

JUMP POINT

ISSUE: 10 02

IN THIS ISSUE →→→

03	DEVELOPER INTERVIEW: New Derelicts
13	BEHIND THE SCENES: Making the Consolidated Outland HoverQuad
31	WHITLEY'S GUIDE: Consolidated Outland Nomad
35	SHORT STORY: Hazy Days

FROM THE COCKPIT

GREETINGS, CITIZENS!

I hope you've had an enjoyable February! It may be the shortest month but it was certainly packed full of *Star Citizen* excitement. From all the warm fuzziness of Coramor to the surprise release of the HoverQuad (more on that below!) to a classic Free Fly. A Free Fly that's ending as you read this, otherwise I would encourage you to tell your friends! But then you Subscribers are the best of the best, the ultimate elite when it comes to following development... so it's a good bet you've already told everyone you know about the 'verse.

In this issue of **Jump Point** we've got a special look at the newest vehicle to become playable, the Consolidated Outland HoverQuad. Did you foresee Consolidated making freighters and construction ships and ground vehicles back when Silas Koerner gave us the first look at the Mustang? Following the renegade ship manufacturer as it develops in lore is practically a game in and of itself! The HoverQuad is even more special because it has a different start to its story: unlike 99% of *Star Citizen* vehicles, it came not from Design needing a new ship but from an artist who happened to put together something cool! But then I should shut up before I spoil the entire article. Since it's a much smaller vehicle than we usually profile, we've taken an extra in-depth look at some of the work required to make it real. I hope you enjoy!

This month's interview covers the new derelict environments that come with *Star Citizen* Alpha 3.16.1. If you remember way back in the original crowdfunding campaign, derelict ships were one of

the earliest environmental things we talked about, a way to make space less empty and more interesting. And now the team at Turbulent (you may remember them from our recent coverage of the new medical environments) has created a whole array of them, each based on the Drake Caterpillar but with different challenges and secrets. It's pretty fascinating seeing what kind of thought has to go into something like this so, again, enjoy!

This month's Whitley's Guide covers the Consolidated Outland Nomad light freighter that was introduced at the 2950 IAE event. We chose it because it matches up with the HoverQuad, of course, but it's a fascinating little ship in its own right. And it has certainly been giving the original Aurora a run for its money as a starter! So turn to the back to learn all about its in-universe history. Then, on the even-more-compelling lore side of things we've got a short story called Hazy Days that gives us a look at an element of the 'verse you might find familiar.

And that should do it for February! As always, **Jump Point** is your magazine and I'd love to know what else you might like to see in future issues as we head for our inevitable interstellar collision with the tenth anniversary magazine in December. Until then, we've got a lot of spaceships and game design elements and decorative hangar fish to talk about! See you through 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: Blythe Gumminger





DEVELOPER INTERVIEW

NEW DERELICTS

Very early in *Star Citizen's* development, the team set one of the first stretch goals to include derelict spacecraft as an additional base type. *Star Citizen's* world has become much larger since then, with fully realized planets and space stations that we wouldn't have dreamed of being possible in the early days... but in spite of all the 'verse has become, we didn't forget about the promised derelicts! *Star Citizen Alpha 3.16.1* brings a set of derelict ships to the game. You might have heard developers alternate between calling them environments, missions, and puzzles because they're all three together. Instead of just dumping crippled Caterpillars around the existing universe, the team at Turbulent has created a set of purpose-built environments that challenge players with everything from wayfinding mazes to attacking AI to the very first in-game implementation of trip mines. If you've had a chance to explore the new derelicts already, you know that no two are the same and that there's a genuine challenge to making them work for you. To find out about all the work that went into the new derelicts, we spoke with Level Designer Nemanja Panic about what he and his team went through getting these ships ready for... not quite flight!

[BEGIN TRANSMISSION →](#)



JUMP POINT: Please give us your name and title and then let us know what you've worked on on Star Citizen in the past.

NEMANJA PANIC: Nemanja Panic, level designer. I am new within the Star Citizen universe, but have worked on the New Babbage, Lorville, and Grim HEX hospitals, Caterpillar derelicts, and am currently prototyping the new derelicts based on the vision of the Concept Art teams in Montreal.

JP: What was your involvement in the new derelict puzzles?

NP: Prototyping puzzles, creating interesting layouts for navigation, organizing playtests, setting up basic lights, showing design intentions, vis area, phys grids, loot placement, placing VFX intentions, collisions, playtesting, and fixing an enormous number of bugs.

JP: What kind of design work goes into a new set of environments like this?

NP: The most fun part for me is the beginning of the prototyping phase where we get to create the tones of puzzles and start narrowing down the ones that are the most fun. But there is a lot more work than that that goes into making these derelicts - the most difficult part was setting up the system to respawn loot and mission entities. We are lucky to have some really good technical designers helping us out with that.

JP: When we say puzzles, what exactly does that mean? How much thought goes into how players will have to interact with these new environments?

NP: First, we needed to know what we can make the puzzles with. What are our ingredients? Doors that open/close, interactable buttons, things you can move with your tractor beam, loot crates, planks, push/pull boxes, exploding mines, and things to jump, vault, mantle, and shoot. Once we have the list of assets we want to use, we can start mixing and matching these ingredients with navigation and verticality to create interesting layouts that the player can explore. What the player can interact with is not obvious, so we needed to guide the player as much as we could towards the useful ingredients to complete these puzzles. We tried to make puzzles that vary from easy to hard, but the goal was always to have a little eureka moment once the player completes the puzzle.

JP: What do you take into account when planning out a puzzle?

NP: The ingredients we can use, the difficulty we want, the visibility in the derelict, ease of navigation, current know bugs and issues, planet terrain and angle, atmospheric hazards, and the time to complete the puzzle, though there are probably a few more things I'm forgetting.

JP: You work with both concept and technical artists. Where do they fit into the process?

NP: Though this was purely a Level Design initiative in the beginning, we quickly realized that we would need some help from the artists with the Caterpillar 3D model that did not snap together properly, on collisions that did not match the visuals, on some new props that fit better with the caterpillar crash site, with level art for the skirts around

the crash sites, and for better loot-box readability. Normally Concept Art would have been involved from the beginning, but this was not a big enough mandate that needed concept art.

JP: How does testing work with these puzzles? Is it done entirely internally or is there a point where you set players loose to see how they respond?

NP: We do a lot of testing within the team (there are five of us). Early on, we had a play session where we invited the Montreal studio to playtest our puzzles. It was great because we had a wide range of players from casual to hardcore gamers and some that have never played *Star Citizen*. It's always hard to get honest feedback when playtesting with co-workers because they usually don't want to bash your work. For that reason, we designed a set of questions based on things the testers disliked; things they found frustrating, if anything was misleading, things they would like to change in the puzzle, any problems with navigation, visibility, controls, etc... The negative feedback is usually the point that you can work on that will bring the quality of the puzzles to the next level. After that, we ask a few questions about things they liked, the puzzle difficulty, time to complete, etc. We also asked the testers during the play session to verbalize what they were thinking so that we could get feedback as they experienced the puzzle.

What was extremely helpful was the PTU session. At some point I would be watching three-to-four Twitch streamers at the same time, taking screenshots and noting bugs for us to fix. We were able to fix a huge number of bugs just by watching the streamers play in the PTU.



JP: Why was the Caterpillar chosen for this set of derelicts? How did you use the same ship to make multiple unique environments?

NP: We used the Caterpillar because it was one of the only ships that was big enough to have navigation and puzzles inside the hull. We needed space for the player to be able to use the tractor beam to move things around and rotate and push/pull boxes, place a few corpses, black box, delivery missions - all other ships are mostly narrow corridors and making puzzles in them would have been difficult.

We separated the ship into nose, middle, rear, and tail parts and created gyms for each section. For example, in the middle gym, we would

have multiple middle sections that varied from small to large. Each level designer created four middle sections that had puzzles with rare loot and four vanilla sections with common loot and no puzzles, just navigation. We repeated that process for the rear, tail, and nose sections and then mix and matched sections together on the planet directly.

JP: What other disciplines did you work with on these derelicts?

NP: We thought it would be a quick mandate that the Level Design team could do alone by recycling the previous Caterpillar crash sites. In the beginning, the designers placed everything including VFX, SVF, lights,

level art, and decals. However, as the shipping date was getting closer and closer, there was no way we would be able to ship the feature alone, so we got a lighting artist who helped us immensely and three artists to help with level art and collision on 3D meshes like the new loot boxes that are way more visible and easier to spot when doing the puzzles.

It goes without saying that this was a ramp-up task for the Level Design team in Montreal. We also had a lot of help from various CIG teams to better understand how we could use the spawn helper to reset the puzzles, how to integrate the puzzles on the map, and how to fix a lot of little painful bugs.

A lot of work goes into these puzzles, including figuring out how to reset them so that they can't just be completed once, making sure that

players don't camp at the site waiting for the loot to reset, making sure that the puzzle interiors have their own phys-grid and environment settings separate from the planet so that players don't feel the wind inside the puzzle, and hundreds of unexpected bugs and behaviors that we encountered for the first time.

JP: Do you have a favorite derelict environment that you worked on?

NP: My favorite crash site is the one I made on Yela. It's in a bowl surrounded by mountains where you can see the rings of Yela and the crash site at the same time.



JP: What are you especially proud of in the finished derelict? Going in, was there anything you especially wanted to make sure you included?

NP: I am most proud of the quality of puzzles and the number of bugs we were able to close before we shipped the feature. There are still a good deal of bugs, like loot crates falling through the ground and disappearing, but that issue is everywhere in Stanton, though this should be fixed soon.

JP: What's next for your team? Will you be building more derelicts or some other part of Star Citizen's environments?

NP: Our team is working on a few things right now: finishing the Lorville and Levski hospitals, adding extra medical rooms to Grim HEX, and working on new derelicts. We are currently evaluating if the Reclaimer could be used for derelicts (with an atmosphere reminiscent of deep space horror movies like Event Horizon). Nothing is set in stone as we are simply exploring these avenues and what would be an enjoyable experience before we start full production in the coming weeks.

JP: Was there anything you needed to cut that you wished could've been included?

NP: We wanted to also create 12 caterpillar derelicts in space but having created a few of them and played them in zero gravity, the movement and navigation experience wasn't great, so we decided to cut them for now. I think we made a good call by refocusing our energy on the Reclaimer, as not all ideas need to ship and having



the guts to cut bad ideas is part of the process. I'm happy we cut the space Caterpillar derelicts to focus on something we think the players will enjoy more.

JP: Do you have any messages for the players who will now begin to explore your work?

NP: You can see these derelicts as a stepping stone for what's to come in version 2.0...

JP: Finally, please let us know who else worked with you on the derelicts so we can credit them in the article.

Louis Rousseau	Lead Game Designer
Cyril Bignone	Sr. Technical Director
Pierre-Luc Boulais	Art Director MTL
Nicolas Painchaud	Lead Environment Artist
Marie-Claude Richer	Level Designer
Lucas Comeau-Ponton	Level Designer
Alexandre Leblanc-Savard	Sr. Dev QA
Elie Monferran	Environment Artist
Louis-Vincent Roy	Sr. Lighting Artist
Mathieu Rasolonirian	Environment Artist
Thibault Reimel	Environment Artist

END TRANSMISSION



MAKING THE CONSOLIDATED OUTLAND HOVERQUAD

KEY CONTRIBUTORS :
ART DIRECTOR - PAUL JONES
CONCEPT ARTIST - GREG CHRYSSAPHES
VEHICLE DIRECTOR - JOHN CREWE
DESIGNER - RICHARD TOWLER

Specifications and appearance are subject to revision during development.

INTRODUCTION

It's full of tinier ships! From the very beginning, *Star Citizen's* designers and concept artists have insisted on creating smaller ships that can be offered alongside their larger stablemates. The very first was in 2012 when Concept Artist Ryan Church, at the direction of Chris Roberts, developed the Merlin snub fighter alongside his work on the famed RSI Constellation. Additional snub ships followed over the years, sometimes only as broad designs alongside ships like the Carrack and sometimes as fully imagined support ships. In 2020, *Star Citizen's* Concept team developed and then implemented the Consolidated Outland Nomad, a small freighter capable of carrying a vehicle stowed externally to its rear. While the Nomad didn't launch with a special parasite vehicle, it inspired one that was recently added to the game.

ART

Avid followers of Jump Point's ship concept articles will already be surprised: the newly released Consolidated Outland HoverQuad bike began not as a specific design requirement but instead as a happy accident from the Concept Art team. Towards the end of the Nomad's development, Art Director Paul Jones (apparently not having his fill of designing spaceships at work) decided it would be fun to play around with the newly completed mesh's materials to try and put together something else. On his own, Jones generated a concept for a ground-based hoverbike using the Nomad as a base in just two hours. The design was incredibly simple; a mix of Nomad components that were resized and chopped mixed with some other "off-the-shelf" parts created for other *Star Citizen* ships. He finished by adding some

exterior lights before putting the design aside, having realized the vision he had in his head. Then, Vehicle Director John Crewe happened to have a look at what would become the HoverQuad, noting that he thought it was pretty cool. From there, the prototype HoverQuad render made its way to Chris Roberts, who was so happy that he asked it be added to the schedule as a real addition to the 'verse. Then Marketing became involved, identifying it as a vehicle that would make an especially cool flyable surprise for players the next year. Thus, two hours of work-for-fun managed to painlessly become a priority for full future implementation!

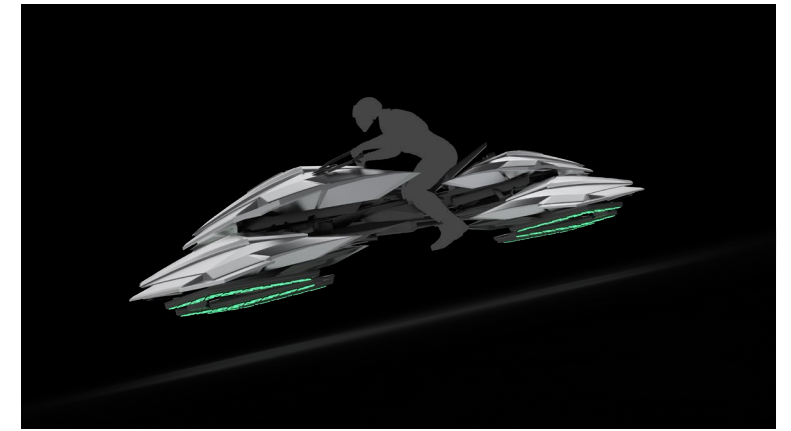
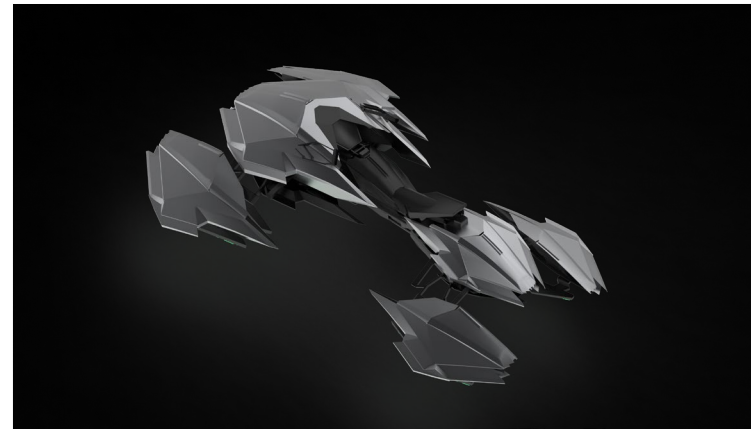
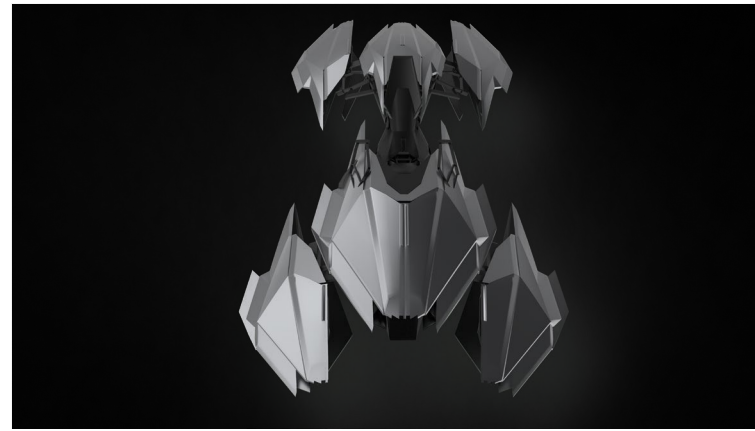
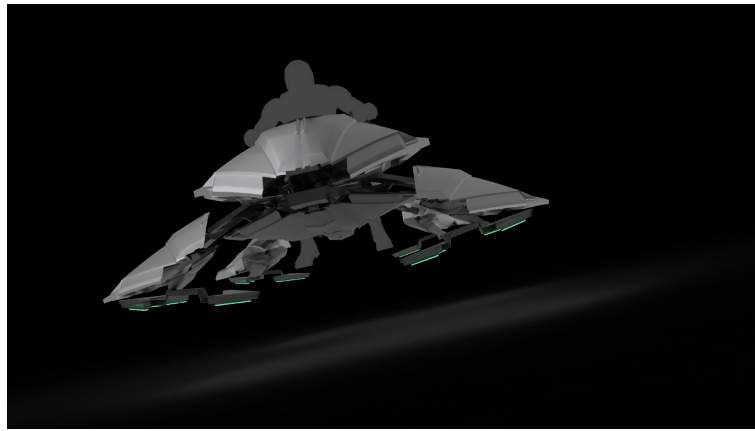
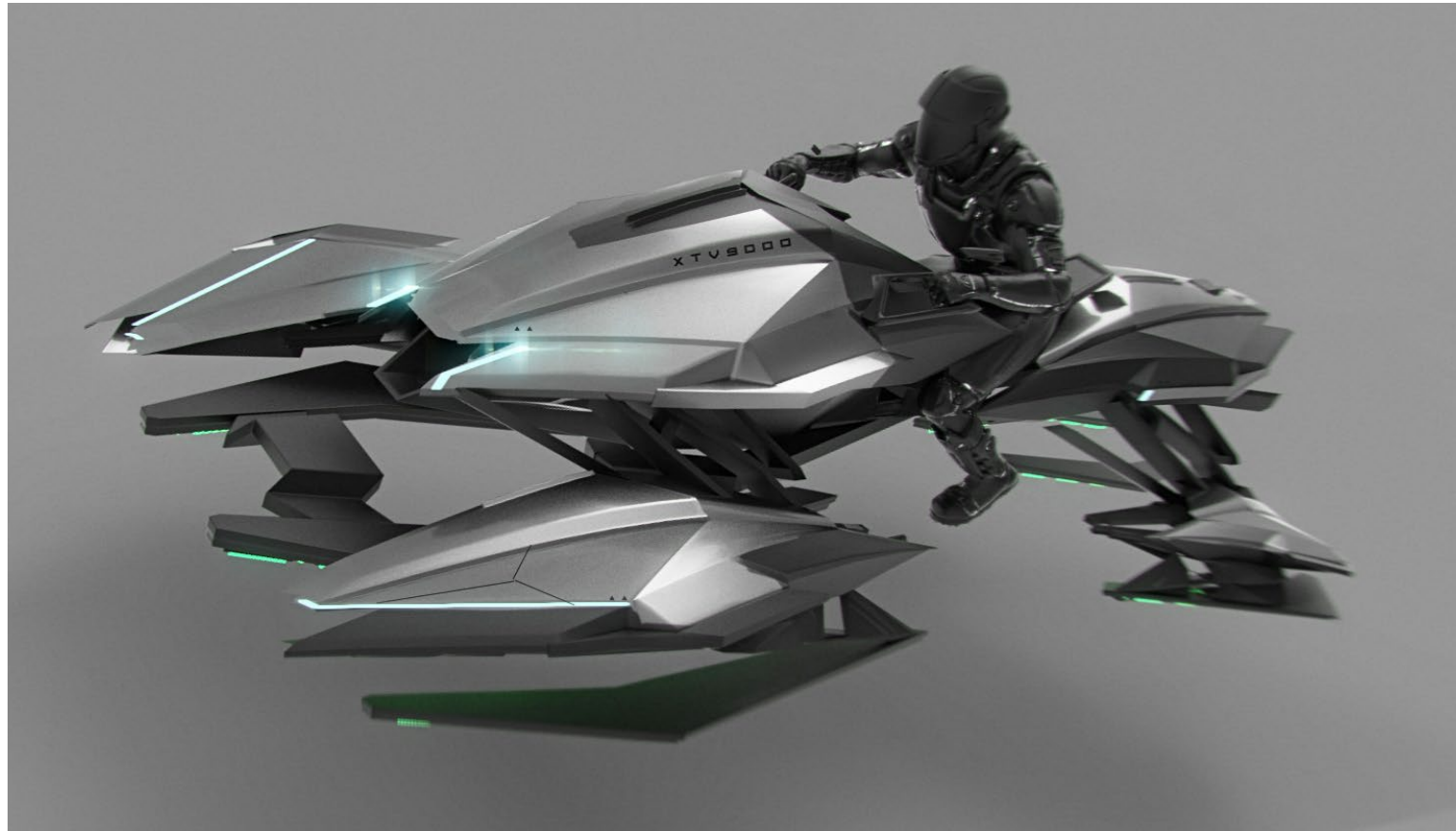
DESIGN

Despite its unusual start, the HoverQuad still needed a design pass.

While Jones' fantastic concept looked immediately to be something players would want to fly over Stanton's vast tracts of unexplored land, it hadn't necessarily been created with *Star Citizen's* usual set of rules in mind. So, Vehicle Director John Crewe assigned Designer Richard Towler to make it work, who pitched the HoverQuad with an additional aspect that would make it especially appealing to existing Nomad pilots:

"Should use grav-lev like the Dragonfly and fit within the Nomad's cargo bay, which holds PTV/ROC/Cyclone-sized vehicles."

The brief specified details on thrusters and metrics to make this possible and added requirements for things that had not been present in Jones' prototype.

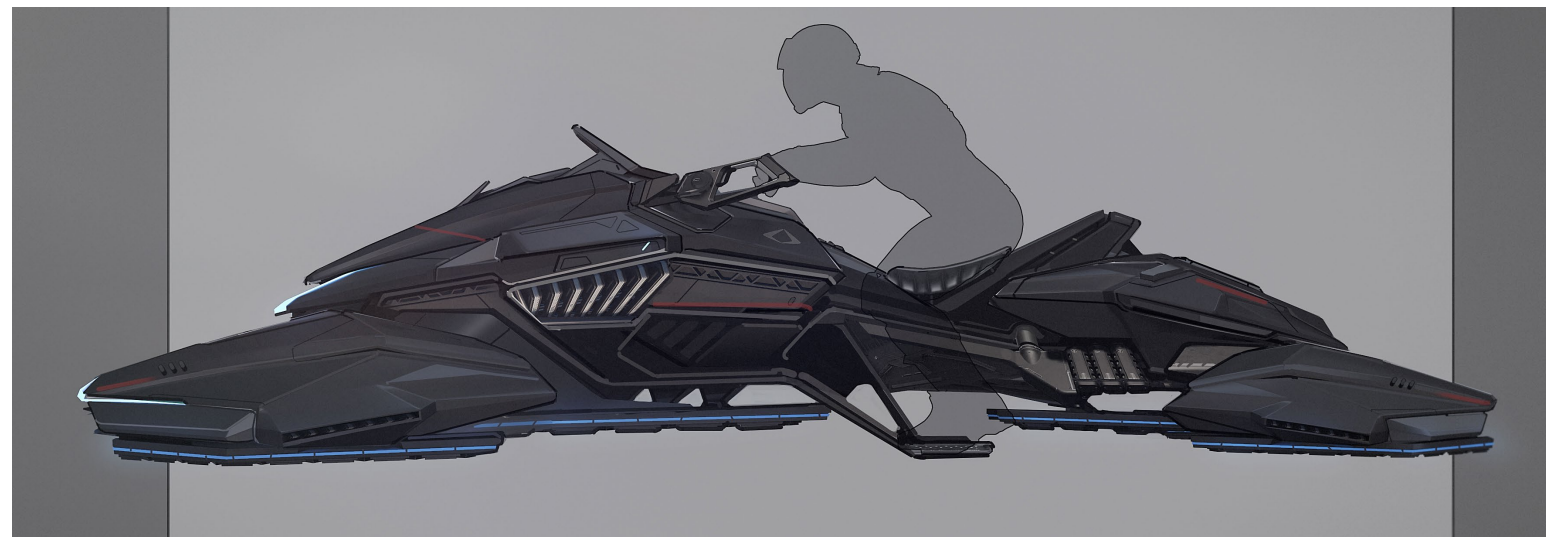


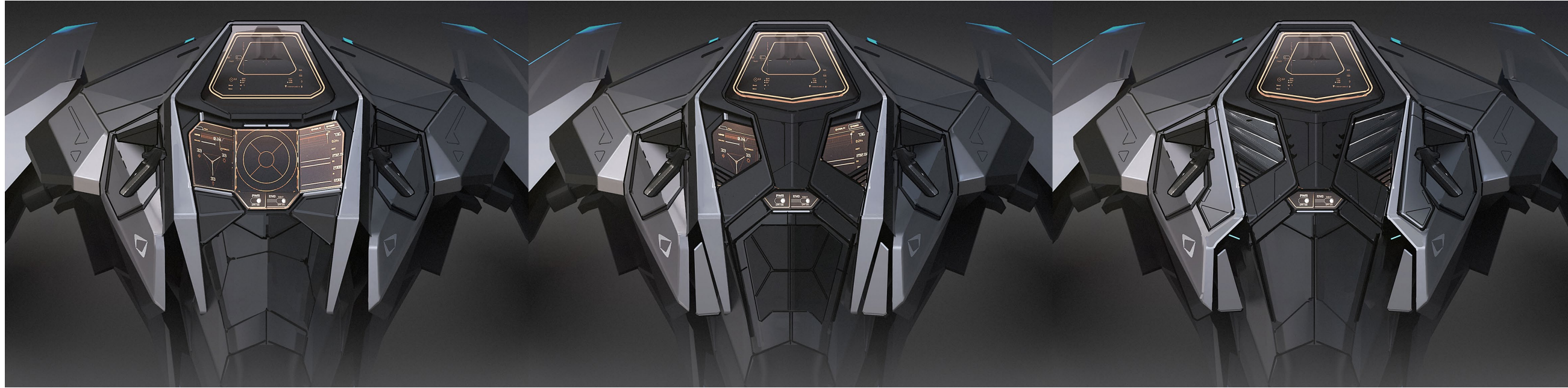
ART REDUX

At this point, the HoverQuad returned to the normal process, once again at home with Paul Jones and the Vehicle Concept team. As reference, Jones created a board that included his initial HoverQuad concept, Nomad renders, additional material from Consolidated Outland, plus some terrestrial motorcycles that exemplified the style he had been going for. Jones selected veteran concept artist Greg Chryssaphes to bring his initial vehicle into concept-ready form, something he notes is much more complex than it seems. While the final concept of the HoverQuad appears at first glance very close to Jones' concept, it actually took a great deal of work to create something that would function properly with *Star Citizen's* rules. Concept artists, Jones says, can become locked into a particular vision and additional eyes can help greatly. Nevertheless, the biggest expected challenge was making sure the spur-of-the-moment

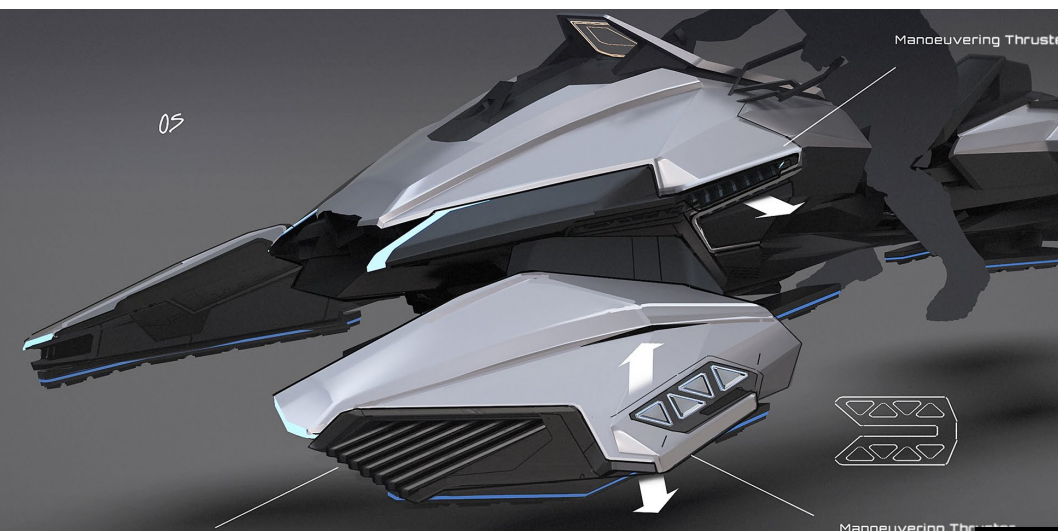
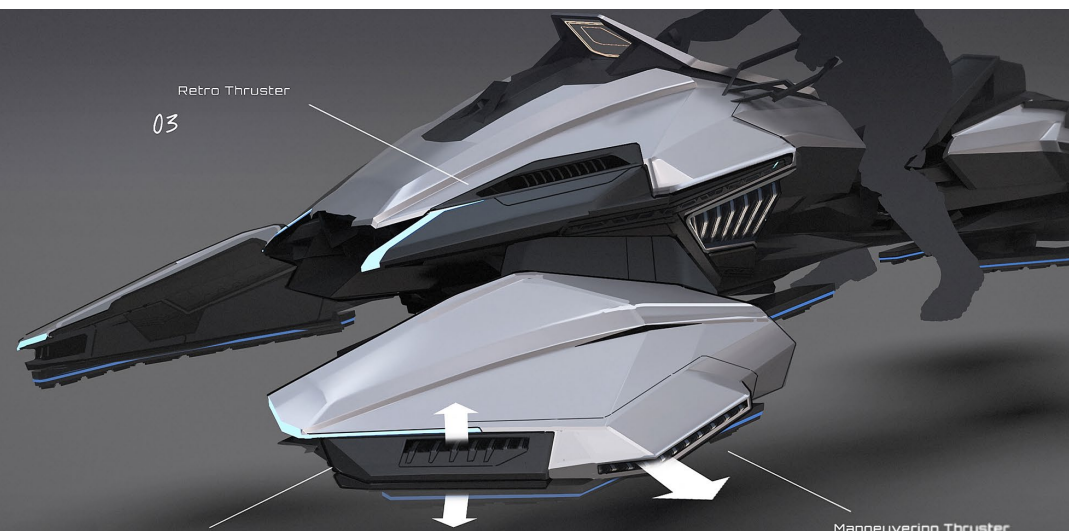
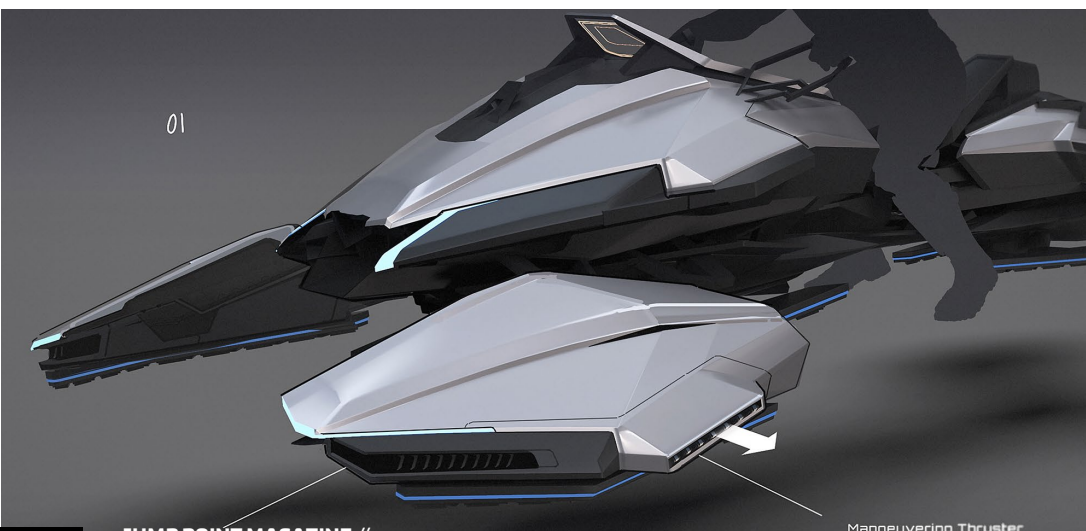
design could be adapted to fit the needed components and other extras without altering the base shape too much. A task easier described than done, given the complexity *Star Citizen* insists upon for systems that range from batteries to weapon mounts to scanners.

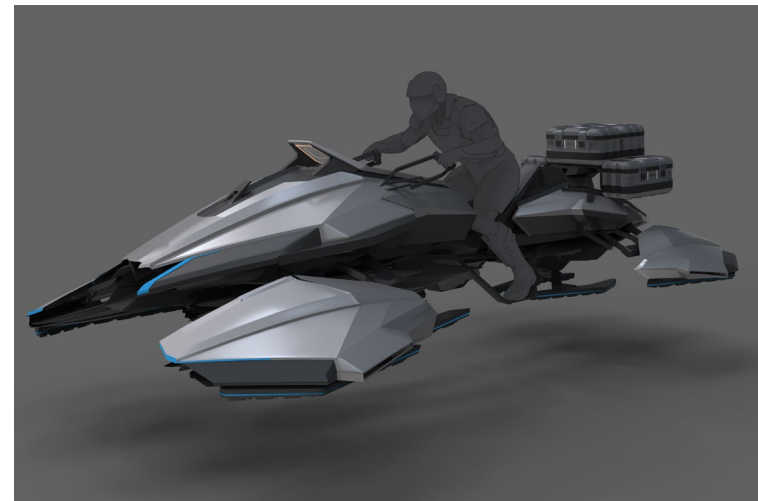
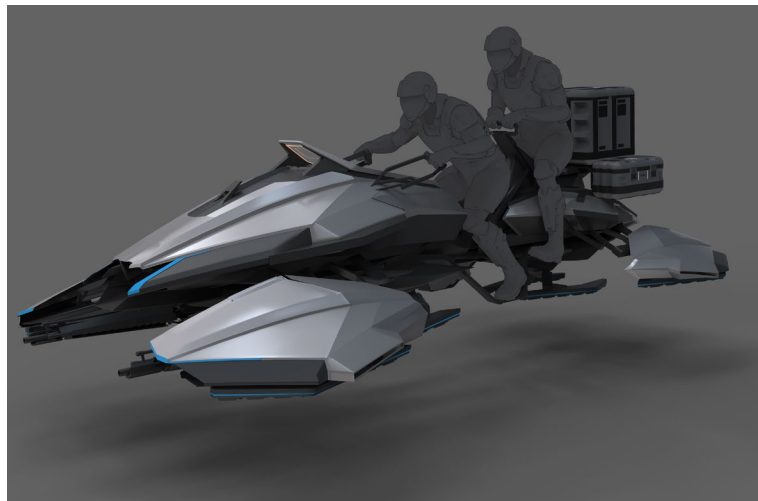
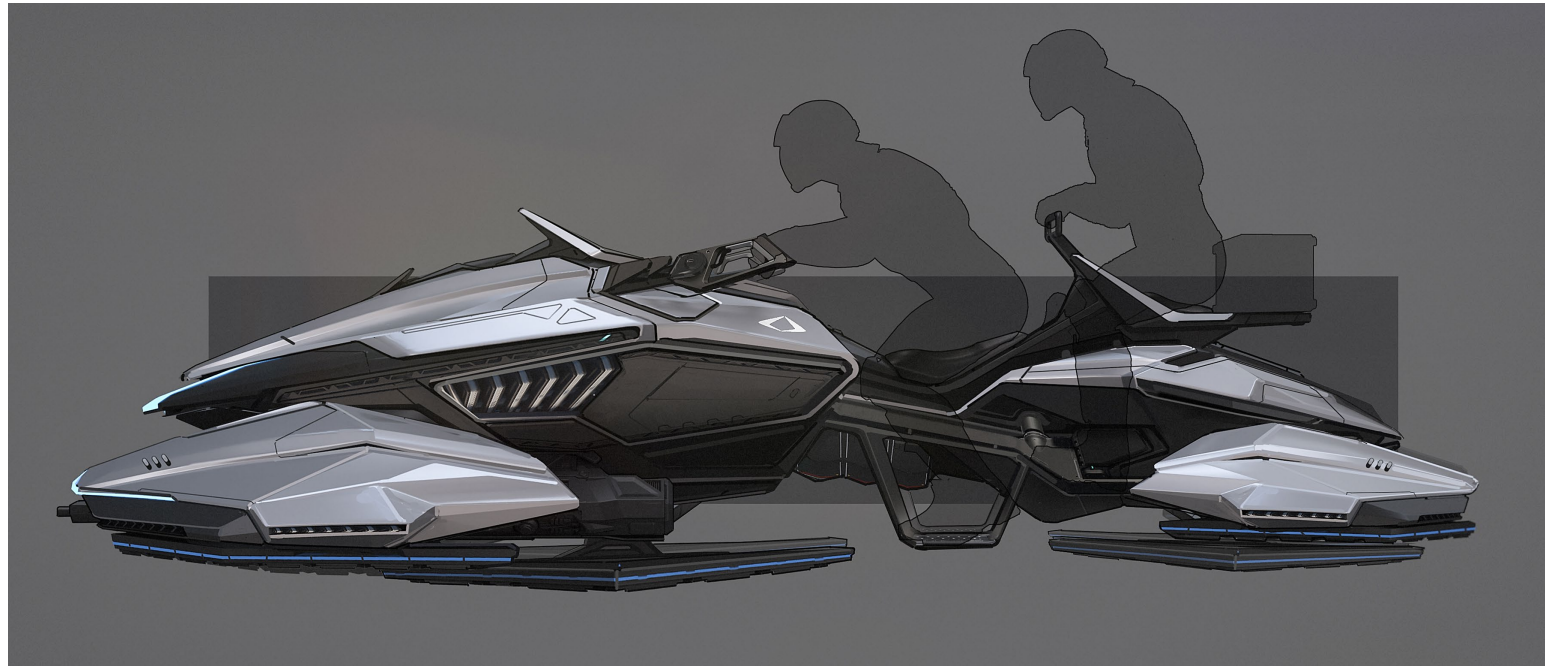
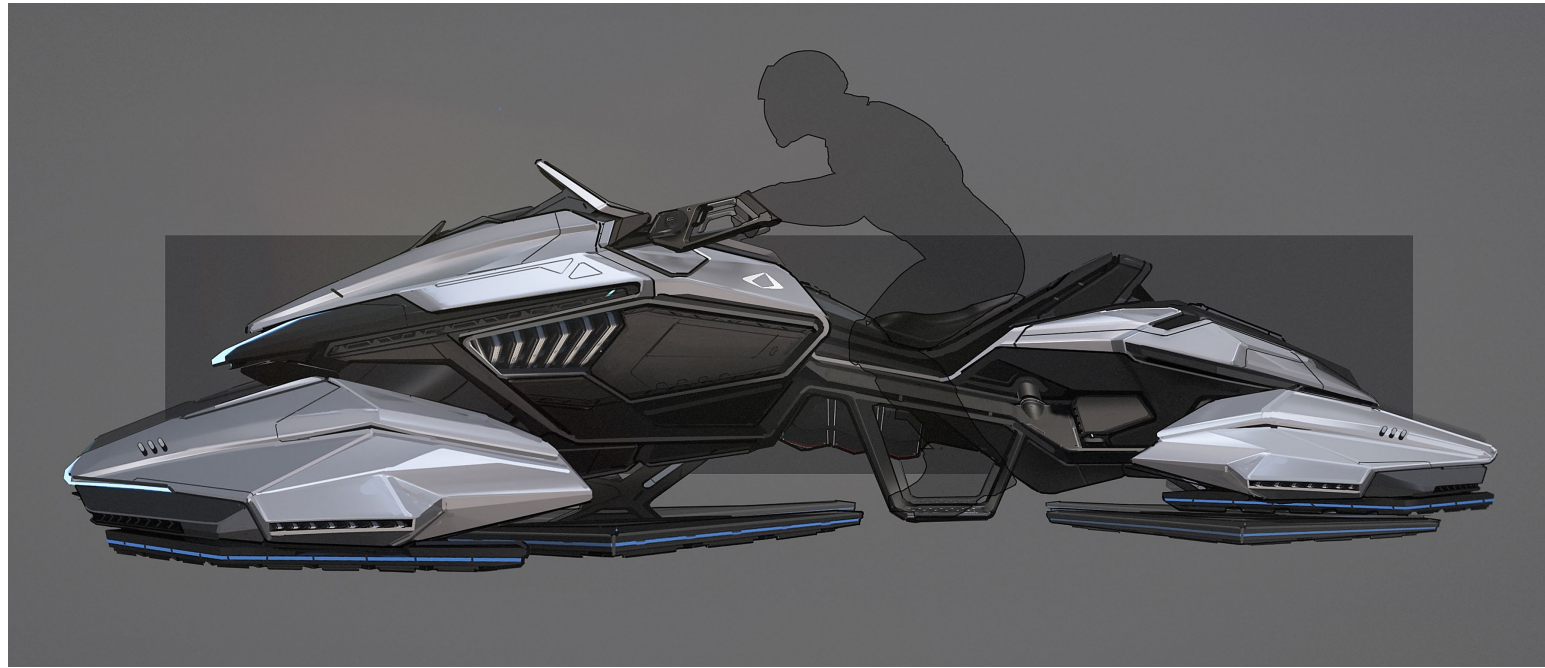
Chryssaphes began his work by making the front wider and by studying additional options for proportions. He experimented with a slimmer waist and a narrower tail, only the latter of which made it to the final concept delivery. Jones felt that Chryssaphes had dialed in very well on his first pass and asked that he continue working on the details. His initial pass provided five different versions of the HoverQuad, each with very slight differences when compared to other vehicles at this stage of development.





Pleased with his work, Jones advised Chryssaphes to continue with the details, including the first look at the cockpit and instrumentation. Should the HoverQuad have a very simple heads-up display or should it have something with screens and dials referencing its two-wheeled ancestors? Chryssaphes tried different numbers of screens and different levels of controls before settling on something Jones was happy with. He also tested different maneuvering thruster styles and positions, something that would impact the ultimate feel of the vehicle.





Next, Jones stepped back to look at the overall proportions, pushing it slightly back towards the original vision. Though now armed with the formal brief from Design, there was a feeling that the concept artists still had some questions to answer: could you have two players on it? What would the

ramifications of that be? What were the options for cargo? How much and where should it carry it? Jones and Chryssaphes experimented with how it might look with a top box on the back for cargo, ultimately agreeing with Design that it should only offer personal storage via an internal pocket.



With two weeks to go, Jones advised looking at the HoverQuad from different angles to study how light hit it from different directions; the sort of thing few people think about but which becomes very important once players can interact with a ship from any direction they choose. Properly articulating the hover-pods was also a focus at this stage. As a feature so key as to appear in the vehicle's name, the hover-pods needed a completely logical functionality and a series of animations that would be passed off to the Implementation team. Here, Jones says that what might seem to a casual observer like easy work is actually a major effort; making sure everything looks good and is reachable and functional to the player (including internal components) can be the most difficult part of finishing a concept.



The end result was a concept model that was extremely close to the initial idea but also massively refined both inside and out. Jones praised the fast back and forth on the HoverQuad, saying that he loves when there is a moment of sheer inspiration that results in such a quick development. Longer projects can lose steam as time passes from the initial "eureka!" moment.

Finally, Chryssaphes took a crack at the different paint schemes, turning out nearly two dozen.

Earlier ships had fewer paint schemes and focused on manufacturer-specific designs. As the team has observed player preference, the concept artists have begun creating more paint schemes that aren't so specific to an individual manufacturer, giving fleet owners a chance to have similarly liveried spacecraft from multiple designers. This also lets the artists suggest more experimental ideas, bright reds and deep blues, with the understanding that they could be broadly applied to multiple types of ship.

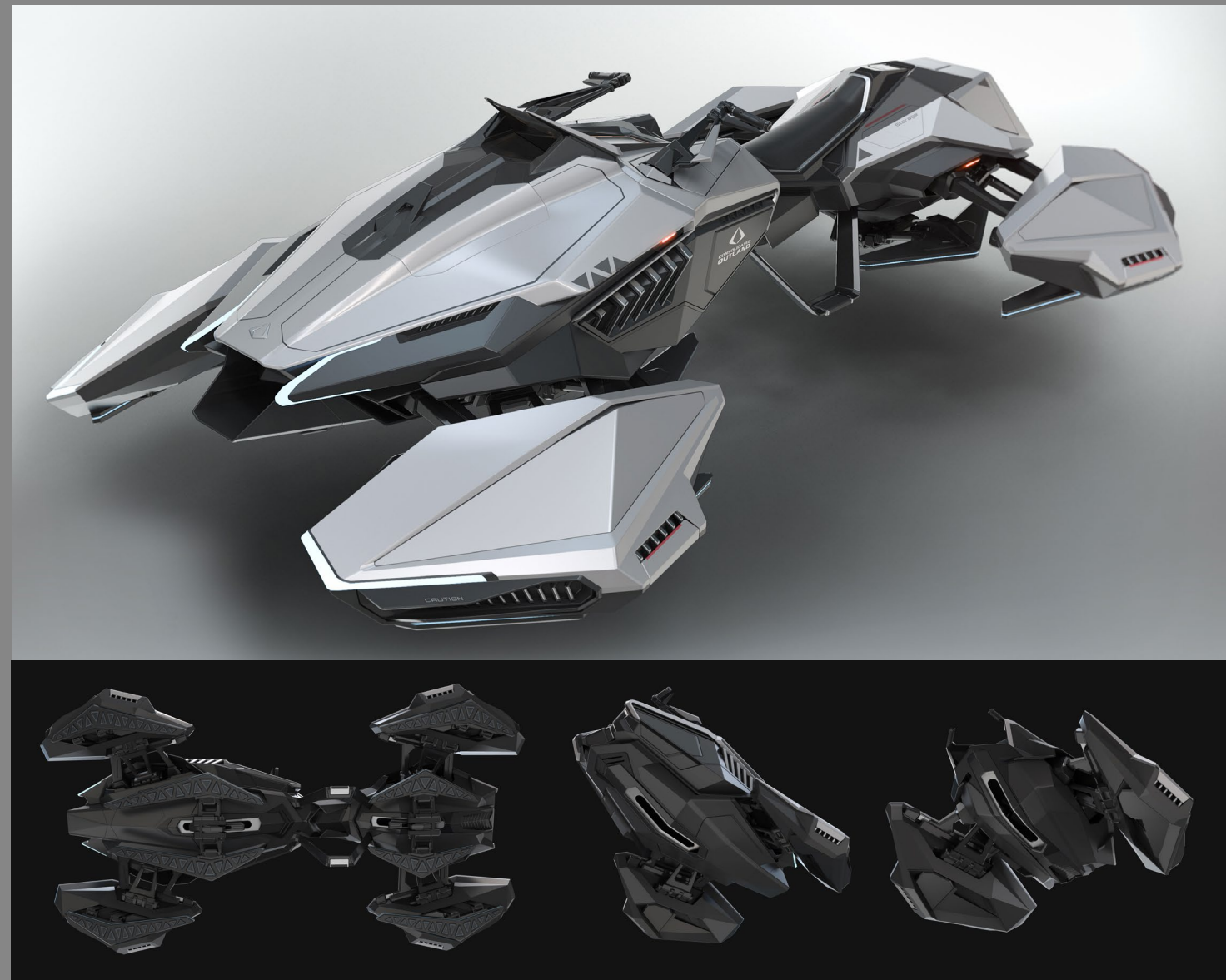
DELIVERY

At the end of the process, Jones and Chryssaphes put together a nine-board presentation for the HoverQuad's eventual implementers. Representative of the material created for every new concept but with a reduced complexity to the design, a closer look at the material helps to explain exactly what *Star Citizen's* technical artists have to work from beyond the concept mesh itself.

PAINT SCHEMES

Two boards explain the HoverQuad's paint schemes. The first includes large renders of the standard model's grey-and-black scheme that aim to display exactly where each different material should be applied to the finished vehicle. An additional set of renders showed the HoverQuad from above and below against a dark background. Jones further advised the team to "use the Nomad as the main point of reference for materials. The HoverQuad will be using the same materials and breakup for the most part." Ordinarily, this board would also include

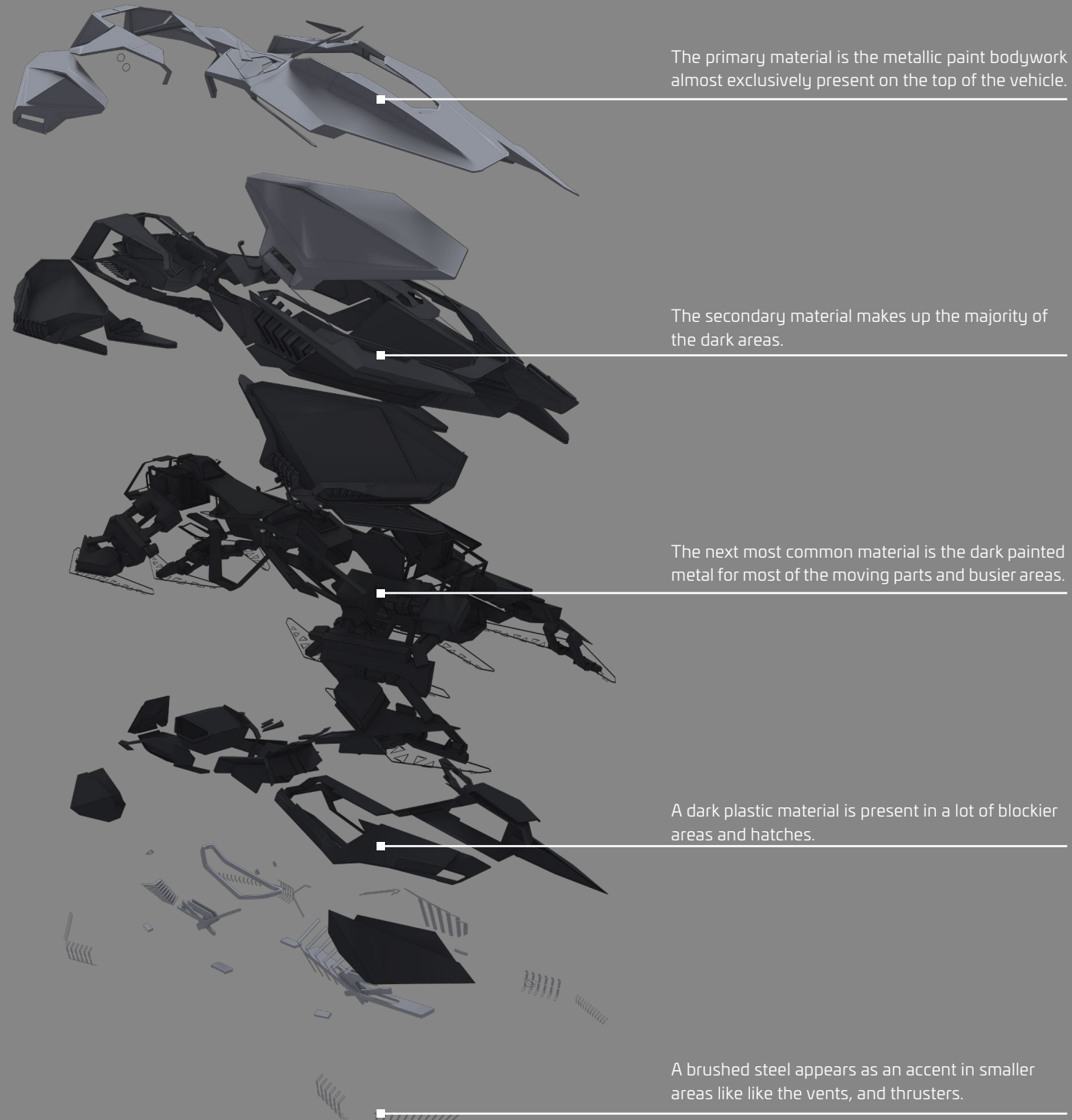
samples of these materials instead of referring to an earlier ship. The second Paint Scheme board includes twenty different paintovers of the main HoverQuad render showing different potential skin options. From this full set of twenty (which range from stealth black to bright options like a fiery red-and-yellow), Narrative and Marketing will select the final options that will appear with the first release and then determine how they fit into *Star Citizen's* continuity (such as the Coramor-specific skin offered in the final launch).



MATERIAL BREAKUPS

The Material Breakups board takes the basic full render of the HoverQuad and divides it into seven increasingly separated versions, somewhat akin to viewing an anatomy diagram that moves from the complete organism to showing only individual systems. Each render

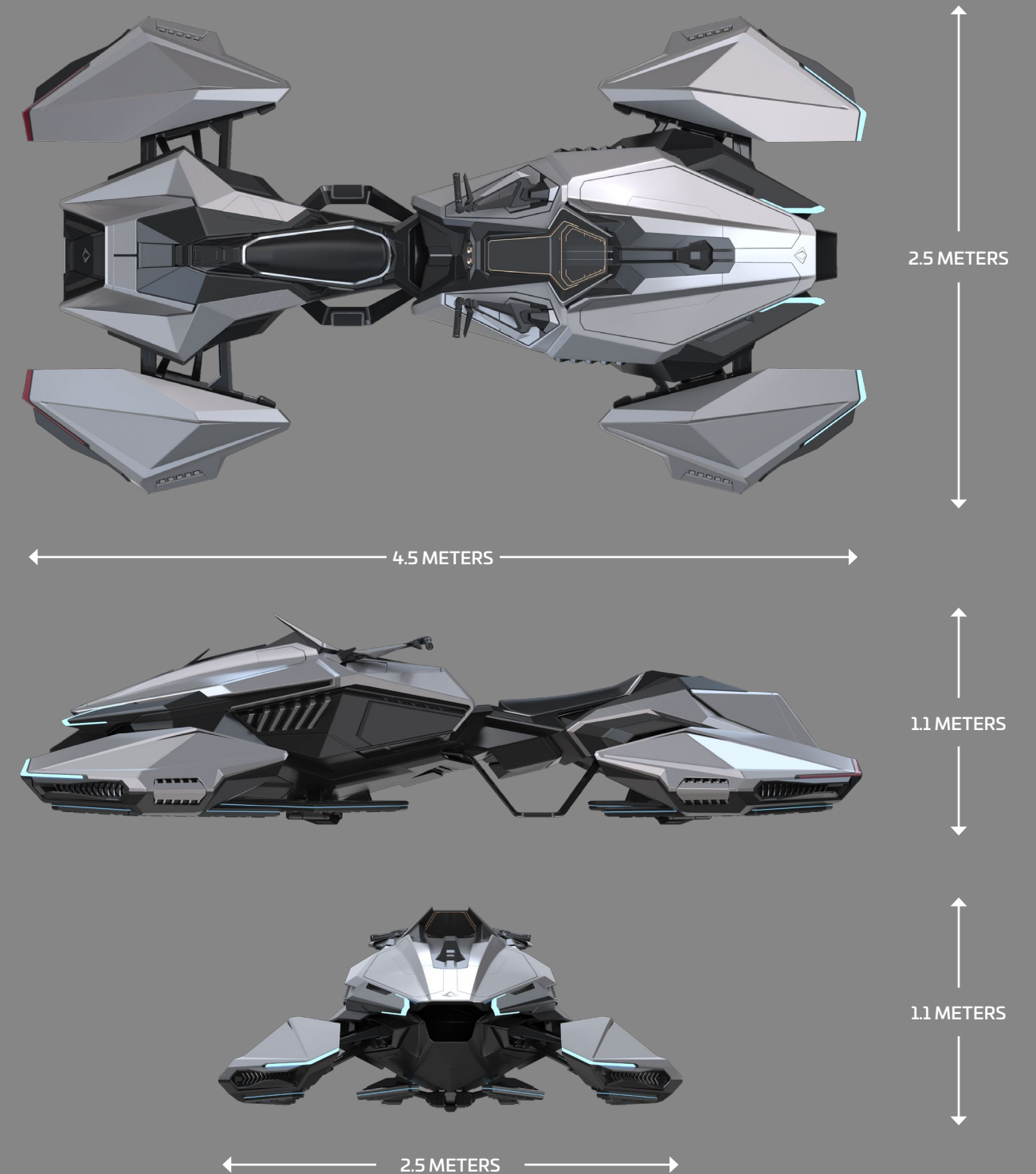
shows only one particular material, instructing the Implementation team on specifically what should be chrome, what should be matte black, what should be metal, and so on. The board explains the purpose of each in captions:



DIMENSIONS

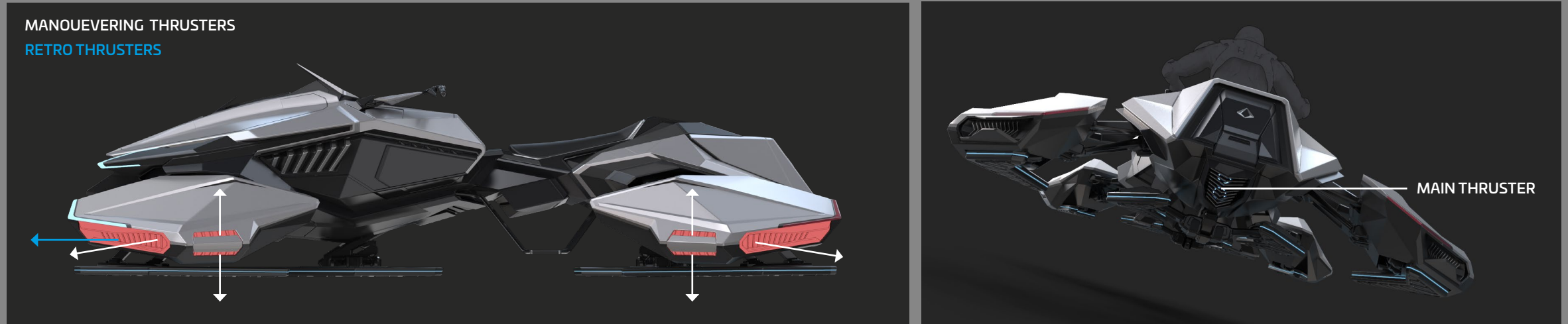
As the name implies, the Dimensions board offers blueprint-style diagrams of the concept renders with their exact physical dimensions listed. The captions show the amount of detail the concept artists need to determine in order to model a spacecraft correctly, with as much as a few centimeters in size mattering to the end result. "In landed mode the vehicle gains an extra 0.1m in height due to the extension of the grav

plates. The vehicle has about 0.35m clearance from the ground when stationary. This goes up to 0.45m when in flying configuration." A second bright-red warning adds: "Important! Entry animation seems to have the pilot start a few centimeters sunk into the ground. Be sure to account for this and make corrections as some of the metrics concerning height and clearance of the vehicle may be off by a couple of centimeters."



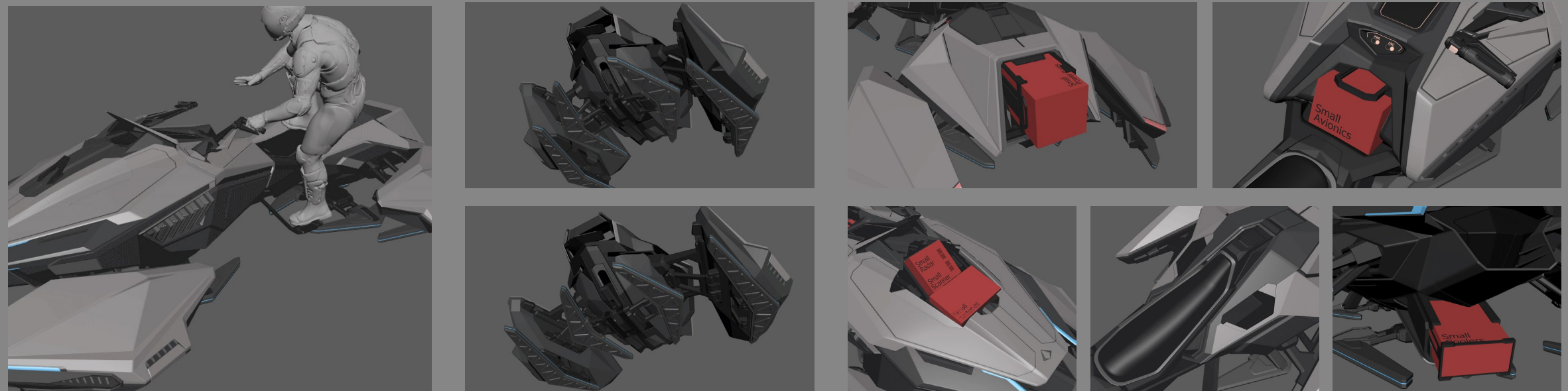
THRUSTERS

The Thrusters board shows another set of blueprint-style diagrams marking the intended location of all of a spacecraft's thrusters, both the retro rockets for maneuvering and the main thruster. Determining this requires every concept artist to be something of a physicist, especially for more complex ships that might feature dozens of thruster points. On a larger ship, this board would also include information on landing gear.



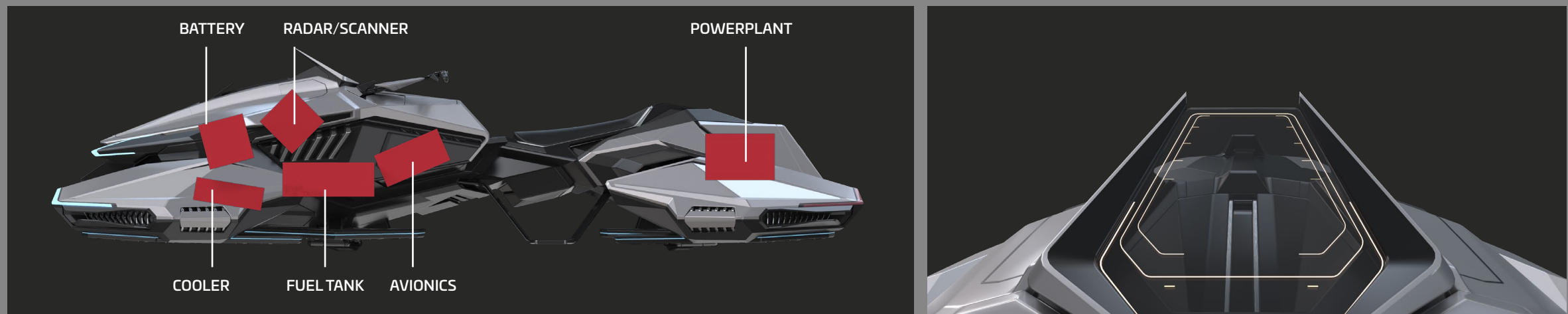
ANIMATION

A complex set of three Animation boards includes a number of greybox renderings displaying how the ship will need to be animated. These are further divided into three types. The Entry board shows how a player character must board the ship (in this instance by climbing aboard the side). The Grav Plates board has two animations showing how the front and back grav plates will move. The Components animation board has five animations showing how the scanner/radar and battery, cooler, avionics, powerplant, and storage will need to move when the player chooses to interact with them. Just think: a ship the size of the HoverQuad needs to have five such animations made... how many more must be needed for the Pioneer or Javelin?



COMPONENTS & FIRST PERSON VIEW

Finally, the Components & First Person View board shows exactly what it promises. In the case of components, the HoverQuad has very few compared to a fully featured spacecraft and so only a single-angled side view is needed to explain where they are located. The first-person view render predicts how the ship will look from the point of view of the player, an important point of comparison for someone recreating the concept in *Star Citizen's* game engine... and a constant source of debate during the art phase!





RELEASE

Star Citizen's supporters received their first look at the concept that would become the HoverQuad at CitizenCon 2021 when Paul Jones' original concept was shared during the Ship Talk presentation. In January 2022, the HoverQuad appeared in the PTU release of Alpha

3.16.1, a complete surprise to the community that was not expecting a fully flyable hoverbike to be added with the patch. The official launch occurred during the February 2022 Corarmor event, where it was offered alongside a unique, event-specific skin.

CONSOLIDATED OUTLAND HOVERQUAD SHIP PAGE

<https://robertspaceindustries.com/pledge/ships/hoverquad/HoverQuad>

SHIP PRESENTATION

<https://robertspaceindustries.com/comm-link/transmission/18526-CNQU-HoverQuad>

Q&A

<https://robertspaceindustries.com/comm-link/engineering/18536-Q-A-Consolidated-Outland-HoverQuad>



THE CONSOLIDATED OUTLAND NOMAD

DEVELOPMENT HISTORY



In 2942, two years before the spectacular launch of the Mustang spacecraft, Consolidated Outland was all but unknown: a minor astro-engineering company funded by wealthy Bremener, Silas Koerner. As a fully private company, the details of Consolidated's goals and resources could be largely hidden from its competitors, though few seemed to believe it would amount to anything of interest in the first place. On the inside, however, Koerner wasn't looking forward merely to the Mustang, he was making plans for the company that looked forward multiple decades. As a result, the earliest Consolidated laboratories were populated by an eclectic mix of Koerner's most loyal high-level employees borrowed from the various enterprises that had helped build his fortune. While many were focused on making the Mustang a reality, several other teams began the first steps at developing their own projects aimed at disrupting existing industries.

One of the most promising pre-Mustang spinoff programs was called MANTA, or Multi-crew Accessible New Transport A. Just as the Mustang sought to create a spacecraft that would affordably compete with Roberts Space Industries' Aurora and Origin Jumpworks' 300 series, MANTA's goal was to change the dynamics of larger hauling spacecraft by producing a multi-crew ship that would cost less than half-a-million credits. What's more, Consolidated Outland did not foresee offering the ship on the open market at all. Instead, the MANTA would be the first part of a larger endeavor that would spin off into a separate

company that managed a massive force of rental spacecraft. The mind behind MANTA was Dr. Charlotte Roland, formerly the chief engineer of Koerner's extensive fish-farming operation. Koerner specifically enjoyed Roland's unusually long-term vision for the spacecraft and her lack of any connection to the current aerospace development industry. As a result, he continued to fund her small team through Consolidated's early years and then the release and subsequent success of the Mustang.

By 2944, the plan for MANTA was a large multi-crew ship roughly the size of RSI's Constellation that was extraordinarily cheap, built from over 95% off-the-shelf components. With only a small central cabin requiring bespoke construction, the plans envisioned a spacecraft that looked more like a child's block toy that would be assembled rather than fabricated. The price tag was in sight, too: engineers had reduced the cost to a cool 750,000 credits, roughly 20% of the contemporary Constellation. The most major innovation was the realization that the superstructure could be constructed so that cargo would be safely stored exposed to space like an industrial hauler rather than fully contained. While there was not yet a firm plan to actually launch the project, Roland's team felt they had accomplished something extraordinary that no one had really believed possible.

Then, the Mustang happened. In the space of a short Galactic Gear segment in 2944, Consolidated Outland and Silas Koerner became the

DEVELOPMENT HISTORY



biggest names in the galaxy and the fate of the company was forever altered. In the months that followed, Roland remained in control of the project as Koerner began casting about for the Mustang's follow-up. While most of the additional funding generated by the Mustang would be assigned to the massive Project Ranger (eventually the Pioneer), very little of Koerner's time was needed in developing the entirely industrial ship. Instead, he began to take a more personal interest in MANTA, initially simply spending time with the development team but eventually taking more of the reins himself.

It quickly became clear that Koerner had a very different vision for the spacecraft that did not align with the initial plans or goals. As he took over more and more aspects of MANTA, he began to battle with Roland. The first fight seemed to be over the name alone, with Koerner replacing MANTA with Nomad in favor of attaching the ship's legacy to that of the Mustang, with the notion that it would allow pilots to strike out on their own. Soon, however, this philosophy led to a complete reimagining of the ship itself as a single-seater transporter capable of moving an especially high volume of cargo. Roland and the original designers found themselves sidelined, with most of the original team reassigned to solve specific issues with the Pioneer. Roland herself opted to resign rather than accept a transfer to the industrial division.

The shakeup led to significant delays in the project as the ship was

reworked for Koerner's vision. Gone was any talk of establishing a shipping company, with the newly titled Nomad now planned to be a direct follow-up to the Mustang that would give private owners the ability to compete with much more expensive hauling ships. With MISC successfully launching the Reliant around this time, Koerner became increasingly obsessed with making an impact in the transport sector.

In its final form, the prototype Nomad was much more of a bespoke design than anyone at the start of the project had ever imagined. While the cost-saving exterior cargo hold remained part of the design, almost every other piece changed, with a giant increase in components that needed to be specifically machined by Consolidated's factories. The cost to the end user continued to rise as well, with the final ship having a sticker price of roughly one million credits; significantly lower than the Constellation, but twice what was originally intended. The most difficult part of the actual prototype phase was the hover technology, which was required to be far more advanced than previous iterations because of how it was being used to reduce the cost of the cargo hull itself. Additional credits and time solved the problem, though it did lead to industry discussion about why Koerner had not immediately followed up on the Mustang.

The Nomad was revealed to the galaxy at the 2950 Intergalactic Aerospace Expo, again presented for the first time by the man who had



helped define the Mustang's launch, Jax McCleary. What's more, in an industry first, the Nomad was available at ship dealers around the Empire the very same day it was announced. Consolidated had secretly shipped thousands of the small ships around the UEE so that they could be test flown immediately in eleven different systems. Koerner announced the ship with a live speech entitled Chasing the Dream that defined the ship as the follow-up to the Mustang but had no mention of its humble origins:

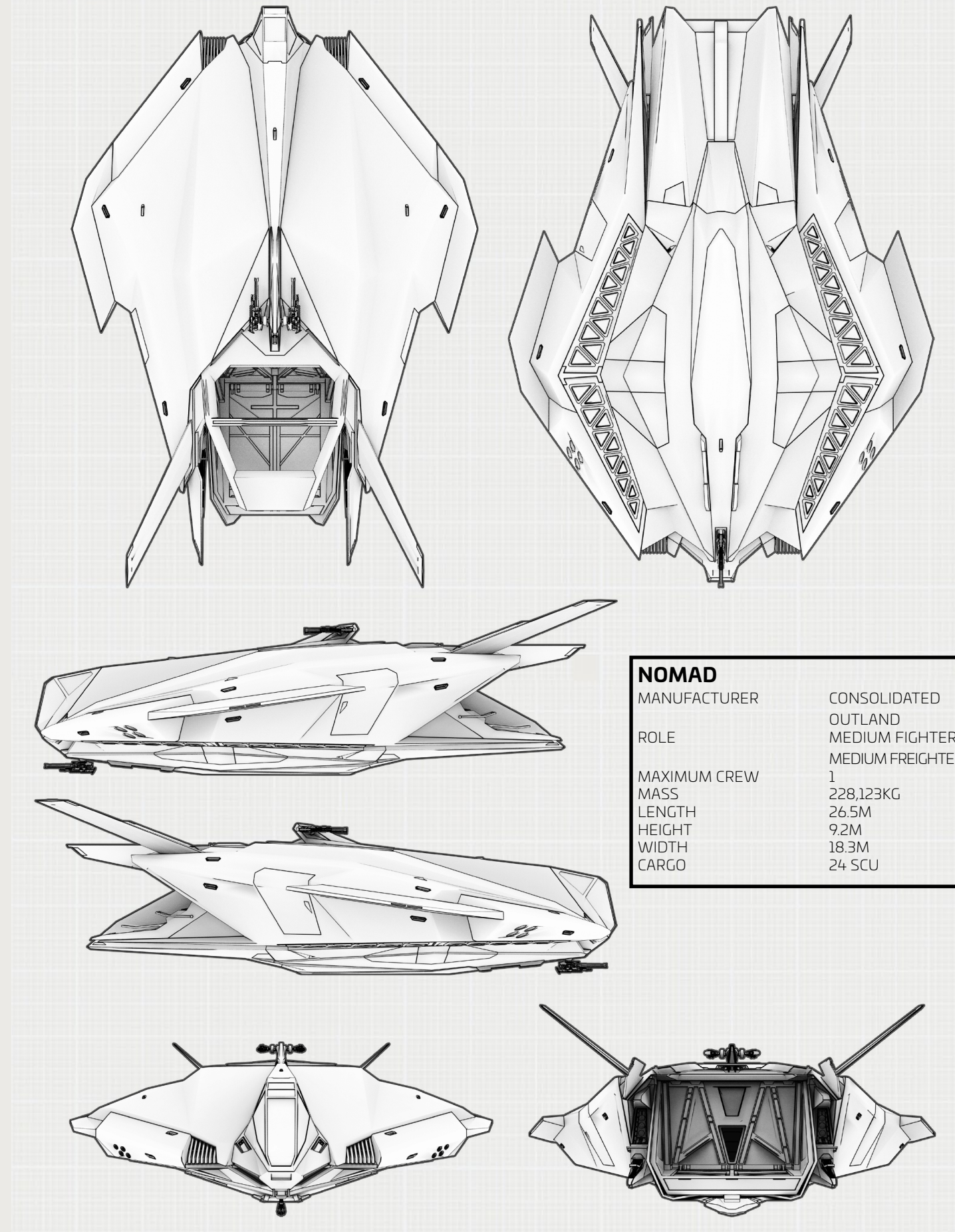
"When we introduced the Mustang line back in 2944, our aim was to reshape the dream of spaceflight. Since then, much has changed in the way we traverse the stars. The universe itself has expanded, with infinite opportunities waiting out there for all of us brave enough to chase them. The time has come to reshape the dream yet again. To push further than we ever have before. The time has come for the Nomad."
Silas Koerner, 2950

The Nomad launch was another immediate success, although the audience ended up being very different from what had been expected. Despite Koerner's intentions, users were not buying the ships to pair with Mustangs but instead to outfit corporate fleets or to serve as introductory spacecraft in their own right. Other unexpected adopters were paramilitary forces who were initially drawn to the internal missile racks and the ability to transport and deploy small arms easily. Media criticism accused Consolidated Outland of courting this audience,

though the outrage faded as it became apparent that the solid overhead silhouette and the exposed cargo area made the Nomad a less-than-ideal choice for dogfighting.

In the two years since the Nomad's launch, the spacecraft has attracted a reliable base of owners and pilots who swear by the design, especially for its unique ability to move small ground vehicles from place to place on a planet's surface. It was from this use case that Consolidated went on to develop the HoverQuad, a ground vehicle patterned on the Nomad's design that can be rapidly deployed from the cargo area. The HoverQuad itself launched two years later with significant adoption among both Nomad owners and groups that had never purchased a Consolidated Outland ship at all. Nomad pilots have also become known for their love of unusual stunts, ranging from attempts to transport unusual things in their exterior docking areas to a series of "live in a Nomad" challenges that saw pilots outfitting their spacecraft for solo crewing in deep space for up to six weeks at a time.

One key benefactor of the Nomad's success is something of a surprise: after leaving Consolidated Outland, Roland proved she held no grudge over Koerner by adopting the Nomad as the chief spacecraft for her new budget freighter rental company. Within a year of the Nomad's launch, she had purchased two full production runs of ninety-six Nomads each, turning them around as unliveried rentals throughout the Empire.



NOMAD	
MANUFACTURER	CONSOLIDATED OUTLAND
ROLE	MEDIUM FIGHTER MEDIUM FREIGHTER
MAXIMUM CREW	1
MASS	228,123KG
LENGTH	26.5M
HEIGHT	9.2M
WIDTH	18.3M
CARGO	24 SCU

HAZY DAYS

A sudden uprush dispels the dark. Pernell Arai opens his eyes to find himself in a bright, sterile medical facility.

“There you are Mr. Arai.”

“Where am I?”

“It’s okay. You’re in Orison. Looks like your regen was successful. How are you feeling?”

Pernell draws a few deep breaths then wiggles his fingers and toes. “A little sore. What happened to me?”

“Afraid I can’t help you with that. You suffered a traumatic injury though, don’t think they’ll be any scarring though, so you’re lucky there. What’s the last thing you remember?”

Parnell’s memories come flooding back. He’s dancing with Sergie. He’s on a beach in Cassel basking in the glow of Goss’s binary stars. He’s a kid struggling to steady a gun to shoot cans in an abandoned building on the outskirts of Archibald Station.

“Your brain activity looks normal, at least,” the doctor says while navigating screens on her datapad.

“Sorry, I’m remembering things. It’s just a lot at once.”

“All good. I ask because your last imprint was quite a while ago. If you don’t imprint frequently your short-term memory can be a bit hazy. You know that, right Mr. Arai... Mr. Arai?”

Pernell shifts his eyes from the window’s stunning vista over Orison back to the doctor then nods knowingly. “Sorry, still settling back in.”

“Totally understandable. Well, all your vitals look good, so you’re free to leave. Obviously, take a little time for yourself, and maybe imprint a bit more frequently. Might make things easier next time.”

Pernell thanks the doctor then leaves the hospital in a daze wearing the clothing provided to him. Wind whips across the Cloudview Center platform chilling him to the bone through the thin material. Still, he stops to enjoy the sunset spreading vibrant color across the sky. He even leans over the railing ever so slightly to take in the cloudbank below. A sudden rush of vertigo overcomes him. Pernell takes a quick step back then wonders if that’s how he died, like a fool, falling off an Orison platform.

He sits on a nearby bench and closes his eyes. No recent memories surface. Eventually Pernell stands and walks across the platform knowing full well that things could be worse. At least he remembers the location of his hab.

Back at his Green Circle hab, Pernell opens a closet to change. For a second he’s shocked to see his favorite helmet missing. Of course he was wearing it when... He pauses again, hoping something will come back, but nothing does. Instead, he recalls how he quit tailing a target in the backstreets of Fujin City to buy the helmet from a pop-up stall. Something about it suited him and it had served well, keeping him safe. That is, until now. Only later did he discover it was an early and exceedingly rare CC’s Conversion helmet. One that is immensely valuable to him in many ways, and now potentially gone forever.

Pernell pops open his mobi and scrolls through his inventory. His heart sinks when he sees what’s missing. It must’ve been a big op if he took so much stuff. There’s enough of his gear still in storage, but he feels



so disconnected from this collection of odds and ends that it's like browsing through someone else's closet. He can't remember the last time he wore half this stuff. Shoving the dull ache of loss aside, Pernel grabs his backup undersuit and stuffs his right leg into it, praying it still fits.

Circling above the surface, it doesn't take long before Pernel spots the bunker's support structures. He slows the ship and adjusts course to keep his distance, unable to trust his memory enough to know whether or not the spot has turrets. It all looks vaguely familiar, and the more he circles the more he feels like he's been here. If he had to bet, this is where he died.

Pernel found this spot after checking his mobi for his recent job history. His last gig brought him to this bunker, which would explain why he took so much stuff. In the past, he would've assembled one, maybe two people for something like this, but Pernel started doing jobs like this alone since coming to Crusader. At first it was out of necessity, since he didn't trust anyone, but as his confidence grew and the credits rolled in thanks to getting to keep one hundred percent of the payout, he soon found himself scrolling his mobi specifically for similar gigs. Plus, if Pernel was being honest, he found the rush of facing down a hive of outlaws all on his lonesome to be incredible.

Now, contemplating landing back at the bunker where he died, Pernel wonders about the wisdom of not bringing back up. He's already at a disadvantage wearing his second-hand gear with some asshole in the bunker probably getting ready to shoot him with the carefully calibrated weapons they've undoubtedly looted from his body.

Slowing the ship's thrusters, he spots a turret and sets his sights on it. He primes a missile and pushes in. To his surprise, the turret doesn't care. He takes his finger off the trigger and buzzes the bunker. When that doesn't prompt a response from the turret either, he loops back and lands without incident; glad it didn't cost him any munitions to set down near the entrance.

He climbs out of the ship, quickly double checks his unfamiliar gear, and hustles toward the bunker. The outer doors are already breached and slightly open, showing a sliver of the elevator inside. He unholsters his pistol, a near pristine Arclight II, and enters cautiously. A few steps inside, a hail of bullets strike his ship. Pernel spins to see that the nearby turret is now very active. His ship's shields flare for a moment before they blink out, and he barely has time to avert his eyes as an explosion sends ship debris flying across the landing pad. Job done, the turret returns to rest. For a second Parnell feels woozy and steadies himself against the door. When it passes, he takes a second to contemplate his next step, activates his mobi, and sends out an emergency beacon. Then he collects himself and steps onto the elevator. Certain that it will take a while for a ride to arrive, and that he didn't come all this way not to get his helmet.

Once inside, Pernel gets deja vu. He knows a lot of the prefab bunkers around Crusader were built using the same modular design, but this one feels strangely familiar. He creeps in quick and quiet then peers around a corner to see a grenade coming his way. Instinctively, Pernel rolls forward and takes cover behind a stack of crates. The blast knocks a few atop him, which he quickly kicks away and starts firing. A figure falls and Pernel rolls through the swirling smoke to a new position. He holsters the pistol, unslings his P4-AR rifle, fires, and watches another figure fall. He pushes forward, drawing fire from another concealed position. Pernel weaves behind cover until he's flanking the remaining combatant. He swings his rifle up and focuses on a hazy shadow within the columns of smoke and squeezes the trigger until the figure falls.

Pernel takes a moment and lets everything settle. His ears are still ringing from the initial grenade blast, but the bunker is otherwise quiet. He gets up and crosses to the last figure he shot. His heart sinks when he sees what's left of the distinct shape of his helmet. Now bullet-ridden and modded to match the gang's colors. Something about seeing those colors makes memories flood Pernel's mind. He looks around the space and it all comes back. Including the fact that there were four of them last time. Pernel hears footsteps behind him, and before he can raise his rifle, everything goes black.

INTENSE DEFENSE

SAKURA SUN | CLARK DEFENSE SYSTEMS



Featuring piercing turquoise eyes and carefully crafted heavy armor plating, Sakura Sun's new Voidripper helmet delivers a unique look alongside supreme protection. To celebrate its release, Clark Defense Systems teamed with Sakura Sun to manufacture new colors of their classic Defiance line of heavy armor to match the helmet. Creating an eye-catching and ideal heavy armor loadout.