JUMP P★INT

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IN THIS ISSUE

GREETINGS, CITIZENS!

For the second month in a row, we're releasing a Work In Progress report on the same day that the ship is released. Last month it was the Banu Defender; this month it's the Aegis Eclipse. This is actually more of a challenge than you might imagine. Putting the article together, while not easy (we might go into why a WIP article is generally a significant undertaking in some future issue), is something I've learned how to tackle, after 50+ issues. But we don't release a WIP article *before* the ship itself is released, and there are lots of reasons why a ship release might be delayed at the last minute. And while I can put together a WIP article, it becomes a much tougher task if I have to start Thursday at noon to pull together a replacement article in time to make a Friday evening deadline.

Therefore, when we met to plan the last couple of month's contents, I can't say I was relaxed about pushing our luck, even when Ben assured me that the Defender and Eclipse would release as scheduled. What persuaded me to give it a shot was that we found a replacement topic that we could actually implement at the last minute. At this point (around midnight Thursday), I think we're good to go with the Eclipse. All systems are go for the ship release tomorrow, which means I expect all our faithful readers to be happily enjoying the Spectral Eclipse tomorrow evening.

Our Portfolio this month examines Ascension Astro, one of the chief contributors to the success of the Eclipse, while we travel to the Banu system of Gliese for another chapter in the Galactic Guide.

Meanwhile, we've known it was coming for a while, and it's finally arriving, gradually: Spectrum, the upgrade of our web chat and forums. This issue we're discussing Spectrum with the folks at Turbulent who have been putting it together. As with most things in the 'verse, this is not a trivial undertaking, and it's not all done yet. But already it's easier to communicate (with CIG staff and with other backers) and to follow threads, and Spectrum will continue to improve over the next several months.

As I type this, I haven't yet seen the first chapter in Adam Wieser's new story. All I have is a name: *Sid & Cyrus*. So I'll indulge in a little speculation. The natural assumption is that it's about a couple of Humans (given the odds, in an Empire filled with Humanity), but it could be about a boy and his dog. Or a Banu and her doggawag. (Do the Banu have "he" and "she"? More opportunity to speculate!) I'm guessing they have adventures (the 'verse being that kind of a place), but will they encounter pirates? priests? peddlars? ... perhaps a princess .... My vote is for a princess; we're long overdue in that category. Bottom line, though, is that I'll just have to read it like you do to discover who Sid and Cyrus are, and how it comes out.

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

David

David.Ladyman@cloudimperiumgames.com

2

FROM THE COCKPIT

Eclipse

AEGIS

Design Doc

AIMS

- The most advanced stealth bomber available

- Stealthier than the Hornet Ghost or Sabre. A bomber with a small, potent payload.

- Not a very competent dogfighter. Armed with weapons for self-defence, but relies on stealth. Not very agile.

AESTHETIC

The AEGIS bomber should combine elements of Aegis's rounded aesthetic, and the design elements of iconic stealth ships.

- A smooth shape running the width and length of the ship like an aerowing.

- Engines and intakes that are moulded to be unobtrusive from the body profile.

- Missiles, bombs, weapons stored internally on the ship so as to reduce its profile; flaps and bays open for their use.

APPROXIMATE STATISTICS

Length   **~22 Meters**

The ship has been discussed to be approximately the size of a Gladiator. For maximum compatibility it should be able to fit inside an Idris, so should be 25m wide max.

Mass   **17,000 Kg**

Being an advanced stealth ship, the size and shape of the ship is kept to a smooth, minimalist nature, which will also help keep its weight down a little.

Crew   **1**

This is a single seater bomber.

Engines   **2**

Twin engines, as they would produce less heat together than one larger engine. A central torpedo bay also would restrict the ability for it to have one engine.

Thrusters   **8 x Joint**

4 x top, 4 x bottom with two top and bottom on the front, and two top and bottom at the rear.

Power Plant   **1 Small**

The ship was suggested to run with small components, which should help to keep its signature down.

Weapon Hardpoints   **2 x Size 2 Weapons**

Ballistic Gatling weapons to be used for short, brutal engagements. However, the Eclipse is not a dogfighter and isn't armed for protracted engagements. Weapons should fit inside the wings and have flaps open during flight/use.

Missile Hardpoints   **3 x Size 9 Torpedoes**

Three size 9 torpedoes are stored inside the ship. A central hatch similar to the Retaliator's opens for them to be fired.

Shields   **2 x Small (front/back)**

The ship is lightly armoured, relying on its stealth capabilities for quick, precise strikes

Armour   **Small**

As above. However its armour should have enhanced scanning/detection reducing properties similar to the Hornet Ghost.

METRICS & TEMPLATES

Animation Templates

Seat template

- AEGIS Avenger-style dual flight stick setup

Enter/exit animation for the ship

- Ladder (side cockpit), Same as the Avenger Warlock

Enter/exit animation for the seat + ship

- Avenger Warlock entry/exit

Ship Components

Components that need to be accessible behind walls or floor panels, or have the interior built around them:

- Power Plant   1 Small (0.5m x 0.75m x 0.5m)
- Shield Generators   2 Small (0.25m x 0.75m x 0.25m)
- Avionics   1 Small (0.75m x 0.5m x 0.375m)
- Coolers   2 Small (0.5m x 0.75m x 0.5m)
- Gravity Generator   None
- Jump Drive   1 Small (0.5m x 0.75m x 0.5m)
- Life Support   1 Small (0.5m x 0.5m x 0.5m)
- Radar   1 Small (0.5m x 0.5m x 0.25m)

Components that don't need to be accessed but are somewhere on/inside the ship:

- Fuel Tank   1 Medium (1m x 2m x 1m)

Internal fixed weapons:

- Ballistic Weapons   S2 x 2 – 3 x 0.625 x 0.625
- Torpedo Bay   S9 x 1 (10m x 4m x 2.5m)
  Contains 3 torpedoes stored horizontally side-by-side
  Individual torpedo size 9m x 0.9m x 0.9m
  Same torpedo size as the Retaliator

Requirements - Cockpit

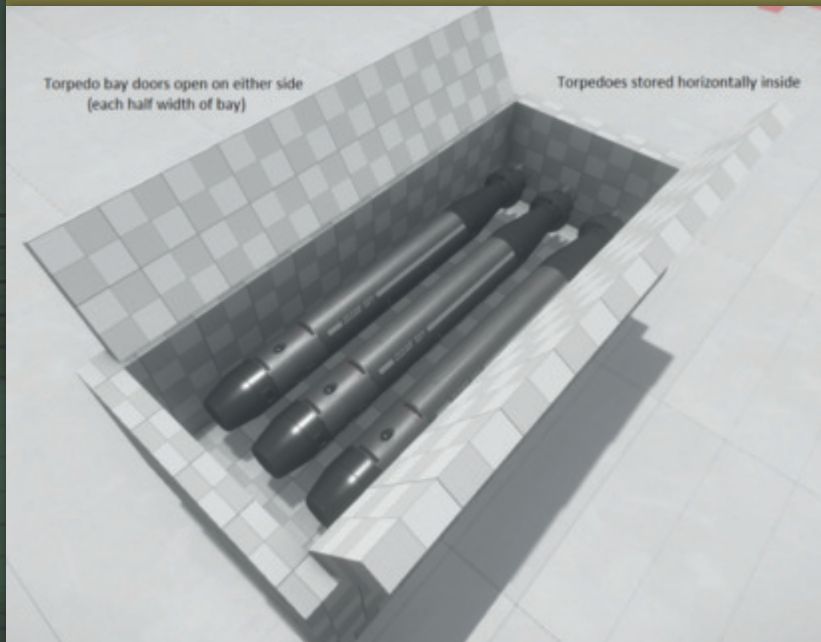Accessed via ladder on the nose of the ship like the Avenger Warlock.

Requirements - Wing Weapon Mounts

Weapons stored on interior of the wings; do not gimbal.

Flaps on wings should open during flight so weapon can be fired.

When closed they should blend in with the rest of the ship's wing profile.

Requirements - Torpedo Bay

Internal torpedo bay with room to store three Retaliator-type torpedoes

• Torpedo size individually 9.0m x 0.9m x 0.9m

Torpedo bay will be housed in the mid/rear of the ship, the underside will open, allowing them to be fired out.

Torpedoes will be housed side by side, allowing the ship to maintain a fairly sleek profile.

Bespoke mount for the hull of the Eclipse

Requirements - Ship Size

Most Stealth ships are considerably wider than they are long. The Eclipse will be able to have a wingspan only slightly longer than its length if it is to fit inside an Idris. 22m x 25m leaves it as long as a Gladiator, and slightly wider.

Torpedo bay doors open on either side
(each half width of bay)

Torpedoes stored horizontally inside

25m

Idris bay

Gavin Rothery, Contract Artist: I've blocked in three options for configurations for the Eclipse *[this page and next page]*. There's quite a few bits and pieces in here that we can hopefully use to hone in on a tighter pass. I've been focusing on overall shape reads rather than any sort of detail work and I went for a "stealth" material colour rather then the mostly white of the Avenger. Option 1 here is basically the Avenger crossed with a B2 Spirit Bomber.

Paul Jones, Art Director: Can you give me some more loose ideas? Here are things to think about:

- Folding wings – love them!
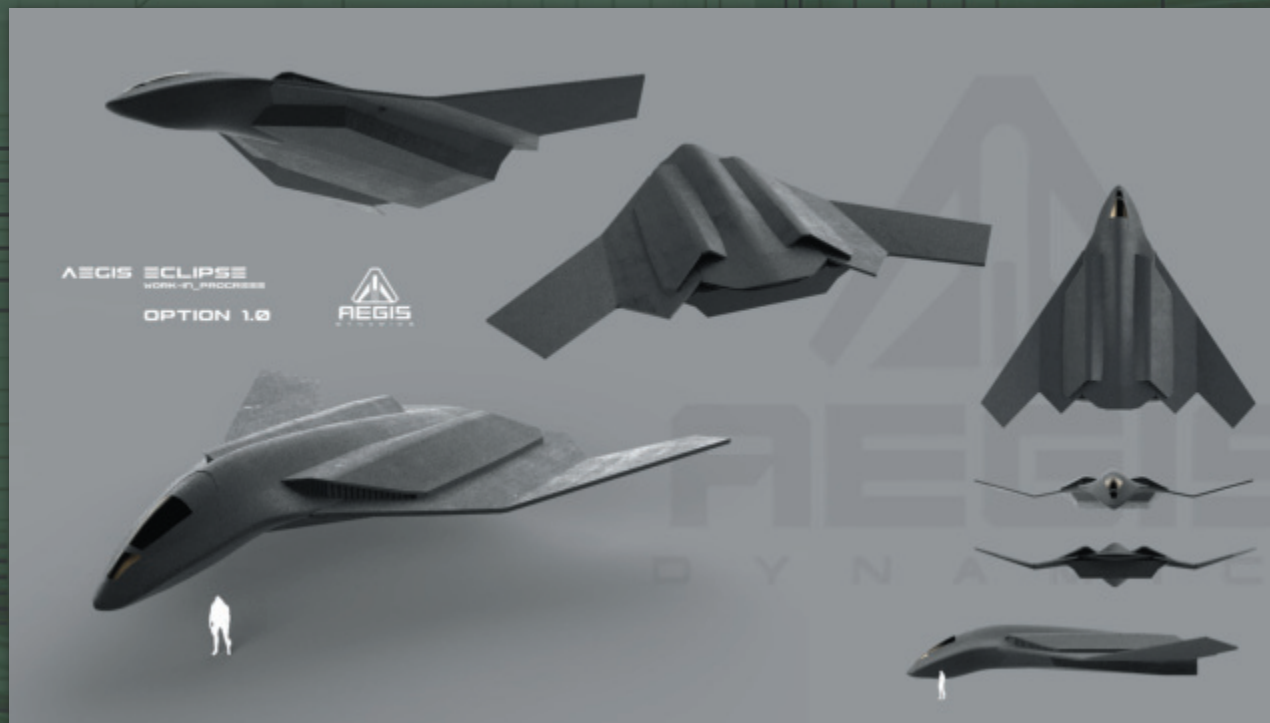
- Strong graphic design translated into shapes.

- We could leverage the tech spine taken from the Sabre and integrate that, except with a cover over it so only a slim line of high tech gubbins can be seen.

- A version with 4 engines, all flat and slimline and split by the wing profile, as in the intakes are half on top, half on the bottom of the wing.
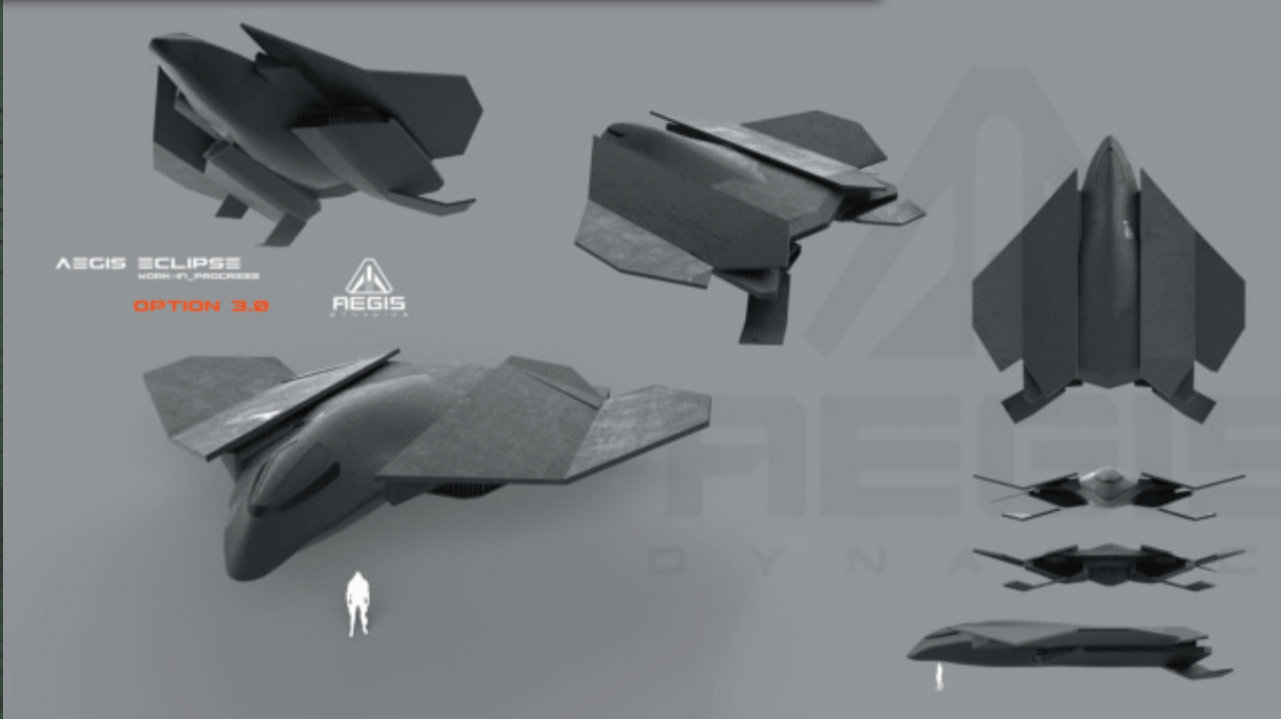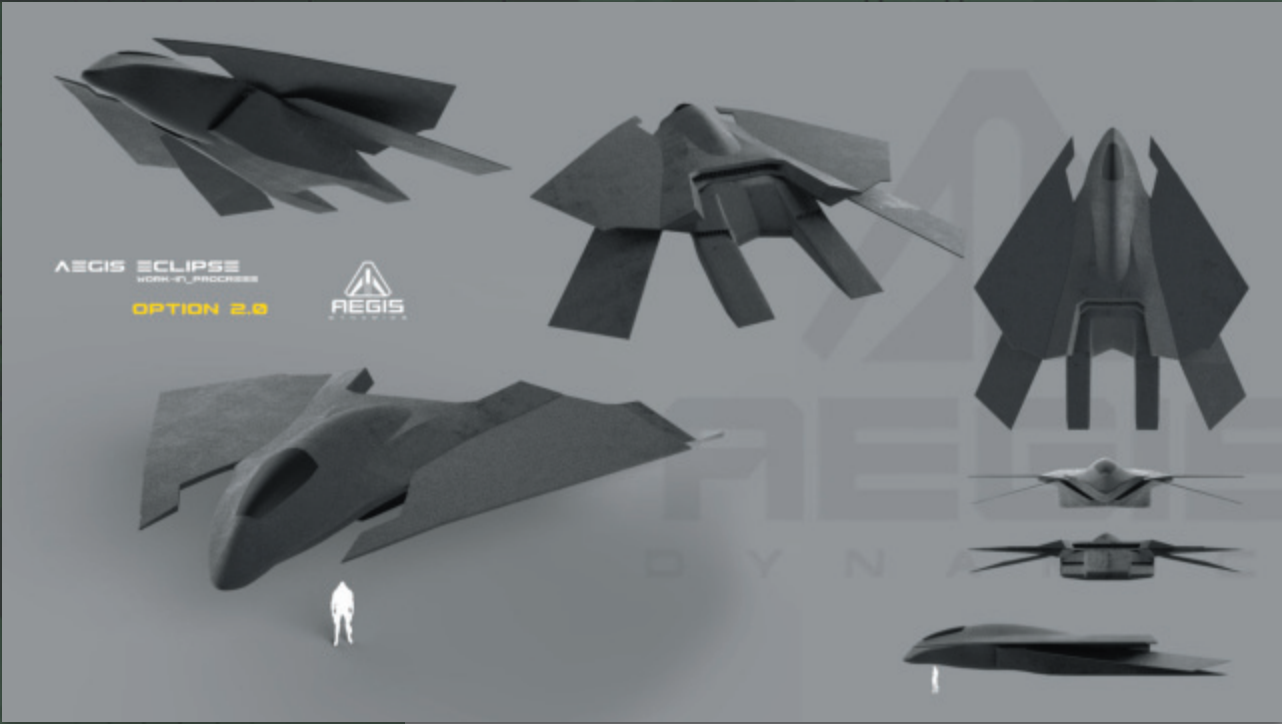
#1 Cool but quite traditional.

#2 Wasn't keen on this one, felt too bat-like.

#3 I like the front and rear profile, but I'm not sold on the slab wings over the top of the softer shape.
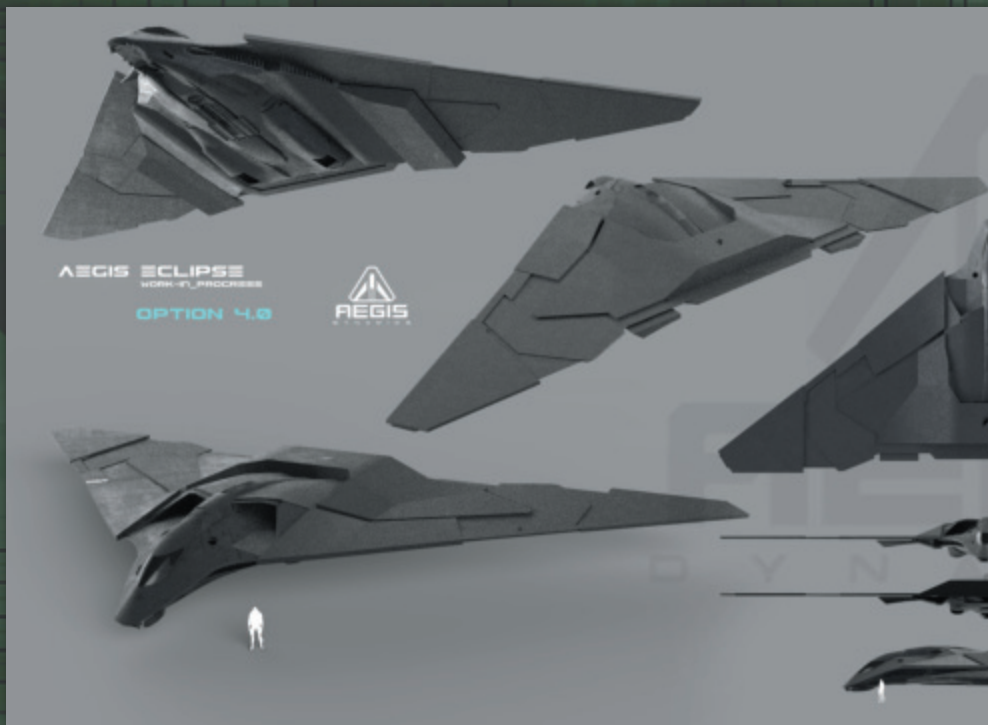
Hope this makes some sort of sense!

AEGIS ECLIPSE
WORK-IN_PROGRESS

OPTION 1.0

AEGIS

AEGIS ECLIPSE
WORK-IN_PROGRESS
OPTION 2.0
AEGIS

AEGIS ECLIPSE
WORK-IN_PROGRESS
OPTION 3.0
AEGIS

WORK IN PROGRESS

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 4.0
AEGIS

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 4.0
AEGIS

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 4.0
AEGIS

Gavin R: I've been working up a new version of the Eclipse. Files up for you to have a look over when you've got a minute. ;)

Paul J (initial internal review): Here's the first drop with Gav's initial rough ideas. (It always starts out pretty simple, so don't worry!)

This is the second drop after making some suggestions. I'll be pushing him for more rough ideas, with different shapes/combos.
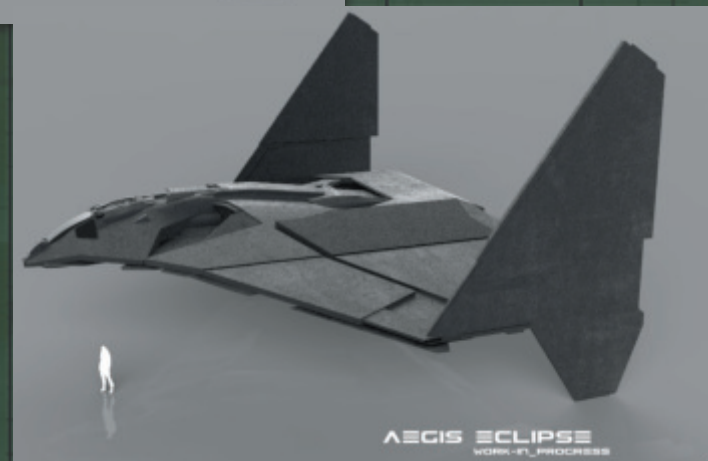
Once we have more things to look at, I will post for you.

Holler if you like anything or think we should stay away from certain things.

ECLIPSE
WORK-IN_PROGRESS
OPTION 5.0
AEGIS

AEGIS ECLIPSE
WORK-IN_PROGRESS
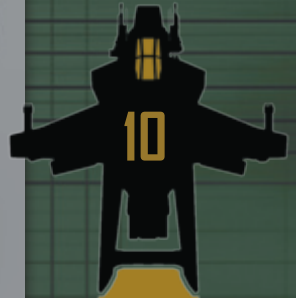OPTION 5.0
AEGIS

AEGIS ECLIPSE
WORK-IN_PROGRESS
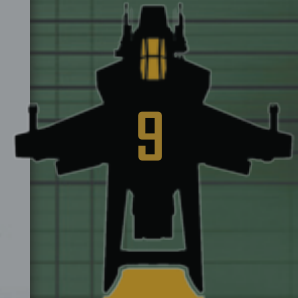
Gavin R: I've dropped some images into today's folder — there's a version 5 and 6 to check over. V5 *[this page]* has a new cockpit that's got some Saber and Gladius DNA in there. V6 *[next page]* has a more complex back end with more control surfaces and a tweaked silhouette. I like the way this one looks landed.

AEGIS ECLIPSE
WORK-IN_PROGRESS

OPTION 6.0

AEGIS

AEGIS ECLIPSE
WORK-IN_PROGRESS

OPTION 6.0

AEGIS ECLIPSE
WORK-IN_PROGRESS

10
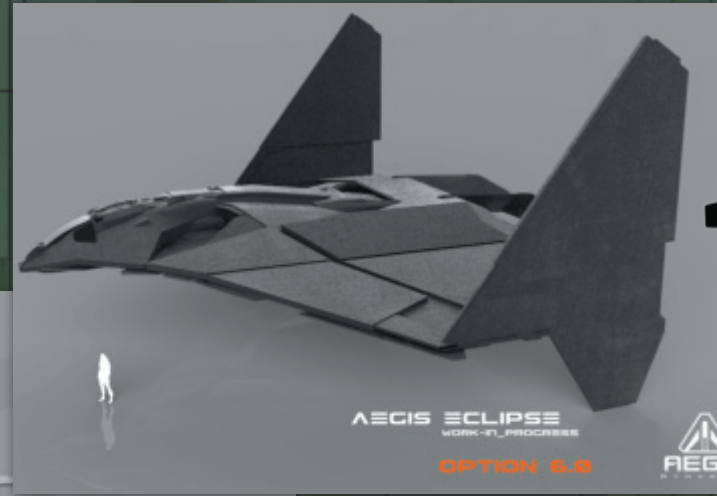
WORKINPROGRESS

Paul J: I spoke to Design and we can do this: can you give me a version with 4 engines? I think it could cut a really powerful look.

Paul J: Also, can you create a version that's a bit more moth-like (see top view)?

Paul J: And here's a 3rd one! It's rough. One thing that has been bothering me slightly is that the ship shape currently is quite traditional. What if we worked up an idea something like this? It could give something quite unique, with negative space between the body and the wing (a gap).

Let me know if it makes sense or not. lol

Gavin R: I've dropped three new versions of the Eclipse in today's folder. *[this page and next page]*

Paul J: Following up our Skype conversation, action points:

- Take option 8 and integrate some more of the Sabre influence (vents, tail).

- Provide landed image of option 7.

- Look at height of craft, as it seems too tall.

- PJ to post current options for CR review

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 7.0
AEGIS DYNAMICS

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 8.0
AEGIS DYNAMICS

Paul J (internal review): Aegis Eclipse stealth bomber. *Options 1–3* are 1st-pass rough shapes, using the Avenger cockpit animation template.

Option 4 with folding wings, like this one. Has softer cockpit lines from Avenger mixed with flatter shapes from Sabre.

Option 5 with flatter shapes and Sabre style cockpit (but adhering to Avenger entry/exit; height needs to be addressed). Wings also curve down. Also has 4 intakes for 2 engines.

Option 6 with rear spoiler/body work. 4 intakes, 2 engines.

Option 7. 4 intakes, 4 engines version (JC approved). Has a more interesting tail.

Option 8. Has an interesting body overhang; awaiting a version with some more Aegis Sabre style shapes integrated. 4 intakes, 2 engines.

Option 9 with Sabre parts. My least favorite.

Chris Roberts: I think I like Option 7 the most of all the options.

I think it needs to have the wings fold when it switches from atmosphere to space.

We could also see what it would be like with the Avenger-style cockpit, but I kind of like this one a bit better.
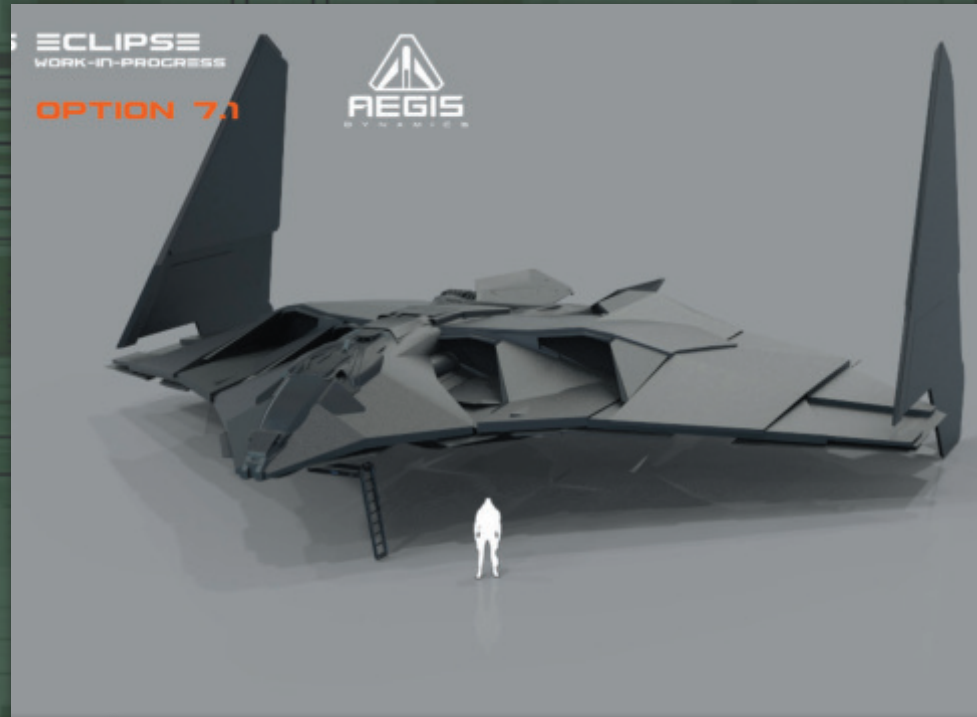
Gavin R: I've uploaded a bunch of renders. I've iterated on the previous version numbers for clarity, so the two versions we're looking at here are as follows:

v7.1. Version with four engines on the top wing. These images are the landed configuration, with the cockpit height adjusted to work correctly. *[this page]*

v9.1. This is a continuation of the work on the version with the raised and separated central fuselage. I've done a bunch of renders to show the model in a base "stealth" rough texture *[next page]*, and also a few renders in a rough colour scheme. *[third page]*

Paul J: Looking cool.

ECLIPSE
WORK-IN-PROGRESS
OPTION 7.1
AEGIS
DYNAMICS

AEGIS
DYNAMICS

ECLIPSE
IN-PROGRESS
TION 7.1
AEGIS
DYNAMICS

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 9.1
AEGIS DYNAMICS

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 9.1
AEGIS DYNAMICS

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 9.1
AEGIS DYNAMICS

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 9.1
AEGIS DYNAMICS

AEGIS ECLIPSE
OPTION 9.1

AEGIS ECLIPSE
WORK-IN-PROGRESS
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AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 9.1

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 9.1

AEGIS ECLIPSE
WORK-IN-PROGRESS
OPTION 9.1

AEGIS ECLIPSE
WORK-IN_PROGRESS
OPTION 9.2

AEGIS ECLIPSE
WORK-IN_PROGRESS
OPTION 9.2
LANDED

AEGIS ECLIPSE
WORK-IN_PROGRESS
OPTION 9.2
VARIABLE GEOMETRY

Gavin R: There are three configurations covered off here (flight, landed and adjusted wing configuration). *[this page and next two pages]*

Paul J: looks pretty darn cool that, Gav. I'll post for CR review. :)

Paul J (internal review): I think we are a good place now. The 4 engines plus variable geometry plus the vertical wing position for landing and some inspiration from the Sabre.

Chris R: Looks bad-ass!

I like the 9.2 development – looking very cool & sleek …

And Aegis was meant to be an almost-out-of-business ship manufacturer whose best days were behind them … until they hired Nathan Dearsley and Paul Jones as Chief Product Officers. :-)

Paul J: Go team! I'll pass on the info to Gav and keep him rolling.

Geoffrey Coffin, Technical Designer, F42: I think I preferred the look of the ship without those holes in the wings. It's nice to see the inner workings of the wings as the wings fold up, though.

That aside, it's looking good. :)

WORK IN PROGRESS

AEGIS ECLIPSE
WORK-IN_PROGRESS
OPTION 9.2
AEGIS

Nathan Dearsley, Vehicle Art Director: I'm slightly concerned as looking at the shots I can already extract what pretty much every mesh is from our other ships. Maybe that's what we are going for, but we run the risk of all these parts then simply crashing into each other and making zero coherent sense. I personally feel it looks more RSI than Aegis right now. It's extremely lumpy / noisy to me, with lots of unrefined geometry simply skewed and crashing into one another, which adds significant time to our schedule if we are to have scrappy meshes thrown our way. Will this be getting resolved?

I'm concerned, as from the distance the shots are taken it just about holds up. Any closer, you'll see construction problems and from a distance it's already quite noisy, especially the side profile.

Silhouettes are nice, though.

Are we using a Gladius entry/exit now, or something else?

Landing gear placement on thin profiles also needs considering (just a heads up). I can see what we're trying to achieve with the wings resting on the floor, but to achieve this you will need to start thinking about dampening and how to get it (moving geometry on parts that touch the ground of articulating the wing where it is attached to the main body, similar to how the Reclaimers' 'arms' are).

Paul J (to Nate): Valid points but no need to worry, Nate, this is just blocking out the forms and we'll solve the crashing geo. Now that we have a direction that CR is happy with we'll smooth it all out, etc.

It's still the Avenger entry/exit, but the geo is a Sabre hack job atm.

Landing gear – roger that.

This week, we'll look at the underside, bomb bay and landing gear, and the lumpy shapes.

Paul J (to Gav): Excellent news, CR loves it and is very happy with the design. :)

Next up:

Can you provide a sheet with just silhouette images and also the model in just flat grey, so I can really see what's going on?

Up to you the order you tackle these:

The overall shapes are visually noisy. I would look to push to cleaner surfaces to achieve the Aegis look. The side profile reads especially noisy (I expect you were going to do this, but it was highlighted so I'm mentioning it).

Landing Gear. Nate is concerned about how it lands [see his note, above]. I think we need about 25cm travel for the ship's suspension.

Bomb Bay. Would like to see the underside and the bomb bay.
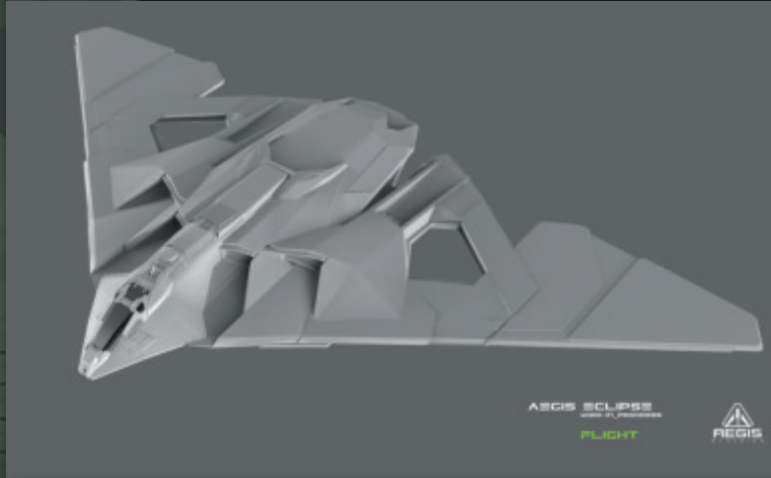
Initial Manoeuvring thruster placement.

AEGIS ECLIPSE
WORK-IP_PROGRESS

OPTION 9.2
VARIABLE GEOMETRY

AEGIS

AEGIS ECLIPSE
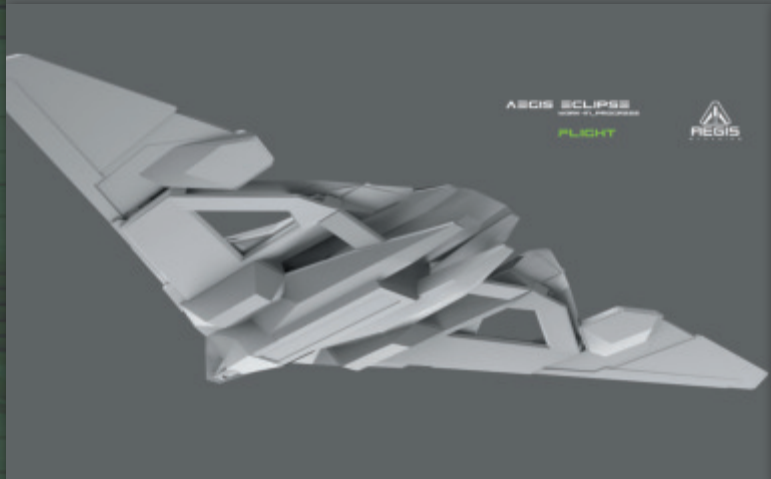WORK-IP_PROGRESS

OPTION 9.2
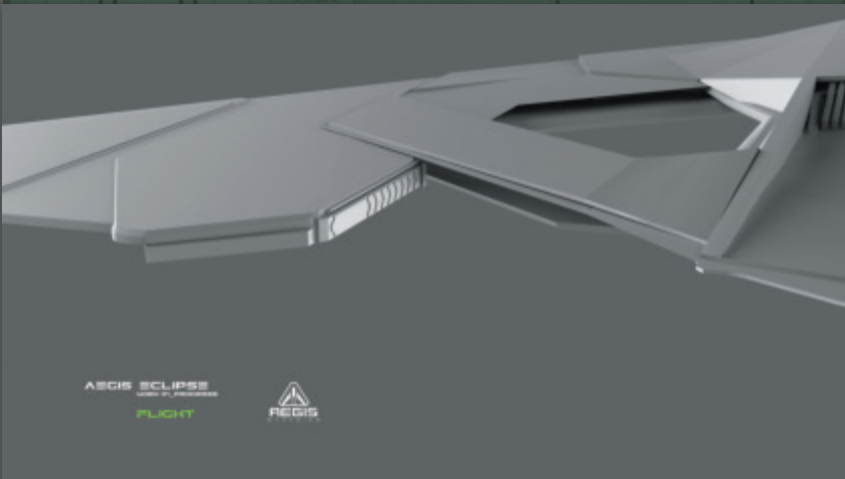
AEGIS

Bomb bay closed

Bomb bay open for launch

AEGIS ECLIPSE
WORK IN PROGRESS
FLIGHT
AEGIS

Gavin R: I've rebuilt the wings and underside and added the functionality of the landing gear, bomb bay and retractable guns.

Everything's tight and it's all working. The bomb bay has a rotating magazine holding the three big torpedoes inside, so it can keep its stealth configuration.
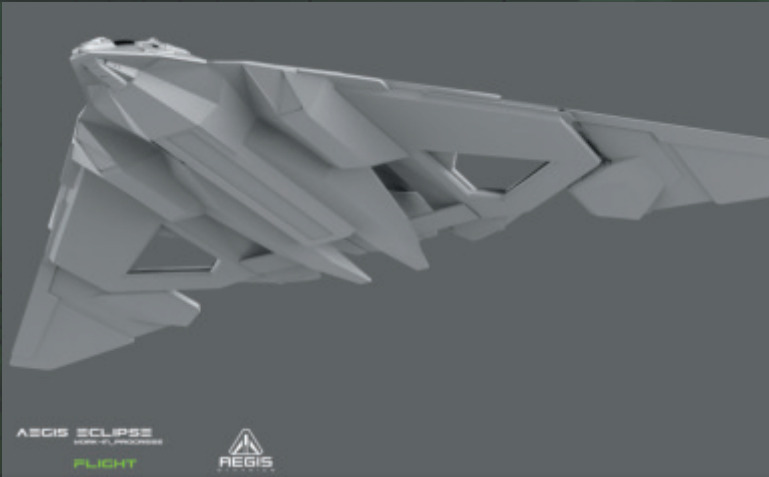

AEGIS ECLIPSE
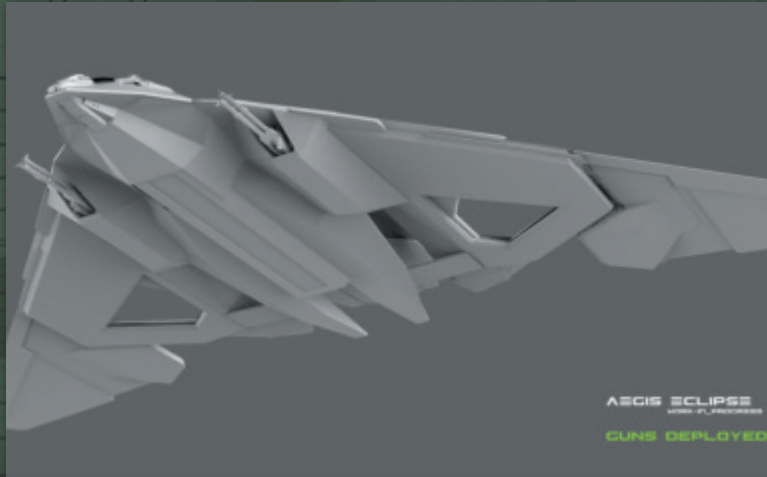WORK IN PROGRESS
FLIGHT
AEGIS

AEGIS ECLIPSE
WORK IN PROGRESS
FLIGHT
AEGIS

AEGIS ECLIPSE
FLIGHT

AEGIS ECLIPSE
GUNS DEPLOYED
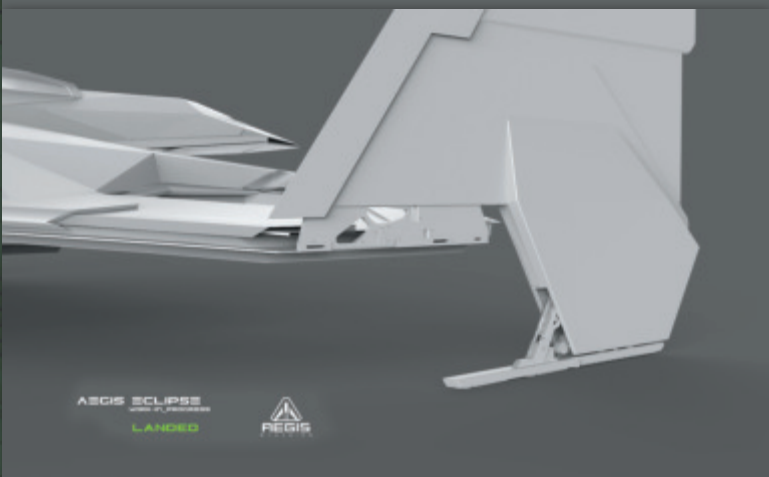
AEGIS ECLIPSE
LANDED

AEGIS ECLIPSE
LANDED

AEGIS ECLIPSE
LANDED

AEGIS ECLIPSE
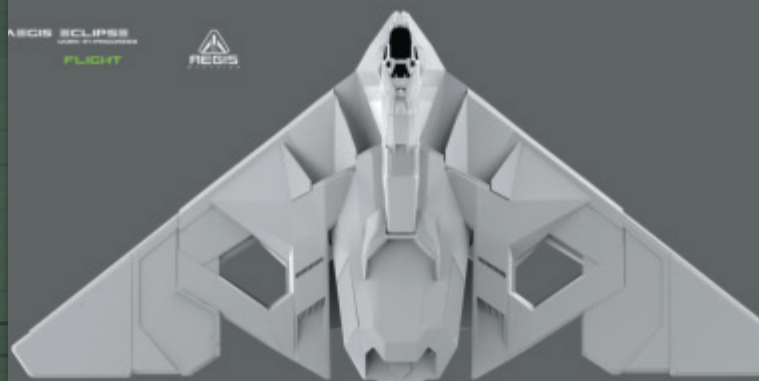LANDED

Gavin R: I've dropped some updated renders of the Eclipse into today's folder. It's still WIP of course, but I've had a tightening pass on the wings and mechanisms, expanded the landing gear and generally taken a pass over the whole ship exterior, tightening angles and aligning surfaces so it has an overall cleaner read. I think this is really starting to pay off, especially with the rear/side engines.

Still working up the engine intakes, underside and nose/top spine section. I've left a gap open at the back showing slightly exposed torpedoes – I think it kind of has a cool look to it, but I can completely enclose them if you prefer. The underside is much cleaner now – I'm thinking it would be easier to work detail in than work it out.

Pushing on with the rest of it now – let me know if I'm off base with anything!

Paul J: Ok cool stuff, but I'd say that the missiles should be enclosed (would be a weak point if not). The underside bomb bay still bothers me, it's just not as elegant as the top side but not sure yet what we need to do to alter it ...

AEGIS ECLIPSE
TORPEDO STORAGE

AEGIS ECLIPSE
FLIGHT

AEGIS ECLIPSE
FLIGHT

AEGIS ECLIPSE
FLIGHT

AEGIS ECLIPSE
LANDED
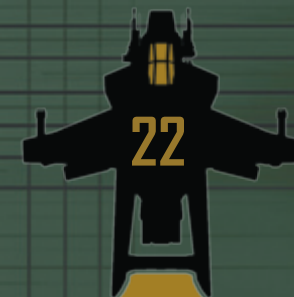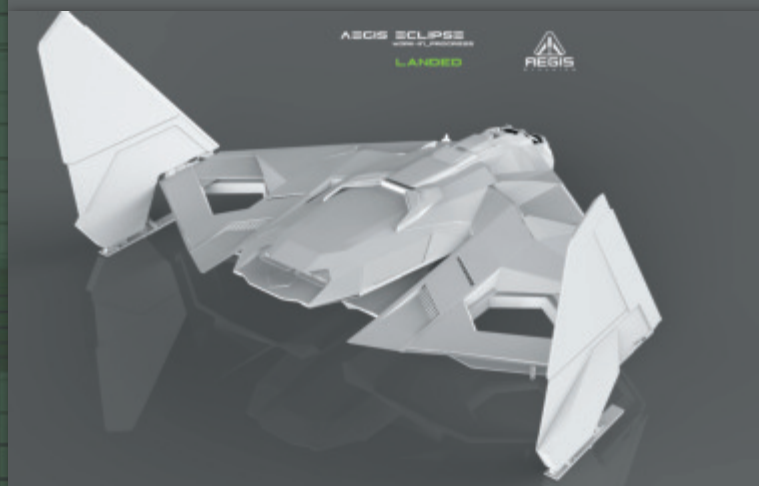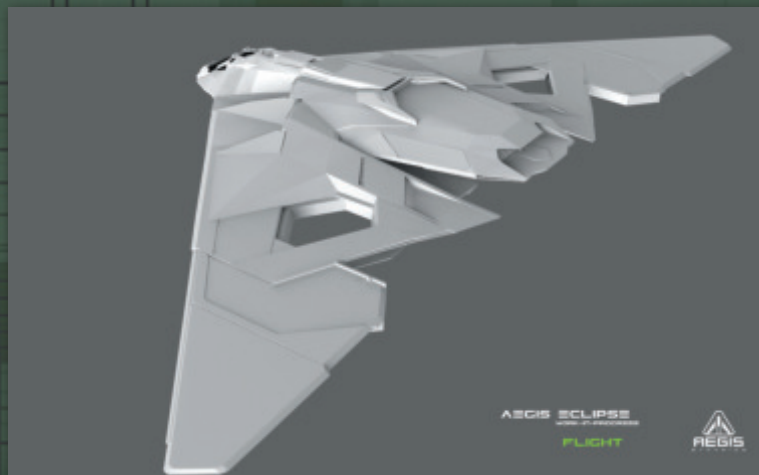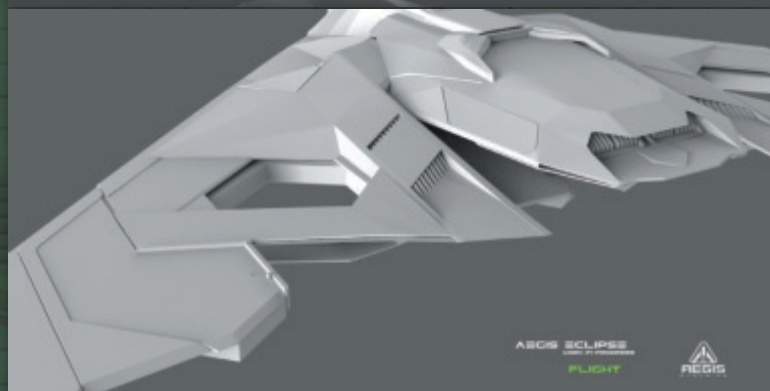
Gavin R: Eclipse update in today's folder for you. Still WIP of course and no thrusters in there yet. Also, more detailing to go underneath, but there's core shapes in there for us to chat about. ;)
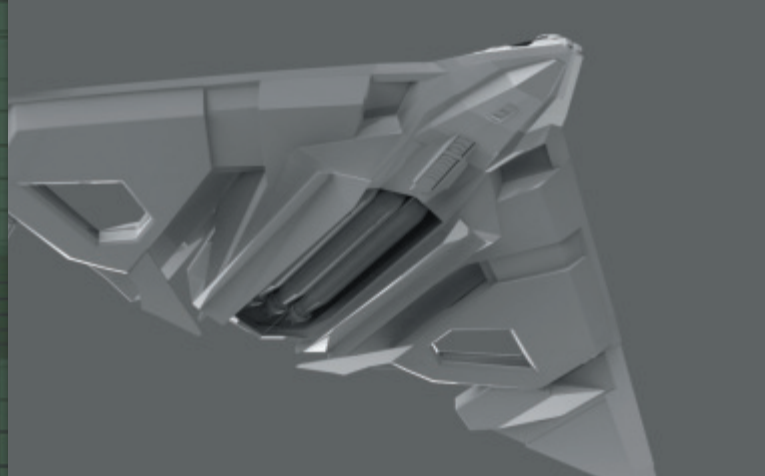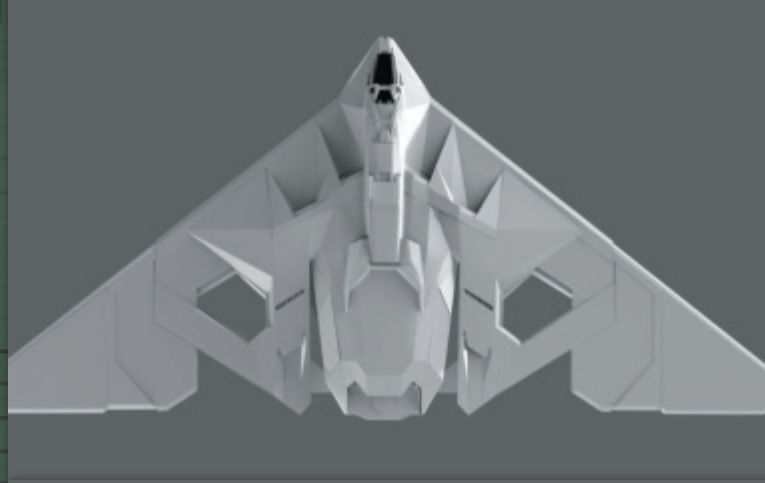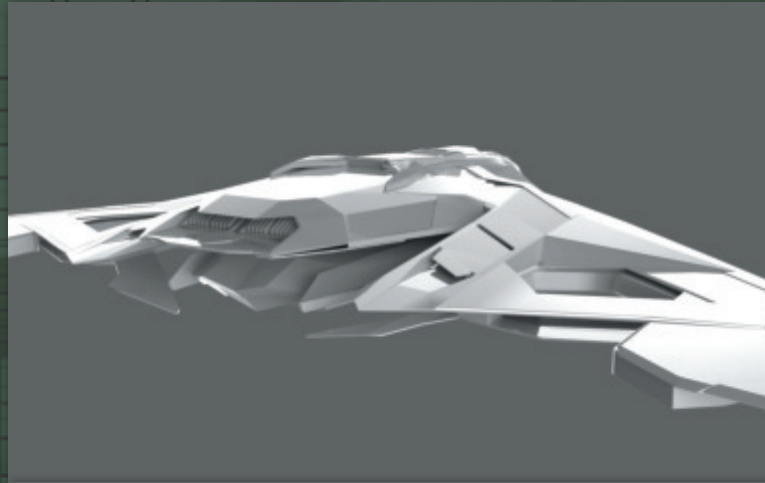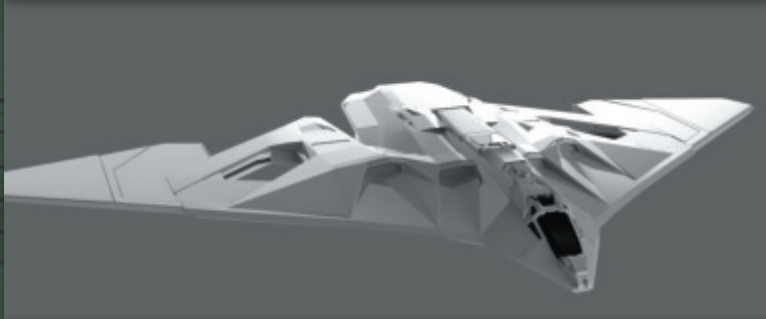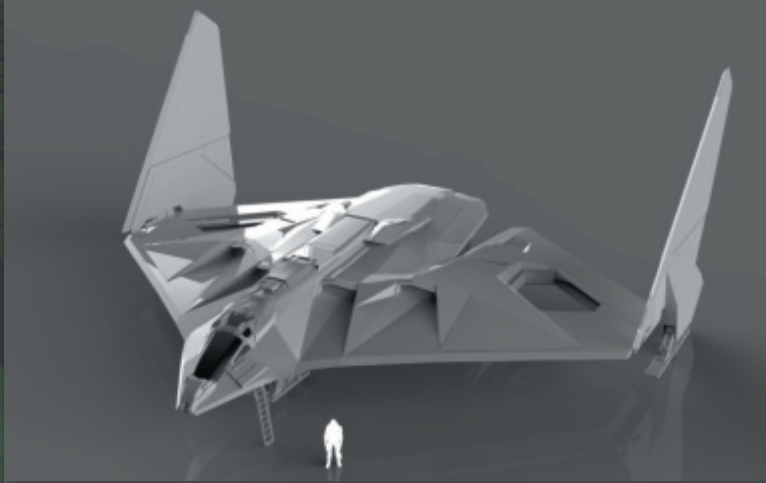
Gavin R: I've put the thrusters in and also done a couple of options for the gun mechanism.

I've been working my way over the mesh, tightening and refining all over the place and adding radius elements and bezels across the lines — surprised I haven't gone blind yet. Lots of picking and poking making the mesh tight enough for the operations to work whilst still trying to move fast and keep things flexible as much as I can. I haven't gotten onto the nose of the ship in any serious way yet, so that's coming up.

Paul J: Looking good, crack on — getting feedback on the door opening, keep it coming!

Guns configuration v1

Guns configuration v2
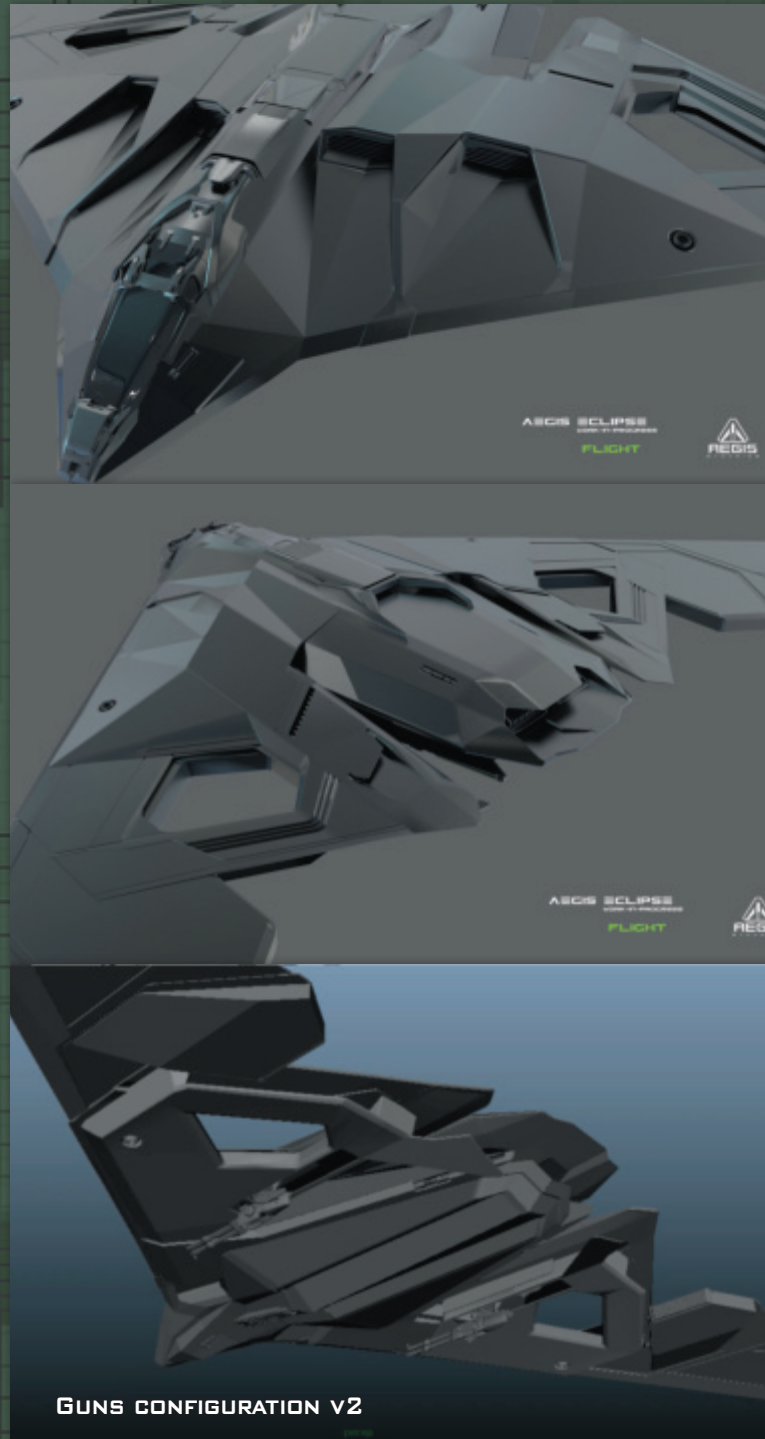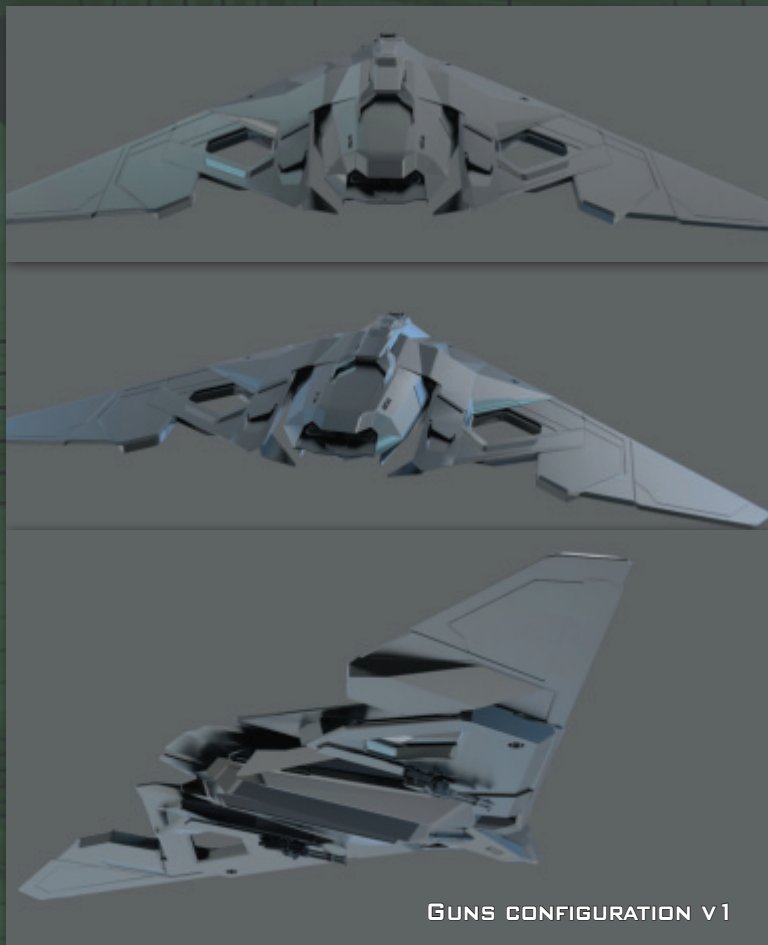
Gavin R: I've uploaded some new images for you to check out. Quite a bit of blocking and shape tweaks going on with the cockpit and upper fuselage. I just wanted to check in and see if you're into the core lines before I push into complicated cockpit stuff.

< Paul J: Hey Gav, looking cool, but prefer the simpler shape you had before for the back part; this gives the eye some rest.

This part of the underside bothers me. **>** If we add a shape that mirrors the top side, it might help … this is rough but you get the idea.

Gavin R: Cheers Paul, I'll roll it back a bit. ;)

Paul J: Not convinced my underside solution is the best, but see what you can do.

Gavin R: I've just put a new cockpit up, as well as a remodeled underside and topside, and also front landing gear blockout and a first shot at a cockpit opening mechanism. Apologies for some funky smoothing groups at the front of the cockpit area in the Keyshot renders – it looks way more smooth than it should as I haven't finished putting in all the little edge loops and bezels yet. The geometry will angle out like the rest of the ship once they're in.

Paul J: See if you can get me a version with the engines more obvious. Maybe it's not possible, just want to cover some ideas before posting. Maybe it's not stealthy enough, but I'm sure we could imply some sort of tech to help out.
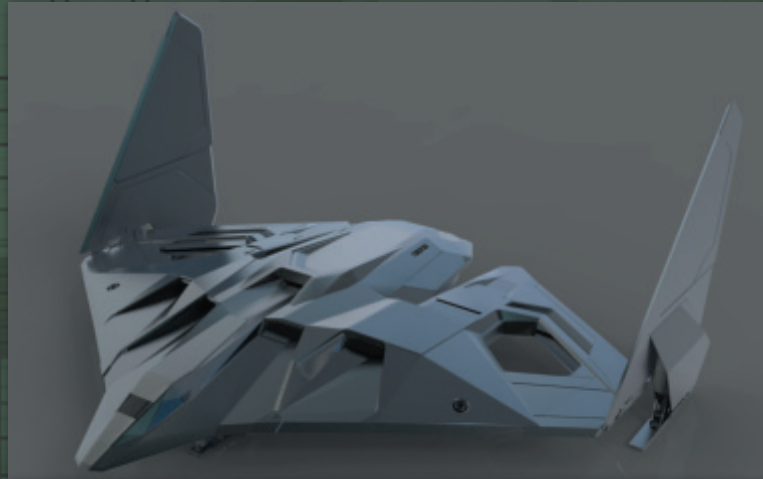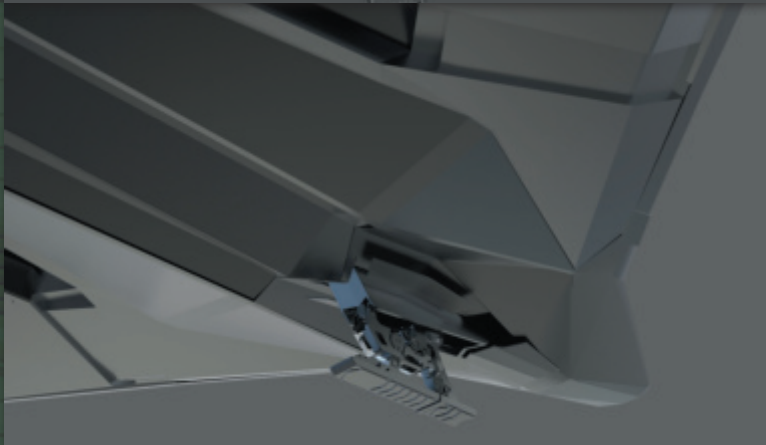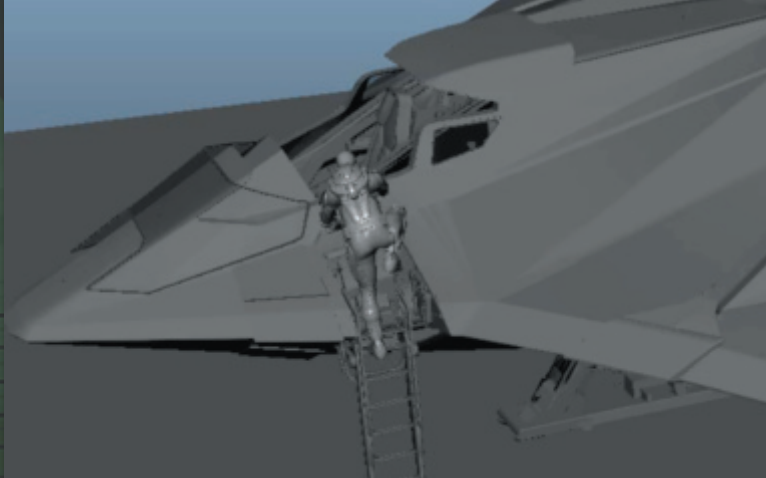
Gavin R: Thanks for sending that over – I just put some new renders and anims into the "Cockpit" folder in today's folder.

This was a good catch actually – I was using a mish-mash of bits from the Avenger and Saber and this was why the seating was looking a little low. When I checked it against the Avenger anim I had to tweak the profile of the cockpit and front-top edge a bit, so I thought I'd best get some Keyshot renders together as well so you could see how it's changed. There's a few rough smoothing groups in there that I need to clean up, but overall you can see where I'm coming from. The cockpit in there now is mostly Avenger with a more angular blocked-out front console. Happy that this came up now so it's all taken care of. ;)

Paul J: Looking good, can you get me a shot of the cockpit (standard angle – from the seat looking to instruments) and also tell me the height of the wings.

Finally, do you happen to have a shot with the components placed?
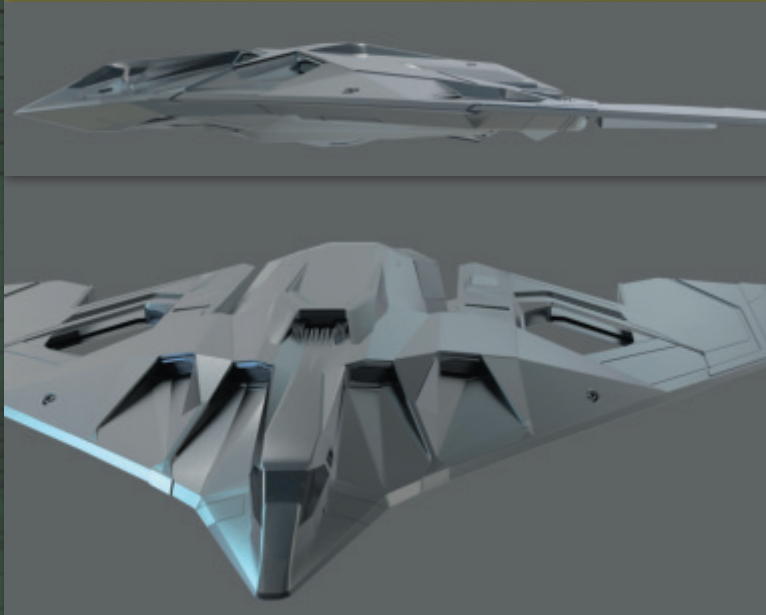
Gavin R: I've just dropped some updated images into today's folder. There are a couple of smoothing groups that are showing up funky in Keyshot, but generally they're feeling pretty close. Still some bits and pieces to tidy up with bevels, such as the air intakes, that I'll be finishing up next. The panel lines have been worked in and the cockpit's had another pass with an opening animation with some Gladius DNA in there. No animated ladder yet, but you can see where it's going.

Paul J: Looking good. Two points:

1. The Avenger cockpit enter/exit anim we supplied – does that work here and can you show a quick preview anim?

2. Can you provide a render of the cockpit interior?
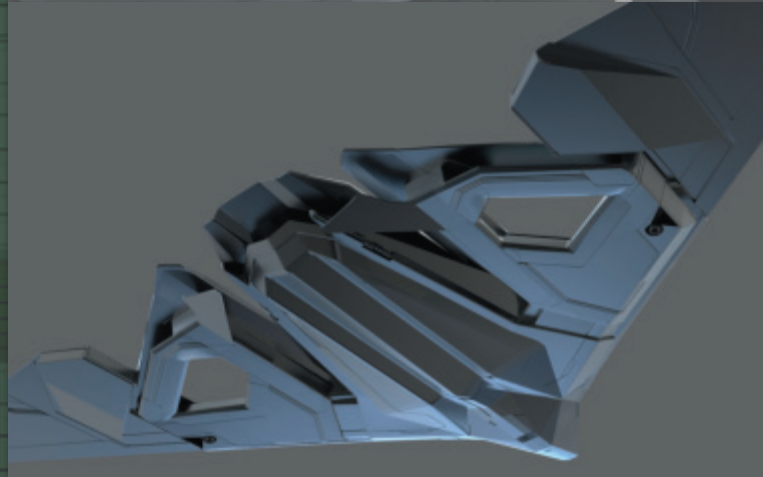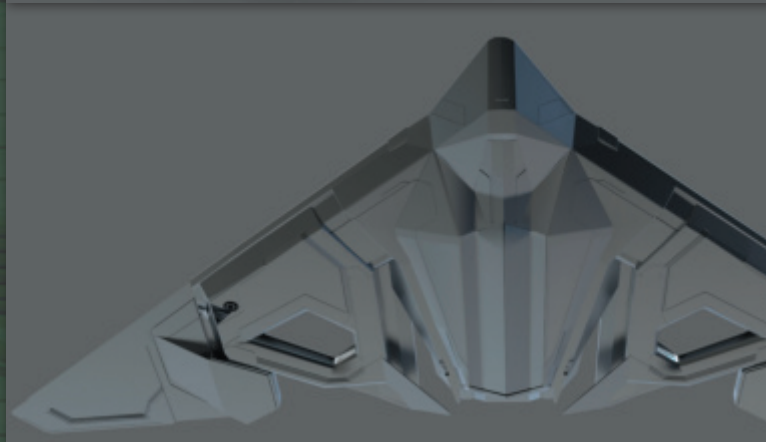
Gavin R: I've measured a few key parts of the wings in relation to ground clearance – let me know if there's anything more specific you need to know the dimensions of.

I've also done a pass over the views of the cockpit both external and internal so you can see the pilot's positioning and get a bit of a sense of what he sees. The current cockpit in there is the Avenger, so it will be getting a bit of a makeover, but the core parts will be in the same places, especially the seat, flight controls and dashboard/front console. The visibility is pretty great – it's almost the same as the Avenger as far as the console and cockpit sides go.

I haven't gotten into the component placing yet. I'll have this in a drop for you tomorrow morning. I'm looking to get the cockpit sorted and external geometry pretty much there for some time tomorrow morning.

Paul J: We had a review meeting for the ship with various leads, and there is one issue: the height when the wings are in the up position is too tall at 11m, preferred max height would be 8-9m.

We could do something like what's done to military ships, but it will affect the landing gear. Interested to hear your thoughts.
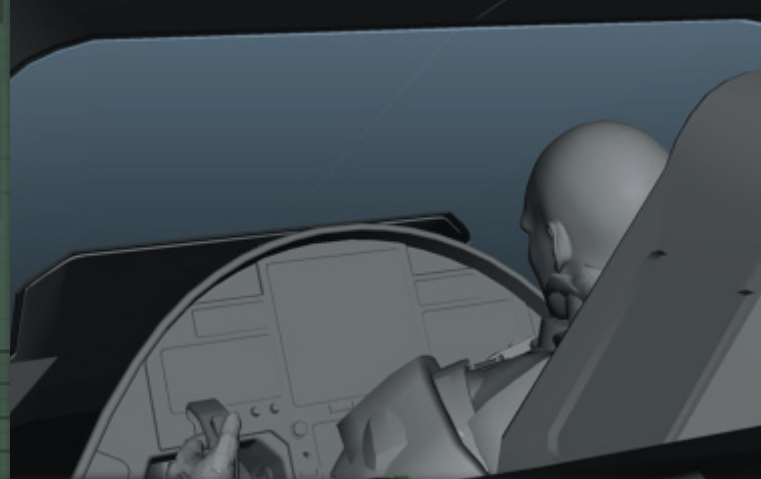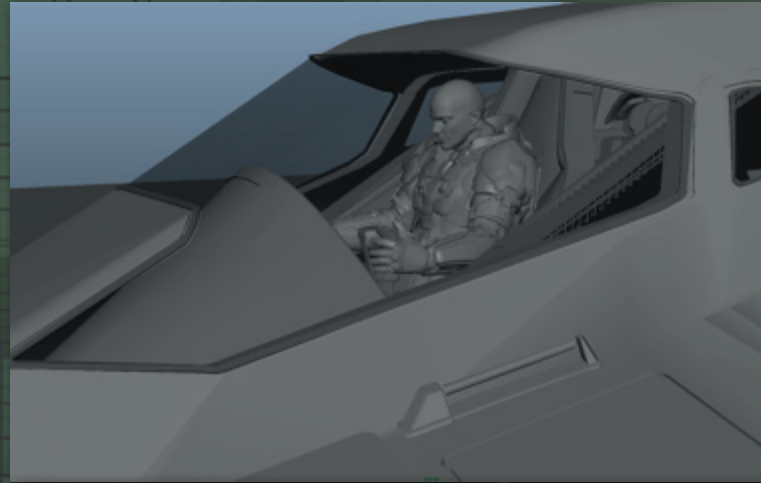
Gavin R: There's quite a bit of stuff today:

1. Cockpit is in (a mix of Avenger and Saber, with some new bits – not 100% finished and work still needed on the dash and center console).

2. Front nose section of ship has been rebuilt and the angles tweaked. I'm not completely into the profile of the nose atm – I think I need to give it a bit of attention to get the shapes cooler.

3. Tweaked ladder/climb areas with character in for reference and sense-checking.

4. Alternate wings folded in – two versions. The second version is rough, but I can make it work and put some tech in the gap so it's solid from an engineering perspective. I think I prefer the second (folded in) configuration – it just feels more tidy and "real world." Would it be a push to suggest two landing variants: the original we had (with tall wings) for places with a clear overhead, and this folded one for interiors? That would be pretty cool and perhaps not a massive animation job?

5. Components are in there now – hopefully the PSDs showing their location make sense. They are all accessed from the top side of the ship, except for the radar unit in the nose.

There's some other bits that have been tweaked and moved around, but those are the headlines.

WORKINPROGRESS

RADAR

AVIONICS

FUEL TANK (INTERNAL)

SHIELD GENERATORS

COOLERS

JUMP DRIVE

POWER

1

2

IS ECLIPSE
OPTION 9.2

AEGIS
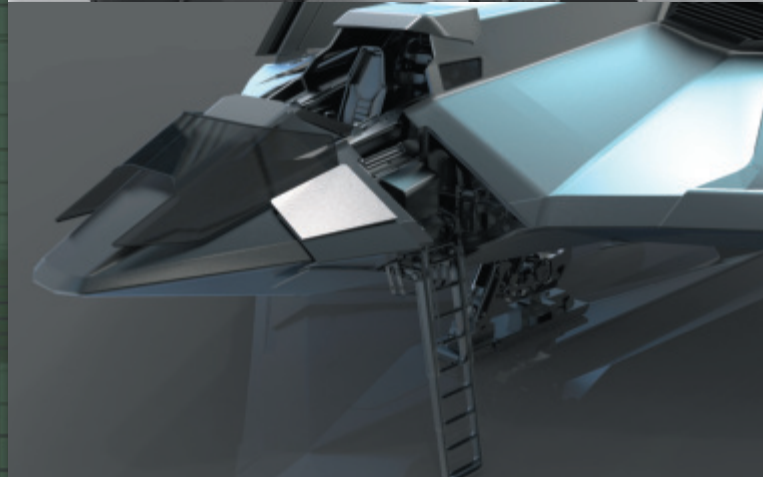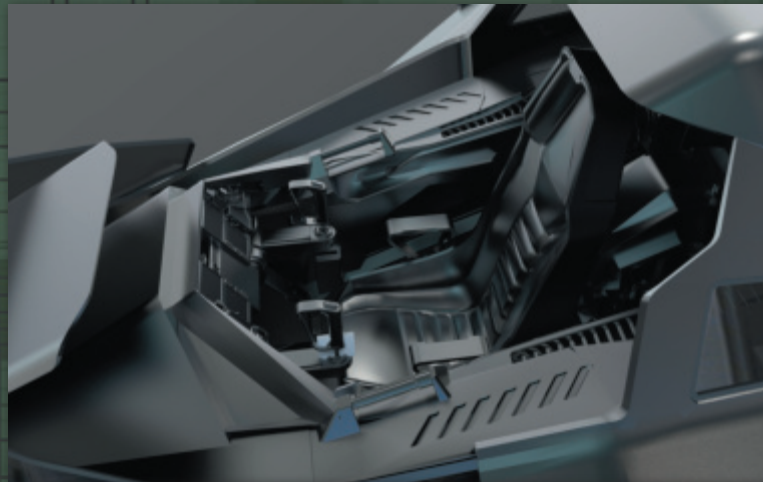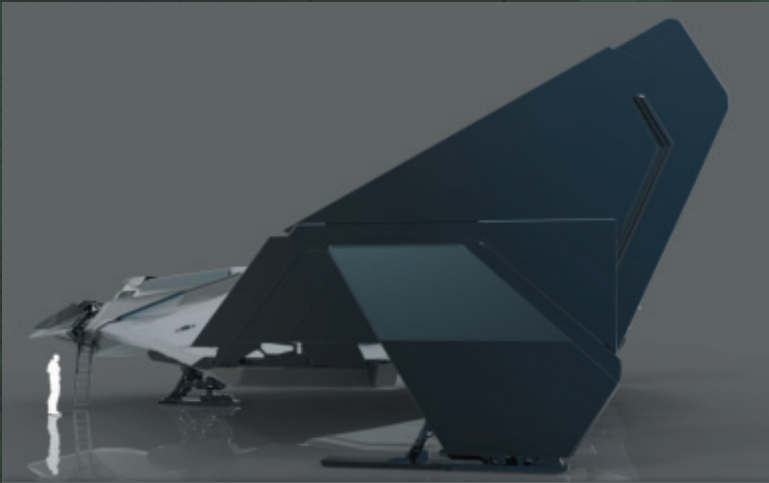
4
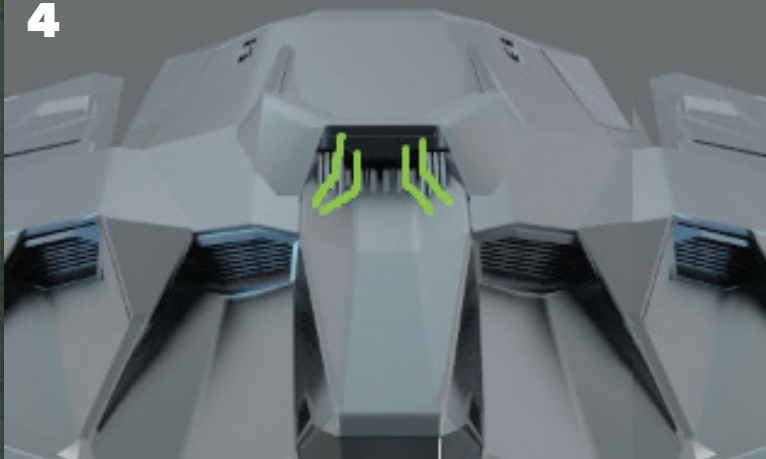
Paul J: Four things:

1. I think we have lost a lot of interest from this early read for the nose and bits sticking out; also our cockpit currently seems too clean — dare I say bland. :P

2. Folding wings – neither of the options is working for me, as we are losing the geometric impact. Could it be as simple as make the craft less wide, therefore less tall?

3. The craft still has two flight states, yes? Space and atmospheric? *[no image]*

4. Also the vent – I think we need some alteration to the angles, less is more and angled.

Gavin R: I'm going to roll the cockpit back a bit and get it looking cooler. You know how these designs go with minimal lines – it doesn't take much of an alteration to make it look quite different. So I'll get that sorted out and also bring the width in to fit the specs – it's going to need to lose 5 metres or so across the beam but it shouldn't look significantly different once it's all done.

Gavin R: I just wanted to run a rough wing shape past you before you head off for the weekend. I've got things in bits over here, but I thought it was worth blocking out an alternate pass at wing shape to see if you're into it.

This configuration gives us 8.75m of vertical height from the floor to the tip of the wing. I thought it might be a good way to go shape-wise, as it brings the shape language a little more in line with the Sabre. Is this a direction you're happy with? Also, would you like me to take material cues from the Sabre for the next pass?

Paul J: Looks good. Colours, go stealth black with bits of red.

Gavin R: Will do. Are you thinking mostly matte finishes like the traditional stealth materials, with fancier looking accents?

Paul J: Yep, kinda like the Retaliator, Sabre.

Big red intakes. :D
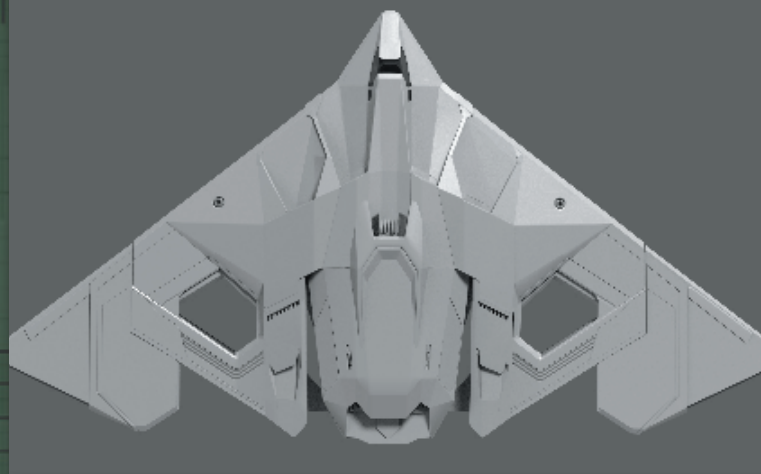
Gavin R: There's a whole new cockpit now. Pushing forwards with materials next. ;)
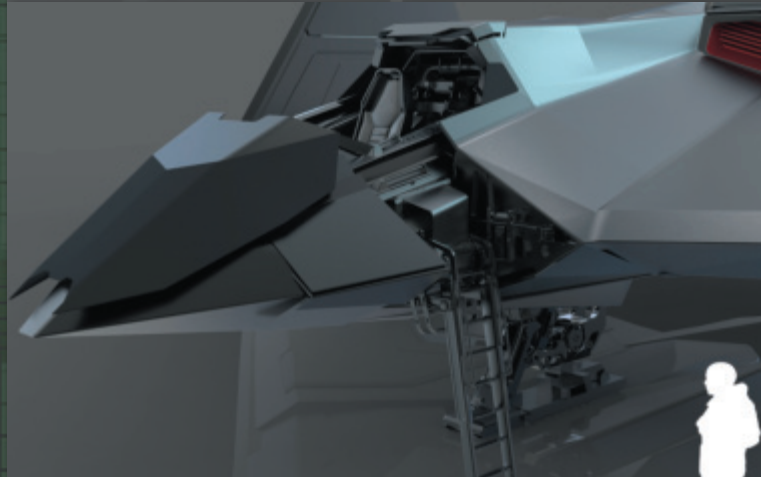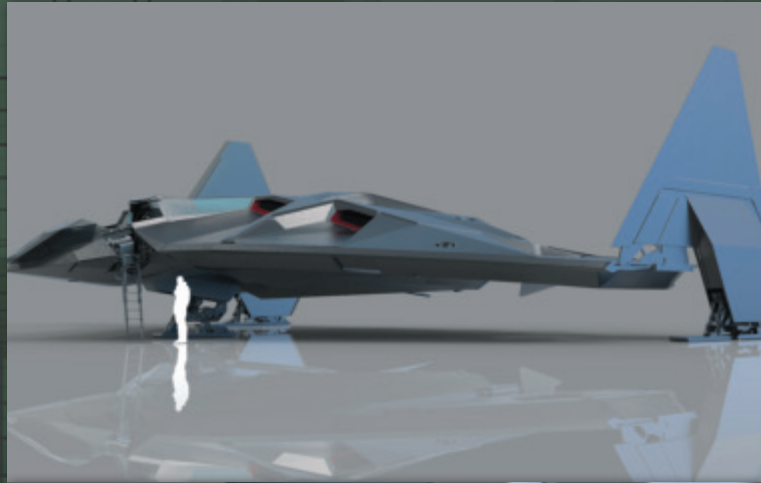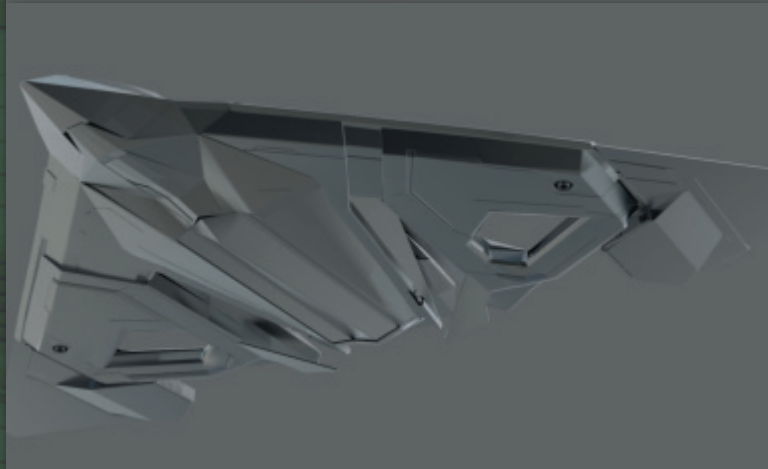
Paul J: Ok, quick follow-up from our discussion, basically need to lock down the cockpit and the exterior, then move to materials/decals.

1. Add scifi extras that somehow have been distilled out.

2. Add in further exterior cockpit detail.

3. Add special material surface to exhaust surfaces.

4. Pull the current vent out like this to make more of a statement.

5. Black vents, red surround.

6. Same.

7. Maybe we have lost these a bit but they were strong graphically initially.

35

WORK IN PROGRESS

Paul J: *[cont.]*

8.   Don't forget lights, spotlights, nav lights.

9.   Good ref for line work, details.

10. Underside details.

11. Jet colour.

That about covers it. :D

Gavin R: Appreciate the roundup. ;) Cracking on now.

Paul J: Can you get me an OBJ or FBX export of the ship – need it landed, cockpit open and cockpit closed, or if you have anims then we can get it from that.

This is for our animated spy shot. :D

Gavin R: These renders show current progress. I'd like to put a bit more spot detail and panel work in the 3D before I get into the 2D panel lines, just to lift it a bit. It really feels better with these last tweaks incorporated into the model.

Paul J: Gav, the current version you have is not reading as stealth bomber to me. Let's try an alternative and remove the red, changing it to a muted copper. The red accent I think will have to come from markings like on other Aegis ships (Vanguard, Retaliator). I think the red was cool, but it's just not stealth, it's screaming look at me and is racy. I liked it originally but we are really trying to sell stealth so I don't think we should hang on to it.

Maybe your roughness needs altering or setting it to plastic. That gives a softer render than metal or paint; pulling the refraction index down a bit also softens it.

I'd like to get the layout of colours signed off and then get an image to final so we know what it looks like. :D

Gavin R: I just uploaded some new files to show you where I'm currently at with the Eclipse. There's a revised model with more surface detail and reworked textures to read more "Stealth." There's no decal work in there yet, so still plenty of detail that can be added in. ;)

Paul J: Just looking at some of the doodads and panels, it feels like we are killing the core shapes a bit. I've asked one of my guys to do a pass on it; should have something the end of today to work from.

Also your material, it's still reading as metal. :(
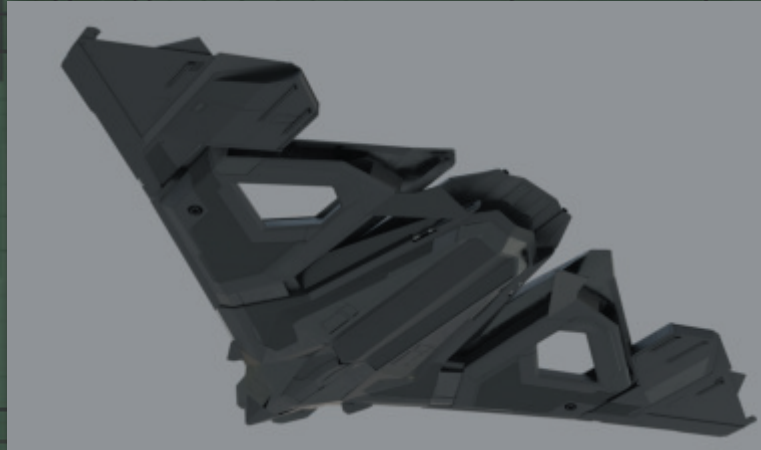
Paul J: Gav, I've upload a paintover *[below]* that will help to get this on track and not spin wheels. :D

Gavin R: Morning, Paul! Just a quick note to let you know that I've uploaded the concept pieces to today's folder. Let me know if we're all good!

Paul J (internal review): Aegis Eclipse Renders. Gav stuck my name on there as a joke, but we can change it to anything. :D

Chris R: That's one beautiful ship!

ASCENSIONASTRO

"Only available on Earth and Terra. That's the type of exclusivity we want," claimed Candace Cowley in a controversial 2903 interview with the *Terra Gazette*. Cowley, who goes by CC, was the public face of Ascension Astro, a boutique component manufacturer that found its start catering to the ultra-wealthy. During the interview, CC proclaimed that the company preferred to sell their stealth components solely to an elite clientele, who could then safely travel throughout the Empire without fear of being targeted by outlaws or other 'ruffians.' She also bragged about how their two storefront locations, one in New York and the other in Prime, were invitation-only establishments with a waiting list months long. To some, CC embodied the glamorous and outrageous lifestyle they wanted to live; to others she epitomized everything wrong with the UEE. Few knew that CC — herself synonymous with Ascension Astro — was but one of the three founders who catapulted the company from obscurity to one of the UEE's most exclusive in just a few years.

Something from Nothing

Ascension Astro was founded in 2901 by CC, Kaitlyn Barwick and Tim Kraft. CC and Barwick had grown up together. Barwick's father owned a small repair shop in Shanghai and found four-year-old CC abandoned at a local transit stop. Similar in age but drastically different in personalities, the two still became fast friends. As adults, Barwick married Kraft and took over her father's repair shop, while CC got a job as a customer service rep at an Origin Jumpworks dealership. Thanks to her persistence, charm and fervent philosophy of only targeting rich customers, she quickly amassed a lengthy roster of high-class clientele.

Then the Origin dealership fired CC for referring clients to Barwick and Kraft's struggling repair shop. CC argued that her intentions were nothing but honorable and within the best interests of Origin's clients, as the services

she was recommending were not available at the dealership. Notorious tinkerers, Barwick and Kraft had devised a way to dramatically reduce the IR and EM signature of the engines that came standard in Origin ships. With these high-end ships often being targeted by outlaws and (even worse) paparazzi, reducing their signature was an invaluable aid in being able to cruise about unmolested. Barwick and Kraft's intricate process was effective, yet the price point for the time-consuming procedure put what was essentially a custom-built engine out of range for all but the wealthiest customers.

Following CC's dismissal, Origin attempted to retroengineer the work done by Barwick and Kraft, but couldn't quite crack their complicated process. When CC heard what her former employers were up to, she took a drastic step and filed a lawsuit against them. Although the courts eventually tossed out the case, the episode became a publicity nightmare for the company, so they attempted to backpedal and offered to hire the duo as consultants. Barwick asked if CC could get her old job back, but Origin refused. Loyal to their longtime friend, Barwick and Kraft turned down the offer. In the midst of all of this, CC had a realization. If Origin was interested in Barwick and Kraft's work, then it must be valuable.

Backdoor Pitch

Even though CC built relationships with many wealthy people while at Origin, she knew approaching them out of the blue with a business proposal would probably fail. Instead, she contacted her former clients to notify them of what she described as her already immensely successful venture. The "ultra exclusive" mobile modification and repair service would send Barwick and Kraft directly to a client's hangar to perform the complicated work on their ship's engine. Since the process only worked on certain engines, CC had to deftly confirm the person still flew a ship with the appropriate engine in it.

CC initially offered drastic discounts to entice these wealthy clients into hiring them; even the rich – especially the rich – love a bargain. Of course this scheme lost money, as the parts and labor involved far exceeded the price tag, but once in the door, CC worked her magic. She painted the picture of a business so busy she was forced to turn down new clients every day, then adroitly transitioned the discussion to how what they were doing was small potatoes compared to what it could be if only they had the capital to make their own stealth engines.

CC's masterful backdoor pitch worked. Several clients became intrigued and invested in the operation. Ascension Astro incorporated in 2901 and a small number of their stealth engines, designed by Barwick and Kraft, rolled off a Moscow production line later that year. Some investors were irate over how few engines were produced, and to make matters worse, CC gave away a few of those scarce engines to a select group of new contacts while spending significant company credits to build a fancy showroom hidden down a dingy alley in New York City. The location had no official Ascension Astro sign, only a comm channel to be used to set up appointments. For the first three months, anyone who contacted them was instructed to check back later since they had no available appointments.

But the stealth marketing campaign was a success. The few who were gifted engines happened to be the most braggadocious people CC knew. Other elites, not used to being denied what they wanted when they wanted it, flooded the comm channel with appointment requests. When Ascension Astro actually sold a few engines, they did so at exorbitantly high prices, and sold out immediately. As the next run was manufactured, the company again claimed that they had no available appointments and refused to take preorders. When the second run was ready, the engines were sold at an even higher price.

Going Nova

Of course, CC's shrewd marketing ploy could only work more than once if the product was good. Fortunately, Barwick and Kraft were as skilled in their way as CC was in hers; the engines were as outstanding as CC claimed them to be. The couple avoided any high-level discussions about the company, preferring to spend time perfecting their engine design and tinkering with ways to repeat their successful signature reduction technique on other components, and leaving targeted sales techniques and networking opportunities in CC's hands.

Meanwhile, CC continued to hone Ascension Astro's public image. She refused to do any traditional advertising, arguing that it would tarnish their reputation by making them like any other brand. Instead, she enticed (and perhaps bribed) gossip columnists to report on her partying at trendy establishments with their elite clientele. CC did what she needed to ensure "Ascension Astro" made the column's copy.

Privately, Barwick and Kraft worried about CC's increasing obsession with her new lifestyle, but couldn't argue with the results. Their stealth engines were named by multiple publications as "The Must-Have Ship Component of 2903." That same year Ascension Astro opened a second storefront in Terra, just as low-profile as their New York showroom, and CC gave that now infamous interview to the *Terra Gazette*. CC had suddenly become a celebrity CEO; beloved by some and loathed by others … until the following year, when she vanished from the public eye.

Expansion & Maturation

At first some assumed CC's disappearing act was another clever marketing ploy. Then a few publications began to ask what had happened to her when her absence became months long. Meanwhile, industry insiders realized that Ascension Astro had begun to adopt more traditional practices. They opened more locations and eliminated the need to schedule an appointment to visit the store. They also significantly expanded their production capacity, and ran actual advertisements for their engines. Their initial marketing campaign was shockingly bland, though it winked at the reputation CC had established. It featured a generically wealthy family comfortably enjoying a journey aboard their 890 Jump under the company's still-used tag line "Enjoy the Journey."

Whenever questioned about CC, Ascension Astro representatives simply asserted that she was still involved with the company. Most industry experts assumed that she had been ousted from power. That misconception was cleared up in 2908 when CC returned to the public eye to promote her memoir, *Something from Nothing*. Although the book chronicled her search to find the parents that abandoned her at that Shanghai hub, she also went into great detail about her part in the rise of Ascension Astro, and how a growing dependence on drugs and alcohol, combined with crippling bouts of depression, ultimately forced her to reduce her role in the company. She praised Barwick and Kraft for their stewardship of Ascension Astro, and after revealing that she had failed to locate her birth parents, declared that they were the only family she needed.

Today, CC maintains a position on the company masthead, but spends much of her time overseeing charities she's established to help orphans across the UEE. In the absence of her unconventional marketing and sales methods, Barwick and Kraft transitioned to a more traditional business model and expanded the company's suite of stealth components. They now encourage the purchase of a complete complement of upgrades to ensure better security while flying, driving home the point to their wealthy target audience that a stealth engine can only do so much to conceal a ship's signature if other systems are running hot. Ascension Astro continues to thrive under their steady hands.

[L-R] Victor Bonnet-Millé, Kaitlyn Lovatt, Phil Rajchot, Benoit Beauséjour, Roger Cyr, Edern Talhouet (Christian Savard not available)

Spectrum:
The Turbulent Team

This month we sat down with our partners at Turbulent in Montreal to discuss Spectrum – what it is so far, and what is still to come. It's definitely an upgrade, but it's also definitely a work in progress. As you can read below, they have lots of plans for the future of communications (of all sorts) in and around the 'verse.

JP: *To help with introductions, what is your job title and (if it isn't clear from the title) what do you do for Turbulent?*

Roger Cyr: Fullstack developer (I do both back-end and front-end programming)

Victor Bonnet-Millé: I'm a QA Intern at Turbulent, working mostly on Spectrum.

Christian Savard: Fullstack dev.

Edern Talhouet: Art Director. I'm working on the web design / UI design of several projects here at Turbulent, including Spectrum (and the Starmap last year).

Phil Rajchgot: I'm a front-end developer, but also doing a bit a of back-end here and there lately.

Benoit Beausejour: CTO. Oversee the design, engineering and deployment of Spectrum.

Kaitlyn Lovatt: Producer/Project Management , working on multiple CIG projects.

JP: *And what is Spectrum? (Assume I an totally ignorant, which is not always far from the truth.)*

Edern T: Spectrum is a communication tool for *Star Citizen* players, including chat lobbies and forums.

Benoit B: Spectrum is meant to be the communication platform for *Star Citizen*, allowing for all sorts of communication methods (rich chat, forums, voice) within the universe, but also outside the game world via mobile and web. It effectively is a bridge between the game world with the real world.

FIRST DESIGN ITERATION
MARCH 2016

JP: *What is rich chat?*

Benoit B: It's a chat that includes embedded media links (automatically fetching remote images, for example) as well as reactions, emojis, autocompletion of people's names and mention notification.

Victor B-M: Spectrum is a way for the players to closely follow the development of *Star Citizen*, interact with the CIG dev team, and manage their organisation's forums and chat lobbies.

JP: *Does it include the in-game and out-of-game sales pages? Am I using Spectrum when I pledge for a new ship?*

Victor B-M: No, as Edern said, it's mostly a communication tool, so no sales pages — but sales announcements, Q&A threads, and Ask a Dev forums are included.

Phil R: Its purpose is distinct from a lot of the functionality of the main site, like the store, but any discussions related to anything happening on the site will certainly be in Spectrum.

Kaitlyn L: If you were about to pledge for a new ship, you might use Spectrum to ask questions to the Devs about the ship, or discuss it in general with other community members.

JP: *How about the in-game articles and other lore? Is that now part of Spectrum? Sounds like that isn't part of it, either. (But those articles do have commenting enabled.)*

Benoit B: No, lore and posts and sale page are not related to Spectrum.

Kaitlyn L: The articles are not a part of Spectrum, but they could easily spark a forum thread in Spectrum.

Victor B-M: Or be discussed with the Loremakers on the Ask a Dev section of Spectrum.

Benoit B: Spectrum is more about player-to-player communications, not only CIG-to-players. :) It's all about enabling ways for players to interact with each other and with other orgs.

JP: *At this point, I think I could make decent guesses for the answers to my next question, but let's go ahead and make it definite. How have each of you been involved in developing Spectrum?*

Victor B-M: I just arrived in early March, but so far I've helped the dev team with bug hunting, I gather the feedback about Spectrum every day, and I repeat it during our meetings

Roger C: I currently do front-end development on it, focusing on improving the overall user experience.

Edern T: I worked on the design part, defining the overall design style of the app and the layout of the interface (with our UX designers). Basically, my job is to make sure Spectrum feel great. :)

Christian S: I've mostly focused on the editor and rendering of messages, in both the forum and the lobby.

JP: *What do you mean by "rendering of messages"?*

Christian S: Dealing with how to handle mentions, emojis, and inline styling.

Home Page
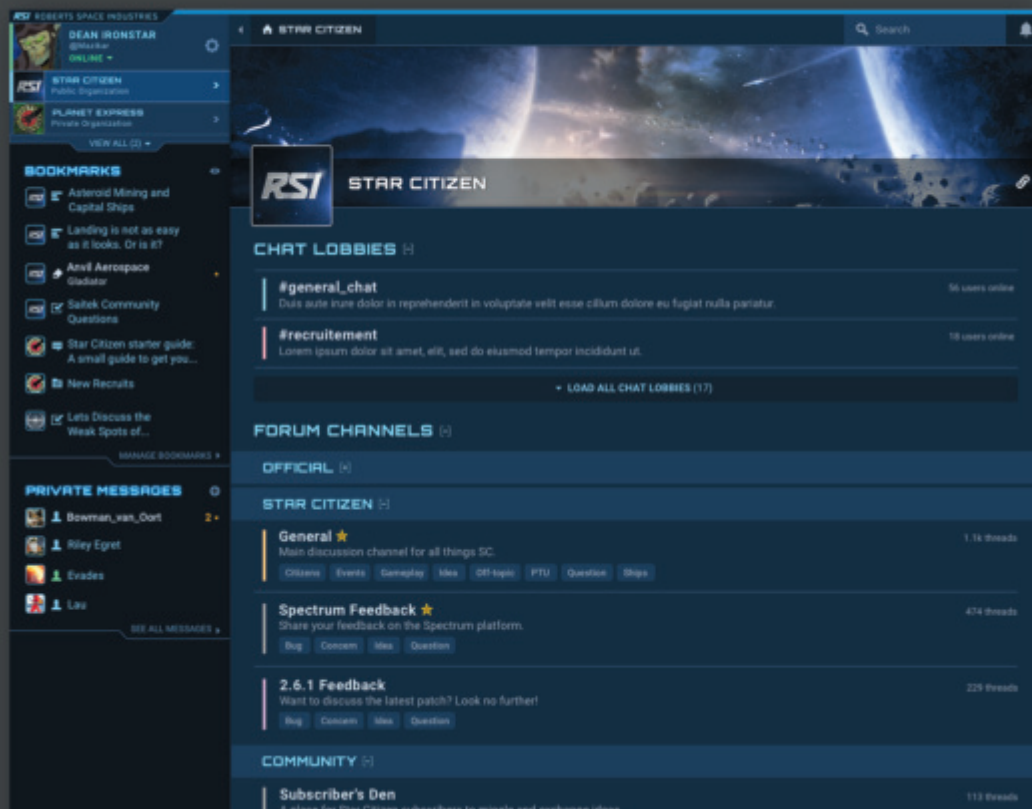
Phil R: I started around September working on the dark and light themes, and integrated a good chunk of the designs into the actual site. I got involved more deeply in the development of various features as time went on. I've had my hand in a bit of everything.

JP: *What are dark and light themes?*

Phil R: Dark and light themes are what you see when you flick that little switch in the settings dropdown. They're color schemes.

Benoit B: I've been involved in the UI/concept/design, but also the software engineering design. I was directly involved in the Search systems, real-time connected back-ends and the overall application code infrastructure.

Kaitlyn L: Benoit has done an excellent job of leading the team, and my typical project manager role is not necessary as the team is really self-sufficient. Most of my involvement with Spectrum is bridging communication with CIG as the project develops. The team develops features quickly and in an organic way.

JP: *Obviously, there was a forum system already for* Star Citizen. *Why did we want a new one? How does this improve what we already had?*

Benoit B: The previous forum system could not be easily extended to provide forums for orgs. One of the main design challenges (and system challenge) we have to tackle with Spectrum is that each feature we build for the *Star Citizen* public community we also make available for player organizations. This means that Spectrum is also powering real-time chat and forums for every organization.

In order to also have a solid integration with the game, we needed to build systems with which the game could interact. This was not simple or desirable with the previous forum engine.

SPECTRUM
DARK THEME

SPECTRUM
LIGHT THEME

Edern T: We designed Spectrum with the full picture in mind. From the design point of view, Spectrum is more future-proof than the old forums and chats, with a more modern and responsive interface for mobiles and tablets.

JP: *Benoit, what do you mean by a system with which the game could interact? Do you mean the game itself might post a forum note, or send a chat message to a player who isn't currently logged on?*

Benoit B: Yes. Spectrum will power all in-game chat lobbies, both those that are within the universe but also those that are outside the universe. This allows you to communicate with friends who are not playing currently on their mobile. Having this as a design goal meant that we needed to be able to control multiple aspects of the UX but also aspects of the data that the messages are built with, so we can display them in-game.

Phil R: The feature set still has a little way to go, but overall the new system we've built allows for a more dynamic experience, like real-time updates and chat. Also avocados and eggplants.

JP: *I'll bite – avocados? Eggplants?*

Kaitlyn L: It's an emoji used by the community.

Phil R: When Spectrum launched there was a never-ending deluge of eggplant emojis in general chat. It was pretty nuts.

Kaitlyn L: Avocados relate to the "evocati," our pool of community members who test the game (and Spectrum), and the eggplants … kinda became the Spectrum emoji.

JP: *Does Cloud Imperium have access to all the chat lobbies and chat threads, even the organization ones and the ones outside the universe? Do I need to be careful about what I say?*

Kaitlyn L: CIG has access to all the general chat lobbies and chat threads. Just like in the previous forums their are moderators who check for misuse (vulgar language, hate talk). CIG really uses Spectrum as a means to connect with the community and listen. Since the community is participating in the development of the game, it's important their voice is heard.

Phil R: Staff/mods don't have access to join and read private organizations' chat lobbies or forums. There is a content flagging system currently in place for forums (that we might add to chat as well), but it's really intended for severely abusive content. As long as nothing is flagged, mods won't see anything.

Victor B-M: Org forums and chats are moderated by the org leaders, not by the CIG mod team.

JP: *So the private threads stay private unless someone flags a blatant misuse, and even then, it's generally the org that deals with problems, not CIG?*

Phil R: As of right now any flagged content will be visible to CIG staff, but we're still considering different aspects of how that process works. It might be that once we add a moderation queue to empower private org mods/staff to handle it themselves, that we no longer need to have as much oversight. Ideally we'll eventually have a separate report type to escalate it so that CIG is aware, and the remaining report types will just go into the org's mod queue.

JP: *It seems like the in-game/out-of-game functionality won't be fully realized until we have a persistent universe that is persistently running – correct? Or is it in use already?*

Victor B-M: Correct. Spectrum is not yet implemented in-game. (The current plan is to have it in one of the next few updates.)

JP: *What else can I do that I couldn't do before with Spectrum? Or what can I do better, now that it's up and running?*

Phil R: The integration with the game will definitely evolve as the game itself evolves. Right now it's mostly limited to in-game presence visibility, but once we have a game overlay with voice comms built in and we see a few more game development iterations, things should start to get really interesting.

Benoit B: Part of the strategy we took with Spectrum was to get it into the hands of players very early in the process so we could iterate with player feedback along the way. Since February, players have had access and now use Spectrum day-to-day for normal communications even though these do not yet bridge to the game.

Victor B-M: Now you can chat with your orgmates in your own chat lobbies and have access to your own org forums. The old forums were public forums; now we have public and private forums (so now every org can have its forum without learning PHP or setting up a forum online).

Spectrum is easy to configure and will be integrated in-game, with voice comms. So it's a big plus for all the organisations that had to configure a PHP forum, have a Discord or Teamspeak, and have a Website. Spectrum is all these things at once.

Edern T: Spectrum is an all-in-one tool, where players had to use multiples services before.

JP: *I have the impression from what we've said so far that the two primary aspects/goals have been crossing the in-game/out-of-game communication barrier and duplicating all the functionality for organizations. Is that somewhat accurate, or are there other primary goals that I'm overlooking?*

Roger C: Spectrum is truly integrated to the web platform, unlike the old forums which were basically duct-taped on top of it.

Victor B-M: Yes, it's accurate! In-game/out-of-game communication and all in one app is what we aim for.

Phil R: Enhancing immersion, too, once the in-game overlay is ready.

Kaitlyn L: What we have discussed is the layers of voice communication — being able to access different voice channels, based on where you are in the game, or how you coordinate with other players. For example in big multi-crew ships, there could be a general voice channel giving the crew instructions, but also a separate person-to-person channel with just two senior members of the crew.

JP: *Ah, so there might be a general command voice channel, but also a channel just for key officers?*

Kaitlyn L: So in some places the captain might talk directly to the crew manning a turret, and in some cases he would make ship-wide announcements.

JP: *Being able to use Spectrum to construct my org's website is great. If I have a website guru in my org, how much will she be able to customize our Spectrum-based site?*

Edern T: Organisations can have their private space on Spectrum, with chats lobbies and forums. They can customize a set of rules on how players can interact with each other in the forum, for example, and they can customize the avatar/logo image and the main banner of their org's Spectrum page.

Phil R: Org landing pages are something we've discussed, but we're still thinking about the actual implementation.

Kaitlyn L: One hot topic at the moment is nested vs. chronological threads. Let's start by discussing the different thread types.

We were tasked with creating essentially two types of forums, chronological (also known as classic) and nested. Both types of forums have their benefits, and they really have two different functions.

Chronological is for longer, thoughtful discussions that have a long life and get contributions over a longer period of time.

Nested threads are for shorter, quick types of discussion that die out faster.

One of the biggest challenges for Edern and the rest of the team has been a design that works with both nested chronological threads. In particular, how to identify what you've already read when you return to a forum.

JP: *How did you resolve that challenge?*

Phil R: It's always a matter of signaling a piece of information so that it's easily noticed and intuitive, without overwhelming the design and making it too busy, with lots of elements competing for attention.

Edern T: Btw we still iterate on that subject.

Phil R: Yeah, it's a work in progress.

Kaitlyn L: There has been a bit of clash in terms of preference: nested vs chronological. Our original intention was that the right forum discussion (nested or chronological) would be chosen by the OP when a thread was created. However, we quickly discovered that users nearly always started a thread with the default setting (which right now is nested) and didn't think in depth about the type of discussion they wanted.

JP: *Can a thread be converted from one type to the other, or is the type locked in once it's begun?*

Victor B-M: It's locked.

Phil R: Initially we had designed the thread types as distinct kinds of discussions that you would choose from the outset, to shape how a discussion would play out. But we're currently playing with giving users the power to choose how they want to view a particular thread according to their preference.

JP: *In theory, it seems like switching from one to the other would be straightforward, but it sounds like it's not at all a trivial process.*

Kaitlyn L: It's not an easy task to give users control over how a thread is displayed once it's been created.

Phil R: We still have some experimentation and observation to do to see if it harms the progression of threads and makes it difficult to follow the conversation, but for most cases it seems like it'll work pretty well. And it's always nice to have options.

Victor B-M: We initially saw the Nested vs. Chronological as a discussion type, but we finally saw that users want it as an user preference, so we are thinking about implementing that.

Edern T: Since Spectrum is a new tool, based on modern technologies, and a design style (flat design) that is simple enough … it allows us to quickly design new features and improve the user experience on existing ones.

For example, for the different kind of threads (nested/classic), we are able to quickly test internally if it's a good idea to give that power to the user, or if it will break the layout of the discussion.

Edern T: It's still an open discussion, and we will be able to test it live.

Phil R: It required some work because they were really intended as separate entities, but we've made the code more generic so that the two view modes are fairly interchangeable now. At this point it's mostly a question of usability and how it affects the flow of threads, which is something that we're still exploring.

JP: *Is this something other forums have, or are we breaking new ground?*

Victor B-M: We will first push this to PTU for our Evocati

and Spectrocati Testers, and if we are pleased with the results, we will push it live.

Edern T: Old forums are usually chronological. A few are nested.

Kaitlyn L: It's breaking new ground, in my understanding, but maybe you guys have come across it in other platforms?

Victor B-M: Nope, new grounds for me, hence the problems we encounter with people understanding how to handle it.

Phil R: It's something I haven't seen anywhere up until now, but the internet is a big place.

JP: *It sounds neat, and I can see myself toggling between the two modes, just to decide which mode makes a particular thread easier to follow.*

Kaitlyn L: What is cool about the nested/chrono debate is that this is a perfect example of how the community is involved in the development. We didn't simply produce the product and that was the end; we gathered feedback from the community. We noted not everyone was happy with it, and it seems like a view mode could be the answer.

JP: *Y'all mentioned that before – what's "view mode"?*

Kaitlyn L: In this case, view mode gives you that toggle ability, to switch between the two.

Edern T: It's the ability to change on the fly a nested/chronological layout.

JP: *If you can make this work (and it seems like you're getting there), I predict that it will be the wave of the future.*

VIEW MODE TOGGLE
WORK IN PROGRESS

Kaitlyn L: The team still needs to test the end result on how the conversation flows (or doesn't flow) when switched, but it's a potential solution.

Phil R: Well, we'll see. It's never wise to put the cart before the horse. :P

Kaitlyn L: It really complements Spectrum. The team built a lot of customization features into Spectrum, and view mode is certainly a similar goal.

JP: *What other neat, new features does Spectrum have? What are some of the other customization features that we haven't discussed yet?*

Kaitlyn L: Giving players the ability to control how they view and interact in Spectrum. The light/dark theme options is a perfect example.

Also, the ability to arrange communities and bookmarks.

Phil R: We're almost ready to push some updates about how tags work out the door. Up until now, they've mostly functioned as a filtering utility, but when this goes live you'll be able to bookmark a particular tag in your sidebar, which'll allow you to see when new threads appear in a category, with a bit more granularity than was previously possible.

Kaitlyn L: It seems every time a new feature is added, it gets an additional week of work tacked on to ensure that it is customizable to the user.

Phil R: There's also a setting for mods to make tags mandatory when posting a new thread in a particular forum category, so that there won't be any "generic" discussions going on in that category.

JP: *Give me an example of how tags will work.*

Phil R: Tags will work almost exactly as they do now, but

will be given more of a first-class status in the forums. So previously if you were in the Announcements category, you could filter threads to see only "Patch" related posts, but you couldn't be notified specifically when a new "Patch" thread was posted. Subscriptions and bookmarks were only at the category level. Now, you'll be able to bookmark the "PTU" tag in General and you'll see the bookmark light up in the sidebar when a thread is posted with that tag. You'll also be able to subscribe to receive notifications when new threads are posted using a tag.

JP: *So a tag will be something like "Banu" or "Glaive" or "trade orgs"? And you tag a new thread that you start, so that other players will have an idea about your post?*

Edern T: It will now be possible to bookmark a tag. For example in the Shipyard, a user will be able to bookmark a specific ship, so he will have an unread notification for every new discussion about it!

Phil R: The Shipyard is one place where this'll be a big help, since players can choose which ships they want updates about. We're going to be spinning Shipyard into its own forum group, with a category for each manufacturer, and a tag for each ship within that manufacturer's category.

JP: *Only the first post in a thread will have a tag, I assume? Multiple tags in a thread: that way lies madness.*

Phil R: The tag is per-thread, and you can think of it as applying to every post in the discussion. It's just a top-level grouping.

Victor B-M: We are also giving organisations the possibility of adding more roles. Today we can only assign five different roles because of the current organisation system, so it'll really help big orgs.

JP: *When you say only five roles currently, you mean (for example) Chief, Lieutenant, Captain, Sergeant, Worker (and no more than that)?*

Victor B-M: Exactly, today you can only get five roles: Chief, Lieutenant, Captain, Sergeant, Worker.

Tomorrow, you will be able to have as many roles as you want: CEO, Chief, Lieutenant, Captain, Captain's Second, Sergeant, Worker, 1st Class, Pilot, Admiral, etc. ...

I don't know if we will put a limit on the number of roles, but I don't think so.

JP: *Kaitlyn, earlier you mentioned the ability to arrange communities and bookmarks. What is this?*

Kaitlyn L: The tags were introduced as a way to create subforums without burying threads — all subforums are accessed from the same point. It also gives a user a quick scan of which subforums in the general forum have the most or most recent activity.

On the left sidebar you have access to the *Star Citizen* general forum and chat, as well as your org's chat & forum. Just beneath that will appear any threads or chat you have bookmarked. You can drag and drop to re-order these as

IMPROVED THREAD LIST
WITH TAG BOOKMARKS

you please. It seems perhaps trivial, but is a small detail in the overall Spectrum experience.

Phil R: Another simple but nice feature coming soon is the ability to rename your bookmarks. That should help with keeping your sidebar organized.

Victor B-M: Another new feature: the friend system and group chat will be implemented soon, so you will be able to add contacts via Spectrum (or in-game when Spectrum will be there) and chat with them.

Phil R: We have some performance optimizations coming soon as well. We're adding an infinite scroll in the chat

lobby user lists so that it'll stay light on resources even in huge chatrooms (#general). And we've been working on improvements to the first load of the page that seems to cut down initial load times by about 30%. That should be nice once it's merged in.

Edern T: It's probably a detail but we will also improve the layout of the thread list pretty soon, to be easier to read so the user can quickly see in which post there are unread comments.

Victor B-M: It's a very cool visual update in my opinion!

Edern T: It will probably be live with the new tag system.

Phil R: Right, almost forgot to mention that one. You'll also be able to see an inline indicator if any CIG staff members have posted in a thread.

Edern T: Right. It's one of the new features of the new design thread list.

Victor B-M: And thread count has been requested by the backers for a long time now, and will come back in a few releases.

JP: *"Thread count"?*

Victor B-M: A counter of the number of threads or comment you have made on Spectrum, and probably on the other forums too.

Edern T: We will soon improve the mini-profile – when a user clicks on an avatar or user name – to include thread counts. That design is not done yet; we're currently testing different iterations.

Phil R: That'll come along with a nice facelift in the design.

JP: *Sounds like there's still plenty to look forward to! And I've kept you from it too long already. Thank you all very much for your time today, and for all the work you've put into Spectrum. Any last words before we go?*

Victor B-M: You're welcome! Big shout out to the Evocati testers and the Spectrocati, you guys really help me finding bugs on the PTU and the Live Spectrum!

Phil R: Thanks to everyone using Spectrum, and to those who give a never-ending stream of helpful and constructive criticism. It's been a great collaborative experience with the community so far, and makes working on Spectrum much more rewarding. And look forward to more cool things soon!

Edern T: Nothing to add other than it's a pleasure to work with everyone at Turbulent and CIG on this project, and with the community.

STAR CITIZEN
SPECTRUM

GLIESE SYSTEM
NOGO & LYRIS FLOTILLA

A bustling hub of interspecies trade, with several asteroid belts and six planets orbiting the blue-white star at its center, the resource-rich Banu system of Gliese has been a popular destination for Human travelers for well over two centuries. Though Humanity has a well established place in the system today, with several burgeoning settlements of their own, it took hundreds of years of bargaining before any of that could come to pass. For while most Banu are eager to pursue commerce with other species, their trade routes are carefully guarded commodities.

After first contact in 2438, the U.N.E. quickly learned how complex negotiations with the Banu could be. Striking a trade agreement with the Protectorate was not enough – to get access to individual systems required diplomatic delegates to strike separate bargains with everyone from a variety of planetary governing bodies, all the way down to navigational souli for map data. In addition, there was the problem that controlling bodies would dissolve only to be replaced by a new souli who had acquired the rights to bargain, starting the whole process over again. Even then, many systems were not eager to welcome Humans, wanting to limit the competition and control the flow of goods through their system and demanding extremely high recompense for the privilege. Persevering through all those complications and over several decades, the U.N.E. eventually achieved visiting rights to several systems such as Bacchus, Geddon and Kins. However, this was not to be a continuing trend.

With the unfortunate circumstances related to first contact with the Xi'an and the terrible violence that came with the first Tevarin War, Humanity's outlook towards other species shifted. While existing Banu trade was tolerated, and even relied upon during resource-taxing wartime, the Empire's willingness to increase our xeno-relations dwindled to nonexistence with the start of the Messer Regime. It wasn't until the severe economic recession of the early 28th century that this new status quo changed.

With rampant military spending at an all-time high in the wake of the first Vanduul incursions, along with the highest tax rate the UEE has ever had, the economy of the Empire had become stagnant at the turn of the 28th century. After trying numerous other tactics to spur market growth, Imperator Messer VIII decided to take a different, more drastic approach. His theory was that if the UEE could further expand their trade markets, it would bring a new influx of credits that would act as a reset button for several important sectors. For the first time in two centuries, Humanity sent a delegation to negotiate access rights to a new Banu system, Gliese.

It is rumored that the UEE had to strong arm several companies into handing over valuable blueprints and tech schematics to the Banu to make the deal happen, but in the end, many economists believe the 2712 opening of trade relations with Gliese prolonged the life of the Messer regime for another eighty years. A vibrant trading center with an abundant variety of resources, Gliese was a boon to the Empire's industry, as Humanity embraced the brisk trade of its valuable raw materials and manufactured goods. Of course, beyond its economic appeal, Gliese also contains one additional feature that some claim is its biggest draw of all — a mysteriously deserted terraformed world.

Gliese I & II

The two innermost planets of the system are relatively quiet compared to the hustle and bustle found in the central trade lanes farther out. With a superheated ferromagnetic iron core, Gliese I has some regular traffic from Humans who claim that orbiting around the planet helps ease symptoms associated with cybernetic limbs (a claim that has yet to be supported by the mainstream medical community). Meanwhile, Gliese II is noteworthy for its retrograde rotation which sees this smog planet spinning in the opposite direction of its sibling worlds.

Gliese Belt Alpha

An "active" mining belt in every sense of the world, this orbital area is notorious for the frequent violence that breaks out between rival soulis during claim disputes over the valuable ore that is still being pulled from asteroids here. While typically Banu prefer peaceful negotiations, it seems the wealth available here has spurred many of the soulis to turn to violent solutions.

Gliese III

As opposed to the nearby belt, Gliese III, a terrestrial world without an atmosphere, is more typical of Banu mining operations. Its various guilds form a shifting landscape of outposts and mining installations, as control of territories regularly changes hands from souli to souli.

Nogo (Gliese IV)

When Humans first arrived in Gliese, they were shocked to discover a fully terraformed utopia that had zero Banu residing on it. With lush forests and grassy hills, Gliese IV seems ripe for settlement, and at one point the Banu themselves must have thought so too. Much of the surface of the planet features the decaying ruins of ancient settlements long abandoned. When asked why the planet is left untouched, most Banu simply reply that they aren't supposed to go there. This common refrain has earned the planet the nickname 'Nogo' amongst Humans visiting the system. With the Banu's unique view of history, to them it is not important why the world must be left untouched, but rather simply that it should be.

After scientific analysis revealed no obvious reasons why the world would be dangerous, several Human colonies decided to stake claims on the world and (thus far) are finding great success making a life for themselves. They even have brisk trade with the nearby Lyris Flotilla, whose inhabitants have rapacious appetites for fresh produce grown on the planet. Several notable Human xeno-archeologists have dedicated themselves to exploring the Banu ruins on the world to discover the truth of what forced the Banu to give up the planet.

Not everything is as completely idyllic on Nogo as images of the beautiful landscape would have you believe. Several outlaw groups have established themselves here, taking advantage of the lack of a formal government and military to prosper, especially since Banu mercenaries will not enter the atmosphere. However, new information has come to light that may be giving those using Gliese IV as a hideout second thoughts. A recent declassification under the Historical Truth Act has revealed that the UEE utilized a secret program called Project Eclipse to target a particularly dangerous insurgent group living on the world with elite stealth bombers.

Lyris Flotilla

The heart of commerce in the system, Lyris Flotilla is composed of a semi-permanent mooring of various stations and large vessels that form a massive trade hub. Almost all ore and other resources collected in the system pass through Lyris on their way to dozens of other systems. With so many visitors stopping at the flotilla every day, there is an incredible mélange of food, shopping and entertainment to be found throughout its various wings and halls. By dating some of the oldest structure which are part of the flotilla, it is theorized that the first ships gathered here when Gliese IV was first vacated, eventually forming into the structure that exists today.

Gliese Belt Beta

Having been more easily mined than Alpha Belt, today this group of heavily worked-over asteroids draws more attention from salvagers, looking to harvest materials from old outposts and abandoned rigs, than it sees from miners.

Gliese V

Thick clouds of dense water vapor cover the surface of this warm gas giant, which is dotted by orbiting condensers. Human corporation Terragra uses Gliese V as the source for their line of bottled water, and claims that its natural purity is unmatched in the Empire.

Gliese Cluster Gamma

This distant and sparse cluster of asteroids has a dangerous reputation and is a viable site only for more experienced miners, thanks to its remote nature and treacherous gas pockets.

Gliese VI

The final stop before leaving the system, this distant and barren protoplanet is littered with luck offerings left by new trade soulis before starting their first journey.

Heard in the Wind

"If you ever wonder where all the losing shirts for the Sataball Championship wind up, then you, my friend, have never been to Lyris. It's like Banu there all live in some amazing alternate universe where the Jumpers won in '39."

– *Tobias Dapur,* Dapur Tells Da Truth Comedy Special, *2942*

SID & CYRUS

by. Adam Wieser

Episode 1

A high-pitched screech carried across the Falling Sky as the front door slid open. None of the regulars at this run-down watering hole noticed the noise or cared. Only Sidney looked up from her post behind the bar. Still as observant and energetic as most people half her age, Sid needed but a moment to scan the young man who entered before going back to work. She'd seen enough.

The kid sidled up to the bar and eyed Vinny, sitting a few stools down. Vinny took a deep drink and kept his eyes glued to the vidscreen. When the Crashers were playing, nothing was more important to him. Definitely not some nervous kid with a wild look in his eyes.

The kid leaned toward Sid, only to pause and glance Vinny's way again. Once absolutely certain he wasn't listening, he muttered, "Tomyris sent me."

Tomyris was the leader of a burgeoning and ruthless outlaw pack calling themselves the Cadejo Crew. Sid knew Tomyris through reputation only, but if this kid thought otherwise, who was she to wreck his reality? So she smiled to put him at ease then replied, "How 'bout I buy you a drink?"

"Radegast, neat . . . wait, you got Ghosts?"

"Course." Sid grabbed the bottle of Tevarin rye white whiskey and poured his drink. The kid took the moment to eye Vinny again. His nervousness was palpable.

"This is your first run, isn't it?"

That returned the kid's attention to her. She set the glass before him. "Don't worry, you're doing great."

The kid gulped down the white whiskey and almost spit it back out as the burn hit his throat. To his credit, he managed to swallow.

"It's just," the kid said as he wiped his lips on the sleeve of his worn flight suit, "well, you know. It's been a crazy day for me."

Sid topped him off with a bottle of bootleg moonshine, certain after the initial burn he wouldn't notice the difference.

"Tell me about it."

"Well, it's done."

"It?"

"You know," the kid leaned in even farther and lowered his voice 'till she could barely hear what he said next, "the convoy to Behistun."

Sid's stomach sank. *Immanuelle.* All she could manage in response was, "You're sure it's . . ."

"Yeah . . . I was there." The kid killed his drink and glanced to the sataball game. Sid refilled his glass and resisted the urge to smash him over the head with the bottle.

"So, we good? They said you'll handle phase two, right?" The kid asked.

Sid forced a smile and nodded. The kid threw back the last shot and set down the glass.

"Never did catch your name."

"Devin."

Sid mentally logged the name. Then said it aloud to imprint it in her mind one more time.

"You stay safe, Devin."

The kid smiled and stumbled to the door, suddenly feeling the effect of the hooch. Sid disappeared into the office in the back of the bar. She found Talsa and said she was feeling sick. Talsa sighed sharply, then waved her off without further inquiry.

Seconds later, Sid slipped out the bar's back door. She debated following Devin and learning what else he knew, but in the end decided against it. Right now she needed Cyrus. Quickening her pace, Sid headed home.

*   *   *

The constant hum of landing and launching ships filled the sky as Sid hurried through the streets of Reis. The city was abuzz with late afternoon activity, as residents rushed to complete errands before Nexus' bluish-white sun sank over the city's heavily fortified walls. Most avoided the streets after dark due to the surging crime rate, but Sid preferred it then. There were fewer people around to slow her down.

Sid rounded the corner occupied by Q&D Aeroservice, then merged with a scrum pushing their way through a particularly narrow part of the street. Causing the bottleneck were a cluster of shacks constructed from scrapped shipping containers. Inside lived refugees from outposts overrun by the Vucari. These survivors were the lucky ones.

The Vucari, one of Lago's oldest outlaw packs, had grown back into power and prominence over the previous months. Led by the newly promoted Master Kraujas, they had become the biggest threat in the area once again, even overshadowing the recent nastiness that was the Cadejos. Methodically, the Vucari expanded their territory by overtaking civilian outposts. Anyone who resisted suffered from their cruelty. Anyone who relinquished all weapons and possessions was allowed to flee. Most ended up in Reis with nothing but the clothes on their backs. The crude shelters, like the ones Sid squeezed by now, were at least a step up from the broken pavement claimed by most poor souls who had to sleep on the streets.

She continued for a few blocks before ducking down an alley. The stench of Human waste slapped Sid in the face. The smell was new, a sign of worsening waste management within the city.

Sid held her breath, and carefully avoided the piles of trash and strange stains. An outbreak due to poor public sanitation was the last thing Lago needed. People were already on edge due to the housing shortage and shrinking food supplies. Sid knew that if Reis slipped any further, all civility would be shredded. She'd seen it before and she knew what would happen next.

The Vucari would take advantage of the discord and strike. Reclaiming Reis was the dream of every outlaw commander ever since the UEE forcibly reclaimed the planet in 2931. Master Kraujas knew such a conquest would establish his name in history. He also understood that civil instability was his greatest ally and that crumbling civility would only make taking the city easier.

Sid slowed at a tall fence made from corrugated metal, her eyes scanning to insure its integrity. She carefully followed the fence around the corner until it connected to the back of a two-story building. She proceeded to the front of the building and entered a rundown repair shop occupying the first floor.

A bell chimed as Sid opened the door. Behind the service counter, shelves of scrap collected dust. Sid ducked under the counter and crossed the threshold into the workroom of the shop.

Cyrus dozed in a battered chair behind a desk cluttered with mechanical parts and electronic components. Sid nudged her husband's feet off the desk, startling him awake. A small drone fell from his lap to the floor.

Cyrus sat forward and took a second, his post-nap haze still not completely clear. Though Cyrus was still sharp and nimble, he was sometimes slow to action.

"What you doing back so early?" he asked while scooping up the dropped drone.

"What good is that bell if you don't hear it?"

Cyrus waved off the reply as he scanned the drone for damage. He snagged a small screwdriver and made a few minor adjustments.

Sid took a deep breath, knowing this next moment might make everything she feared real. Cyrus sensed the pregnant pause and met her eyes.

"What's wrong?"

"We need to check Immanuelle's tracker."

Cyrus took a moment to process the request before spinning in his chair and tossing the drone on his desk, all in one swift movement. He briskly typed at his terminal as spare parts rattled on his desk. He glanced up to see Sid pacing. Her shoulders hunched forward with anxiety, making her look every bit her age.

Seconds later, Cyrus began to launch a program he hadn't opened in almost a year. It was a backdoor into the geo-location and biofeedback sensors in Immanuelle's armor, a feature of which their daughter was not aware.

Cyrus added it after a Vucari raid had hit her convoy hauling food and first aid to settlements across Lago. She had spent a week in the hospital afterwards, one of the longest weeks of his life. Outlaws were growing more emboldened by the day, but Cyrus knew that wouldn't stop Immanuelle. At her age, it wouldn't have stopped him, either.

Conflicted over what he had done, Cyrus told Sid. In the ensuing argument, she both chastised and thanked him for doing it. The two agreed to access the armor's information only if absolutely necessary. Immanuelle had been on numerous delivery runs on Lago's contested planetside since, without incident. This was the first time they had felt compelled to check it.

Cyrus knew something was terribly wrong without even having to ask, but he couldn't sit in silence not knowing for much longer. "What'd you hear at the bar?"

"Some kid came talking about an attack on a convoy to Behistun. He thought I was someone else, so I don't know how much I can trust him . . ."

". . . but . . ."

"He had that look in his eye." She didn't need to say more. Cyrus understood.

"Think it's Vucari again?" he asked.

"Cadejo."

Cyrus visibly paled. The program finally initialized. He typed a few quick commands and waited. The terminal pinged and returned results.

"Well?" wondered Sid, unable to bring herself to face the screen. Following a few seconds of excruciating silence, she turned to find Cyrus scanning data. "Is she ok?"

"Uncertain," he replied carefully.

"What does that mean? Is that thing even working?"

"It was. Until eight hours ago. There's been nothing since. There's a chance —"

"Where?"

". . . what?"

Sid crossed to the terminal, "Where'd that last signal come from?"

"North, 34 degrees . . . 26 minutes —"

"Not the coordinates." Sid leaned across the desk and expanded the map's visible range. The signal came from the middle of the Platean Plain, about half-way to Behistun.

"That's Vucari territory, isn't it? What are the Cadejo doing there?"

Sid gave it a passing thought; hitting a shipment in enemy territory violated the honor code many of these outlaw packs lived by. Then she grabbed her rifle and slammed a fresh battery in it. "I don't know and I don't care."

* * *

Neither Sid nor Cyrus had the courage to vocalize their fear about what might have happened to their daughter. Instead, they simply agreed to find out for themselves.

The two spent the night gathering and prepping their old gear. They moved furniture and raised floor panels to access hidden weapon lockers built by Cyrus. The caches were strategically placed throughout their two-story building so weapons would never be too far away if outlaws or ghosts from their past arrived on their doorstep.

In their own words, Sid and Cyrus ran a small security firm before moving to Reis. The reality was that they were in-demand mercs with an impressive portfolio of missions and a notable number of enemies. It was the life they wanted until the unexpected occurred.

Immanuelle had never been part of their plan. Sid was as shocked as Cyrus to discover she was pregnant. The news floored the couple and forced them to reassess their life. To both their surprise, they realized that they liked the idea of expanding their family. Problem was, they had dodged death far too often and knew it was only a matter of time before it caught up with them. Immanuelle's arrival was a chance to reset and escape the dangers that had become part of their everyday existence.

When Immanuelle was five they bought this modest two-story building on Reis. The previous year, the UEE had wrestled control of Nexus away from outlaw pacts that had dominated the system for centuries, so the government offered sweetheart land deals to entice new residents. Since Sid and Cyrus had never worked within the system, they figured it was an ideal place to start fresh with a minimal chance of encountering their past.

Cyrus converted the building's ground floor into a repair shop. His knack for fixing things proved invaluable, as outlaw attacks on supply shipments were common. Sid helped run the repair shop and raise Immanuelle, but felt restless until she wandered into the Falling Sky bar. There, a bit of the buzz came back. She found a piece of her old life among the mercs who frequented it. So, she taught herself to make a killer Terra Tornado, convinced Talsa to hire her, and lived vicariously through the regulars' stories of Lago's untamed planetside.

All the while, Immanuelle remained none the wiser to her parent's previous life. It's not that Sid and Cyrus hid their past from her. They merely were selective with what they said, both hoping that the gene of self-endangerment had skipped a generation.

Still, it didn't take long for their daughter's sense of adventure to surface. Before turning ten, Immanuelle had explored every last nook, cranny and alley in their neighborhood. As a teenager, she often got in trouble for sneaking into the Falling Sky when Sid was off duty to hear the outrageous and often grisly tales its patrons told. It was obvious to Sid and Cyrus that their daughter was cut from the same cloth as her parents.

Cyrus checked ammo clips one by one before sliding them into his pack, in an effort to get his emotions in check and focus on the job at hand. In recent months, he had only heard passing mentions of Tomyris and the Cadejo Crew, but each one had sent a shiver down his spine. Unlike the Vucari, no one attacked by the Cadejo made it back to Reis. Rumors swirled that the Cadejos preferred to take people alive for use in some sinister ritual. Cyrus didn't quite believe the tales, but had seen enough strange stuff in his day to not completely discount them. At least if true, he reasoned with himself, Immanuelle might have a better chance of still being alive now.

Cyrus slung a duffel bag filled with gear and guns over his shoulder and carefully carried it downstairs. He dropped the bag behind the counter with a thud. He drew a deep breath, surprised by how winded he was, then stepped into the repair shop.

"First light in forty-five," he called to Sid. "I'll bring the buggy 'round back."

"I'll come help in a few."

Sid stood at a workbench making adjustments to her energy rifle while wearing heavy armor sans helmet, her lucky bandanna holding back her hair. The sight gave Cyrus pause. She'd always worn light armor in their merc days, preferring to be fleet of foot over aggressively armored.

A few years ago, she returned from a shift at the Falling Sky wearing the heavy armor. She scared Immanuelle half to death by confidently striding behind the repair shop counter before identifying herself. Sid claimed someone gave her a good deal on it, and asked Cyrus to work his magic. She said it might come in handy some day. He never expected this to be it.

"Going with the heavy, huh? You have a chance to field test it?"

"Seems as good a time as any," she replied.

"The effect on your speed and stamina might surp—"

"Hey . . . I thought you were going to get the quad."

Sid took her eyes off her gun to shoot Cyrus a look. Her face almost appeared to float amidst the massive armor around her.

"Fine, but I need to tell you two quick things. One, and I'm just being honest here, you look a little ridiculous," he said as he headed towards the garage. Sid's eyes flared with intensity. "And two, when you put on your helmet, apply the setting labeled with your name. I've already programmed in your preferences."

A small smile crept across Sid's face, the first one Cyrus had seen since she arrived home. Before she could respond, Cyrus was out the door. The smile was all the reassurance he needed to know his world wouldn't completely crumble if this mission ended in the way neither of them dared say.

*   *   *

Reis sat on Sid & Cyrus' six half an hour later. The two shared a look exiting the city's eastern security checkpoint. This was the first time the two had been out on an assignment since Immanuelle was born.

As they crossed the Mycale Valley, towering gray mountains loomed on the horizon. Being backlit by the slowly rising sun only made them more ominous and imposing. As Sid drove, Cyrus calculated several potential routes to their daughter's last known location. Transposing it to the map, he saw that to reach the Platean Plain they would have to navigate one of the many passes that cut through the Harran Mountains. He scanned the list, unsure which one would be the safest.

"The most direct route is through the Datis Pass," he noted.

"Feels like someone at the bar is always talking about how that pass is infested with outlaws. Any other options?"

Immanuel had once admitted that crossing this range was often the most harrowing part of her journey.

"How about the Sargon Pass? That an option? Vinny swears it's the safest one heading east."

"You trust the guy who also swears that asteroid in Nemo actually looks like a space whale?"

"He can't be wrong all the time. Just check, ok?"

Cyrus smiled. The lightness of their exchange evaporated as the intention of their mission again came front and cen-

ter. He scanned the list of potential routes until finding one through the Sargon Pass.

"It'll add at least an hour to the trip." He selected the route to examine it in detail. "Wait . . . Remember that trip Immanuelle and I took together say about five, six years ago?"

"You two still laugh about it," Sid sighed softly.

"Really wish you hadn't gotten sick the night before we left."

"Me too."

Silence sat between them.

"Anyways, I just realized we took the Sargon Pass on that trip."

"So at least one of us is familiar with it."

Cyrus nodded. Sid stepped on the accelerator and steered the quad more southward towards the pass. The buggy's suspension bucked under the rough terrain.

Ahead the sun's rays licked the mountain peaks, finally providing the range some depth and definition. Cyrus took a second to admire the view, then returned to worrying about getting through the pass safely.

*   *   *

"Why'd you volunteer us for this shite gig again?" Dmitri drew his thin coat closer to insulate against the cold seeping from the rocks that composed his sniper perch.

"Stay off comms," Charlie barked back.

A chilly wind whistled through the Sargon Pass. A shiver worked its way down Dmitri's spine. When it finally fled, he looked through his sniper rifle scope and scanned the mouth of the pass, which was still shrouded in dark, early morning shadows.

He defiantly spoke into his comm again, "This pass is too narrow for any big fish to take. You're not gonna impress your new friends by catching any of the minnows that come through here."

"The hell I just say?"

For an outlaw, Charlie certainly was a stickler for the rules, a trait that had only intensified after the two decided to crew with the Vucari. Dmitri figured it'd be fun to run with the pack that had come to dominate so much territory. Meanwhile, Charlie quickly became enamored with the Vucari's master plan to wrest control of Reis away from the UEE. Dmitri merely looked forward to the looting.

Despite their motivational differences, Dmitri and Charlie were now hunkered down on opposite sides of the Sargon Pass, hoping to ambush anyone coming from Reis. Dmitri checked the time, and wondered how much longer it would take the sun to illuminate the mouth of the pass and more importantly, provide him a bit of warmth.

Eventually, the sweet lure of a stim felt like his only salvation. Dmitri left the sniper rifle in position and slid down from his perch so Charlie wouldn't see the vapor. He removed his helmet and plucked a pack of Kings out of his pocket. He savored the flavor as the first pull rushed to his head. It almost made everything all right.

Suddenly, a faint hum filled the air. The sound was subtle but growing closer. Dmitri scanned the sky to discover a small drone hovering no more than ten meters away. Some bugger was spying on him.

Dmitri drew his pistol. His free hand frantically felt for his helmet but couldn't find it. He turned to look for it, then everything suddenly went black.

Distracted by the drone, he never saw Sid slip in close. She lowered her rifle then hit a few buttons on her mobi. The drone zipped to her location and landed safely. After Sid checked the kid's pulse, she bound his hands and then searched him out of habit, finding only a half pack of Kings. He wore a patchwork of clothes and cheap armor plastered with the Vucari insignia.

Climbing up, Sid snagged the sniper rifle from its perch and hunkered behind a rock formation while inspecting it. The serial number had been filed off and the Vucari emblem crudely etched into its stock. So, the Vucari distributed meager armor but decent weapons. She made a mental note.

Confident the Vucari hadn't assigned a single guy to guard the pass, Sid quickly scanned the other side through the sniper rifle scope. If anyone else was around, she couldn't see them. There had to be at least one, maybe two associates staked out elsewhere. Until cleared, driving any closer could be dangerous.

"We've got company. Subdued one of them. Going to flush out anyone left with the drone."

"I'll come help."

"Hold position. Don't know what we're up against yet."

Sid launched the drone to survey the pass from above. It looked clear at first glance. Then she spotted a strange shape between two big boulders. She slowly lowered the drone over the location and saw a parked Dragonfly. That thing only seated two, so that must mean there was one outlaw left.

Suddenly, the drone's video feed died. A gunshot echoed through the pass as the drone fell from the sky. Sid scrambled to spot the shot's origin but it was too late. Impressive — the shooter needed only a single round to hit it.

A strange crackling sound startled Sid. She spun, weapon raised, to find no one there. She exhaled, relieved, then tracked the sound to the outlaw's helmet lying on the ground below. It wouldn't be long before his compatriot realized this position has been compromised. She had to move soon.

Sid slowly lifted her head with the sniper rifle at the ready. Gunfire erupted, spraying bullets all around her. She quickly ducked back to cover, but at least had a bead on the assailant's location.

"That you firing?" Cyrus' voice crackled in Sid's ear.

"It will be . . . in a few seconds," she responded while adjusting her spot behind the rock.

"I'm on my way."

"I can handle it." Sid raised up with the sniper rifle trained on the spot where she had seen the muzzle flash. No one was there. More gunshots peppered her location from a slightly different angle. She hit the deck before gauging exactly where they came from.

"You get him?"

"Still wasn't me."

"That's it."

"I just need—"

"Something to draw that fire elsewhere."

Cyrus was right. Plus, it had only been small arms fire. That wouldn't do too much damage to their ride.

"Fine. Show yourself but don't venture too far up. For all we know, the entrance could be lined with explosives."

Hidden not far from the pass, Cyrus stepped on the accelerator. The buggy lurched forward. It felt a bit jumpy to him, and he made a mental note to look at it once home.

Meanwhile, Sid circled to a new firing position further up, hoping her new vantage point combined with Cyrus' arrival would end this encounter.

"Just cresting the pass," Cyrus announced.

Sid readied her weapon and peered over a rocky embankment toward the other side, waiting for this slippery bastard to show himself again. The vehicle's rumble echoed through the canyon, announcing its arrival. Sid kept scanning with her finger on the trigger.

A sudden movement drew her attention. She focused on the location then paused. Something didn't look quite right. It took her a moment to realize what she was seeing. The outlaw had a massive weapon hoisted on his shoulder and aimed at the buggy.

"Rocket launcher!" Sid cried over comms.

She squeezed off a series of shots at the outlaw and saw him stagger. His movement was exaggerated by the massive weapon somehow still on his shoulder. She drew a deep breath and fired off more shots while exhaling. The outlaw finally dropped out of sight.

A moment later, an explosion erupted from the place he had fallen. Sid felt the mountainside shake and heard the distinct rumble of rocks and boulders rolling downhill. The rock formation facing where he had fallen was blasted to bits.

Moments earlier, when Cyrus heard Sid's warning, he instinctively slammed on the accelerator, concerned that the rocket launcher might be pointed in her direction. The next thing he knew, a boom echoed through the canyon. By the time he realized what was happening, it was unavoidable.

Cyrus saw what looked like a tidal wave of rubble roaring toward him. He yanked the steering wheel hard left and the vehicle spun about ninety degrees, exposing the passenger's side, just as an avalanche slammed into it. The impact knocked the vehicle's wheels off the ground and blew it downhill. Once at the bottom of the pass, it continued rolling until it lost all momentum.

Sid heard the impact and repeated crunch of rock on metal. When the sound mercifully came to a stop, she trained the sniper rifle on the dissipating dust cloud at the bottom of the pass. The vehicle had ended up on its roof, battered and bruised but in one piece. From this angle, though, she couldn't see inside the cab.

"Cyrus! Can you hear me?" she cried over comms.

Before receiving an answer, she began to run downhill. Sid felt like life was moving in slow motion. Soon she struggled for breath, the heavy armor and heart-stopping anxiety hitting her hard. She stopped to gather herself, then glanced up and across the pass. She sighed with relief at the sight of the Dragonfly still safely tucked between two boulders, its position just above the blast.

Sid commandeered the Dragonfly and sped to the crash site. Cyrus was motionless inside the upside-down vehicle. Still secured to the seat by the safety restraints, his arms limply dangled past his head. Sid grabbed his closest arm, pulled out a MedPen, and stabbed it where his undersuit was exposed.

Cyrus came back from the brink. His body filled with adrenaline and confusion as to why everything was inverted. He turned to see Sid. Slowly, the preceding series of events came back.

"You get him?"

Sid nodded her head. "You ready?"

He nodded in return. She carefully cut away the safety restraints and helped him out of the cab. Finally freed, Cyrus slowly sat up, mind and body still not in sync. Sid felt bad for thinking it, but he looked just like he did when she caught him napping in the shop.

"Hey . . . I'm gonna see if I can find where the med kit wound up."

"I'll help."

"You sure?"

Cyrus sat forward and stood up. "Rally back here in five?"

She gave him a thumbs up. Cyrus wanted to smile but wasn't sure if he could. He still felt like not all his wires were connected.

Sid climbed on the Dragonfly and carefully followed the trail of destruction, searching for anything worth keeping. Cyrus slowly circled the buggy but found nothing. It at least afforded him the chance to get his legs under him. Sid returned faster than expected.

"No luck. You probably flung it halfway home." Sid scanned the horizon. "If we want to expand the search radius, let's do it fast. No guarantee the previous owner of this bike didn't inform the entire Vucari clan that we're trying to get through that pass."

"I'm fine. Let's go."

Sid eyed him, uncertain.

"The most important thing is to clear the pass before reinforcements arrive." Cyrus pulled his custom sniper rifle from its attachment point. His heart dropped. The barrel was battered and slightly bent.

"Here . . ."

Cyrus looked up as Sid tossed him the Vucari sniper rifle. He gave it a once over. It wasn't bad, but it wasn't his.

He jumped on the Dragonfly. Cyrus' back came to rest against Sid's. He exhaled, laid the sniper rifle across his lap and then strapped in. Sure he was safely aboard, Sid opened up the throttles to max and concentrated on putting distance between themselves and the ambush site.

*   *   *

Sid and Cyrus faced no more resistance leaving the Sargon Pass. They raced onto the Platean Plain and were blinded by the morning sun. At various points across the horizon, the land just vanished. These gaps indicated geographical scars that were once strip mines, but were now more and more often hiding outlaw encampments. Sid made sure to give the gaps a wide berth.

"Anyone following us?"

"Not that I can see." Cyrus scanned for dust clouds or other obvious signs.

"Good. We're almost there."

An unnatural jumble of shapes was silhouetted against the horizon. That must be it. Sid quickly glanced around. She could see for kilometers in all directions. Interesting spot to ambush a convoy.

Sid stopped at some distance from the wreckage. Cyrus eyed it with the sniper rifle and saw no one. The scanner on the Dragonfly said the same.

They approached, then circled the ambush site. Several trucks sat in various states of ruin. One was burnt to a crisp, barely more than a frame. Others were thoroughly riddled with bullet holes and laser blasts. One lay on its side.

Sid stopped the Dragonfly at the center of the convoy's line. The two dismounted and glanced in each direction. Not a single body was anywhere to be seen.

"Left or right?"

"I'll take left," replied Cyrus. He headed off in his assigned direction. The closest vehicle had been incinerated by something. There was little left besides its frame and ash. Cyrus still gave it a good once over.

The utter destruction had to be the work of the Cadejo Crew. The Vucari would've been more careful so they could use this equipment for their own purposes. The Cadejo were clearly challenging Vucari for control of the area. Such a gang war would only further destabilize this region and make getting supplies to Behistun that much more dangerous.

Cyrus was halfway to the next vehicle when Sid commed him.

"Cyrus, on me."

He turned and hurried in her direction. Sid stood at the back of a mostly intact truck, its rear doors open wide. Where supplies had once been stored now sat a pile of battered armor. In the middle was the chest piece from Immanuelle's armor. With the number of times he had repaired it over the years, Cyrus would recognize it anywhere.

After scanning for explosives, they pulled Immanuelle's armor out of the pile and inspected it. He asked, "You believe the rumors about the Cadejos taking people alive?"

Sid slowly walked away from the vehicle, suddenly drawn elsewhere.

"I don't believe most of what I hear, but I'm not going to let that stop me."

Cyrus looked up to see Sid staring off into the distance. He joined her and then saw it. Tire tracks leading north.

Sid and Cyrus locked eyes. Nothing else needed to be said besides, "I'll go get the bike."

To be continued

CHRONICLES