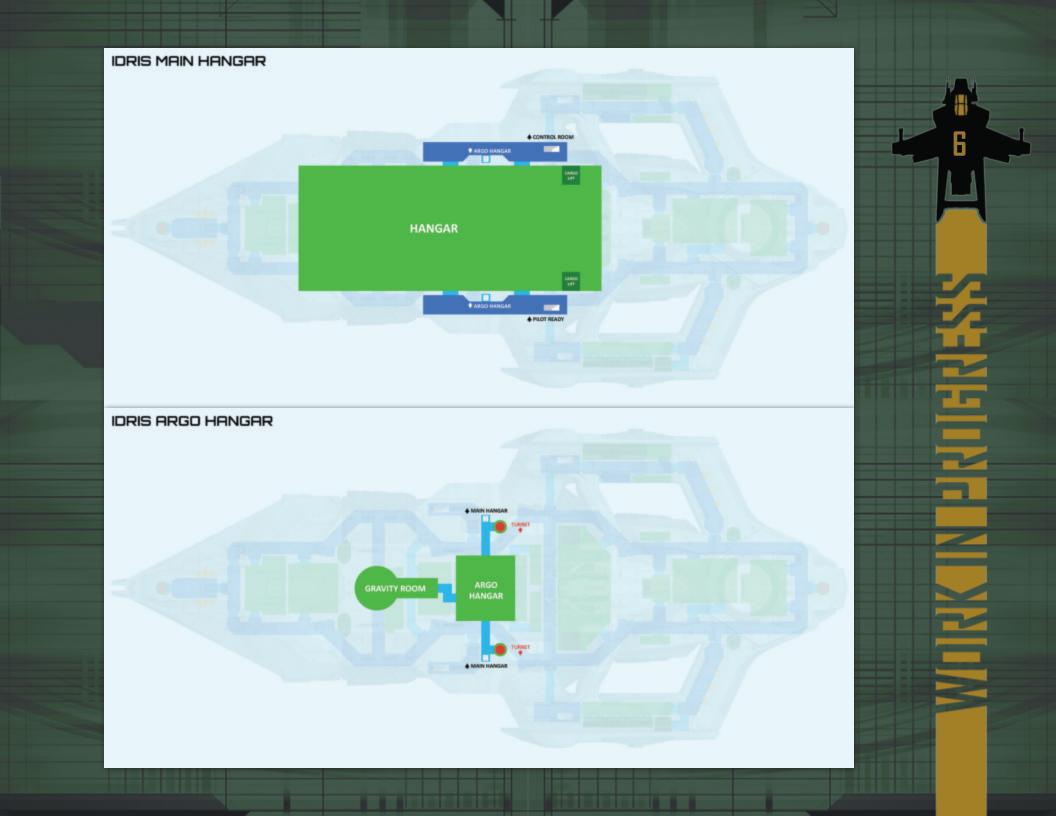


We'll start with schematics (top to bottom / bridge to hangars), so you have an idea where each of the subsequent images is located.









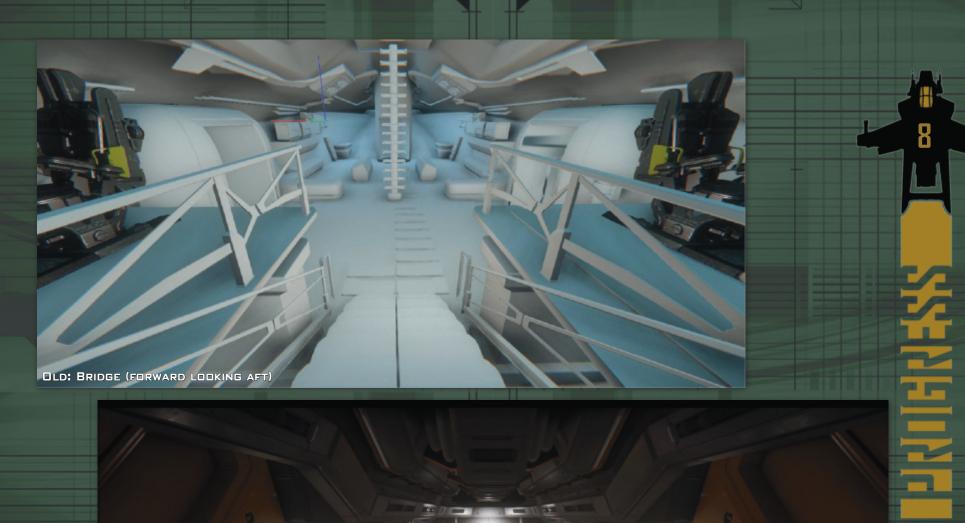


The commentary on the next 16 pairs of images (Old & New) is by **Ian Stewart, 3D Artist**.

Bridge [4 pages]

The seating area at the back end of the lower bridge had to be replaced with multi-purpose crew consoles. These will assist in re-routing power/systems and operating the unmanned turrets on the nose of the ship. The central ladder leading up to the exterior of the ship had to be removed, as there needed to be a designated area for docking to the ship via an airlock.



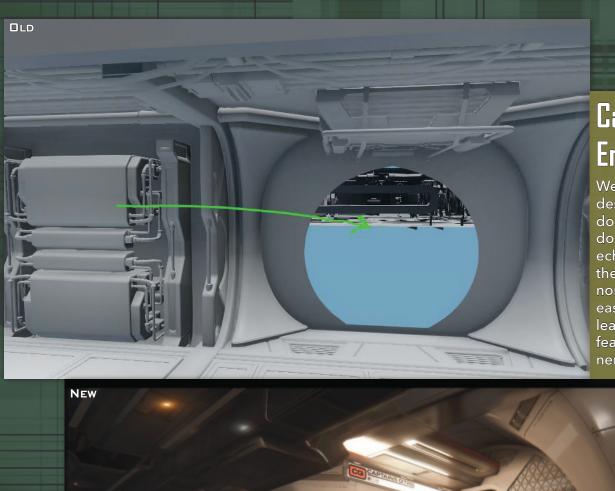








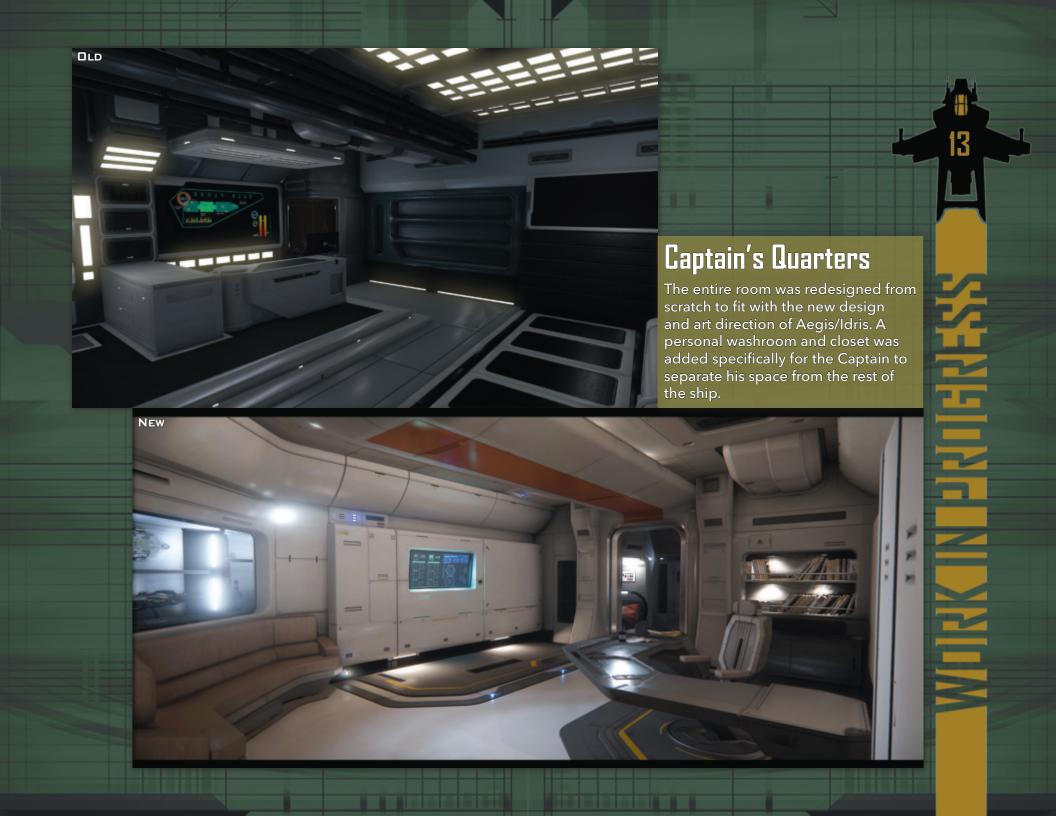
Docking Collar Originally, there was a large viewing gallery window here, but it was decided that the ship needed a room/airlock for when it docks with other larger ships and space stations. OLD: GALLERY ROOM NEW: DOCKING COLLAR ROOM

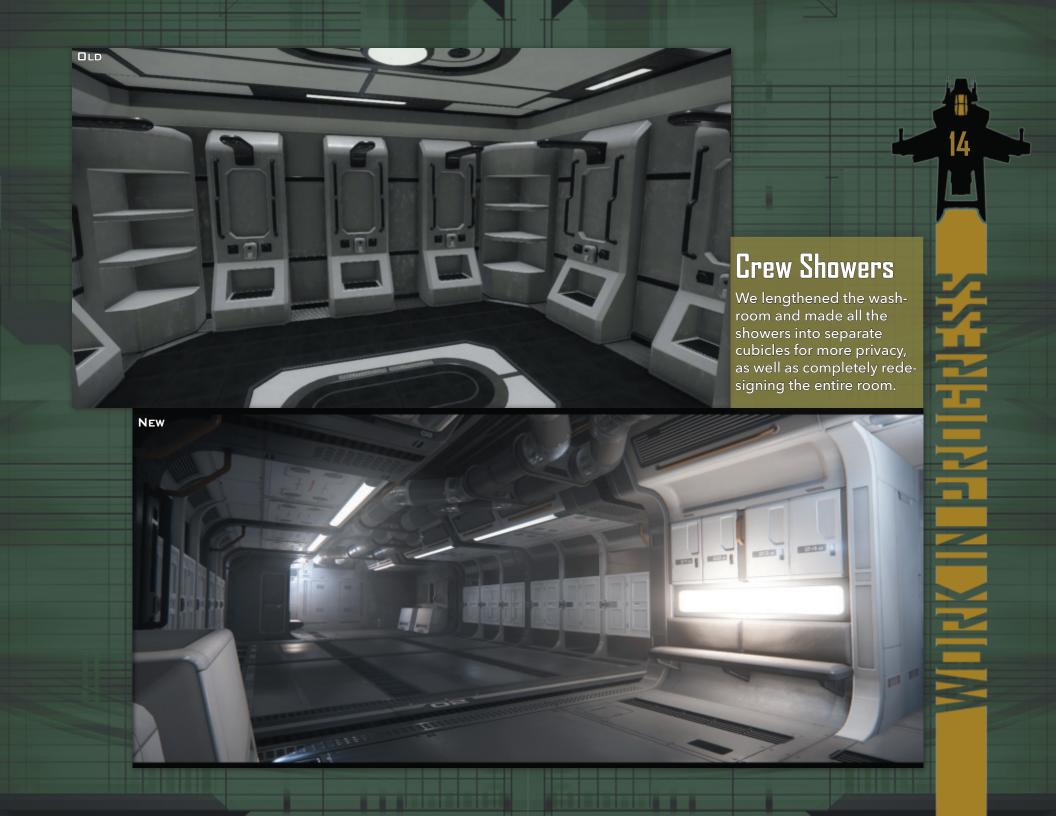


Captain's Quarters Entrance

We tried to stay true to the original design and placement of the corridors, with the very striking circular door entrances. This theme was echoed over the entire ship and over the entire production process. They normally lead to important rooms/areas of the ship. This particular image leads to the captain's quarters and features two small modular components.







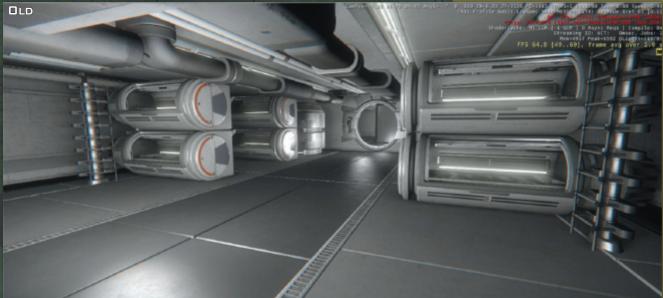


Mess Hall

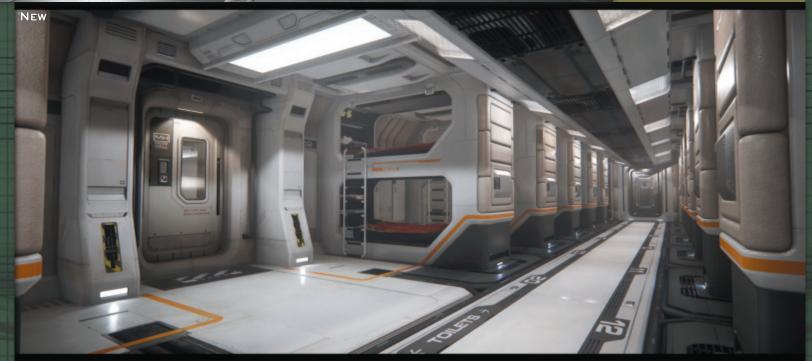
The mess hall was redesigned to make it more of a communal space and have some order to it, as this area will be heavily used by players and AI characters. There are six tables that provide seating for six crewmembers on each table, accompanied by a usable chow line for drink and food. The lighting has changed several times in this area due to art direction, but the most recent change was to move the main light sources from the center of the ceiling to the side and angle them to 45°. This will help with character lighting. We later added large windows in the ceiling to look out into space.







The sleeping quarters had to be completely redesigned to bring it in-line with the new aesthetic. The number of beds needed had to be doubled and a crew washroom was added. Following the art direction, the beds had to be changed due to metric requirements and the way the characters would interact with them. They were also designed to be integrated with the room itself, rather than free-standing bunkbeds.



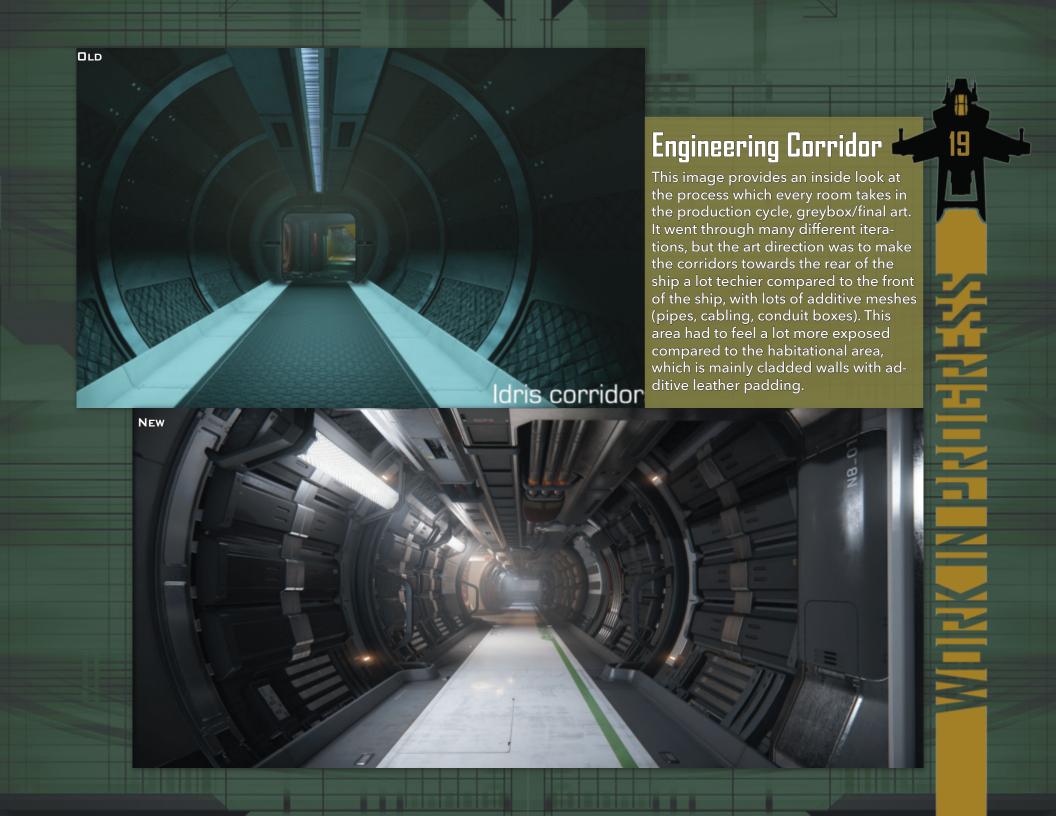


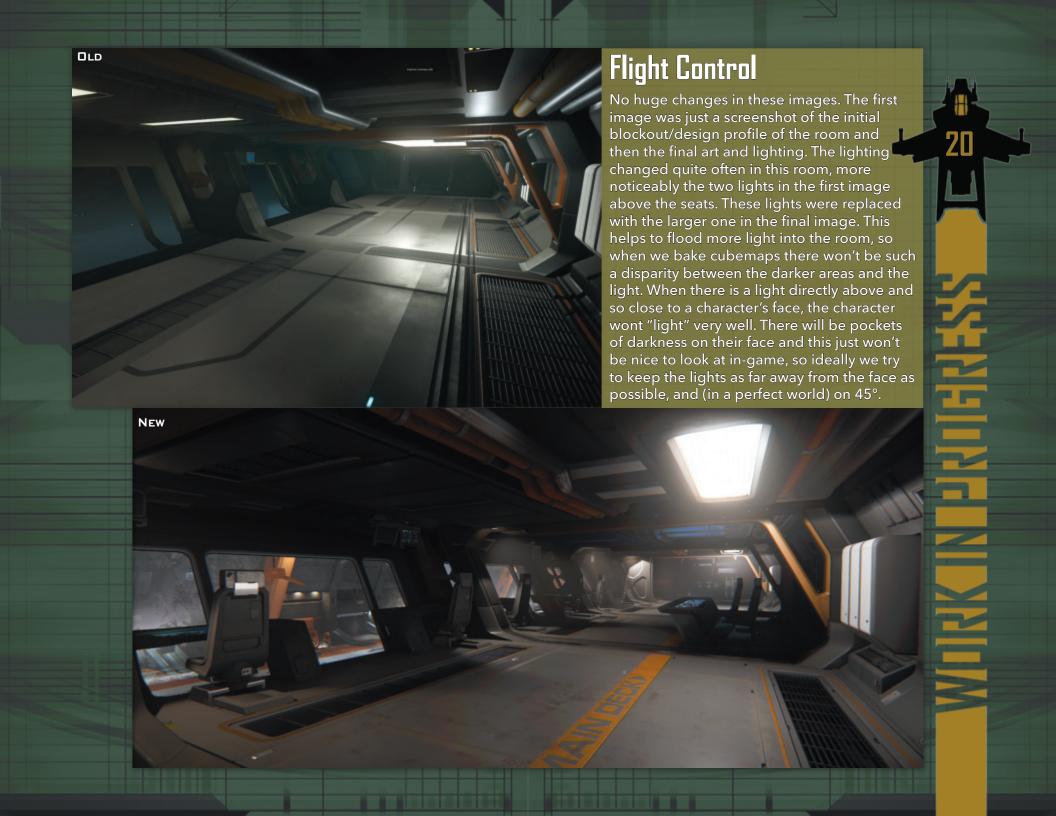
The barracks and the shooting range were moved across from each other. This was not only a better design and more efficient on performance, but it made it much easier for design to do their PCAP (player/motion capture) for the AI for Squadron 42.





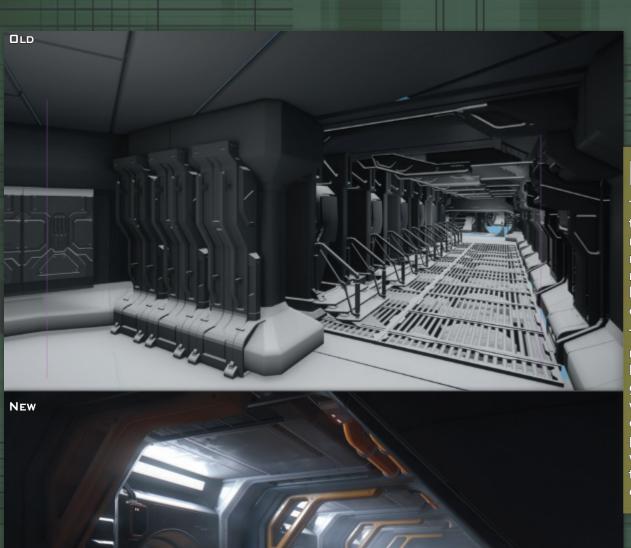












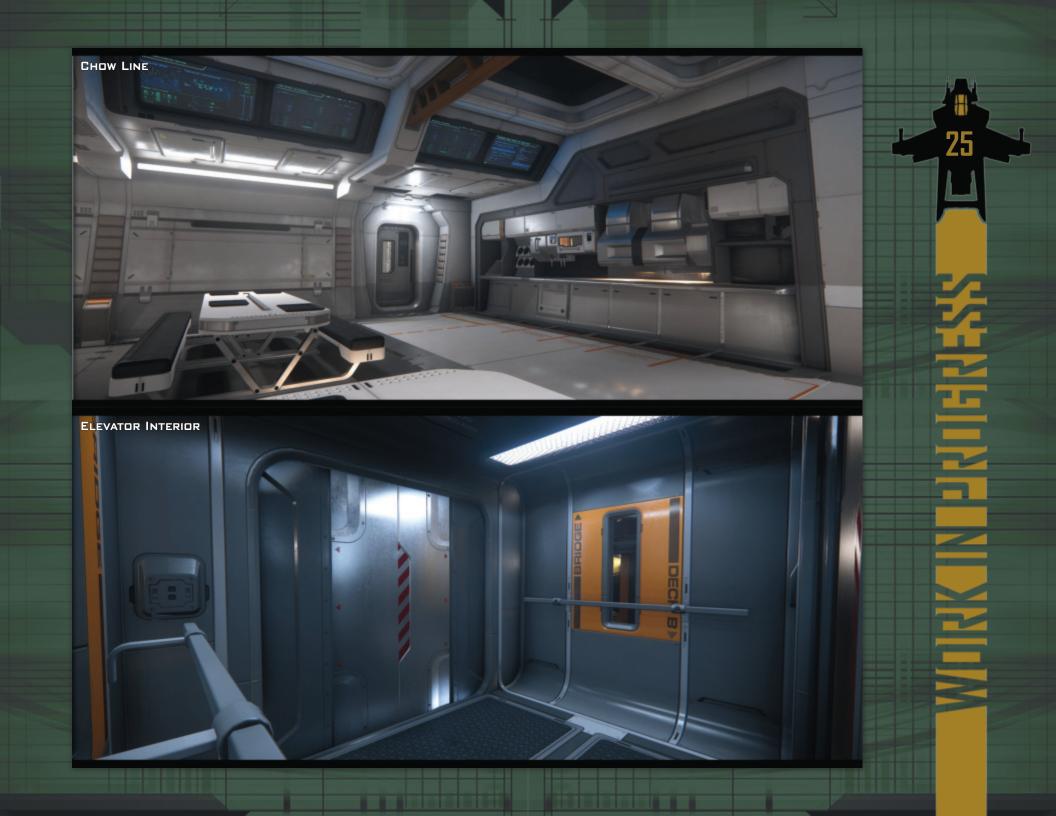
Escape Pods

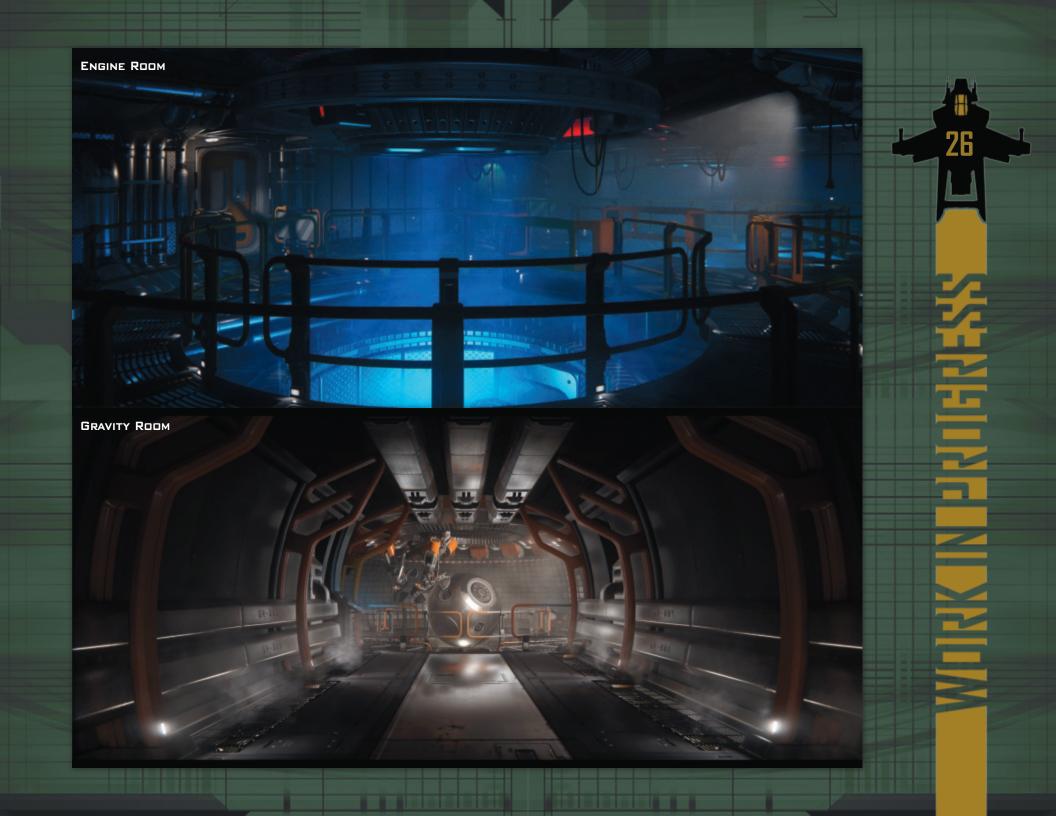
The escape pod area went through a complete transformation. The art direction was to make more of a feature of it. The new design makes it feel more like an iconic and important part of the ship.

The escape pods themselves received some drastic changes. Instead of there being six single-person escape pods, this was changed to three larger escape pods that can hold eight people in each (24 in total). This was a much-needed change, as the size of the Idris has grown exponentially.

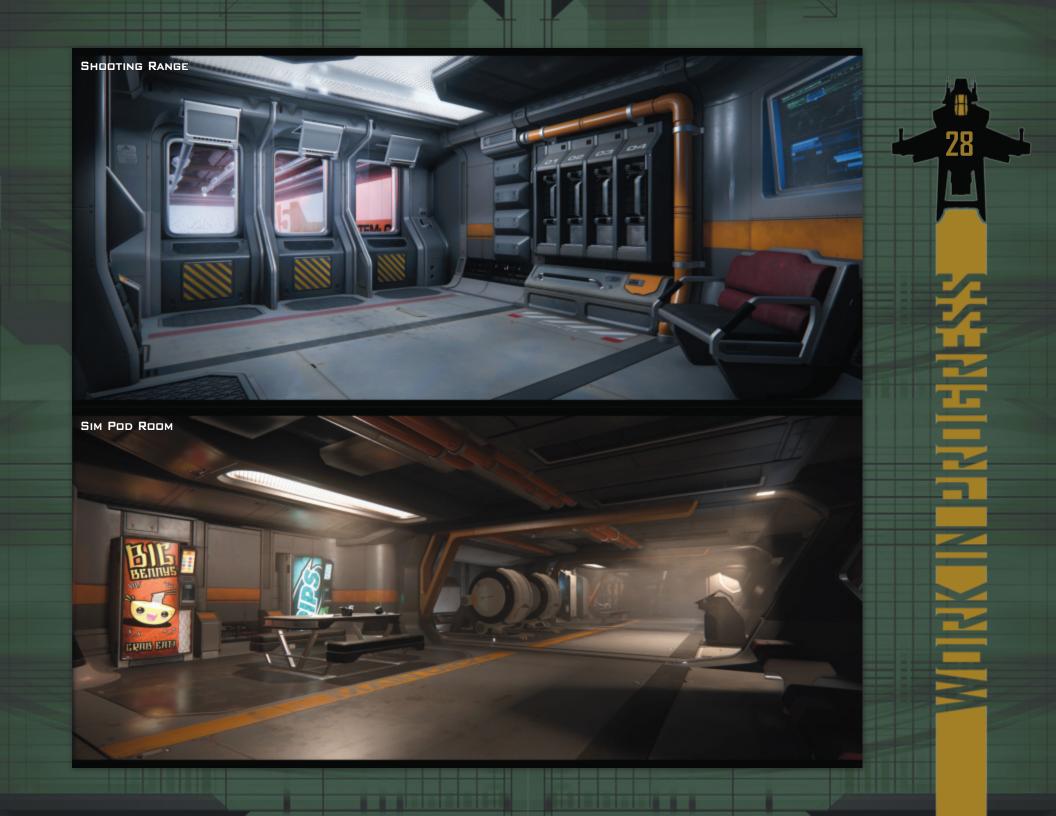
The remaining images on the next five pages certainly don't display everything the Idris has to offer, but we hope they whet your appetite for what the future holds – the best is yet to come!













To quote famed businessman Engel Nordigan, "a good business is blessed by the public. Profits can be spectacular, but if the public dislikes or even worse, distrusts a company, they will face an uphill battle." Few corporations understand that mantra more than Chemline Solutions.

Humble Beginnings

Victor and Adorai Zahid didn't have what many would consider a 'normal' childhood. Their parents, both employees at Kel-To ConStores, were part of the internal inspection teams making sure the various branches adhered to the corporate safety mandates, which required the family to be constantly on the move.

In Victor Zahid's memoir, *Titan*, he recounted that the family would rarely stay in one place for more than a month, as they rotated through the thousands of Kel-To ConStores located throughout the UEE. For Victor and his twin sister, Adorai, this left little opportunity for any kind of stable home. They spent their entire childhood racing around various transport ships and Housing Exchanges while their parents worked. At night, their parents taught them from a meticulously constructed education curriculum, designed to allow them to test for Equivalency early. Their assignment during the day was simple: learn. They were encouraged to find out about the area they were living in, the people around them, anything. Each night, the children would need to present what they learned that day and then the parents would discuss the information.

"I didn't get it at the time," Victor wrote in *Titan*. "But in retrospect, talking about why this HEX was in a sad economic state or why that hauler we talked to was doing the things he was doing was their way to teach us empathy, to understand that everybody had a story."

Although both of the twins were equally studious, their interests began to diverge as they got older. Victor developed a taste for commodity trading, often using his allowance to purchase small quantities of goods to trade at other stations. When he wasn't actively buying or selling, he kept meticulous notes about prices from the TDD and local traders. Meanwhile, his sister Adorai became fascinated with the world of mathematics and engineering and studied all the various stations and ships that they encountered throughout their travels.

Both of the Zahid twins achieved Equivalency at sixteen and received partial scholarships to Terra University. Victor graduated with a dual-degree in economics and business management, which led to an immediate position at Clifton Brothers in Prime. Adorai stayed in school a little longer to earn a degree in geological engineering. During her final year, she was approached by reps from Edo Inc., a small mining and exploration exchange based out of Lo in the Corel system, to work in their planetary development division.

Although they spoke often, the twins did not see each other for almost ten years. Adorai stayed in one spot and progressed through the ranks at Edo. Victor, however, seemingly was unable to shake the transitory lifestyle of their youth. During that time, he left Clifton Brothers and went on to start a number of business ventures of his own, including an event planning company and a brief foray into band management.

In 2889, while Victor and Adorai caught up at their father's 98th birthday party, Adorai told Victor about the experi-

mental extraction technology she was trying to develop for Edo. Although the research was promising, financial projections as to the cost to implement these upgrades outweighed the potential profit margin, so the board of directors were moving to cancel the project. While she lamented having to abandon the research, Victor could see the potential. If successful, this technology could revitalize old dig sites. About two hours of intense discussion later, he proposed an idea: why not develop the technology on their own?

An Idea Into An Institution

Within the year, Chemline Solutions was born. Although its primary business would be as a provider of industrial chemicals (referred to as 'the cash flow' by Victor), Adorai was able to convince Edo's board to sell her research to the fledgling company. As she got back to work, Victor tapped into the various connections he'd developed over the years to build the company's initial client list. His goal was to build enough capital not only to support Adorai's research, but also to have credits on hand by the time she completed it.

Between Adorai's work behind the scenes and Victor's business acumen, the company grew at a remarkable rate. Within five years, they operated out of six distribution hubs strategically placed throughout the UEE.

By the end of the 29th century, Adorai had completed her first functioning prototype of her new extraction process. Utilizing low-frequency seismic vibrations, the project (codenamed Resurrection within the company) delivered on its promise of unlocking previously inaccessible gas pockets for collection. With the company already making a steady profit, Victor was convinced that this would take the company to the next level.

Victor began scouring the UEE for potential dig sites. The answer was a small moon in a distant system.



Situated near the remnants of the first planet in the system (destroyed when the star went nova), Odin 1a had been extensively mined by a variety of companies for almost twenty years until it was finally abandoned in 2865. The moon, known as Gainey, turned out to have a significant quantity of gas pockets, and the lack of a local population made it an ideal site for the new tech. The only shortcoming was that twenty years of intensive resource harvesting had left a shocking amount of abandoned buildings, satellites and trash around the tiny moon, the cleanup of which pushed out their timetable.

Thanks to the condition of the moon as well as its remote location, the company was able to secure extraction rights at a bargain rate from the Planetary Development Bureau and immediately began construction on the extensive network of structures that needed to be positioned around the moon to house the seismic actuators that would extract the gas. By 2904, Chemline Solutions activated their first gas extraction facility.

Adorai's theories started paying off almost immediately, but over the course of several years, she became increasingly worried about the increasing seismic events on the moon. Fissures began to open up unexpectedly in seemingly random places, which made it difficult for Adorai to confirm that her machine was causing them.

According to Adorai, soon after she began to investigate these seismic events, Victor entered into negotiations to build another extraction facility on a populated world. Still nervous that her technology might be dangerous to a local population, she protested the expansion, but he refused outright, citing the massive profits the new facility could generate. When presented with her findings, Victor claimed that her 'evidence' was a collection of inconsistencies and assumptions.

The ensuing argument escalated over the next few months and ultimately resulted in Victor firing Adorai from

the company. The twins, inseparable through their childhood, were now locked in a bitter legal dispute. Adorai sued Chemline Solutions and her brother for the rights to her technology, but the initial company doctrine signed when the company was formed specifically stipulated the extraction technology as a company asset. Regardless, the string of lawsuits and countersuits spanned nearly a decade.

By 2919, Chemline Solutions couldn't maintain the Gainey facility anymore. Due to the fallout from Adorai's very public battle with the company, the UEE was reticent to provide any more licenses for the technology.

Victor tried for years to find a buyer to take over the Gainey facility to help offset the legal costs, but no one was willing to assume responsibility for the property. By 2923, Victor removed as much equipment as he could and permanently sealed up the facility.

The Path Forward

These days Chemline Solutions has pivoted back into primarily serving as an industrial chemical distributor. Victor Zahid has attempted to obtain extraction licenses since, but the initial cost requirement to construct the vast array of structures needed to fully utilize the technology has now become a larger obstacle than the government's reticence to sanction it. In 2938, Victor instituted an 'open door policy' for geological and mining inventors to pitch their ideas, hoping to strike it rich with another genius design.

Adorai Zahid receded from the public after the series of trials was settled, becoming a professor of Geological Studies at Terra University. In 2940, she released an educational textbook about surveying ethics, but has never spoken publicly about her experience with Chemline Solutions.

It's unknown whether the twins have ever spoken directly since.





busy these last couple of weeks. They mumbled something about "three points" (basketball? A field goal?) and suggested we find another team for this month.

So instead, necessity being the mother of invention, we chose another format for this month's article. But it was fun to put toThe December issue of Jump Point magazine aims to celebrate all the incredible work you have been doing over the past five years, especially what you've done to make Alpha 3.0 possible. We plan to include a special Behind the Scenes article that briefly highlights

the incredible people across the company that are contributing to the release. (That means everyone!)

If you would like to be included, and have the time, please reply to this email with short answers (50 words or less) to these questions:

- What has been your primary responsibility in helping to reach 3.0? (everyone has helped in some way)
- What has been your greatest challenge in reaching 3.0?
- What has been your most satisfying or enjoyable moment in reaching 3.0?

(optional: screenshot of what you're talking about in any of the above answers)

• What is your favorite 3.0 ship?

Thirty-six of CIG's 300+ staff actually had a few spare minutes to reply (thanks to each of you!), and we've got their answers all listed here in no particular order. Don't worry if you don't see a particular favorite; we've got plans to highlight everyone at CIG in the coming issues.

Here's what they had to say:

Michael Dillon Gameplay Programmer

What has been your primary responsibility in reaching 3.0? Quantum Drive implementation and drive stability. I also worked with the Effects team to get the VFX and SFX hooked into the drive.

What's been your greatest challenge in reaching 3.0?

Quantum has been an evolving design, so lots of communication with multiple disciplines to bring forth a product that is enjoyable for the players!

What was your most satisfying or enjoyable moment? A mixture of seeing all the various bits of quantum come together (zone transitions, effects, travel envelope) as well as seeing some of the bugs that come with making things work lol.

What is your favorite 3.0 ship?

The Constellation is what I bought when I backed the project back at the start and it will always hold a special place in my heart.

Chris Smith Lead Ship Artist in Austin

What has been your primary responsibility in reaching 3.0? After I finished up the Nox bike, Josh [Coons] and I mainly focused on squashing all sorts of ship-related 3.0 bugs, making sure everything was working correctly and had a certain level of polish.

What's been your greatest challenge in reaching 3.0? Some of the bugs we had to fix were tedious and involved multiple disciplines to solve, but with good teamwork and communication we were able to overcome those obstacles.

What was your most satisfying or enjoyable moment? Fixing problems that have been present for a while was satisfying, and also the thought of all this work finally reaching our audience is what excites me most.

What is your favorite 3.0 ship? The Nox bike, of course!



Yogi Klatt Senior Audio Programmer

What has been your primary responsibility in reaching 3.0? Mostly audio-related 3.0 bugs, ship- and actor-related audio systems.

What's been your greatest challenge in reaching 3.0? Finding out why some reverbs went missing in release builds.

What was your most satisfying or enjoyable moment? I misused the results of our audio raycast system for the environment mix and it surprisingly worked out really well (see screenshot).

What is your favorite 3.0 ship? Super Hornet

Jared Huckaby Content Manager, Video Production

What has been your primary responsibility in reaching 3.0? My responsibility is less about making 3.0 itself, but making the journey to 3.0 as informative and entertaining as possible over this last year.

What's been your greatest challenge in reaching 3.0? Keeping the community informed over the last year, while not spoiling every aspect of the patch before they play it.

What was your most satisfying or enjoyable moment?
Getting to shave this massive beard I agreed to grow until
3.0 was released. Eight months of eating hair is too long.

What is your favorite 3.0 ship?
As Lucas would say, "I love the Cutlass Black. It's so bad."

David Colson Junior Gameplay Programmer

What has been your primary responsibility in reaching 3.0? I've been working problems and features surrounding flight control and gravlev. I've added some new features, such as the afterburner system, and worked with John Pritchett to solve problems and improve the stability and performance of the flight system. I've also helped with other vehicle-related issues surrounding IFCS, such as networking, landing gear, and whatever other issues I can help with.

What's been your greatest challenge in reaching 3.0? Some of the bugs we've dealt with have been extremely hard to solve. There've been days when I wondered if I'll ever be able to fix them. To me, this stage of working through a bug is always the hardest part of game development. There was a bug we had where ships would fall through planets when you got out of the seat. It took multiple programmers days and days to solve.

What was your most satisfying or enjoyable moment? Seeing people play the game when we released to PTU was one of the most rewarding moments so far. It feels amazing to see that people really care about your work and are enjoying something that you've worked on.

What is your favorite 3.0 ship?

Absolutely the Gladius. I've had a soft spot for it ever since it was revealed, and to this day it's still my favourite ship. Nimble and small, it's just like a futuristic space fighter I'd have dreamed of flying as a kid.

André Beccu Senior Systems Designer

What has been your primary responsibility in reaching 3.0? I've been setting up the objects with which the NPCs interact on the space stations.

What's been your greatest challenge in reaching 3.0? Keeping up with the rapidly evolving AI code and animation iterations to keep things from breaking.

What was your most satisfying or enjoyable moment? I took a ship from Port Olisar to Levski, landed, entered the station, and was greeted by a peaceful scene of NPCs going about their lives, with nobody sitting on benches backwards or leaning on thin air. It was glorious.

What is your favorite 3.0 ship? AEGIS Avenger Titan – it's versatile, sturdy and has firepower.

Adam Parker Junior Technical Designer

What has been your primary responsibility in reaching 3.0? I set up the 85X and Prospector ships, and did the health/armour balance.

What's been your greatest challenge in reaching 3.0? Getting that health/armour balance correct!

What was your most satisfying or enjoyable moment? My first time landing on a planet.

What is your favorite 3.0 ship?
Prospector (no bias; honest, guvner)



Jeffrey "Bearded-CIG" Pease DevOps Engineer

What has been your primary responsibility in reaching 3.0?

- Quantifying the stability of the game.
- Helping others to understand the math behind the stability calculations to aid with the prioritization of stability issues.
- Assisting the QA team with investigating issues that occur with backend services.
- Publishing the game to our players.

What's been your greatest challenge in reaching 3.0? Not having enough time to investigate strange issues in close detail due to having to prioritize other responsibilities.

What was your most satisfying or enjoyable moment? It's always exciting, rewarding and fulfilling to see how players react to the strides we've made in developing the game. We have so many players that have already started

making amazing videos of the sights and sounds that they're experiencing in the Stanton system and it's great to see them having fun.

What is your favorite 3.0 ship? Caterpillar. I've been using it to make cargo runs between Olisar and Levski in order to try out the new trading system, so I can have a mental comparison to other space games I've played. Eventually the Herald will be my main ship once we have the data running mechanics in.

Andreas Johansson Lead Level Designer for the PU

What has been your primary responsibility in reaching 3.0? Leading the Frankfurt Level Design team in designing locations like Levski, GrimHEX and the Surface Outposts.

What's been your greatest challenge in reaching 3.0? We are pretty organized here in Germany, so it was pretty smooth for us.;)

What was your most satisfying or enjoyable moment? Integrating Levski with a procedural moon and experiencing the seamless transition from ground to space for the first time.

What is your favorite 3.0 ship? Gladius for sure!





Daniel Reynolds Live Designer working on the PU

What has been your primary responsibility in reaching 3.0? Creating various mission content through subsumption and improving existing gameplay features within the PU.

What's been your greatest challenge in reaching 3.0? Learning and using the new Subsumption tool created a lot of challenges and was something the whole team had to overcome.

What was your most satisfying or enjoyable moment? It is always satisfying seeing players go through missions you have helped create and experience the enjoyment they get from playing them.

What is your favorite 3.0 ship? My favourite ship changes quite regularly, but at the moment I would say the Sabre.

Jesse Mark Associate Tools Engineer (Backend Services Team)

What has been your primary responsibility in reaching 3.0? I've been mostly focused on quality of life bugs and features relating to the backend services.

What's been your greatest challenge in reaching 3.0? Diving into and learning the massive code base that we have, and how all the systems interact and work together with each other. As my previous experience has been more gameplay oriented, it was a bit of a challenge learning the backend server/services side of things.

What was your most satisfying or enjoyable moment? Seeing some of my changes make it to the front-facing portion of the game. It's not often backend services affect what the player sees (unless it's a bad thing), so it was nice to see that present in some good quality of life changes I made. For example, there was a bug with the Contact system that would require players to restart their clients to see newly added friends online and be able to invite them to matches, which is quite a hassle. This bug was caused by some incorrectly set data on the backend that the UI code was pulling from, resulting in the newly added friend appearing offline. I was able to make some changes to the data and the code flow, and now players who add each other will see the person they just added online instantly and not have to restart the client. It seems like a small thing, but if you have a lot of friends, this would definitely be a pain.

What is your favorite 3.0 ship?

The Caterpillar. While it may seem just like a hauler, I love it from a technical standpoint. The modularity of it shows what we can and will be able to do with other ships in the future. I also love the hauling aspect and how it brings flying, cargo, planets and many systems together. For example, I recently saw a video of a player blowing up a fully loaded Caterpillar in one of the new moons atmosphere. The cargo just started raining down on the moon (along with the ship parts) and landed on the side of a mountain, rolled down it and came to rest in several piles spread over a bit of the moon. What's so cool to me about this is that there is no custom code to handle this specific situation; instead, you have a bunch of systems (gravity, physics, moon rotation, etc.) working in their own specialized ways and coming together to produce this awesome realistic moment. Emergent gameplay they call it, and it's just one example of the thousands we'll surely see as the game progresses!





really fun. When I first saw an outpost on a planet surface, and I watched the camera zoom in and out of the planet, it was mind-blowing. That certainly was a very memorable moment.

What is your favorite 3.0 ship? I think it has to

Luan Vetoreti Environment Artist, UK Studio

What has been your primary responsibility in reaching 3.0? Nothing specific, as the environment team works on just about any part of the game. However, I created the asteroids around Delamar, worked on the Platinum Bay outpost, and have been the level owner for both Star Marine maps.

What's been your greatest challenge in reaching 3.0? It was definitely the asteroids. For the longest time we've been trying to figure out a workflow for very large asteroids that works well. So having a part in such an integral part of the game is quite rewarding. Some of these asteroids are 20km long, so making something that looks good is about knowing where to compromise and using the tech in a smart and creative way.

What was your most satisfying or enjoyable moment? Watching the outposts come together has been really,

be the Sabre Raven, I just love how sleek that ship looks. I'm also quite a big fan of the MISC Prospector, the view out of that nice open cockpit can be quite something to behold when flying above a planet.

Scott Woodbury Concierge Specialist in Player Relations

What has been your primary responsibility in reaching 3.0? Answering Concierge Backer questions and assisting with any account issues they may have.

What was your most satisfying or enjoyable moment? Reaching out to the community and engaging with our Concierge Backers on a daily basis.

What is your favorite 3.0 ship? Drake Caterpillar



Edward Fuller Senior Live Designer

What has been your primary responsibility in reaching 3.0? Developing and implementing missions for 3.0.

What's been your greatest challenge in reaching 3.0? I have been developing the Subsumption mission workflow and re-designing and building missions from scratch for 3.0. Of specific note is my work on developing and delivering the uniquely managed space/planet derelicts and their missions in a way that they work as their own ecosystems for those missions that use them.

What was your most satisfying or enjoyable moment? Seeing players experiencing the missions I have worked on within the natural flow of the gameplay and seeing it all come together. It's very heartening to hear players exclaim, "These black box missions are pretty fun," and then seeing multiple players realising they may have to contend with one another as they vie for ownership of that black box!

What is your favorite 3.0 ship?

Cutlass Black – it's just super versatile, especially with its decent cargo hold, that makes it great for all our missions that involve delivering items and all the scavenge that can be harvested from derelicts.

Matthew Lightfoot Associate Producer for PU Design

What has been your primary responsibility in reaching 3.0? My primary responsibility in helping to reach 3.0 has been driving multiple features and making sure they are being delivered to a high quality; also corralling the various departments to cohesively work together and fix any issues to get these features ready for release.

What's been your greatest challenge in reaching 3.0? The greatest challenge in my opinion is the bugs that occur. This is a perfect example of something we know that we don't know. There will always be bugs with the final push to a release, but it's what these are and how we fix them in a short timescale that is the greatest challenge, in my opinion.

What was your most satisfying or enjoyable moment? It's not occurred yet, but it'll be about three to four hours after release, when I've gotten home, have jumped into Discord and Teamspeak with my buddies in my org, and we are flying into the first full live release of 3.0.

What is your favorite 3.0 ship?

My favourite ship has to be the Super Hornet, it's probably the most balanced ship for dogfighting. With its decent weapon mount sizes, it's still got relatively high manoeuvrability, resulting in a capable multi-role fighter.

Chris Hathaway Quality Analyst

What has been your primary responsibility in reaching 3.0? I have been double-checking bug fixes as well as implementation to make sure that everything we release to the public is up to par.

What's been your greatest challenge in reaching 3.0? Just going fast enough so we can release on time, haha!

What was your most satisfying or enjoyable moment? Heading down to a planet for the first time!

What is your favorite 3.0 ship? F7CM Super Hornet. It is an absolute beast.



Chris Eckersley Lead Technical QA Tester

What has been your primary responsibility in reaching 3.0? Crash and performance reporting, large-scale automated testing and build system support.

What's been your greatest challenge in reaching 3.0? Reacting to very frequent PTU pushes and scaling up our tests to accommodate the new player cap.

What was your most satisfying or enjoyable moment? Performing the first successful QA act of piracy.

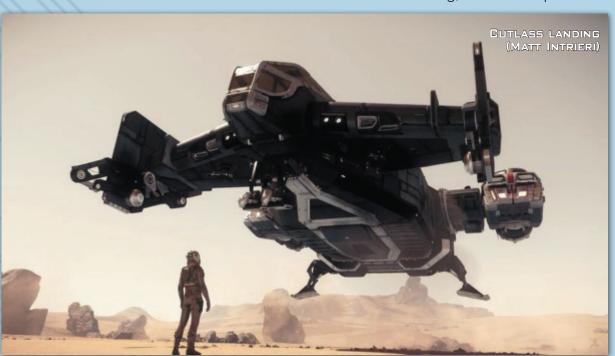
What is your favorite 3.0 ship?

The Cutlass Black. The cargo hold and improved firepower mean it can handle all the new content in 3.0.0.

Matt Intrieri Principle Ship Technical Artist

What has been your primary responsibility in reaching 3.0? Tools and Ship Pipeline, Item 2.0 Conversion, VisArea and Portal Culling, Ship Optimization, Landing Gear Compression, Ship and Vehicle Damage/FX Setup and Prototyping New Features.

What's been your greatest challenge in reaching 3.0? The greatest challenge has been to move the ships over to the Item 2.0 Tech, which required removing interiors, doors, ramps and other meshes from the ship file and making them entirely independent items with their own logic. Itemization of components affected ship damage, mass distribution, lighting, culling and character animation slaving, which all required re-tuning.



What was your most satisfying or enjoyable moment? I love watching people land on the planets and seeing the landing gear physics compress satisfyingly. And it's always fun to see the ships explode.

What is your favorite 3.0 ship?

My personal favorites are the Drake Caterpillar and Aegis Reclaimer, though I love all the ships and try to give them equal attention.



John Pritchett Senior Physics Programmer

What has been your primary responsibility in reaching 3.0? Atmospheric flight model and gravlev simulation.

What's been your greatest challenge in reaching 3.0? Keeping the flight systems working with all of the other changes being done for 3.0.

What was your most satisfying or enjoyable moment? Exploring planets on gravlev bikes.

What is your favorite 3.0 ship? Nox

Luke Adwick Senior Environment Artist, Frankfurt

What has been your primary responsibility in reaching 3.0? For 3.0 I helped establish the moons and various elements to Levski.

What was your most satisfying or enjoyable moment? Mainly the exterior of the mining pit and outlying areas of Levski. It's great to see the community's reaction to the moons as we move forward and improve the tech and visuals further.

Dave Haddock Lead Writer

What has been your primary responsibility in reaching 3.0? Writing dialogue for the Mission Givers. Helping with the capture and edit of their performance capture. Generating text for the mission text (from both the mission givers

and the job board). Helping with some environmental set dressing docs. Wrote and helped record some additional NPC voice packs. My main contribution was just the moral support, though.

What's been your greatest challenge in reaching 3.0? Writing procedurally generated text. It's really tricky to come up with different ways to say the same things that can be strung together in a programmatic way and still make sense.

What was your most satisfying or enjoyable moment? Either seeing the Mission Givers come to life or wandering around the PTU and feeling a general sense of life. It's great to see that these foundation systems of the universe are working together and knowing that they'll grow and evolve from here.

What is your favorite 3.0 ship? The revamped Cutlass is pretty sweet.

Benjamin McMonnies Production Assistant - TA

What has been your primary responsibility in reaching 3.0? Organizing and greasing the wheels for ATX Animation, Design and Back-End.

What's been your greatest challenge in reaching 3.0? Keeping everything neatly organized and moving forward efficiently.

What was your most satisfying or enjoyable moment? Helping Design get the new 3.0 Shopping Experience implemented.

What is your favorite 3.0 ship? The new Cutlass



Jussi Brox Environment Artist

What has been your primary responsibility in reaching 3.0? Creating environment art for Levski, and getting it into a good state for release.

What's been your greatest challenge in reaching 3.0? Bringing Levski to a 3.0-ready state, by adjusting old elements to fit the bill, and by adding a few new ones!

What was your most satisfying or enjoyable moment? I was once testing some bug submits in the client, and ended up driving the Ursa Rover around Delamar for about 20 minutes. That was amazing.

What is your favorite 3.0 ship? The Magnificent Greycat

Lori Krell Game Support Agent & Tech Writer

What has been your primary responsibility in reaching 3.0? In my first three weeks with the company, I've been helping get players installing, troubleshooting, and playing in 3.0 PTU, and I've answered issues and questions on accounts and the game. I'm also working on new documentation, FAQs, KBs, and more to help CIG staff, and soon players, with updated content.

What's been your greatest challenge in reaching 3.0? I'm new to CIG. I'm learning a ton about errors and logs, picking apart the details, and getting help to all players as fast as possible. I can't wait to get in some game time, but after I help players first.

What was your most satisfying or enjoyable moment?

Tackling issues for players, seeing folks playing, and playing test dummy. There's nothing like the game finally loading and launching for players, and we celebrate in ticket chats! Many of our discussions are ending up in the documentation.

What is your favorite 3.0 ship?

Cutlass Black, time to fly the skies in escorts and solo exploring.





Rob Reininger Lead Technical Designer, ATX Studio

What has been your primary responsibility in reaching 3.0? Between me and my team (Robert Gaither and Pete Mackay), in ATX we have been primarily focused on extending the shopping functionality, along with the shop designs, major landing zone designs, PU NPC AI, (as basic as it is right now, we have big plans for making the world feel much more alive), mission givers, as well as economy-related things (prices of items, mission rewards, etc.).

What's been your greatest challenge in reaching 3.0? Being torn in multiple directions. We had to wear a lot of hats in the ATX studio, and while we're currently trying to grow our design group, we often had more work than we could handle. Thankfully, we were able to lean on some of the other designers in the Frankfurt and UK Studios to help us power through our task list.

What was your most satisfying or enjoyable moment? Hands down, seeing all of our work get into the game. We had to pivot a few times throughout the year, which forced us to leave a few things in a 'half done' state, but towards the end we were able to circle back to them and get them taken care of. That's always a nice feeling to know you got to complete something that you'd started.

What is your favorite 3.0 ship?

This isn't technically "in" 3.0, but it was announced during Citizen Con 2017. The Pioneer "outpost building ship" has to be the most exciting thing we've got going. Not only is it an unlimited amount of content for the game, but I think it's really what *Star Citizen* is really all about. Once this comes out, you can literally find a planet, and settle down and create whatever type of outpost you want. That is TOO cool and I can't wait till that's in the game.

Michel Kooper Lead Environment Artist, Frankfurt

What has been your primary responsibility in reaching 3.0? Leading and growing the environment team in Frankfurt. Our main goals have been getting the planet tech and our first batch of planets into the game and looking great.

What's been your greatest challenge in reaching 3.0? Getting all the locations' look and feel cool and consistent, while making sure they run smoothly.

What was your most satisfying or enjoyable moment? Finishing our first moon was a highlight along the way, but I'd have to say watching all the people actually play and enjoy 3.0 online on Twitch and YouTube is by far the best thing.

What is your favorite 3.0 ship? I'd have to say the Gladius.

Bryce Benton Quality Assurance Specialist

What has been your primary responsibility in reaching 3.0? Ensuring overall game server stability on the QA side and reporting server crashes and disconnections.

What's been your greatest challenge in reaching 3.0? Finding a good balance of players and ships while keeping performance up.

What was your most satisfying or enjoyable moment?
Being able to explore one of the three moons or a planetoid while my friends are on the other side of the map or on another moon.

What is your favorite 3.0 ship? Aegis Sabre Raven



Will Maiden Senior Systems Designer, Foundry 42

What has been your primary responsibility in reaching 3.0?

For 3.0, I was chiefly responsible for the design of the Cargo System that the LA engineering team masterfully put together, as well as designing the initial version of the Insurance system that is getting its debut.

What's been your greatest challenge in reaching 3.0?

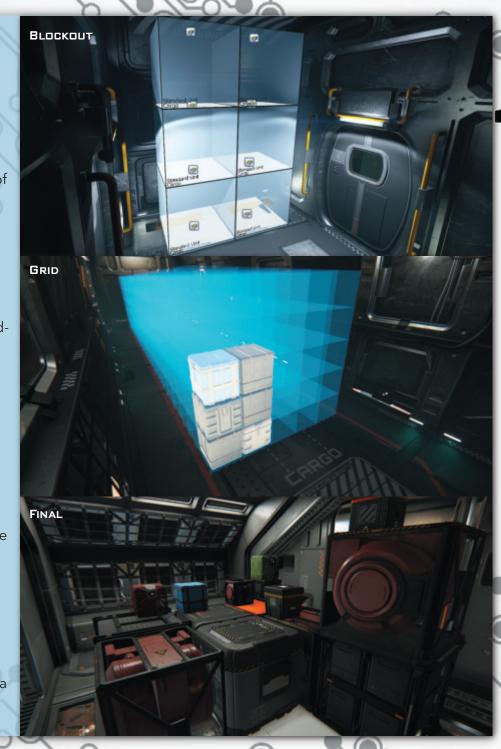
Juggling restraints meant both missions and trading gameplay need to make use of the system, but ship, prop and level art teams needed a say in the physical size of everything, while the engineering teams require it to not break the game whenever you look at the cargo hold.

What was your most satisfying or enjoyable moment?

The first test when we managed to load a box into the ship, fly it to another station and sell it. It's a simple test but it took so many smart people to get it to work. That's when you know it's worth continuing with. No matter what ... it works.

What is your favorite 3.0 ship?

My favourite ship in 3.0 is probably the Cutlass. I must have spawned that ship a couple hundred times testing this and that; it got to be second nature throwing it around starports. It's certainly a lot of fun, regardless of how badly they smell.



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Shane Johnson Concierge Support Specialist

What has been your primary responsibility in reaching 3.0? Assisting backers with all manner of issues, including troubleshooting for both player accounts and the game itself.

What's been your greatest challenge in reaching 3.0? We've been putting in some long hours! Thankfully, it's a labor of love.

What was your most satisfying or enjoyable moment? It's extremely rewarding to see players in our early builds reacting to the changes we've made. Even though we're still in early testing phases, a lot of the feedback has been positive. I think our backers are getting a good idea of what a full 3.0 release will look like, and they seem to love it.

What is your favorite 3.0 ship?

The Aquila is one of my favorite ships, period! It's outfitted for exploration and comes stock with an Ursa. What's not to love?

Spencer Johnson Associate Gameplay Engineer

What has been your primary responsibility in reaching 3.0? Mostly the new and improved shops and commodity kiosks, as well ship insurance.

What's been your greatest challenge in reaching 3.0? Synchronizing the shop inventories and updates across a bunch of disparate parts: the shop, the UI, the shopping service, the cargo manager, etc.

What was your most satisfying or enjoyable moment?

Fixing a major insurance bug which would break your newly claimed ship, just in time to go to Evocati, and then doing a BugSmashers on it.

What is your favorite 3.0 ship? The M50

Ben Curtis Props Art Director

What's been your greatest challenge in reaching 3.0? All the technical set-up required for the usables, cargo and shopping. A lot of new systems were added behind the scenes for 3.0.0 that have required us to update our workflow and support the new tech as it's come online. It's been great to have the support of the design and tech teams and working closer together across the board.

What was your most satisfying or enjoyable moment? Dressing and theming the surface outposts and adding all the smaller story-telling props. It has been really rewarding to be able to focus on a particular theme, then hand them over to the environment and ship teams for dressing and seeing the creative ways in which they use our assets to create really interesting and exciting environments.

Seeing all the hard work for Levski paying off, the first time I saw AI fully mulling around and being able to walk into a shop and purchase items. It really feeling like it's full of life.

In general just seeing all the teams working together to add life to the Stanton system.

Oh and the new flair and subscriber rewards for next year – really proud of what the team delivered for them.

What is your favorite 3.0 ship? Drake Caterpillar



Gareth Bourn Live Designer

What has been your primary responsibility in reaching 3.0? Authoring Crusader planetary system in SolEd, Design workflow for Planetary Placement technology (Outposts, Derelicts), Creation of Delivery and Collect-based missions, and Environmental Mission Scenarios/Quantum Travel Interdiction.

What's been your greatest challenge in reaching 3.0?
Working with new technologies to achieve the best results.

What was your most satisfying or enjoyable moment? Seeing the player being successfully interdicted by an asteroid on the way to Daymar during a delivery mission and seeing the final result of the outposts on the moon by visiting the Shubin outpost – it was an awesome culmination of all my work.

What is your favorite 3.0 ship? Cutlass Black

Calix Reneau Technical Designer

What has been your primary responsibility in reaching 3.0? I worked on the interaction system and the ship Item 2.0 conversion, as well as working on the UI RenderToTexture conversion and implementing some of the ship screen behaviors.



What's been your greatest challenge in reaching 3.0? Branching out into UI work – it's a whole host of new challenges as it has me working with new pipelines, assets, tools, etc. Now that I'm up to speed on it though, I really enjoy being able to work on ship systems, both in terms of how they behave and how they communicate those behaviors to the player. Plus, the UI extends the interaction system, which has been my baby for years now, so it's nice to bring those things together, too.

What was your most satisfying or enjoyable moment? I was testing out the IR suppression functionality on the Caterpillar when suddenly the ship went dark. It took me a few seconds of looking around the quiet ship before the lights kicked on again and the monitor screen came back and I realized what had happened: my shenanigans had cause the power plant to overheat and fail, so the whole ship shut down until the components cooled enough to recover!

What is your favorite 3.0 ship? I'm biased, I gotta give it to my Nox.



Forrest Stephan CG Supervisor

What has been your primary responsibility in reaching 3.0? Supporting the artists and helping with technological hurdles between disciplines.

What's been your greatest challenge in reaching 3.0? Working with new toolsets and technology that drive the 3.0 feature goals.

What was your most satisfying or enjoyable moment? Seeing planetary environments begin to breathe new life.

What is your favorite 3.0 ship? The Aurora

Chris Gorman QA Tester, Austin, TX

What has been your primary responsibility in reaching 3.0? I've tested/regressed many things in 3.0, however my main testing focus is on the Persistent Universe and server stability testing for it.

What's been your greatest challenge in reaching 3.0?

Testing the moons and the design mechanics that were introduced with them; a lot of testing was done for them all!

What was your most satisfying or enjoyable moment? Testing Item System 2.0 for the game, I was in much awe at how much immersion there is with this system in ships and the game world.

What is your favorite 3.0 ship? I actually have 2 favorite ships, Avenger Warlock and the Drake Cutlass Black.

Jason Cobb Senior Audio Designer

What has been your primary responsibility in reaching 3.0? Audio system profiling, debugging and optimizations, and a few minor sounds for ship damage.

What's been your greatest challenge in reaching 3.0? Reimplementing sounds when other game systems change.

What was your most satisfying or enjoyable moment? Becoming unblocked as bugs are resolved, or when something works right the first time.

What is your favorite 3.0 ship? MISC Prospector

YELA (FORREST STEPHAN)





the Idris System to be the location of one of the most important events in all of Human history. Here, in 2544, an ambitious young officer named Ivar Messer directed dangerously close bombing runs to turn the tide of the battle and arguably the entire First Tevarin War. One can only imagine how history would differ if the Tevarin had won that day and the fanatical Ivar Messer never risen to power to usher in the darkest days of Humanity.

cant impact on the Empire in more ways than one.

TRAVEL WARNING It may not be apparent, but security is tight around the Tevarin War memorial. Though dedicated to those who bravely fought in both wars, its association with Ivar Messer has attracted criticism, vandalism and threats to destroy it.

INNER PLANETS

In 2493, Terrell Dorazio slowly piloted his exploration ship, the Ika'Roa, across a sector of Rhetor. A student at Mentor University, Dorazio and a friend visited this section of space to ingest hallucinogens and stare at Rhetor V as it traveled through a picturesque portion of its orbit. Mid-experience, Dorazio became convinced that his ship's scanner had picked up an anomaly, but his friend assured him it was just part of the hallucination.

The experience stuck with Dorazio. After graduation, the novice explorer returned to that sector and spent weeks scanning it. Eventually, he found a jump point into an undiscovered system and named it Idris after the friend who insisted nothing was there.

UNE pathfinders explored Idris to discover one potentially habitable planet and a mineral rich protoplanet. They quickly claimed the system and rushed to terraform Idris IV. Once habitable, the government declared Idris IV a Recommended Growth Center in 2533. Its population swelled and businesses flocked to the system as it became a symbol for Humanity's ability to quickly colonize a new system.

No one could have predicted that making Idris IV conducive to Human life would also make it a prime target for an alien invasion.

FREEDOM'S FRONTLINE

In 2541, Dr. Kellar Lench discovered the Elysium System and the new species that called it home – the Tevarin. The UPE attempted to establish diplomatic ties with the Tevarin, but they were more interested in Humanity's land than in peace. The Tevarin had not mastered terraforming and were desperate for new planets to inhabit. After discovering that the atmosphere of their worlds was similar to that of Human planets, the proud and martial Tevarin concluded that invasion was the answer to their problems. The first Tevarin War ignited and the UPE Navy was dispatched to defend the Elysium-Centauri jump point.

Unfortunately for the population of Idris, the Tevarin discovered a jump into the system and mustered a surprise attack in 2542. The Tevarin invasion began with orbital bombardments that devastated population centers and left countless dead. These massive impact craters can still be seen on approach to the planet. While most survivors fled the system, some sought refuge in the mountains and

organized resistance groups to provide valuable intelligence and assistance when the UPE finally struck back on the planet.

When the First Tevarin War ended in 2546, Ivar Messer had been elected Prime Citizen, a position which eventually transitioned into the role of Imperator. It was a meteoric rise to power. He wielded his immense influence to reshape the government to his liking and help those who aided his ascent, which included the people of Idris. The new UEE government flooded the system with credits to help rebuild cities and resettle inhabitants.

To commemorate the system's sacrifice during the First Tevarin War, and curry favor with Messer, Aegis Dynamics named a line of capital ships after the system in 2551, and even opened a facility on the planet to manufacture them. Ivar Messer gave a famous speech at the inaugural Idris launch, which hinted at the fascism to come.

In this speech, Messer said that "never again can we let Humanity be made the victim. Let all who would dare become the enemy of our Empire tremble as they hear of our victory in Idris and the ship that bears its name."

The system's reconstruction was stalled in 2603 with the outbreak of the Second Tevarin War. Committed to preventing Idris from again falling to the Tevarin, the military stationed a massive force in the system. Tevarin warlord

Corath'Thal recognized Humanity's intent to hold the system at all costs and used it to his advantage. On several occasions, he sent decoy fleets into Idris to draw more UEE forces into the system before launching a surprise attack elsewhere.

Only after the Empire defeated the new Tevarin threat could the Idris system truly prosper.

OUT OF THE ASHES

The centuries following the Second Tevarin War were not as dynamic, but were no less important to Idris' development. On Idris IV, Aegis Dynamics bought up tracts of cheap land to expand their production facilities, while the significant military presence in the system kept trade lanes safe and secure. Cheap real estate, safe shipping and lax regulations were a boon to businesses flocking to the system. By the end of the 27th century, the system had evolved into a production powerhouse.

However, during the Messer regime, the system developed a reputation of putting the needs of corporations

before that of the general population and earned a poor track record regarding workers' rights. The well-organized strikes of 2808 pushed back on poor working conditions and low pay. It energized a planet-wide movement that pressured the Governor's Council to refine their labor laws. Numerous UEE systems have since adopted similar standards, now universally known as the ldris Amendments. The legislation is considered a significant accomplishment for the system, though its impact on the Empire receives much less attention than its part in the rise of Ivar Messer.

IDRIS I

Idris I resides a mere 0.1 AU away from the system's F-type main-sequence star. It lacks an atmosphere and both its

crust and mantle have been blasted away due to its solar proximity, leaving the planet's iron core to solidify.

IDRIS II

While Idris I lacks an atmosphere, the one encompassing Idris II makes it completely inhospitable to Human life. Planetside temperatures soar under the thick and vola-

tile cloud cover. When combined with dangerously high atmospheric pressure, this rocky planet is best viewed from afar.

IDRIS III

Idris III is an uninhabitable terrestrial planet mostly covered by an ocean of water mixed with ammonia and other volatile fluids. Countless research probes sent to inves-

tigate this high-density mixture have fallen victim to its viscosity. If anything of note resides beneath the soupy seas of Idris III, it's still waiting to be discovered.

LOCKE (IDRIS IV)

Rachel Locke fled into the mountains of Idris IV following the invasions of the First Tevarin War. Though she had no official military training, she led the resistance movement known as the Greys that terrorized the Tevarin invaders. Following the war, the Governor's Council honored her leadership and heroism by naming the planet after her.

As the system's only habitable planet, Locke is Idris's beating heart. Besides being a business-friendly location, word has spread among outdoor enthusiasts about the picturesque Corsti Mountains in the north.

A thriving tourism industry based in and around the city of Tanys is geared to those interested in taking in the sights either on foot or by vehicle.

The planet is also known for growing a distinct version of the ugni blanc grape varietal. The planet's soil composition accentuates the grape's acidity, making it ideal for cognac and brandy production. The Starlight Idris Cuvée has been voted the universe's best cognac on multiple occasions.

IDRIS V

This protoplanet originally contained a wealth of valuable minerals. The government and various companies systematically strip-mined Idris V throughout the 26th and 27th century until its resources were significantly depleted. Today, the abandoned facilities there are best known for being sporadically occupied by criminals and squatters.

HEARD IN THE WIND

"Freedom comes at a cost of more than lives and credits. It requires commitment, dedication, and a willingness to do what's unpopular to accomplish what's right. It must be ready to crush any opposition that threatens it. With that last point in mind, I'm pleased to unveil the latest capital-class ship from Aegis Dynamics – the Idris. It is the UEE's new definition of a freedom fighter."

- Ivar Messer, speech at the inaugural Idris launch, 2551

"Humanity made this world what it is. If we walk away instead of fighting for it, then the Tevarin have already won. They'll push further into Human space until all our planets and even Earth are subjugated. That's why we must make a stand here and now. Because if this frontline falls, who knows how far they'll go."

- Rachel Locke, pirate comm broadcast, 2543

by Will Weissbaun THES

Keeping one hand on the controls, Berkley leaned over and grabbed the small packet of food he had tucked underneath the radar display panel. He'd learned over the years of pulling long hauls that with MREs you didn't want to eat them hot like the instructions on the back recommended. That just made the flavors more pronounced. The only thing worse than crap was steaming crap. Eating them room temp wasn't good either. Sure, the flavor was dulled, but the texture wound up somewhere around chewing on a damp sock. Nope, the best option was to gently warm them to around 62°C, i.e. the exact same temperature that his outdated and prone-to-overheating radar display generally operated at.

Unwrapping the ReadyMeal packet, the concentrated aroma of . . . well, he didn't know any better way to describe it oth-

er than intensely brown . . . hit him directly in the face. Why did it have to be a Beef Chunk day? He always told himself that he should stop buying the bargain variety pack. It was a lot cheaper, but it invariably ended with him having to force down three packs of the Beef Chunk flavor at the end of the month. All that scraping and saving was going to finally pay off, though.

Berkley thought about just ignoring his gnawing hunger, but with a deal this big he couldn't risk being distracted and irritable. His original plan had been to treat himself to a nice meal in celebration after his payday came through, but sitting in one of ArcCorp's notorious traffic jams with no sign of budging made the Beef Chunks the only option.

The local spectrum had been quiet so far on the cause of the backup, but he wasn't too surprised when the alert had first sounded. ArcCorp always seemed to have twice as many landing accidents as any other port of call he visited. A big part of that was due to the sheer number of ships that made their way to the planet every day. More ships, more accidents. Though Berkley thought that the flight path changing almost every time he visited thanks to a couple more new skyscrapers being erected was probably equally to blame.

He quickly shoved a large bite into his mouth and distracted himself from the taste by glancing towards the horizon where the skyline of Area17 beckoned. He was tempted to try his luck landing there instead, but he resisted. Heading there now would mean being placed all the way at the back of the landing queue and he'd burned enough time already. Plus, his fuel supply was down to almost vapors. Another thing he intended to correct once he got paid. No, better to stay the course and stick it out at Area18. Plus, now that the acrid black smoke billowing up from the wreck site had begun to clear, Berkley hoped that air traffic control would start allowing more ships through soon.

Just then, two ships rocketed past his holding position towards the wreck, their regtags alerting everyone in the vicinity that they were BlackJac security. He involuntarily tensed at the sight of their flashing lights. That explained what was taking so long. If BlackJac was involved, this wasn't just some hull-bender. The company provided most of the security on ArcCorp, so it was safe to say that whatever had gone down was likely of a more sinister nature. Maybe a theft gone wrong or a particularly bold smuggler. Whatever it was, he didn't like being around this kind of scene. Another BlackJac ship flew past. He might be stuck here even longer than he had originally thought.

Reaching over, he re-connected to the local network and refreshed the TDD alert again. His heart sank right along with the trend line on his screen. Just in the time spent sitting here, the dozens of cargo crates stored in his hold had decreased in value. Though Berkley had accurately predicted that the price of agricium would skyrocket on ArcCorp after a component manufacturer announced that they were increasing production at their factory here, it seemed the market's peak had already come and gone.

Even with the buy rate still near the record high, his chance for real profit was rapidly closing . . . not that his margins were that big to begin with. He didn't have time to shop around if he wanted to take advantage of the situation and so he had paid way too much for the agricium in the name of expedited acquisition. Berkley had bet pretty much every credit he had to his name plus a pretty sizable loan on being able to unload before the bubble burst. After a year of living hand to mouth, barely scraping by, he was ready for something to work out in his favor.

His last big trade was when he had correctly guessed that Sakura Sun's Lil' Morps were going to be the must-buy Citizen's Day gift of that year. His rear hatch still had a dent from where a parent had flown off the rails after learning Berkley had sold out of the popular Mr. Tintel figures. That success should have easily been parlayed into even more, but a couple misdeals, several hundred spoiled bilva, two major engine malfunctions and his very unpleasant misunderstanding with the Advocacy last year had left him worse off than when he started. The chunk of gristle he was currently trying to chew his way through served as an excellent reminder of that.

It had been hard staying optimistic after basically having to rebuild his life almost from scratch, but trading had given him something to focus on. If you kept yourself open HENE H

to opportunity, you could exchange one thing for something better. That's what he was trying to do with his life. This deal today would net him enough to pay off most of his debt and outstanding legal fees. With that cleared up, everything else could be put back into growing his business. Maybe even finding someone to fly with. Maybe even buying a better brand of MREs, he thought as he forced another bite.

Before he could swallow the chunk, Area18's ATC chirped onto his comm. Tossing the half-finished packet of food onto the empty co-pilot seat, he snapped open the channel, "Go for *Good Haven*."

"Hey *Good Haven*, got you cleared to land," informed the weary traffic controller. "Pad 2-0-6."

"Fantastic," said Berkley, his enthusiasm more than making up for the controller's massive apathy. "Could you also go ahead and send four or five cargo handlers my way? I'm in a bit of a rush."

"Well, you picked a pretty terrible day to be in a rush. Won't be able to spare anyone for at least another hour."

Berkley did some quick calculations in his head. "How many credits to spare some people sooner?"

"Outta my hands. We got a full Hull-E unloading and Black-Jac commandeered most of our handlers to deal with their mess, so it's going to take a lot more than credits to make a lick of difference. Best I can do right now is have a bot sent to your pad. Anything more than that and you'll just have to wait."

The cargo transfer drones were normally fine, but thanks to stringent safety protocols they weren't the best option when you were hoping to empty a hold PDQ. For that, you needed good old fashioned Human disregard for safety. "Yeah, the bot'll have to do."

"Proceed with caution and enjoy your stay on ArcCorp,"

the traffic controller intoned before killing the channel.

Berkley tapped his nav and brought landing pad 206 up onto his screen. Tilting the stick forward, he felt the thrusters grab hold as he carefully merged into the stream of ships heading down to the surface. The controls were sluggish from the weight of a full hold, a reminder to be extra careful. Before him, the messy urban patchwork below slowly resolved into a complicated grid of factories and warehouses as he approached. Sometimes you hear Humanity compared to a virus. Seeing the overwhelming sprawl of ArcCorp made Berkley think that comparison wasn't too far off.

He adjusted his course and headed into the heart of Area18, a dense forest of towering skyscrapers. His focus fought against the assault of flashing lights and billboards that lined the buildings. Steering around a tower, a fifty-story-tall hologram of a woman waited on the other side. She helpfully squeezed a roll of bath tissue before transforming into a giant animated box of noodles. Where other worlds might have shown restraint out of safety concerns, ArcCorp fully embraced its consumerism with both arms. There was no mistaking that ArcCorp was created in a boardroom by a bunch of executives. Nearly everything on the surface of the planet was dedicated to industry and the generation of credits. And right now, that list included him.

Almost as soon as his landing struts touched down on the pad, Berkley was out of his seat. With the buildings blocking so much of the natural light, the city itself usually stayed pretty chilly unless the sun was directly overhead, so he made sure to grab his warmer jacket off the floor. Lowering the cargo hatch, he was pleased to find the drone waiting there. He was not pleased that it was an outdated model, probably older than he was. Unloading his ship was going to take even longer than he had estimated. Reflexively, he checked the TDD status again. The downward trend

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was picking up pace. How many other traders were here unloading agricium right now? At this rate, by the time the cargo was off the ship and into bonded storage he was pretty much guaranteed to lose money.

"Hey, you looking for some help?"

Berkley turned to see a woman approaching him. She looked like she had seen better days, but he imagined she was probably thinking the same thing with how worn and stained his jacket was.

"You with landing services?" Berkley asked.

"More or less."

The response triggered Berkley's suspicious side. "How much less?"

"Listen, Stac and I are just trying to make a few honest creds. You don't want the help, that's fine. We can go."

Berkley was about to ask who Stac was when he spotted the other woman approaching the pad in a full loader suit. From her controlled gait, he could tell that she knew what she was doing. He did some quick estimates. With the drone going full speed, and these two coordinating, he bet he could get the whole ship unloaded and bonded by the time he got to the TDD. He knew that he should be wary of strangers, but on the other hand, maybe it was time that he finally caught a break today. Besides, he could appreciate people hustling to make an honest living for themselves.

They made formal introductions all around and after a brief haggling session, he transferred Camari and Stac half the agreed upon price, the rest to be sent when they finished. It pained him to have so very few funds left in his bank account, but as soon as Berkley saw how quickly they finished clearing the first palette he knew the credits had been well spent. This might just work out. Even the bot wasn't as slow as he feared. With his precious

cargo in good hands, he left them to it and headed towards customs.

The fact that he did not get stopped at all going through security was enough to convince him that maybe his luck had really started to turn around. Stepping outside, what had been a dull hum turned into the roar of a city thrumming with activity. People flowed around him in a seemingly endless stream of Humanity. Salesmen and executives in crisp clothing mingled with haulers and factory workers in greasy jumpsuits. Several Banu worked their way through the crowd selling hot tea from dispensers mounted on their backs, while at the fringes, scrappers collected the population's jetsam for resale. Overhead, bright neon ads blared slogans and jingles over the din of the crowd, who in turned shouted even louder to be heard over the noise. Mix in the sound of constant ship traffic and it was overwhelming to the point where a few seconds in and you felt the sound pulsing through your body more than you were able to actually hear it anymore.

Ahead, Berkley saw the large spinning gear sculpture that marked the center of the city and realized that he had allowed the crowds to push him past his turn. Going across the stream of pedestrians, he jostled his way back towards the Trade and Development center. Catching his breath for a moment underneath the sculpture, he wondered if it was supposed to represent the harmony of the city all working together or if it was implying that they were all just cogs in some grand machine. Who knows, maybe ArcCorp had simply needed something to do with a bunch of extra gears.

Long lines stretched outside the TDD. For a moment he feared that people were waiting to access the commodity trading facilities, but with relief realized that most were there for the Jobwell. Even with as many opportunities as Area18 had on offer, it seemed that there

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were never enough to go around. So many people came to ArcCorp looking for work that employers could afford to be highly selective. Any opening would have dozens of people competing for the same slot, and even then they were usually short-term low-paying gigs. Despite all that, more people kept showing up every day. Berkley was thankful that he had been able to find a path for himself that had so far kept him well away from the struggles of trying to survive as a day worker. With a friendly nod to those waiting, he moved quickly past the lines and into the TDD itself.

It was a surprisingly grand room to hold so many people arquing. The high sweeping ceiling swallowed up the sounds of trades being negotiated at a furious pace. His eyes found agricium on the large ticker board and happily noted that the price actually had leveled off. It wasn't going to be as big of a score as he had originally hoped, but all said and done he was going to come away with a nice, tidy profit. Maybe the first thing he'd do after the trade went through would be to get a drink. Or maybe a shower. Hard to say which one he needed more. He logged in at the kiosk and brought up his account and felt his stomach do a flip. The inventory list was completely empty. Maybe they just hadn't finished unloading. He waited a minute staring up at the ticker. The price had begun to fall again. He tapped refresh on the screen. Nothing. Then a little voice in the back of Berkley's head broke through the growing panic he was feeling and pointed out that not even the first palette that he had watched being unloaded was listed.

Berkley was already heading to the exit.

Sure enough, upon returning to pad 206 he found Camari and Stac were gone and that his ship had been emptied. The BlackJac security officer who showed up a few hours later to take his report verified as much.

"Yeah, looks like they took all of it," said Officer Frobisher, shining a flashlight unnecessarily around the hold. "A little free advice for you. Next time, stick to hiring verified workers."

"I'll try to remember that," said Berkley. "What do you think the odds are at recovering my property?"

"Well, that's up to you now isn't it?"

"How do you figure?"

"Finding lost property isn't easy. We're looking at a lot of hours investigating, talking to suspects, hunting down clues, and whatnot. That all costs credits," explained Frobisher.

"Are you seriously trying to shake me down?"

"Not sure what you're implying, sir. I'm just trying to see that justice is served to the best of my abilities. Would be a shame if I got distracted," said Frobisher, walking down the ship's ramp towards Berkley. "For example, says here that you were arrested for smuggling a year back. Can't help but wonder if that has anything to do with what's going on here. How do I even know if there was any cargo here in the first place? Hell, this whole thing could be some insurance scam you're trying to pull."

Once he heard his smuggling record mentioned, Berkley knew he had two options here. One, he could keep protesting and probably be brought in as a suspect. Once in custody, chances were he could get out eventually, but with his past and the fact that all the law here was handled by private security contractors like BlackJac, it made that a riskier proposition than it should be for an innocent man in the Empire.

Funny thing was, Berkley didn't even have insurance on the cargo. Not that it would really matter. They would just find something else to pin on him and the result would still be not getting his property back. He had been incarcerated once in his life. He wasn't going to let it happen again. The other option was giving Frobisher a bribe. Berkley guessed that he didn't have enough credits to actually get his case investigated, but maybe he would have enough to get Frobisher to back off. It shouldn't have surprised him that on ArcCorp even the cops were a for-profit institution.

In the end, the bribe actually took less money than Berkley would have guessed, but still enough that he was now officially broke. He had always thought that his throw-caution-to-the-wind attitude was one of his better personality traits, but now, lying in the dark cot of a ship he couldn't afford to fly, he was starting to second guess himself in a very unhelpful way. He probably should have gotten the insurance instead of doubling down on the cargo. He probably shouldn't have hired two random people to unload his ship without thoroughly vetting them. He probably shouldn't have agreed to deliver a package for a friend and all those months ago without knowing exactly what was inside of it.

A few hours ago, he had arrived on ArcCorp with a ship full of possibilities, and here he was destitute. He owned his own spacecraft, but didn't have enough credits to pay off his landing fees. Plus, even if he did, he didn't have the funds to buy fuel to fly anywhere. He couldn't borrow money because he had maxed his credit. He could try to get a job, but with his record and now, no ship, there was little work he was qualified for. The contracts he could get were sure to be barely be enough to live off, let alone get off-world.

He could maybe find someone to buy his ship. That would net him some credits, but then he'd still be stuck here without a job and no place to sleep. There was at least still one thing he could accomplish today. Pushing himself off the bunk, Berkley turned and went to blow the last of his money on a drink.

Some of the helpful downtrodden folks still queued up in the Jobwell line were kind enough to point him to a bar where he could get blasted for a reasonable price. G-Loc was the kind of place that specialized in being generic. There were sataball posters on the wall, a near empty dance floor playing popular music from five years ago loud enough to keep conversations private, and the drink options ranged from cheap and drinkable to top-shelf bottles kept mostly for show.

There was an interesting mix of customers. Two people surrounded by bags and boxes toasted to their successful shopping trip. An old vet sat by himself at a hightop table laughing loudly at the muted commercial on the vid screen. Crowded into the corner booth, a gaggle of factory workers in matching ArcCorp uniforms silently contemplated their beers.

Berkley sat at the bar nursing a serviceable tequila reposado and watching a drunk hauler flail on the dance floor all by himself. He asked the bartender to top him off with ice, hoping to make the drink last just a little bit longer. To his surprise the bartender added ice and a little more tequila.

"On the house. No one around here drinks the stuff anyway."

"Thanks. You have no idea how bad I needed that."

"Tough day?"

Even though he felt like a cliché for doing it, Berkley wound up telling the bartender the whole story of how his entire life went pear shaped. Rather than provide some sage wisdom to help him cope, the bartender gave Berkley a friendly nod and went off to help another customer. You knew your problems were serious when even a bartender looked grim.

"You know where you went wrong?"

HEIGHT H

Berkley turned to face the grizzled woman sitting next to him. She however continued to carefully watch her red wine as she swirled it around the glass.

"I know exactly where I went wrong. Several times over, in fact," he answered.

"You thought those BlackJac bastards would actually do anything to help you. Fat chance." She took a large gulp of wine. "The only ones they look out for are themselves. A lot of people learn that lesson the hard way."

"Yeah, tell me about it."

"Wasn't talking about you."

The drunk dancer stumbled and knocked over a glass with a loud crash. The bartender swore under his breath and went to clean it up.

Once the bartender was out of earshot, the woman leaned in closer to Berkley and said, "If you're serious about gettin' your cargo back, I might know someone who can help."

"I don't have any money to pay for help."

"She doesn't work that way. You said you did some smuggling, right?"

"I said I got arrested for smuggling once. But that's not me. I trade clean."

"And how's that been working out for you?"

The sting of this assessment hurt more than Berkley would care to admit. He had tried to live his life right and all it had netted him so far was the societal equivalent of a back alley shakedown. "Fine. I'll bite. Who is she?"

"She likes to say she's a freelance time manager, but what's important is that there isn't much goin' on in Area18 she doesn't know about. Hell, she might be arranging the sale of your cargo right now anyway. Come on. I'll introduce you."

With that, the woman killed her drink and slid off her stool. She went to the door and turned, waiting to see if Berkley was going to follow. Berkley himself wasn't sure if he was going to follow or not . . .

The first time he had become a criminal, it had been an accident. One that it seemed like he had been paying for over and over again. Maybe it was time that he got a little payback of his own.

Berkley tilted back his drink, but it was already empty. He put the glass down, tipped the bartender with his last credit, and throwing caution to the wind, stood up to follow.

The End

