

JUMP POINT

ISSUE: 09 8



IN THIS ISSUE →→→

03	DEVELOPER INTERVIEW: Building Orison
25	SPACECRAFT: Commercials Index (part 1)
31	WHITLEY'S GUIDE: RSI Constellation Taurus
35	THE BREMEN BELTWAY

FROM THE COCKPIT

GREETINGS, CITIZENS!

Star Citizen Alpha 3.14 is here! I suppose that will be old news by the time you read this, but as I write we're currently enjoying one of the most rewarding parts of the development process: watching *Star Citizen's* supporters enjoy the fruits of our labor. I can take no credit personally, but Alpha 3.14 may be the most playable patch yet, and everything that's new is so very exciting! If you haven't explored Orison or tried out the RSI Constellation Taurus yet, then I would encourage you to do that before you read on here!

As promised last month, we're opening with a look at one of the most impressive parts of Alpha 3.14 (at least one of the most impressive ones you can see): the new landing zone of Orison, a massive collection of platforms above a gas giant that has to be explored to be believed. I'm always keen to understand how such incredible environments can come to be and we were lucky enough to have a designer and artist who crafted Orison sit down and answer some of our questions. I don't envy the amount of world building they have to do but, man, their skills in the field are truly unmatched. Enjoy!

Then we've got a look back at *Star Citizen's* long history of ship commercials. I figured this would be an easy article to put together that would also provide a helpful index like our ship brochure piece... but I greatly underestimated how many amazing ship commercials we've done over the years! As such, consider this part one of two (or someday three!).

Chris Roberts was insistent on using the commercials, always in-engine, as a way to both show the potential of the game and also to help develop our universe, and it's wonderful how going back to even the earliest ones still makes the heart sing.

On the lore side of the magazine there's a new Whitley's Guide that (appropriately!) covers the newly refurbished Constellation Taurus. When I was working on the Constellation variants way back when, I pitched the Taurus as the "iPhone 5C" version of the ship - the cheaper model that lost some features but still let players on a budget enjoy multi-crew gameplay. Of course, now the darn thing is as impressive as anything else in space! We also have a fantastic excerpt from *The Bremen Beltway*, a 30th-century historical book that talks all about the extremes political activists needed to go through during the UEE's Messer era. It's fascinating stuff!

I also want to take a moment to note that the real **Jump Point** heroes are the incredible team credited above... without their hard work editing and putting together the layout this wouldn't be worth the electrons it's printed on. We'd be totally lost without their dedication and skill and I don't think I say it enough!

Until we make the next **Jump Point**,

Ben

JumpPoint@cloudimperiumgames.com

Editor & Writer: Benjamin Lesnick Narrative Team Writers: Adam Wieser & Cherie Heiberg Design: Michael Alder

Copy Editor: Martin Driver In-Engine Imagery: Charline Wegria, Simon Ravenhill & Simon Jennings

Associate Marketing Producer: Dan Houbrick Marketing Art Producer: Matthew Simpson Narrative Team Producer: Stephanie Bedford



BUILDING ORISON

Star Citizen Alpha 3.14 is here and one of its crown jewels is the new Orison landing zone. But how does such a detailed and enormous new world come into being? We've seen Star Citizen's shipbuilders spend months on each craft making them space-ready, so how do you scale that up into an entire world and eventually a galaxy? To find out, we interviewed some of the talented artists and designers who built this exciting new environment.

[BEGIN TRANSMISSION →](#)





At this point, Level Design start looking at the systemic side of things. For example, markups for room systems, AI, gravity, trains, and elevators. Of course, we keep up discussions with other departments working in the level to exchange feedback while the location is taking shape.

Finally, at this point, we look at polishing to provide a great experience, such as tweaking the trains or NPC population, but also a lot of bug fixing as well.

JP: *What kind of considerations go into how an environment is designed? What's the process like going from a broad lore description to something that players can actually use?*

MH: First of all, we ask ourselves the following questions: What is the purpose of the location? Which kind of gameplay do we expect to happen there? Do we expect a lot of traffic, and how many NPC would probably live there?

Orison is quite an open space compared to our other major locations to enhance the experience of walking in a floating city in the clouds. In contrast, the social space in the prison is located in a large cave, but the actual walkable space should be more limited and cramped, hence everything is connected by catwalks.

Also, the following considerations are made: How do systems like the law system affect the space? Where do we allow players to go and where can they go but get punished for entering?

DESIGN

JUMP POINT: *Please start by letting us know what you've worked on for Star Citizen.*

MANUEL HEIDER (MH): My name is Manuel Heider. I'm a level designer and primarily worked on Area18, the rest stops, the prison, Levski (maintenance), and last but not least, Orison.

JP: *What is the process of designing a new environment for Star Citizen?*

MH: First there is a location request from the directors, who then establish some high-level concept with the leads. Then, during pre-production, a level design location owner is added who sets up and drives the documentation via level design documentation (LDD), which is the point I join. At the end of this phase, the directors and leads review the work and, once it's signed off, we head into the production phase.

At this point, Level Design starts the whiteboxing process to get a feeling of the layout and size of the environment as well as test gameplay and mechanics. During this phase, we're in constant discussions with other departments like Art and System Design to exchange feedback and make quick iterations until everyone is more or less happy. Once again, reviews and signoffs happen and then we head into the greybox phase.



Another aspect is traversal. We aim to create a space that feels real but also doesn't have players wandering around for ages not knowing where they are, or one that requires them to backtrack a lot.

In addition to that, we question ourselves - where do we want or need elevators and trains to traverse between major areas? Elevators can be quick means to travel from A to B but forcing too many elevators or trains is boring and tedious.

Another major aspect is performance. Having long-distance corridors or spaces can take a heavy hit on frames, so we try to consider interesting layouts that also help save performance where possible or necessary.

JP: What kind of materials were you provided at the start of the process. Did Star Citizen's writers provide a brief or other description?

MH: I haven't been on Orison from the very start and rather inherited the location from my former senior colleague, but before working on major locations we get briefed by our lead level designer, who tells us about the purpose and vision of the location. Eventually, there's some kind of mood board or concept to showcase the vision of the location.

Shops on the other hand come with a brief description from the writers and we just take it from there with our own research, which allows us to do some creative work. In this case, we also get in touch with System Design on their requirements of what needs to go into them. For example, how many mannequins and displays they need. Then, we start iterating in whitebox.

JP: What kind of software is involved in designing a location? It's easy to imagine anything from graph paper to custom level-building tools.

MH: For creating mood boards I prefer photoshop as I'm used to working with it.

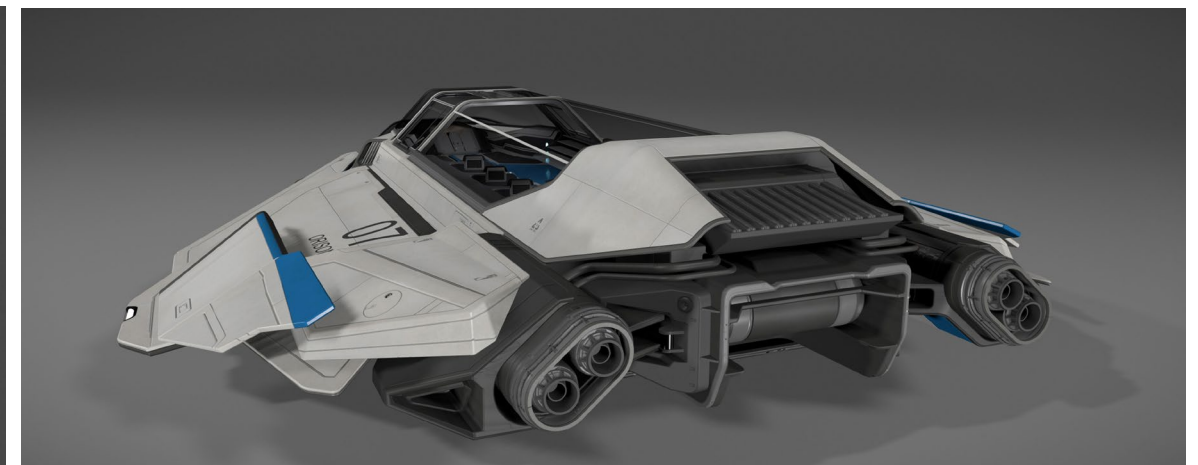
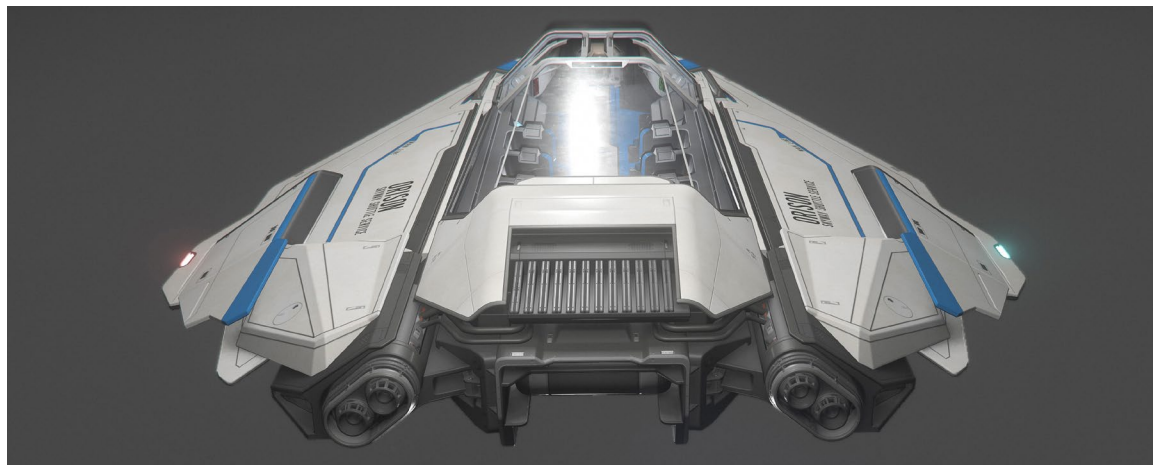
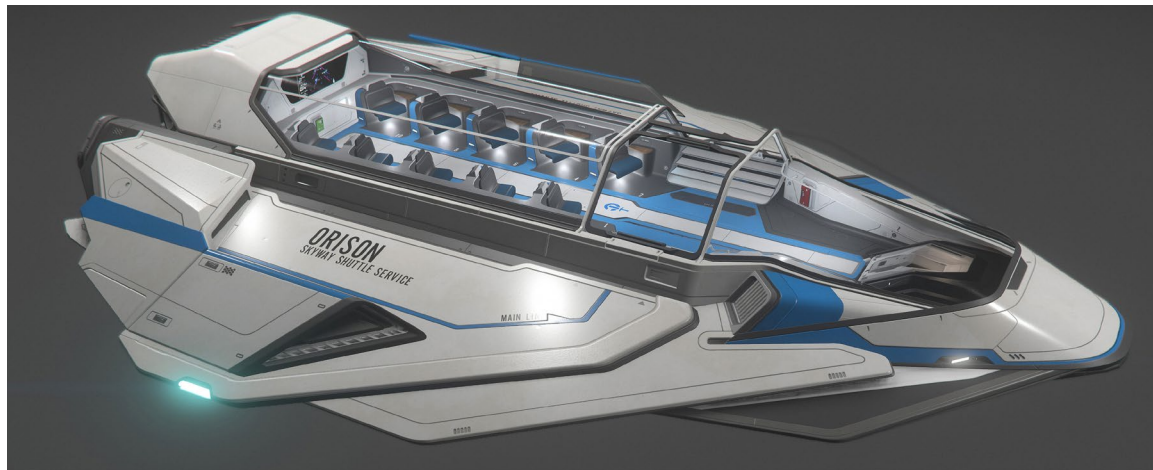
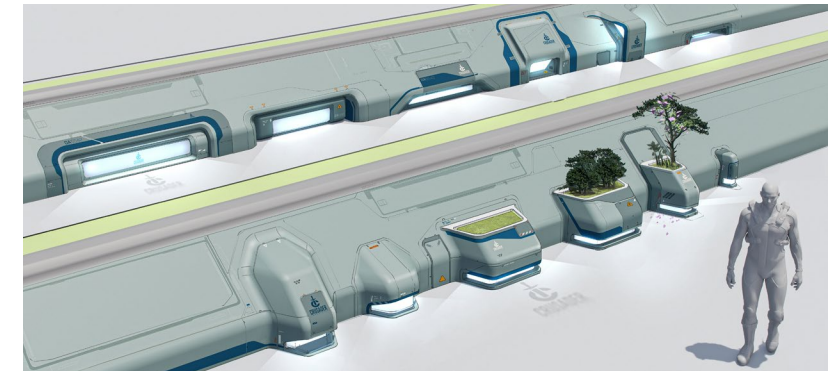
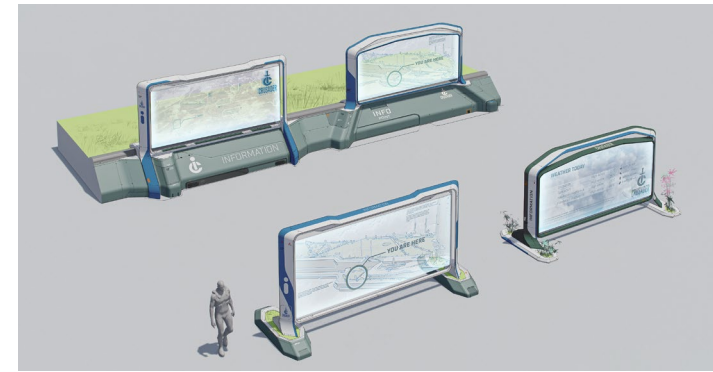
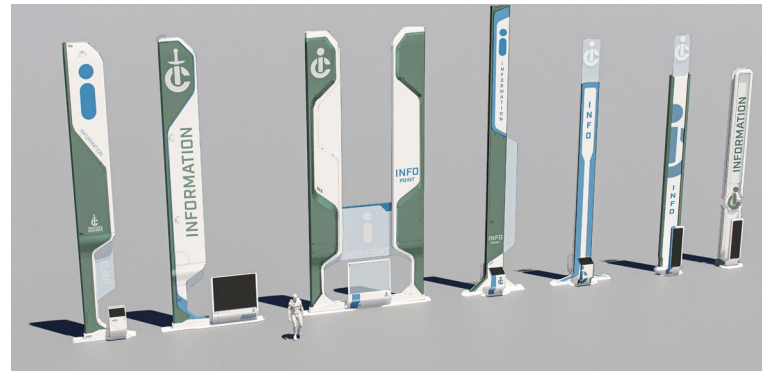
When it comes time to do some sketches, it can vary from level designer to level designer. Some like to draw on paper, others use various sketch tools, and others start directly iterating in the editor.

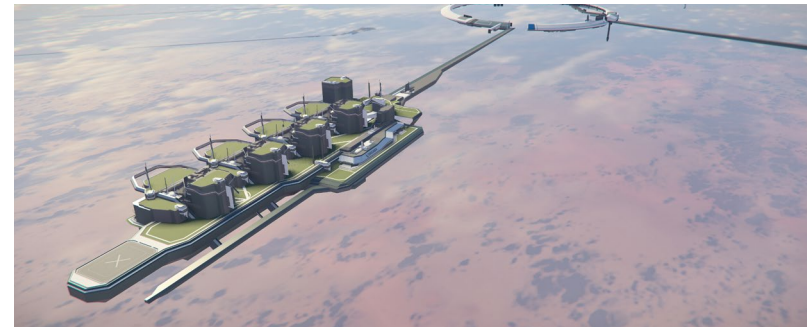
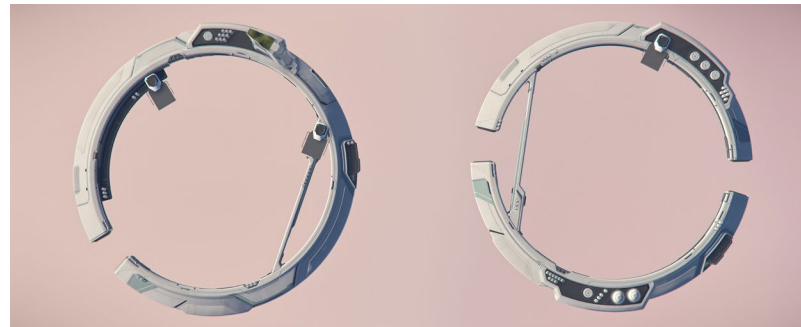
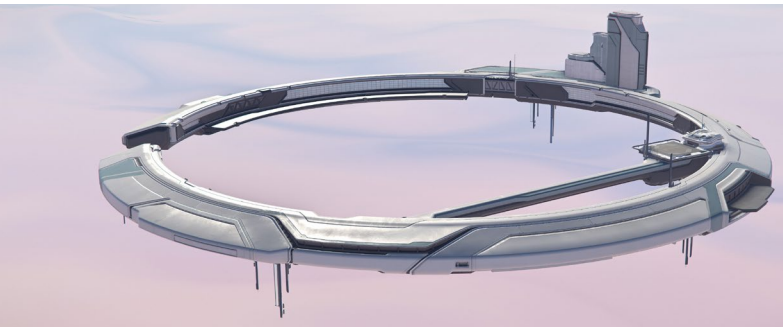
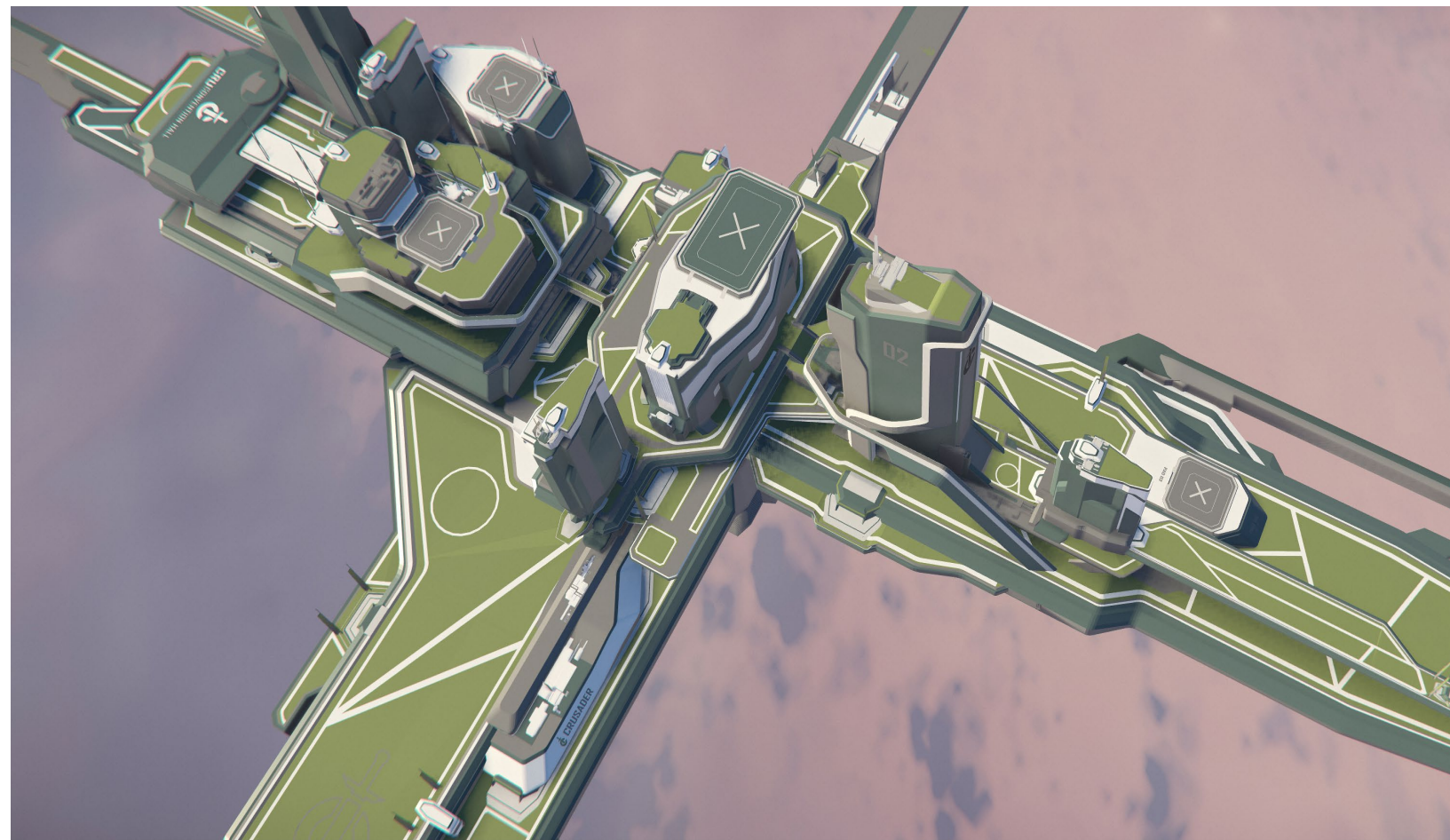
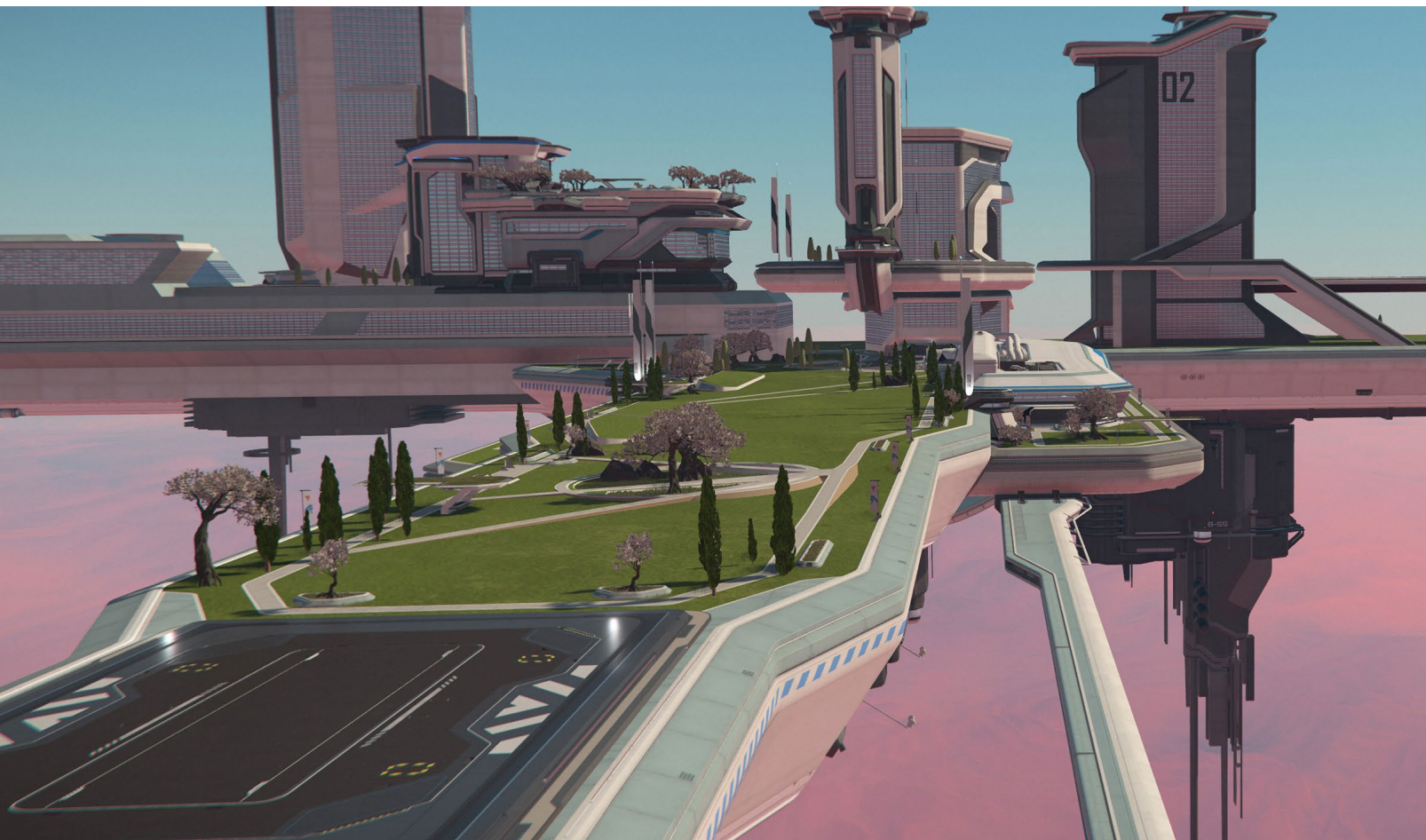
For me, it depends on the situation. If it's a shop space, then I just launch the editor and start right away. However, when building large spaces, I tend to do some sketches with pen and paper first.

Then, there is the most important tool for us level designers: our in-engine editor. In there, we have the tools to do whiteboxing with designer solids by manipulating simple shapes, but we also have a custom library of template tile sets (such as wall or floor pieces), which we can use and mix.

JP: Do you put together any particular reference when developing an environment like Orison? What inspired your design?

MH: Since I haven't been on Orison from the very start, I can't speak for what inspired the design. But, in general, yes I spend some time doing research and looking for reference images, which I eventually put together in a mood board to get a feeling for the environment. It's also inspiring to look for architectural elements that can be adapted in some way, shape, or form.





JP: Was Orison procedurally generated, crafted by hand, or some mix of the two?

MH: Orison was crafted by hand – the three main platforms (spaceport, commercial, and industrial) more than the other flavor platforms. These flavor platforms are built in a modular way to quickly create a couple of them, but in the end they're still handcrafted.

JP: How many platforms make up Orison today?

MH: That's actually a question for Environment Art as flavor elements are driven by their team. We were more focused on the three major platforms as the main gameplay areas and the surrounding systems. There wasn't any directive of "we need x platforms," but rather what feels right for the city.

JP: What teams were involved in turning your design work into the finished environment? (Animation, Audio, etc.)

MH: Primarily Art, who took the whitebox and moved it to greybox and then final art, but also Character, Narrative, and AI who provided the NPC variations that we get to place around and set up in the environment. Engine helped us add new features and extended functionality to existing systems, like adjustments that had to be made to the restricted area and transit systems, while System Design populated the shops with items, which players then get to buy. Live Design also added missions and placed drop-off lockers in the location.

JP: Did Orison require developing any additional technologies for the game or was it developed using the same systems as Star Citizen's other environments?

MH: From a Level Design perspective, we've been using the same systems, except for the Orison Discovery Tour, which needed more functionality... but that's something for later.

JP: Is there a location or some other element of Orison that you're especially proud of?

MH: Since I inherited Orison after pre-production, most of the groundwork was already done, but I'd say I'm quite proud of the two shops I contributed, Makau and Covalex. Also, the transit system, which I spent a lot of my working time on trying to make it a smooth experience for the players.

JP: Did you run into any unusual bugs as Orison was constructed that needed additional design efforts to work through?

MH: Hmm, no I wouldn't say we had unusual bugs. We faced some trouble with the restricted area, which caused some issues with how open Orison is. On the one hand, you don't want to make it too large and obstruct flyable space more than necessary, but on the other, you need a certain amount of leeway to allow the autopilot to take over. We also don't want to punish the player for accidentally flying into it. It's not perfect, but I think we found a good middle ground until the tech progresses.

JP: Is this Orison's final form or do you envision expanding the environment in the future?

MH: Personally, I don't envision Orison growing much further. I'd rather anticipate putting more meat on the bone of what is already there and providing more depth to the location as a whole.

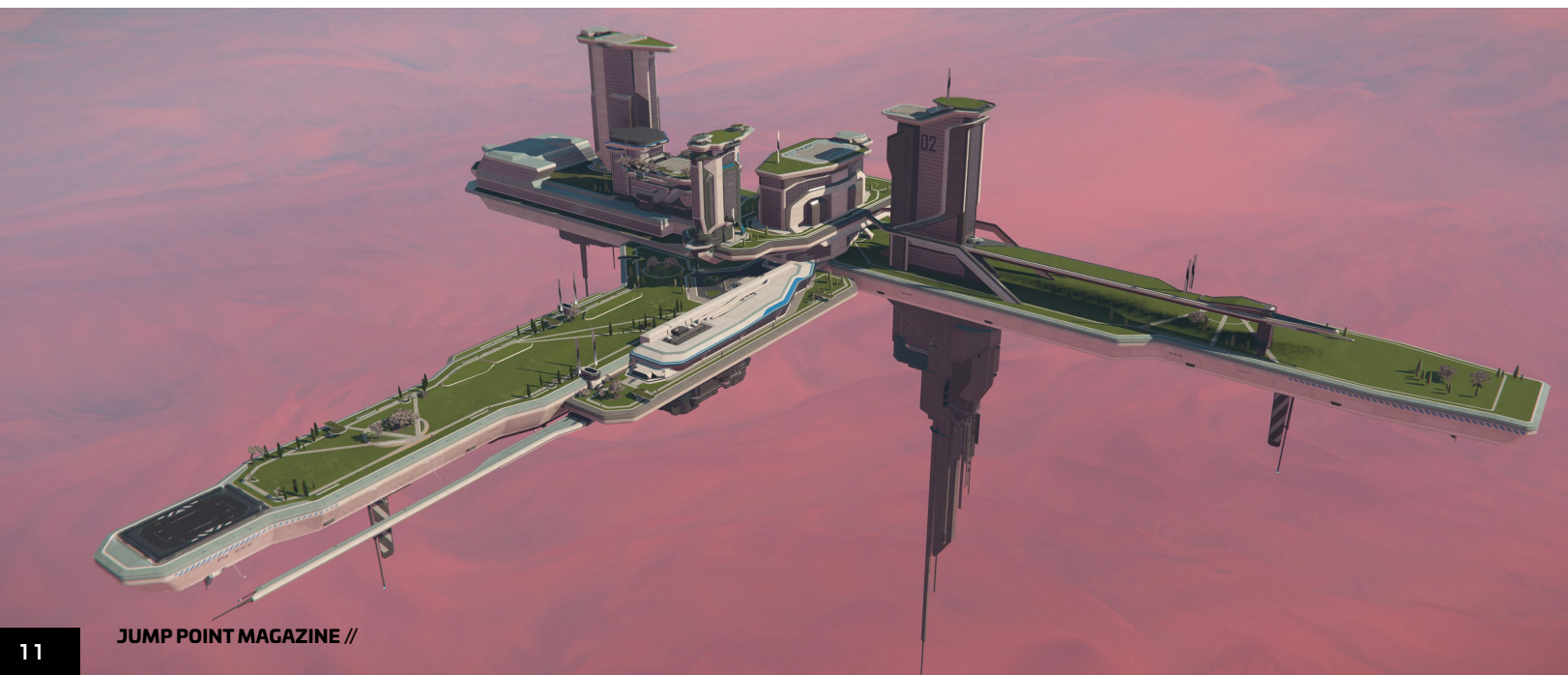
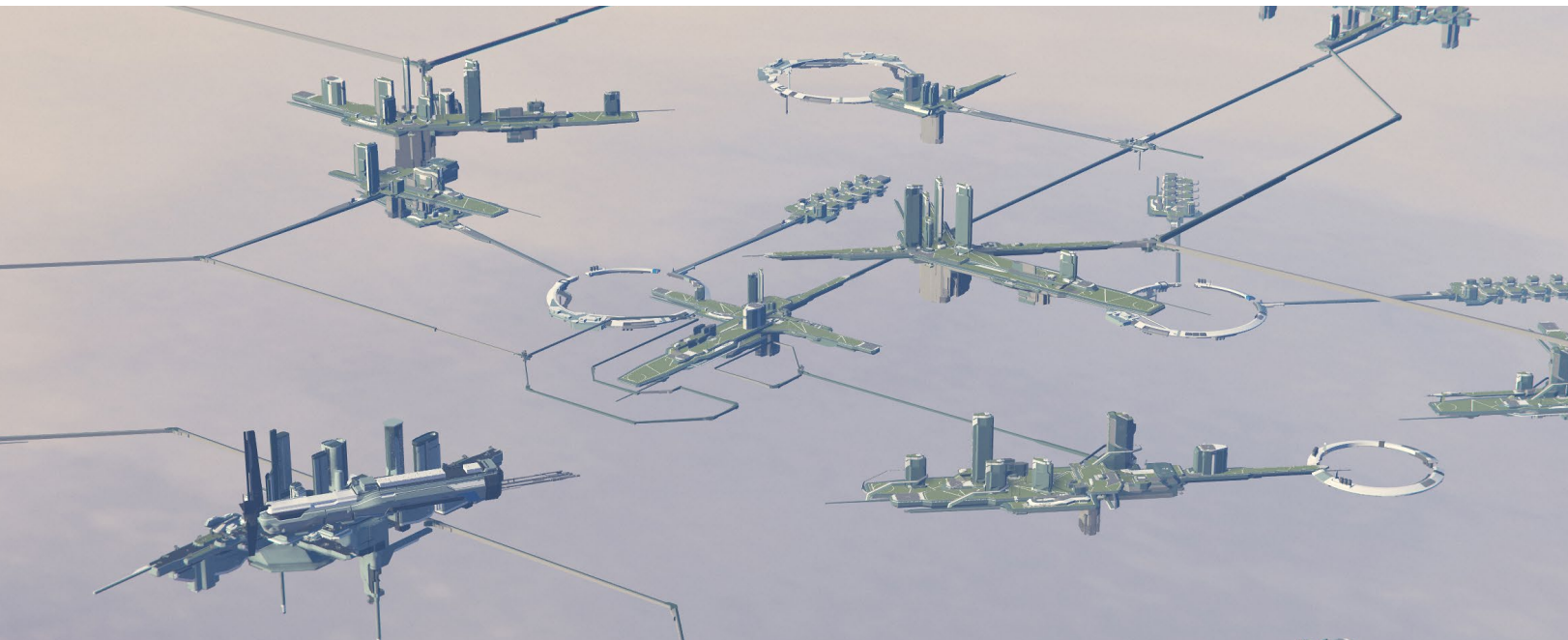
JP: Do you have any special messages for the players who will be exploring Orison?

MH: My message would be: "Be kind to the whales! Watch, but don't touch!" I'd like to see them experience the location as a whole and eventually take on the Orison Discovery Tour once it's in. Until then, enjoy your day at the Voyager Bar and relax.

JP: Finally, please let us know who was involved in developing and implementing these systems for our credits section.

MH: Those are not all people who worked on Orison, but the ones I directly worked with that affected areas and systems I've worked on.

LEAD LEVEL DESIGNER:	Andreas Johansson
SENIOR LEVEL DESIGNER:	Tobias Johansson
LEVEL DESIGNER:	Rob Peterson
JUNIOR LEVEL DESIGNER:	John Lang
LEAD VEHICLE PROGRAMMER:	David Colson
GAMEPLAY PROGRAMMER:	Tom McIntosh
LEAD ENVIRONMENT ARTIST:	Nicholas Etheridge
PRINCIPAL ENVIRONMENT ARTIST:	Josh Van Zuylen
SENIOR ENVIRONMENT ARTIST:	Adam Sanders, Luan Vetoreti
ENVIRONMENT ARTIST:	Tom Radford, Frederik Maribo, Stephan Dammrau
AI DIRECTOR:	Francesco Rocucci
SENIOR AI PROGRAMMER:	Tomas Plch
EMBEDDED QA TESTER:	Harun Ali, Laurent Poliakoff



ART

JP: Please start by letting us know what you've worked on on Star Citizen.

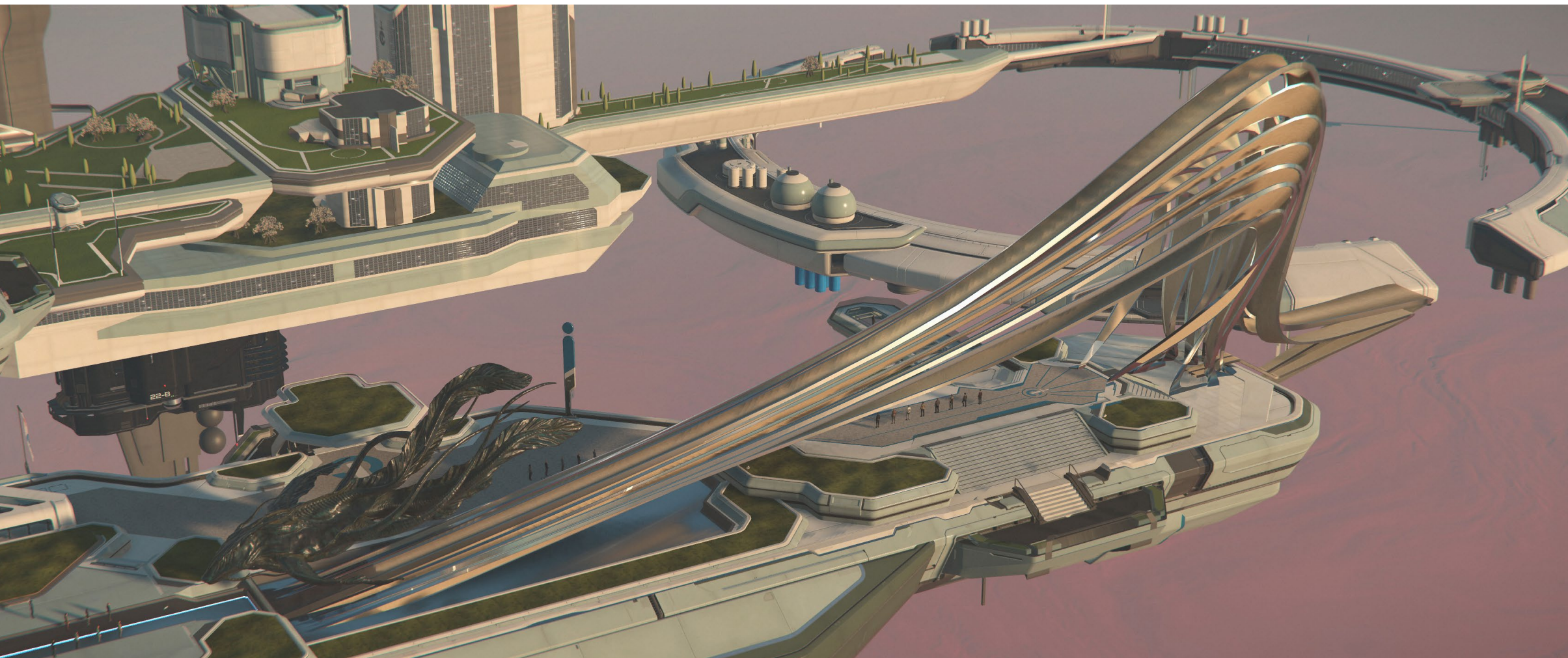
JOSH VAN ZUYLEN (JVZ): Hey! I'm Josh Van Zuylen, I work as the principal environment artist for the PU and have worked on mostly landing zones from New Babbage to Orison, but also branch out into all aspects of content and departments to ensure artistic quality and fidelity in everything we do.

JP: What is the process of developing artwork for a new Star Citizen environment? Walk us through your part in the process. Where did you start with Orison?

JVZ: To start a location is no simple thing and is ever-changing as we learn new and better ways to approach it. The amount of design intent we have been able to put into our two latest landing zones is proof of this, as they are comparably a lot more considered in their artistic design intent.

We will often jump on with a small team of artists and the level designers to start working out ideas for layouts and spaces. While this is happening, we will either request concept key art (or it's already in process or finished). Sometimes, we build locations around a theme or key art, though this doesn't mean we recreate a concept 1-1; it almost never works when you need to consider the gameplay space and location requirements. This is generally called pre-production (pre-pro), which we tend to get more or less time on depending on what's happening in the wider Star Citizen universe. This is one of the areas we are generally trying to improve the most on, as it often doesn't get the attention it properly needs. But I hope you will agree that this has gotten at least slightly better over the past two locations and modular updates.

Past this, we go into whitebox, where we get all the artists onto the location and start building it out with all of those findings and level design requirements we established in pre-pro. Then, we move on to greybox and final art from there. That's basically the process of the classic "enhance" feature in spy movies - slowly, the real artwork



comes out of the blocky shapes and it starts to feel like a real tangible location.

JP: What's the first step in developing the look of an environment? We've seen how ships are developed with concept art, but how do you concept hundreds of platforms (or entire worlds)?

JVZ: Haha! That's the secret, we don't! Not to say it's too different to ships, but generally, we don't get full concept meshes or comprehensive concept designs. This is mostly down to the sheer scale of the spaces we have to build.

The first step of developing a location is establishing the art style, which is usually worked out between the directors. Generally, the art director will pitch an idea along with some supporting key art and, if available, with a visual target (VT) of a small area created in-engine. VTs are one of my responsibilities in this instance, which are really useful for establishing the engine and technical limitations that need to be accounted for, but also for seeing how we can push past the generalization we tend to get in key art and dig further into the details before the team jumps on.

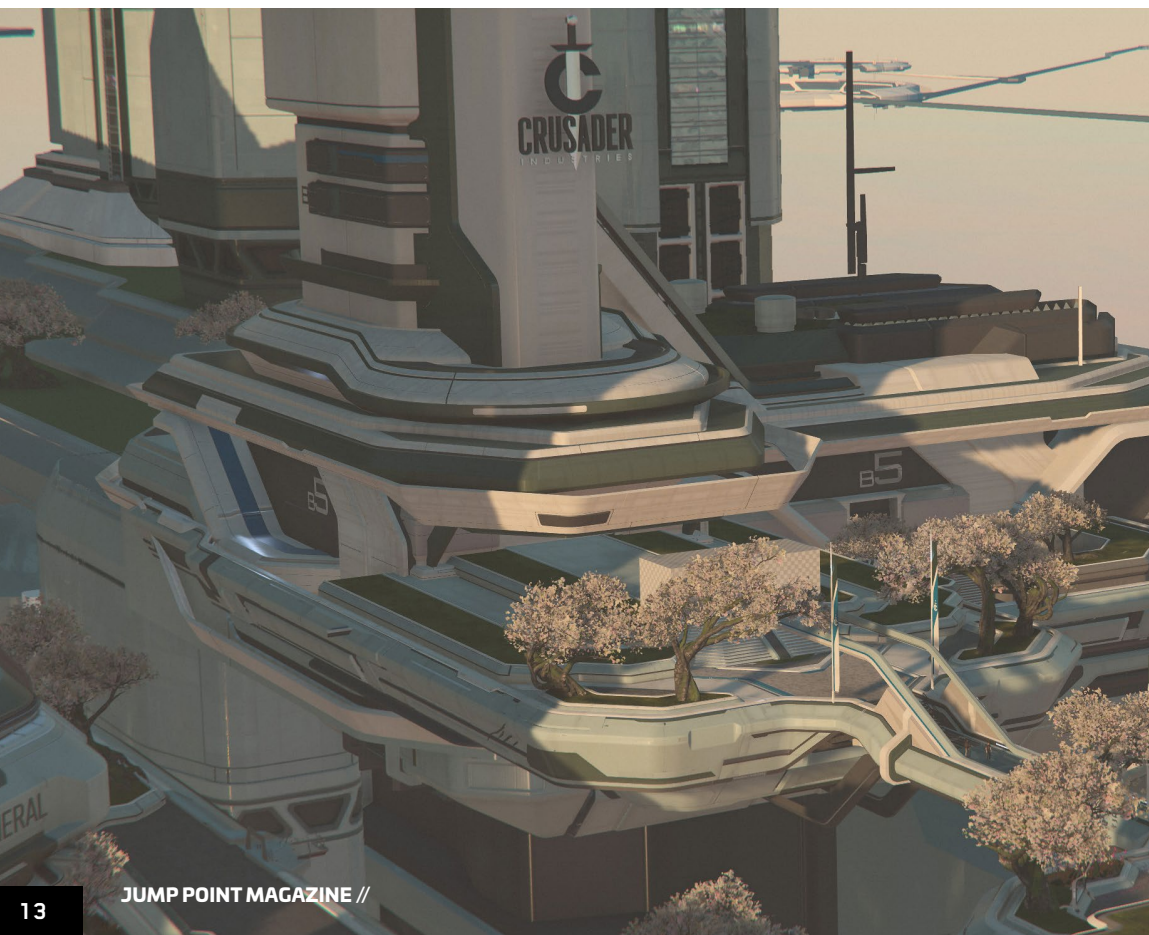
Sci-fi is one of the hardest types of art to make, and when you are dealing with an art style as sophisticated as *Star Citizen's*, it comes with a lot of design challenges. This is something most game studios don't have to deal with unless they are also doing sci-fi or fantasy. You can imagine it being quite overwhelming having to make all these decisions that you don't usually have to make on top of not having concept art for everything... and it is for a moment. But the workflow we use helps a lot in this regard for sure. Honestly, it's one of the most liberating problems to have as an artist. Being able to be a concept artist as well as an environment artist is something truly unique to CIG and is something I would never want to change.

JP: Do you put together any particular reference when developing a new environment like Orison?

JVZ: We throw together lots of mood/reference boards early on in pre-pro and early production. We tend to mix two aspects, these being the general shape language and then the cultural and thematic twist. For example, New Babbage is high-tech, high-precision, very expensive, smooth-flowing curves mixed in with silicon-valley hipness. And then Orison is the same shape language more or less, but with more eastern-inspired themes. Obviously, it's more complex than one sentence but I'm probably not allowed to write a small novel here.

For Orison in particular, I developed the industrial platforms (Providence platform) first-person areas. This has a different sub-style compared to the rest of Orison and is not as clean and a little more exposed. This is a great example of where we had done a bunch of concepts but none of them really worked, then the art director let me pursue an idea I had after doing some quick sketches in 3D, which resulted in what we have today.

The accessible part of the platform is focused on the less hazardous parts of the operation, mostly logistics and maintenance. This was down to just making logical sense for something the general public could access unassisted by employees. This helped drive some of the ideas for how this area would look, why we have so many storage tanks, and the use of pipes and cargo facilities. Past this, however, we wanted to create a high-tech but functional space. Traditionally this is something that has been harder to achieve for us as we have never



really considered space that's both designed with intent and high-quality craftsmanship but also completely utilitarian. Form follows function. Keeping that in mind, most of the spaces and designs were planned out around these utilities as you would expect. But, we have one extra consideration... it's a floating shipyard after all! The game fundamentally changes at this point because of that. So you start to think about how these things are built more than just serving a function because these are huge platforms and are going to need a lot of structural rigidity. So that's where I started.

I began with a skeleton shape that most of the space would be based around. This defines how everything is shaped and fits together and actually makes my job way easier, because I don't have to think about how things connect anymore as I have established a fundamental design rule. From there, I looked at those utilities and how they connect to one other and how they can be positioned in regards to the level layout provided by Design. One aspect I want to bring attention to, which is unique to the industrial platform, is the

corrugated walls, similar to shipping containers. This little addition to the shape language helped really define it as a working space. When mixed in with the design intent that I mentioned previously, we start to get something that feels unique but is also still distinctly Orison.

JP: *How long were you working on Orison? It's hard to imagine scheduling work for such a massive environment!*

JVZ: Orison is one of the longest locations I have worked on at CIG, bar a few SQ42 levels. Orison has taken roughly around a year to develop, but being one of the most extensive and exposed locations I'm kinda surprised it didn't take longer! For art time, this is comparable to many smaller AAA games and probably covers as much if not more physical space. This can ring some alarm bells, as the game will never get done if we spend this long on every location for all the systems. But, the plan is to only ever spend time like this on gold-tier locations, which Orison is. Terra, for instance, will be another.





Scheduling for something this big is very hard, especially something as subjective as art, which can have wildly different estimates if you choose to integrate a bin into a planter or have it freestanding. We have to be fairly reactive and work through any new things that need to be considered and cut things that are less important. For instance, the industrial platform was supposed to have an internal network of tunnels that got cut from the final release - most of them were built but couldn't be done in time as working on something else was more important.

JP: Orison is a unique environment, especially when compared to the planets and moons we've seen so far. How did that impact your work when compared to what you've done on Star Citizen previously?

JVZ: The fact that Orison is a floating city alone doubles the workload. Usually, we only have to consider the top part of a location, not its foundations. But Orison doesn't have foundations, it has thrusters and fuel tanks and a huge latticework of support structures and exposed infrastructure. Nothing is hidden!

Because of this, we decided to actually make the individual locations quite small compared to our other ones, though they don't feel it. What really helps here is the near-complete removal of no-fly zones, allowing players to land on "background" structures. This had the knock-on effect of us spending a little more time than usual on those structures but achieves a much more natural feeling location despite it being anything but.

JP: What kind of material were you provided at the start of the process. Does design provide a list of needs or is it more of a back-and-forth process?

JVZ: When the Production team joins on properly, Level Design have spaces they have created that will have considerations from the Shop Design team, as well as any extra elements like hero mission givers or something like the whale tour, which is a unique attraction.

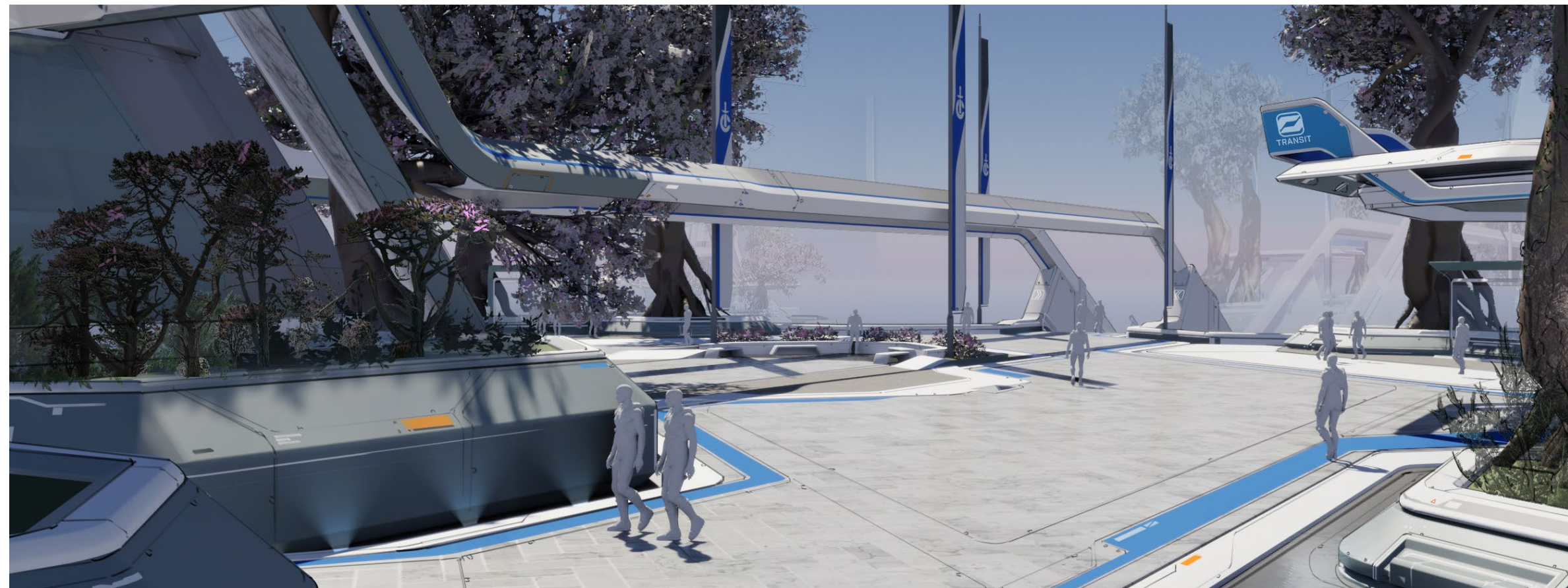
From this point it becomes more iterative, as the location evolves and becomes the grown-up we always hoped it would be, though inevitably it will have a rebellious phase and we have to have a discussion about issues that have shown up. This could be anything



like needing more landing pads or more hubs. In the case of the industrial platform, we tried to have the transit system on the inside of the shipyard, which didn't work, so we made it on both sides, which still didn't work, so now we have it just on the outside, which works obviously.

JP: What kind of software is involved in creating the art for a location? Do you all work the same process or does it vary depending on the artist?

JVZ: It really depends on that artist's specialty and/or interests, as we like to allow people to work on stuff that interests them and fuels the creative fire! So, that means someone who is into texturing will do that and use things like Substance 3D Designer to create procedural textures. Everyone generally touches 3ds Max (our main modeling program), but some people might spend more time in the engine than modeling depending on their skill set or interests. We have some people that are big on some of the technical sides of the engine, so they might spend more time setting up the workings that make a location function rather than modeling. Same with people who like dressing locations with props and assets. Recently, we picked up a little more graphic design work, so we have used photoshop a little more than we used to, which is fun.



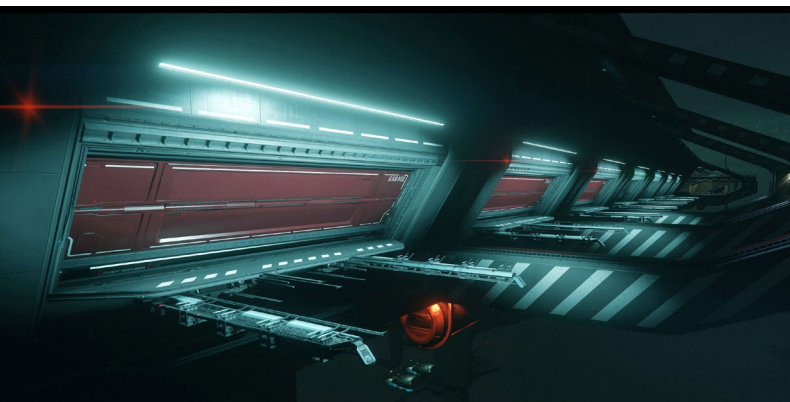
JP: What other disciplines do you work with while an environment is being put together? Could you describe a little bit about how different parts of the team collaborate?

JVZ: Who don't we work with is an easier question to answer! If game development was a river, then Level Design and Environment Art is the glacier at the top of the mountain, at least where landing zones are concerned. At various stages of development, we will work with Concept, Props, Gameplay, Live Design, UI, Graphics, VFX, Characters, Audio, Marketing, and the best department of all, QA!

I won't go into all of them, but a great example is the engine exploding animation on the industrial platform, where we have a model of the Starlifter engine deconstructing itself like an infographic - this has lots of departments involved.

So I, as part of the Environment Team, proposed the animation and designed and built it as well as the proximity triggering logic. Then, it got sent to Narrative to write up all the descriptions for the different elements of the engine. Then it went to VFX to add lots of cool UI and flavor elements as well as replace all my bad placeholder VFX and add in the text. Then, Audio got their hands on it and synced audio to all the parts breaking apart. Then, finally, QA told me it was broken... so I fixed it, and then it was done!

JP: There's such a variety of beautiful artwork in Orison, from elegant gardens to hardcore sci-fi platforms. Do the same people create all of that or do you divide your work based on what kind of environment is being created?



from New Babbage as well as many of the props shared across high-tech locations and POIs. It really depends on the particular area how many new assets need to be created. Usually, we try and create unique architecture for hero spaces but might mix in some modular content to solve an area we think is less important. That's not to say there aren't locations that are built from entirely existing assets. For example, some parts of Area18 are like this. Ultimately, it comes down to how much time we can invest in a location.

JP: *Is there a location or some other element of Orison that you're especially proud of? What's your favorite work on this one?*

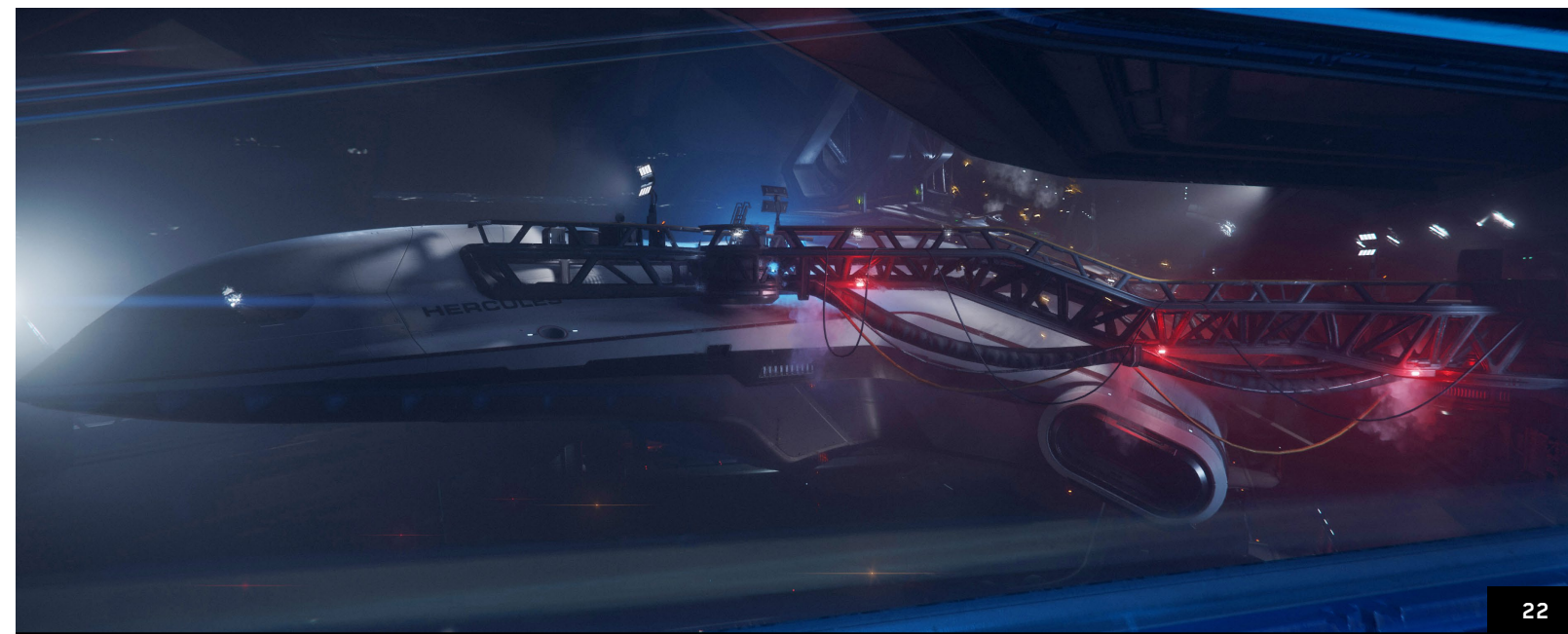
JVZ: Some of my favorite work the team did on Orison has got to be the architecture on the spaceport interior, that stuff is straight fire. It's very beautifully designed and considered and acted as a benchmark for many of the teams for other on-foot spaces.

In regards to my own work, I'm super fond of the antennas on the

industrial platform. I had so much fun designing and building those, and the idea that people are likening it to a certain other city in the clouds is all the more flattering as well!

JP: *Was there anything you built for Orison that didn't make it into the final release? Anything you wish you could continue working on?*

JVZ: Oh yes, there are lots. We really wanted at one point to expand the industrial platform to include things like machines that make parts and components, 100-ton presses, milling machines, etc. for the ships, but that very quickly and obviously got pushed to the background and cut due to the sheer complexity of the idea. Another, as I mentioned before, was the passageways inside the industrial platform, which linked the transit system for the shipyard as a whole together. This area was always a stretch goal, but we almost got there. There are many more things we thought of and wanted to do but ultimately were not able to this time. Perhaps in the next location...

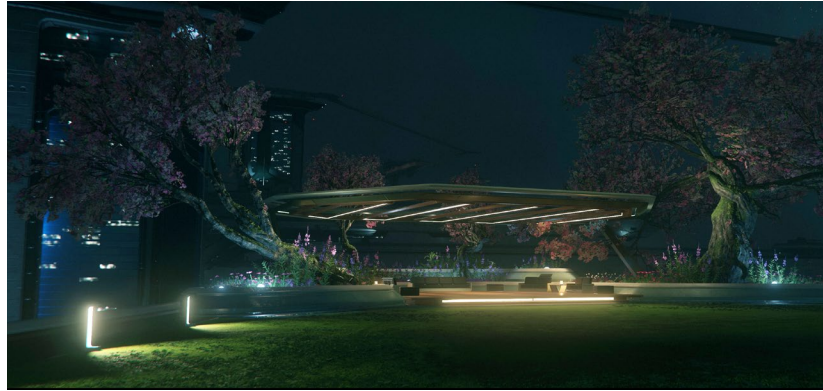


JVZ: We like to divide work up into what people want to work on first and foremost, but sometimes people are requested to work on particular things. For instance, I was requested to work on the industrial platform space because we were having such trouble developing the idea for the space and I'm good at solving design problems. We try not to have a space shared by more than two people and would prefer only one person to own a space if we can, whether that be a room or a whole platform. This is so artists can have ownership, which is really important for making people feel like they own a part of the project and being more invested in their work; so they can show their mum and say I made this! We still have places where this doesn't happen, but usually it's down to deadlines, and this is becoming less and less the case as we work smarter not harder. This means that while I'm working on the industrial platform,

one person is working on the green circle, another on the plaza, another on the shipyards, another on some more shipyards, one on the spaceport interior, and one on the exterior. Having this ownership is super important to morale and really gives everyone a great sense of pride and achievement when it's all said and done!

JP: *Were you able to adapt art created for other Star Citizen environments to help with Orison? How much did you have to create fresh in the end?*

JVZ: As the project is huge, we try to reuse where we can. However, when we create new gold-tier locations, we want them to look as unique as possible. In the case of Orison, we reused a few buildings



JP: *Do you have any special messages for the players who will be exploring Orison? What would you like to see them experience? Is there anything special you hope they discover?*

JVZ: There are so many layers of story and world-building that go into each of these locations that we never get to talk about that we nerd out over. Like how all the floors on the industrial platform are floating floors and are not connected to the walls except for the tour area because it's a little more commercial. That's one of the things that got me into making games, back playing Halo CE, making up stories as to why the alien structures looked the way they did. Take your time and appreciate some of the stellar artwork that's on display from the teams. Yes, it's not gameplay, but it's the framework that which it will take place in. Watching people react to the crane animation I did for the industrial platform and, even though it's nothing extraordinary, people still got

excited about it, that smile, that amazement, no matter how silly or small, is why I make games.

JP: *Finally, please let us know who was involved in developing and implementing these systems for our credits section.*

JVZ: Obviously, I have mostly spoken about the level design and environment art teams here, but I couldn't list every individual from every department that contributes to our work. I personally want to give a shout out to QA for saving my neck so many times!

END TRANSMISSION

SPACECRAFT COMMERCIALS INDEX (PART 1)

Star Citizen's spectacular ship commercials have long been a hallmark of how the game is presented to the world, largely using in-fiction, car commercial style videos rather than just showing off cinematics. By adding a little bit of a story and presenting ships as though you're learning about them in the distant future, the commercials build immersion and allow the team to show

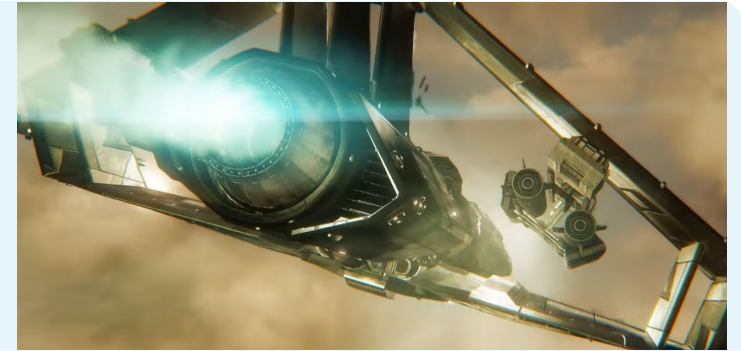
off what they're working on (always in-engine). Alongside the larger-scale commercials, smaller 'live' adverts introduced players to vehicles as they became playable in Alpha 3.x+ patches. These also proved to be exciting because they're shot entirely in the game itself and show that the incredible visuals promised all along have come to exist during ordinary gameplay.



ORIGIN 300 SERIES Year: 2013

Star Citizen's first ship commercial presented the brand-new Origin 300 series variants, the 315p, 325a, and 350r. While the narrative might be relatively simple compared to later presentations, the in-engine visuals are still top notch, selling the 300-series ships as the luxury spacecraft they were intended to be. This commercial sets a lot of standards that are still followed today... and the director's cut linked below has more than a few interesting Easter eggs!

<https://www.youtube.com/watch?v=YTBzrUwB6Oo>



RSI AURORA Year: 2013

The RSI Aurora commercial was originally released as a sort of backup: the Hornet commercial that would present the new variants of that ship was becoming more complex and the team wanted to offer something that would keep supporters interesting while it was finished. The solution was a video walking through the starter's own variants with a special focus on the amount of detail already put into the ship's individual weapons and components. If the flying section at the end looks familiar, it's because it takes place in the same environment as Star Citizen's original demo!

<https://www.youtube.com/watch?v=UvDs7RDKCag>

ANVIL HORNET Year: 2013

The Anvil Hornet commercial was first shown at the very first CitizenCon in 2013 to a chorus of cheering and applause at the Alamo Ritz theater in Austin, Texas. Not content to simply show off the incredible detail that went into the ship itself, the Hornet commercial tells a fun story about a character battling hazards and pirates to deliver... a container of ice cream! Everything in the Hornet commercial is in-engine, with some spectacular cinematography from the minds that would go on to work their magic on Squadron 42.

<https://www.youtube.com/watch?v=gOgZES2pTWk>



MISC FREELANCER Year: 2014

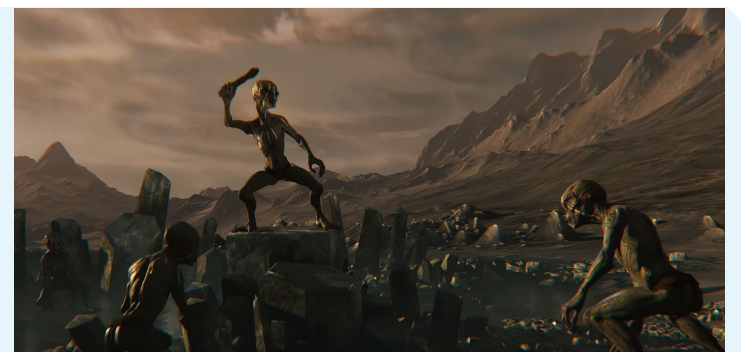
"Built for Life" - if the 300i is a luxury car and the Hornet a piece of military equipment available for civilians to play with, the MISC Freelancer is the space equivalent of a pickup truck, ready and able to work any sort of job. With outstanding narration and a truly familiar sensibility, the Freelancer commercial attracted a great deal of attention when it launched in mid-2014. And just compare the asteroid fields seen here to the ones in the Aurora commercial. What a difference a year makes!

<https://www.youtube.com/watch?v=v07RxsZpcKc>

RSI CONSTELLATION Year: 2014

For Star Citizen's original flagship spacecraft, Chris Roberts opted to present the ship on pure prestige, complete with a swelling musical score and cinematic visuals like nothing seen in Star Citizen before. With a few giant nods to Stanley Kubrick's 2001: A Space Odyssey, the Constellation commercial sells the thrill of a new universe and the potential of exploration like nothing before. This commercial focuses on the explorer variant.

<https://www.youtube.com/watch?v=zG-82TakEqk>



ORIGIN M50 Year: 2014

The M50 commercial was the one that first brought *Star Citizen*'s cinematics beyond gaming and shared them with the larger world. The spot introduced Galactic Gear (later Galactic Tour) and its outspoken host, Jax McCleary, to the universe and things in the ship reviewing business have never been quite the same! Presented as a segment of a 30th-century spacecraft review show, the M50 commercial is funny and clever and introduced a dozen concepts that would be followed up in future videos and the larger game world.

https://www.youtube.com/watch?v=_SpsjUHj_I1

**DRAKE CUTLASS Year:** 2014

The last of the originally promised ship commercials, the Drake Cutlass segment features a ship commercial outlaw-style, suited to Drake's renegade reputation while still clearly being a corporate ad spot. But the most exciting reveal here wasn't the ship itself, it was the female character model that made its first appearance in the ad's final reveal.

<https://www.youtube.com/watch?v=qE7TFnSI9y4>

**CONSOLIDATED OUTLANDS MUSTANG Year:** 2014

Meet Silas Koerner, maverick trillionaire and one of *Star Citizen*'s many fascinating characters! The Mustang commercial introduces the game's second starter by means of a presentation from its creator and, like the M50 piece, it's another jump further away from a simple advertisement. Here, the Mustang is presented thoughtfully and stylistically as though it were part of a major corporate reveal. And you know what, it was!

<https://www.youtube.com/watch?v=BR07oZCOOHU>

**ARGO ASTRONAUTICS MPUV Year:** 2016

Ship commercials took a hiatus in 2015 as the team that had created the original set moved on to focus on other important cinematics projects. But as *Star Citizen* became more complex, the options for creating new commercials increased and, in 2016, Argo presented the first ever commercial to help explain why players might want to have an MPUV of their own.

<https://www.youtube.com/watch?v=4eI3wOkRLUM>

RSI POLARIS Year: 2016

Star Citizen wants YOU to help save the galaxy! To present the brand-new RSI Polaris, the long-promised capital-sized corvette replacing the embiggened Idris, the team put together a patriotic commercial for the UEE Militia Mobilization Initiative, the fictional effort to arm civilians on the frontier to allow them to 'answer the call' and fight off Vanduul raiders on their own.

<https://www.youtube.com/watch?v=sK52v7NF-CA>

**GALACTIC TOUR 2946 Year:** 2016

For the 2016 anniversary event, *Star Citizen*'s Cinematics team outdid themselves and brought back Jax McCleary in the process! Now hosting 'Galactic Tour,' Jax offered a walkthrough of the first-ever IAE show event with NINE separate episodes that each focused on a different company's presentation! It's a great example of work on commercials leading to advances in the real game: the next time the IAE event came around it was hosted in the game itself instead of with recorded videos!

Intro: <https://www.youtube.com/watch?v=OMGs63MsSBI>

RSI: <https://www.youtube.com/watch?v=3FSFjR0p4Z8>

Drake: <https://www.youtube.com/watch?v=2eKotGpwjBE>

MISC: <https://www.youtube.com/watch?v=lxJj-Tkp8P4>

Anvil: <https://www.youtube.com/watch?v=6aeRYrT8Zso>

Origin: <https://www.youtube.com/watch?v=YYeBhPvhybk>

Exotic: <https://www.youtube.com/watch?v=4vE6wrgZ3vw>

Aegis: <https://www.youtube.com/watch?v=tYQCtaP54qQ>

Closing: <https://www.youtube.com/watch?v=WTvS6nSSvQ>

**MISC PROSPECTOR Year:** 2017

A sometimes-hidden gem, the MISC Prospector trailer announced *Star Citizen*'s first single-player mining ship, and it showed individual mining in progress for the first time! While players today can fully engage with the Prospector and mine themselves now that the mechanic has launched, it was an exciting thing at the time to see a little glimpse of the not-so-distant future.

<https://www.youtube.com/watch?v=tTP2lPWNNdE>

ALPHA 3.0 LIVE SHIPS Year: 2017

Starting with *Star Citizen* Alpha 3.0, the team began putting out introductory trailers for each new ship that came online. Of course, you could be forgiven for missing them in the furor over the game's first steps into a Persistent Universe, but they're more than worth revisiting! It's fascinating to see how great these pieces, recorded in-game, look compared to the original in-engine ship commercials. Six were produced for Alpha 3.1 in late 2017.

Drake Cutlass Black: <https://www.youtube.com/watch?v=fUAIE0hkdok>

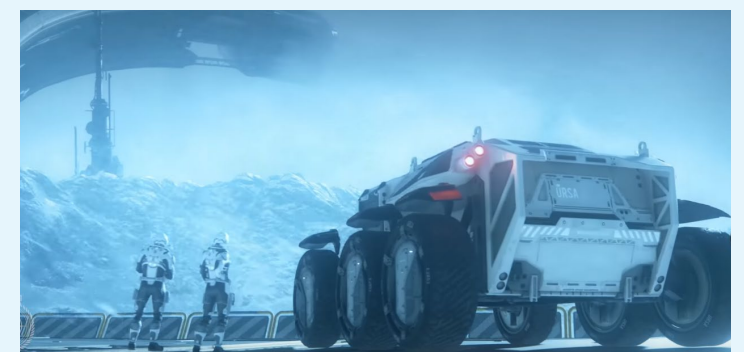
Aopoa Nox: <https://www.youtube.com/watch?v=A2vgYRiO07M>

RSI Urso Rover: <https://www.youtube.com/watch?v=t6qh1mjaPAU>

MISC Prospector: <https://www.youtube.com/watch?v=hXmbmWYF5Go>

Aurora Update: <https://www.youtube.com/watch?v=1gdTg6vOT7k>

Drake Dragonfly: <https://www.youtube.com/watch?v=Qoa38oaosW4>



**ORIGIN 600i Year:** 2017

Luxurious, elegant... modular? The company that first brought luxury to the 'verse returned to the grind in 2017 with a commercial for the newly conceived 600i explorer, the company's RSI Constellation competitor. The spot is heavily musical and shows the new ship as its sleek, flowing lines are being designed and constructed in a top-of-the-line, high-tech workshop.

<https://www.youtube.com/watch?v=gbCSQDhPOIk>

ALPHA 3.2 LIVE SHIPS Year: 2018

The second major patch of 2018 saw the addition of four new ships: the Avenger, Blade, Eclipse, and Hurricane. These trailers were proof positive that *Star Citizen* was both catching up on already announced concept ships and putting new ones into action faster than anyone had previously believed possible!

Aegis Avenger: <https://www.youtube.com/watch?v=2FcJykFmMcO>

Vanduul Blade: <https://www.youtube.com/watch?v=VcEsq9k9UAQ>

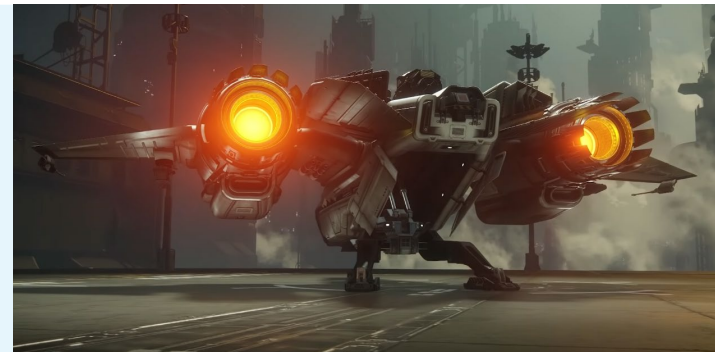
Aegis Eclipse: <https://www.youtube.com/watch?v=sOPGbBY56zM>

Anvil Hurricane: <https://www.youtube.com/watch?v=rVvO2iSWjSO&>

**DRAKE BUCCANEER Year:** 2017

The Drake Buccaneer was introduced as a companion to the Drake Cutlass, which had moved in a direction that took it away from a pure dogfighter. The Buccaneer is lean and mean with a design that looks like it could hurt you without leaving the hangar. The commercial follows the original Cutlass spot with a little more Drake styling that makes it one to watch.

<https://www.youtube.com/watch?v=TGNsjNIGOC4>

**ALPHA 3.1 LIVE SHIPS Year:** 2018

Star Citizen Alpha 3.1 hit in early 2018 and it presented another great array of newly playable ships, all of which needed their own introductory trailers! These ships ranged from the speedy MIS Razor racer to the Tumbriel Cyclone ground buggy and all the way to the massive Aegis Reclaimer, the largest ship then introduced to the game.

MISC Razor: https://www.youtube.com/watch?v=N6N3uJB_Xjw

Nox Kue: <https://www.youtube.com/watch?v=CRdhRmwXHs8>

Tumbriel Cyclone: <https://www.youtube.com/watch?v=pJR2SuLmjks>

Aegis Reclaimer: <https://www.youtube.com/watch?v=1Vb4QpA354A>

Anvil Terrapin: <https://www.youtube.com/watch?v=jtIKOBuYmOU>

**ANVIL VALKYRIE Year:** 2018

Riding to the rescue, it's the Anvil Valkyrie dropship! The first dedicated concept commercial in quite a while, the Valkyrie sequence shared a hugely exciting preview of space-to-ground combat in the 'verse with all the same style and panache that years earlier had revealed Anvil's Hornet variants to the world. The commercial really takes a ship that might be forgotten next to other similarly roled ground attack planes and makes sure you never forget what it's capable of.

https://www.youtube.com/watch?v=_RmaaxMW2uQ

**CONSOLIDATED OUTLANDS MUSTANG UPDATE**

Year: 2018

The Cinematics team produced two exciting new spots for *Star Citizen's* seventh anniversary in 2018. The first of these was to present the massive update of the Consolidated Outlands Mustang, once again featuring the company's eclectic president, Silas Koerner. Watch it back-to-back with the original to see not just how much the Mustang itself has changed but also how much *Star Citizen's* environments have matured.

<https://www.youtube.com/watch?v=2zwvPvuVOtE>

**DRAKE KRAKEN Year:** 2018

RELEASE THE... well, you've heard that one before. But when the Drake Kraken commercial premiered at CitizenCon 2948, no one had ever seen anything like the so-called pocket carrier! This excellent video does a wonderful job of telling an action story using a ship that *Star Citizen's* captains were probably already wholly sold on!

<https://www.youtube.com/watch?v=to1kDbR4L4I>



Roberts Space Industries had the desire to create a cargo version of the Constellation since the line's original launch in 2712. After the first model Constellation's massive success, competitors at Origin Jumpworks and elsewhere attempted to claim the design was a violation of RSI's stated purpose of lowering the barrier to entry for private spacecraft ownership. The attacks were disingenuous; while the Constellation had a higher sticker price than the single-seat Aurora, it still undercut every multi-crew ship on the market significantly. Nevertheless, the attacks stuck with RSI's planning group and the company would revisit the concept of a low-cost or cargo-focused Constellation spinoff repeatedly over the years.

The company's first attempt to adapt the Constellation line was uncharacteristically out of left field. In 2745, Roberts Space Industries prototyped what insiders nicknamed "the barge," a bespoke reusable cargo container constructed from the basic frame of a standard Constellation. The concept was to take a Constellation fuselage from the standard production run once its basic superstructure had been completed and finish it instead as a simple vacuum-positive container. A special 'loose dock' attachment was fitted to the bow that could be hitched to the rear of a Constellation allowing existing ships to more than double their cargo capacity by acting as a sort of space train. While the prototype was fully functional, it was immediately obvious that the concept was not to be. Not

only did it massively impact performance, it also blocked weaponry and had no defenses of its own. RSI conducted marketing surveys to gauge interest and found that there was very little at any price: logistically, a roughly Constellation-shaped cargo container would require overhauling every platform, station, and starport constructed around the existing SCU standard. Finally, while the cost was low compared to a standard Constellation (as it lacked life support, thrusters, weaponry, or much of anything else), it was still ridiculously high when compared to a standard cargo container.

The first outright attempt to build a lower-cost Constellation was also a fiasco. In 2815, Roberts Space Industries began to develop what they termed the "Connie Light," a budget edition of the Constellation that would trade some of the more advanced capabilities for a significantly lower price point. Development of the ship was slow but steady, taking roughly three years from initial budgeting to the first prototype. It took a then-standard Constellation Mk. II hull and carefully removed or replaced nearly every internal component until the total unit cost had been cut by 35%. Turrets were flattened off, computers reduced, docking facilities removed, and components like thrusters replaced with lower-cost stock items. The result was a less-capable Constellation that could be afforded by smaller organizations and others interested in a larger introductory

ship. The only problem was a disastrous rollout campaign that is still studied by marketing students for the nature of its immediate and total collapse today. In short, rather than present the light model as an ideal cargo ship or something worthwhile on its own unrelated to the more expensive Constellation Mk. II (the base model having not yet been given a subtitle), the advertising focused entirely on the low cost of the ship. From day one, the ship (formally called the Constellation Light) was sold in presentations and Spectrum commercials as a budget alternative, heavily suggesting it was only for those who couldn't afford the full spacecraft. Competitors spun this into gold, referring to the Light as the "Constellation Junior" and the "Plastic Constellation." The criticism stuck and RSI withdrew the design from the market just eight months after the first spacecraft rolled off the conversion line.

Still, the desire to reduce the cost of multi-crew civilian spacecraft remained and, while the Constellation Light team was quickly disbanded, several other proposals were considered. Ten years on, in 2828, the decision was made to try again... very carefully. The second team was asked to avoid referencing the original model and to instead recreate the work itself with an eye towards retaining value instead of simply cutting features. While the process remained largely the same--removing turrets, reducing overall component cost--the end result was required to be able

to defend each change as serving a salable purpose rather than simply making the ship more affordable. Remarkably, it was not until this point that the realization was made that the low-cost Constellation should be presented not as a lesser ship but one that was actually MORE capable of doing an already-in-demand job: cargo hauling. RSI developed a massive campaign touting the new ship as the most capable Constellation yet, a spacecraft ideal for building a successful transport company.

Roberts Space Industries cautiously launched the final product of its efforts in 2836 after several years of careful consideration. This time it worked, with customers flocking to the new cargo ship, apparently forgiving and forgetting the Light debacle. Heavy sales of the first Constellation Taurus model were assisted by another company's misery. MISC's vaunted Hull series, a favorite of the shipping industry, was briefly grounded after a software failure caused three separate incidents in which Hull B spacecraft crashed during their automatic docking procedures. No lives were lost, but several million credits worth of cargo was destroyed, including one incident in which the collision caused containers of plastic toys to spill and disable an entire shipping hub for two days. Imagery of the incident showing spacesuited yard workers collecting tiny doll torsos with EVA equipment embarrassed all involved (and continue to circle to this day). To say that smaller haulers were keenly interested in a ship that



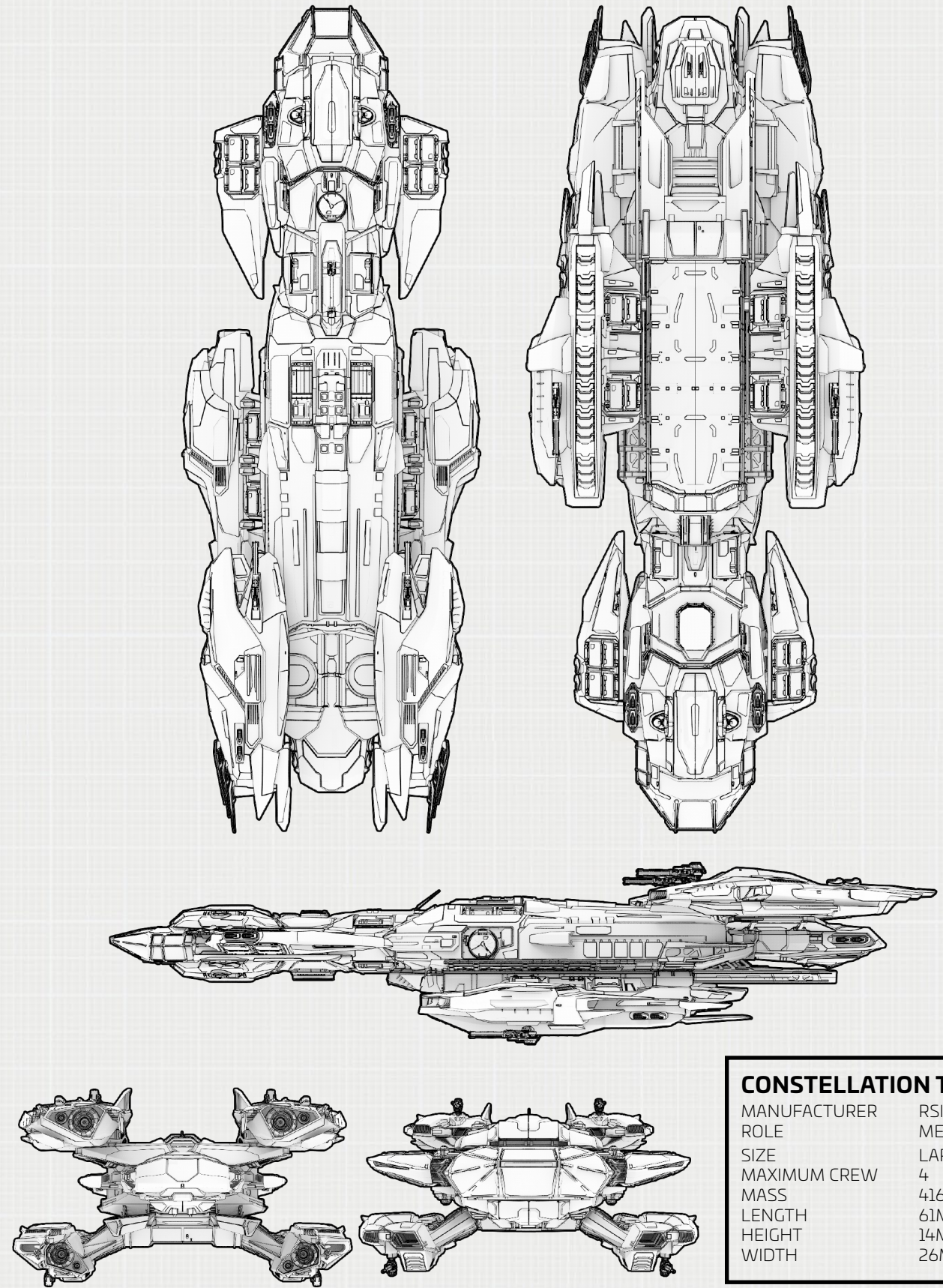
stores containers internally would be an understatement, with a number of freight lines stepping over themselves to purchase (and boast about) their own fleets of the new RSI ships.

In the years that followed, though, Roberts Space Industries' reputation for solid, affordable spacecraft would continue to apply to the Taurus, leading to steady sales regardless of the news cycle. Individual captains rated the ship highly, calling it spacious and capable, while corporate owners found a great deal of value in the added protection for smaller cargos and the fact that the sturdy ships could share the same low-cost supply chain already in place to support the base Constellation and the Aurora. The Constellation Taurus scored an unexpected boost as the 29th century came to a close and pirate attacks increased when it was discovered that, owing to the general shape of the ship and the weapons placement, a group of four could operate in a box formation that multiplied their overall defensive coverage and firepower. With stories of crippled Hull-series ships being raided and expensive space yachts falling victim to unidentified raiders running rampant at the time, the comparatively inexpensive Taurus became a solid investment to anyone operating multiple mid-sized cargo ships at once.

The Taurus design received its first major overhaul in 2915 following the successful launch of the Mk. III Constellation. This second Taurus was actually built from the ground up, with a three-year R&D process

working from a basic Mk. III hull to produce similar results as the previous process. The outcome was largely similar, though it retained some of the additional features of the Constellation Mk. III, notably the improved safety systems that had recently won a spate of awards. The updated Taurus was as big a success as the new base model as new individual owners sought to join the Constellation family while the now sizeable number of corporations operating fleets of Tauruses welcomed the opportunity to upgrade. In the decades since the launch of the original, the Taurus has become a favorite among interplanetary cargo concerns and short-term spacecraft rental companies, both entities in need of a steady stream of new hulls.

In 2951, RSI debuted the most recent model of the Constellation Taurus, based on the hull of the incredibly popular Constellation Andromeda (aka the Constellation Mk. IV). The Mk. IV family Taurus increases overall cargo capacity to 168 SCU by reducing two internal bulkheads and overhauls a number of components, all of which are significantly better rated than those used aboard the original Constellation base models in the 28th century. The model also defies expectations by returning one of the turret slots, the first time one has ever been available on a Taurus. Additionally, engine upgrades now allow it to keep base with the Andromeda and the base package also includes a fully-featured tractor beam. Initial sales have been positive and it's likely RSI will be producing the new Constellation Taurus in great numbers in the coming years.



CONSTELLATION TAURUS	
MANUFACTURER	RSI
ROLE	MEDIUM FREIGHT
SIZE	LARGE
MAXIMUM CREW	4
MASS	416,009KG
LENGTH	61M
HEIGHT	14M
WIDTH	26M



THE BREMEN BELTWAY

"I've never been more nervous. Our network of activists had been completely betrayed, forcing us to flee as Advocacy agents began their raids. I knew some of my friends had made it to Xi'an space, but others just disappeared. People assumed the Messers got them, but I also heard stories of smugglers selling them to the Banu. Still, I had to risk it. Anything was better than one of the Messers' re-education prisons, so I climbed into that smuggler's crate and they sealed me up. Next thing I know, some Xi'an was shaking me awake. First one I'd ever met, and I, ah... well, I screamed because it was all very shocking. Then I just broke down and cried because I knew I was finally safe."

- August Dunlow, Crusader Industries Founder

August Dunlow's vivid firsthand account of fleeing the UEE is one of many that appear in *The Bremen Beltway*; a book that brilliantly mixes interviews, journal excerpts, and declassified government documents to illuminate the extreme measures used to smuggle activists, journalists, opposition politicians, and others in and out of the Messer-controlled

UEE. While the regime made escaping the empire a difficult and often dangerous proposition, one method would come to distinguish itself as the most secure and significant. Nicknamed the Bremen Beltway, the route is not only believed to have smuggled out more people than any other but was instrumental in quickly returning hundreds of significant anti-Messer activists once the revolution began. Their timely return proved key to organizing the various planets to finally topple the totalitarian regime.

Though over time the journey became best associated with Bremen, the route actually runs through five systems: Bremen, Nyx, Tohil, La'uo (Virtus), and É'aluth (Eelaus). Bremen earned the namesake because it was the starting point within the UEE and the only system travelers knew about prior to their trip. Strict security measures meant the only information travelers received was a time and a set of bespoke coordinates within Bremen. Arrive there safely and smugglers would provide sleeping pills and a cramped smuggler's crate. Meanwhile, high-ranking members of the Bremen Defense Force (BDF) would secretly ensure the smugglers could avoid security patrols by the UEE and less sympathetic BDF members

while crossing the system and making the jump to Nyx.

Though Levski's residents also yearned for revolution, they sadly were unable to offer permanent harbor for the revolutionaries fleeing through Nyx. Leaders of the People's Alliance gladly offered up Levski as a stopping point for refueling, but with significant portions of the old mining facility still badly in need of repairs and life support systems already overtaxed, they were unable to support a larger population at the time. So, most smugglers working the Bremen Beltway hurried through the system to get to Tohil.

A Perry Line system meant to act as a buffer between the two species, Tohil instead drew them together. Tohil became the main exchange point between Human and Xi'an smugglers, who were now tasked with safely transporting the refugees into Xi'an space. Smugglers on both sides nicknamed this meeting point the "Tohil Trampoline," partly because handoffs often happened on large botanical biomasses floating in Tohil III's oceans. These exchanges proved so safe and reliable that Xi'an Emperor

Kr.ē and Terra Senator Terrence Akari met on Tohil III in 2789. The meeting produced a peace accord that was narrowly approved by the UEE Senate but never signed into law by Emperor Messer XI. Still, the passing of the Akari-Kr.ē Treaty exposed the Messer regime's waning control over the Senate.

Despite being a part of the Perry line, Tohil's remote location, combined with mounting economic pressures, kept the Messers from stationing soldiers in-system. Instead, UEE security relied on a vast system of sensors and periodic patrols from fleets stationed in Oya - obstacles easily avoided by seasoned smugglers on both sides. The UEE Military, primarily worried about a large-scale Xi'an invasion, believed these lax security measures were permissible because the system could only be reached through the unclaimed and almost empty Nyx and two other Perry Line systems. The first being Oya, where the closest UEE troops were stationed, and La'uo (then known as Virtus), a system considered inhospitable due to the expanding red giant at its center. That also made the system the ideal next leg of the Bremen Beltway.



The UEE treated La'uo like a Perry Line system in name only. They didn't bother to patrol or place more than minimal sensors there since those heading to the UEE still had to pass through Tohil. The Xi'an freely roamed the system with little fear of running into a UEE patrol. That meant once in Xi'an hands, travelers on the Bremen Beltway were considered safe and secure. Most were woken, helped out of the smuggler's crate, and placed in "Humanized" quarters for the remainder of the voyage.

Still, the Xi'an knew how politically dangerous it would be if the Messer regime ever learned of UEE refugees being given diplomatic sanctuary. For political cover, they smartly exploited a culture difference that took advantage of how little Humanity understood their species. In practice, this meant only Xi'an pirate gangs could transport, house, and care for the UEE refugees. That way, if ever discovered, the Xi'an government could truthfully claim that the scheme was carried out by "pirates," a loaded phrase for both species. The Xi'an knew that Humans considered "pirates" outlaws that acted outside of the government's purview, and that Humanity didn't yet know that some "pirates," like most other criminal organizations, were officially sanctioned by the Xi'an government.

Though UEE forces never ventured as far as La'uo, the Xi'an deemed it unwise to keep refugees there and instead moved them into the Xi'an Empire. Most ended up on pirate-controlled space stations retrofitted for Human occupation in E'aluth (Eelaus system). Upon arrival, the refugees would be interviewed by Xi'an officials who were collating data on the current situation inside the UEE. Once released,

the refugees could socialize, strategize, monitor UEE news via remote spectrum relay, and more. Encrypted comms could also be sent on rare occasions, as a separate data running pipeline was established to smuggle messages into the UEE. Aboard these space stations, refugees recall comfortable living quarters and a willingness by the Xi'an to adjust conditions and amenities to better suit Human needs. The Xi'an learned much about Humanity during this time and subsequently used those lessons to improve the appeal of ships, foods, and other products now widely available in the UEE.

Years would pass. Some UEE refugees grew restless being confined to a space station and would make the harrowing journey back home, but most were determined to stay ready to aid regime change when the time was right. That patience paid off when the fateful Massacre of Garron sparked riots across the empire. Sensing the fires of revolution, the Xi'an reversed the Bremen Beltway to expedite the return of important refugees to the UEE. Their timely and surprising arrival amidst the uprising cemented the revolution and directly led to the eventual overthrow of the Messer regime.

The Bremen Beltway can be considered key to helping topple the Messer regime and bringing the Human and Xi'an species closer. Together, sympathetic members of the Bremen Defense Force, kind-hearted Human smugglers, and loyal Xi'an pirates acting as government proxies created the safest escape route between the two empires. The Bremen Beltway proved that the two species could work together, and that the universe could be better because of it.

KNOW THE UNKNOWN!



Adventure awaits those willing to explore the cosmos. Honor the Interstellar Cartography Center (ICC) and their goal of "Charting the Way Ahead" with three special liveries made specifically for the Avenger Series.

