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low down low

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Maria Ramirez is an exceptional pilot and near the top of her mile long list of competencies is that of a HWG driver. She is qualified to fly guns but her specific forte is zooming about as a Razorback pilot. Flying the Razorback, also known as a slick, means that your core objectives are stealth and evasion and basically flying around or away from the shit. Flying guns however is a one-eighty flip from slicks because you are intentionally seeking to be in close proximity to the shit, or flying into the shit, or instigating said shit.

In her early years Maria has flown dozens of Razorbacks into combat yet in all those sorties she has never fired a shot, but then, when you think about it, the hallmark of a successful slick mission is *not* firing a shot. Maria's meteoric rise up the ranks saw her as a battalion Chief Master Sergeant by the time the war with the Co-op started and she spent much of what followed in support by running the show from a backseat. In more times than anyone could count, in that capacity Maria has proved that she could magically pull victory out of the jaws of defeat and, with her exceptional strategic planning skills, she has become the most revered and feared combat commander in the history of the Steel Annex.

That said, Maria may be large-and-in-charge, in command of the entire SA, but on this mission Michelle Kiel is in tactical command of the AO because that's how they rock. Maria may have mission responsibility but here it's Kiel that moves the 'Rhesus and pieces' around for mission success. Since the recon teams did a fabulous job mapping out the Mari Lug, and quickly adding the subterranean landing pad for the tacnet, Kiel's impromptu assault landing went off without a hitch.

And 'without a hitch' has a half-life of about one minute.

Decelerating like mad, four of the RAF Warthogs drop to the landing zone with the lead ship slipping through the hologram over the landing pad, and that was after a quick radar pulse to double check the parameter of the pad against the tacnet data. The other three put down around the pad and turtle up in a defense posture against air assault. Victoria and Alfie, in the close air support role against possible ground incursion, take up a three kilometer orbit in the quadrant furthest away from the incoming transports from Net Basha.

Preceding the landing Maria, Nicole and Simmons race past the landing pad and take up sloppy looping orbits and figure-eights in the quadrants closest to the incoming airborne assault. This leaves Kiel circling over the landing zone coordinating everything.

If one were coming in towards the AO from Net Basha they would really think twice about breaching the five kilometer parameter because the SA has a reputation of not playing nice. The SA also has a reputation of following the Rules Of Engagement to the letter so, with a much larger attack wave only ten minutes behind them, the first wave lands balls-short to that parameter and were able to purge their own 'monkeys and kit' without being fired upon. Overhead the SA micro-drones are keeping tabs on the activity of the troops from Net Basha, mapping to the tacnet their deployment which is a ragged line-abreast formation hidden in the high brush and short trees.

Kiel broadcasts, ["Looks like they're gonna rush! Get ready to hose 'em down." Kiel notices Simmons to the right in a tight loop, "Klicks, hold position and if they breach you make the first run."]

["Roger that, Gun Crazy. The leash is tight!"]

Each of the dropships is staffed with the pilot, a WSO, and a three-man fire team whose job it is to provide parameter security when a ship is on the ground, and from the empty hold of the lead drop ship, Opie and Oshiro were already broadcasting live a whole minute before they touched down. Kiel is also providing them with drone video feed from the outside showcasing the four dropships landing and their lead ship slipping through the hologram. These real time external visuals from the SA, continuously fed through the broadcast channels in tandem with the commercial feed, makes it all an inside scoop inside the scoop of the decade.

On this mission both Opie and Oshiro are flagged as tacnet friendly, meaning they can run and shoot video without escorts, so on touchdown the ramp of the dropship slams open with a thud followed by the two racing down while being shadowed by commercial octodroid cameras. With the camera droids shooting in all directions Oshiro, with her own handheld camera rig and droid in tow, races into the underground facility to film the interior, specifically the culture and

cloning lab, while the 'on scene' reporter, Opie, stops short of the milling throng of children at a staging zone. Guarded by one of the recon squads, and watched over by the older late-to-market juveniles, the children here appear more apprehensive than frightened.

While being filmed by the droid, with the children and recon team in frame behind him, Opie fields questions like a pro, "Yes, it is a research and development facility, and we have confirmed the rescue of one-hundred and fifty-eight children."

In Opie's headset he hears the lady news-anchor ask him, ["Daniel, how many people did they arrest?"]

"We've been told they captured a staff of thirty-three."

["We have a press release coming in indicating that it was a joint mission with the RAF. Can you confirm that?"]

"Yes, Oshiro and I flew in on an RAF drop ship."

["Any idea how that came about?"]

"I have no details but the story I heard is that it was purely a coincidence that the RAF was on Sapphire. I was told that when the mission came up they offered to tag along. One more thing our viewers should know, especially anyone who is watching this from Great Britain, and this was confirmed, that Major, Victoria Wilson is flying one of the RAF gunships."

["The Queen! Are you sure about that?"]

In Opie's visual cortex is a HUD with multiple floating windows showing the feed being transmitted, so he queues up the short video of Victoria and the others before launch, and as it runs he narrates, "That was what we shot right before we launched. Major Wilson is flying what they're calling an overhead CAP just north of here."

["Can you get a camera droid on it?"]

"We're doing that now but, one thing our viewers should know, Nufa has sent an assault force that just landed outside the area of operation and they have more coming right on their tails. We've been informed that if those troops cross into this cordoned off zone things may get a bit harry."

["Daniel, we want you to keep your head down."]

Opie gives a flip snort, "You know full well that if the shooting starts Oshiro and I are goin' topside..."

The half-billion or so people watching this live broadcast are curious to see if this was going to get out of hand or not, and as things go they were not to be disappointed.

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In air combat a pilot is making a lot of mental calculations and guesstimates on the fly. Way back in the day when this all started it was simply an intellectual challenge, with a pair of machine guns and the sun at your back, but the performance of today's ships, and the sheer variety of weapons and countermeasures à la mode, makes it kind of maddening to wrap your brain around it all. Modern tacnet and AI interfaces do manage to ease some of the information and tactical brain-strain's overload but, relying on old school training and regular practice, the act of piloting itself remains substantially effortless and entirely hands and feet reactionary. You can program any flight model parameters into a droid and get specific and predictable results, yes, but you can't instill the abstracts of random or chance which can throw the efficiencies and overt aggressiveness of AI out of kilter.

When facing off against human pilots AI kinda sucked at it.

The underlining physics to aerial combat centers on energy management and to have a flair for flight requires you to render it all down to two distinct fighting styles. Those being 'turn fighting' and the tried and true and much overlooked 'boom and zoom' techniques.

Turn fighting is the easy one to grasp because this is what you see in 2D and the ever so popular neuronet interactives. Turn fighting is all about energy-investment loss because when you turn with an adversary you are overcoming your ships natural inclination to fly straight by creating a pocket of lift to force the direction of travel away from the straight. Doing this causes you to lose some energy and in this some ships lose energy faster than others. Some ships are designed to turn with a minimal loss of energy and if you in your ship try to turn inside the tighter turning ship then you'll end up losing. That is unless you sacrifice energy (e.g. cut power or vector) to tighten your own turn to attain lock, which could work, but if it doesn't you are now at a low energy state and in combat this is not a healthy state. Yes, it only takes 23 seconds for the latest Thunderbolt to go from 0 to Mach 5.2 at 1000mb, and 34 seconds for a Condor to go from 0 to Mach 4.8 also while on the deck, and you only need a small portion of those seconds to recoup some of that lost energy—but there's some desperate as hell seconds when the cavalry is too far out to save your dumb-ass after you dropped a wooden nickel on the Yo.

Where the F40 Cottonmouth was designed with turn fighting in mind, but turn fighting at high speeds and high altitudes, and the F308 Bulldog was designed for turn fighting at low speeds and low altitude, the ASF47 Thunderbolt, in spite of its mass and cross-section, was designed to turn fight against both of those ships however, in a

target rich environment, like here on Arrakis, turn fighting would be considered passé at best or suicidal at least.

This leaves the boom and zoom option and that's especially true when dealing with the F51 Gryphon.

The F51 Gryphon series of fighters were not designed to be turn fighters but they do it so damned well. They were originally developed by the SA for the Co-op back when they were good buddies and the ASF47 was out of the Co-op's budgetary reach. The original design was an intentional nerf to the F40 by slapping on a couple of MDDSH nacelles to the nose so that it could have some rudimentary jump capability. The original may have been a bit of a dog but the follow on models proved to be very competitive.

The Anzu, the F51a, was the whole reason the Annex had to punch things up with the D-model of the Thunderbolt, and with the export of the F303 blocked by the U.S. government the Co-op cobbled together the Buer, the F51b, which was a severe underperformer. It was the F51c near the end of the war, known as the Condor, a stripped down version of the Buer, that forced the SA to go back to Sukhoi, the original designers of the Thunderbolt, who went to task and raised the bar with the 'bis' model of the ASF47. It didn't stop there because after the tussle with the Marines in New York, the Annex came up with significant field upgrades for the ASF47 and the 'bisE' designation.

The old adage 'speed is life and altitude is life insurance' may be at the heart of flying boom and zoom, but 'chicken-shit' is its soul. The idea is to: 1.) Select the easy or safe target and preferably one that is busy or doesn't see you, and; 2.) Initiate an attack that will catch them in a poor position or a low energy state while you maintain a high energy state, and; 3.) Boom, that is launch or fire on them with the least amount of maneuvering to position yourself for that shot, then; 4.) Zoom, that is fly past the target and egress from the point of attack regardless of the success of said attack, and; 5.) Utilize your high energy state and put distance between you and the target, preferably trading it for altitude, so that you can either plan the next attack run or select the next target.

B-n-Z teams, when they work together to troll and bait for one another, regardless of who scores a kill, are by far the most lethal adversaries in aerial combat—and the pilots of the Annex eat, sleep and cerebrate the B-n-Z mantra of, "Būm-zūm, būm zūm."

Point being...

If this were a 2D thingy, like a movie, you would be treated to some fantastical pitched battle of twisting and turning fighters, all swooping about and throwing themselves at each other at high speed with lasers and plasma blasters 'pew-pewing' with the bad guys getting

fire-balled and tumbling out of the sky in flaming heaps...but that's not what you're gonna get today. The close-in switchblade street fight in New York is not going to work here on Arrakis.

What would have been a delightful little seven kilometer wide fur-ball actually hemorrhaged with most of the Thunderbolts exploding out of the other side at high Mach with five of their own accompanied by thirty-one of them destroyed and plunging towards the ground.

What happened in that seven-second/seven-kilometer wide maelstrom of fighters and missiles was a textbook example of measure versus countermeasure with most of the missiles and mini-missiles neutralizing each other and only thirty-three actually finding their mark and three more of the Condors falling to guns. Of the fighters that were destroyed the cockpits did eject clear and thirty-three of the pilots survived, and when they touch down most of those pilots will wait out the battle and enjoy the show. Some may elect to run but if they switch off their IFF or get back in the fight they'll be targeted for sure so, in compliance with general orders, in the minds of most it's probably better to sit tight and twiddle their thumbs.

Another oddity for a neutral observer is that the fighters shot down are falling from the sky as clusters of junk and debris and not burning per se. They're not burning because with the quantum particle engines they don't require fuel so, you could say, they are burning ambient air—which is not physically possible in any universe but that's the best analogy anyone can come up with in regards to the impact of quantum partial-annihilation to explosive thermal expansion. Because of this they do carry cryogenic gas (e.g. liquid nitrogen) to spritz in the engine as one would an afterburner, and this would have the same effect as a fuel but, either way, bleve or burn, plasma is still plasma.

A lot of things came with the ASF47 upgrades...

With the bisE came larger ventral fins and the 'safety-razor' engines, yes, but the 5-barrel 7.62mm cannon was upgraded to 8.80 almost doubling its lethality. Also when flying in combat the guns are now set to pre-fire so that if your targeting reticle sweeps over an enemy the AI will automatically squeeze the trigger. That's how two Condors got dropped but with Jacob he killed one trailing him. In the tail of the ASF47bis was an itsy-bitsy cyaxle railgun in 4.75 called the stinger gun, whose purpose was to down missiles, but for the bisE they swapped it out for a permanently mounted single-barrel cannon also upgunned to 8.80 and this one wrecks everything.

When Jacob was about to exit the fur-ball alone three Condors saw this and pulled around to his six-o'clock which meant he baited them perfectly. With a pair of Thunderbolts hot on the Condor's tails all five shoot missiles off at the same time. Jacob launches a 20/20

cluster bomb backwards at the three missiles closing in on him. The bomb flicks its 40 bomblets into the pathway of those missiles and all three are blown out of the sky.

One of the Condors caught a missile up the ass, in the top vector port, thus vaporizing the back half of the ship. Another Condor had a missile slam into the fuselage at the root of the wing, and spun the ship around in a crumpled mess. The lead Condor was hit by a burst from Jacob's stinger gun and this clipped its canard and sheared off the wing from the port side thus spiraling it out of control towards the ground.

The Ottoman Slap to the fighters of the Co-op did the trick. Jacob, with thirty-eight Thunderbolts following him, break free from the melee leaving only thirty-eight of the Condors swirling around each other in defensive loops. He then notices that Peña is already over twenty kilometers away chasing after the IR5, and the four fighters of second squad are screaming in towards this fight. He is also alerted by the tacnet that high above them another forty-eight F51 fighters, the last from the three cruisers, are probing the low orbit spider mine-field looking for a safe point of entry. Jacob realizes that if they're going to win then they need to scatter the Condors down here before the new ones above get past those spiders.

Jacob radios to second squad as he pitches his nose around, "Second squad, let's break them up! Dump all your missiles on 'em and we'll follow ya in!"

The Thunderbolt has been called a lot of things through the years like The Wedge, Rhodan, The Sukhoi Plague, and Jacob's all-time favorite of ZoMug (for ZOMG!), but with the bizE model a new one has come to light. Just as Jacob finishes his turn, thirty-two centipede missiles rip through followed by second squad then Jacob and the rest hot on their tails. It's as if the flying demons of the Kitab al-Bulhan have assembled into some grotesque conga line and now set upon the remaining Condors.

In short, the 'Pchela Monstrs' are on a rampage.

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Simmon's Warthog pancaked into a short depression after a third mini-missile ripped through the deck from underneath. The ships AI reported that she was the only survivor and that the trauma maintenance system of her JACC is struggling to keep her alive. This was not exactly an auspicious beginning to this firefight but her perimeter run, a whole kilometer away from that five-klick barrier, netted the discovery of a whole squad of troops from Net Basha

sneaking on foot through the tall grass and Simmons bringing the hammer down with a vengeance.

Where the Thunderbolt now has the 88, a 5-barreled Gatling gun firing 8.80mm explosive bolts, and the 23, a similar 3-barreled gun in 23mm firing the wontons, a one-ton yield micro-nuke bomblet used for ground attack, the Razorbacks have three of each gun all on flexible stinger mounts with two in front, two in back and two more that can sprout out from the mortar tubes amidships.

Simmons fired her 23mm cannons on the squad which pretty much wiped them out in seconds but, instead of keeping her underside flat to the ground, she banked slightly to tighten that turn so that she could stay close in while keeping the sharpest edge of the fuselage towards the target. She should have kept her distance and her belly level to the ground because another squad of troops just a few hundred meters away from the now dead squad just couldn't resist the juicy and tempting flat underside presented to them.

The skin of the dropships is the same used on Thunderbolts. It's a carbon tube latticework that's quartz crystal hard and yet light as pine board. The skin of the Thunderbolt is a centimeter thick, but the skin on a Razorback is twelve-centimeters and the deck is three. Developed by the Russians, the American licensed version was called CCCP by Northrop (for Carbon Composite Compounding Process) and this plasma printing system was first used to make transparent canopies consisting of virtually indestructible artificial diamond for fighters like the Bulldog and the Cottonmouths. Now with the iron infused carbon based composite skins, joking referred to as Stalinium, at a steep enough angle rounds usually glance off, but at around 30° from square-on those rounds tend to crunch in a bit or penetrate when exerting enough force. When flown properly the Co-op's missiles and rail-munitions will bounce off a HWG all day long but with Simmons' deck hiked up they kind of punched right on through.

Maria and Nicole race in and hose the entire area up to the perimeter barrier with their plasma-guns, 23mm cannon and cluster bombs. With the transports from the second wave lifting off after dumping their troops, Maria and Nicole would rather be blasting them but, as of yet, nobody from the other side of the five-klick barrier has yet to fire a shot so they are still off limits pursuant to the ROEs.

The idea of off-limits doesn't last long.

While Nicole was busy blowing up the terrain along the perimeter, keeping the second wave of troops from Net Basha thinking twice about rushing forward, Maria is flat turning around Simmons' ship looking to zero in on the troops that shot her down. They have already closed in on the crash site—not to attack it as much as not to

get shot at by Maria from above. The AI on Simmons' ship was using one of the small penta guns in an attempt to drive them off but the troops from Net Basha are in the Co-ops newer ACE fighting suits, designed for all combat environments like the JACCs, so out of range the penta guns in 2.73 serves more to annoy them more than to keep them at bay. The AI on the downed Warthog then deploys the 88 gun from the mortar tubes and with this everything goes to hell.

Because of the thickness and durability of their carbon and iron composite fuselage the Razorbacks still carry cryogenic hydrogen and oxygen to spritz into their engines to maximize thrust where needed; however the skin of Simmons' warthog has a severe crack. By just casually looking at it you would notice ripples radiating away from the ship but if you were to switch to infrared you would be treated to a dazzling 30 meter plume of flame shooting out from that breach which is now glowing red. If the skin and cryogenic tanks would have been weaker the ship would have exploded outright but, as long as the combustion stays outside the shell, the fuel will just continue to burn out of control until it burns itself out.

The Warthog's AI fires the 88 through that heat plume and on the squad from Net Basha but, because the extreme heat from the burning hydrogen/oxygen mix is throwing the sighting system out of whack, some of the 8.80mm rounds deflect off of the hull and fly through the five-kilometer perimeter killing three from Net Basha. In a completely knee-jerk reaction those troops fire back en masse.

"Oh shit!" Maria then broadcasts, "Weapons free!"

Kiel has been continuously tracking and assigning targets and areas to each of the gunships, so with the missiles and miniballs flying in, Kiel radios, "Hit your targets now!" And then, very unexpectedly she orders Victoria in because her ship has a missile farm segment in the hold, "Hedgehog, step up and cover Tiger."

Victoria laughs, "Well now, Guns, isn't this a cock up!"

With Nicole doing high speed runs with all three of her 23mm cannons blazing and 20/20 cluster bombs flying in random patterns, she is effectively pushing the second wave back a whole kilometer from the five-kilometer zone, and with Simmons' AI popping a 20/20 bomb about every second straight up to scatter the wonton bomblets around her ship, that gives Maria a chance to expand her orbit and locate any squads that got past them.

With the missiles coming in the 88s have been very effective in blowing them out of the sky, but with Maria locating three squads below her she shouts, "We have contact!"

Before she could get a shot off a mini-missile from the squads

below hits the underside of the nose of her ship and shears off the 88 cannon that was fending off centipede missiles. Because of this the 88 on top failed to target a Co-op centipede that hits the topside of her nose which punches the ship into the ground. Now pitching into the dirt Maria's ship cartwheels and rolls landing upside down with its ass in the air. The 88 and 23mm cannons in the back deploy and set to work but cannot depress their aim enough to get troops that may close in from behind.

The underside penta guns didn't deploy in time so of the three mini-missiles shot at the ship, one got through and punctured the deck and blew up in the port compartment across from the cockpit thereby killing her three man support team.

Hanging upside down in the cockpit Maria shouts at her WSO, "God damn it! Ozo, get out!"

From his position across from her, Sergeant Ozo laughs back, "Fucken right about that!"

The pilot and WSO hatches above them snap open and Ozo falls out while Maria blows the explosive bolts holding the massive cargo hatch door to the fuselage. Still attached to the deck, the top edge slams into the ground and this quick thinking will give them the only cover they have for the fight that's about to come because, with her ship down, Maria knows the squads from Net Basha, the ones that took the nose cannon out, will now converge on her.

It's a hunch, a gut feeling, not the borderline feral prescience that Jacob exhibits but her hunches do serve her well.

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Peña is in a rolling scissors with a Condor, and losing energy fast, and he's thinking to himself, *how the fuck?* He could now see that his stupid mistake was made about thirty seconds ago when he decided to charge in at low altitude like when flying a Bulldog, but that little realization doesn't help right now.

Chasing after the IR5, Peña anticipated that this guy was going to try the same trick he pulled on Second Squad, and Peña was ready for it when he did. Coming down hard he dropped below the IR5 who was in a vertical turn, and while pulling up to get guns on he raked his 88 through the right wing cutting off the horizontal stabilizer on the tip that functions as a rudder. This took the fight out of the IR5 who decided to git while the gittin' was good, and Peña let him get away because that's their standing orders for now.

With the IR5 high-tailing out, Peña drops below the Condors

scattered by Jacob and the others. He could see through the tacnet interface that nine more condors and one Thunderbolt were tumbling out of the sky from that last attack and that half of the remaining Thunderbolts were chasing after the rest of the Condors, but none of them were chasing any in his general direction.

Peña, near Mach 1 and tilling the dirt at 30 meters, has four Condors heading his way at Mach 1.5 with the lowest one at 1000 meters above him. At three kilometers out Peña decides to flick a micropede at that low one simply to shoo him away but instead of going up-vertically, as was expected, this guy rolls over the missile and dives down-vertically for Peña.

Obviously, Peña was looking to slip under the cover of the Thunderbolts now in command of the air over the Moloka'i preserve and, yes, that Condor should have raced off with the rest of his crew, but the bonus payout for taking down a Thunderbolt appears to be worth the risk.

Seeing this, Peña turns tight to stay under the Condor forcing him to either aerodynamically compress in the dive, thereby crashing into the ground (if he was in a stupid rush to take the shot) or pulling in alongside Peña while in that turn thereby losing that shot. The Condor pilot chose the latter option, the temporary formation-flying with Peña over the crashy-dying option, and for a split second both pilots look at each other—wondering where this was going to go.

Peña rolls up-over the Condor with the intent of falling on its six but, instead of overshooting the Thunderbolt, the Condor also rolls and coils back putting the two into their first rolling-scissors. The problem faced here by the two pilots is that this is a low-altitude and progressively losing-speed maneuvering fight that harks back to the antiquated prop and early jet days from centuries ago. Fact is, nobody on either side is going to believe that this actually happened until they see the telemetry and path the files for themselves.

Like most pilots they log hundreds of hours in flight simulator games, and what's going on here is not exactly a common occurrence even there, but it appears that in game both pilots here have mastered the art of the stall-fight. Each time they turn towards one another they cut power and follow with a quick pulse of vectored-pitch to tighten their turns trying to force an overshoot, but failing that they cross-scissors past each other only to twist around to yet again chop more power, with another smidge of vector-pitch, trying to squeeze a little more tight out of their turns.

So, here's Peña, sweating bullets and amazed that he is in an honest to God stall-fight with a Condor pilot who actually knows what he is doing, and in ships that were never designed to pull maneuvers

like these, Peña realizes that cutting through the anxiety and the adrenaline rush he's grinning like an idiot.

In Peña's mind he's actually having fun.

Here on the seventh scissors the Thunderbolt and Condor look like they are both hanging motionless in the air. They've lost so much energy and they are so slow that their AG pods have kicked in to supplement the loss of lift that was keeping them airborne. Yes, either of them could punch their throttle and shoot into the sky like a rocket but there's that little overshoot problem to consider. The pilot that loses nerve now will get an ass full of cannon rounds for sure.

At this point there is no more wiggle room. The mass of the Thunderbolt, where it usually maintains significant momentum through turns, now works like an anchor with Peña's fighter grinding to a halt in midair. The super-lite Condor, now unable to roll, is forced into an excruciatingly slow hammer-head and between the two it's obvious that the Condor is going to win this bout—and as the Condor's reticle drifts onto the Thunderbolt, Peña, in a last second Hail Marry pass, punches his throttle in a full powered vector pitch. The nose of his ship pushes over and Peña fires the very moment the Condor shoots his cannon at him.

At thirty meters apart, point-blank range in fact, the cannons are automatically set for a wide-spread dispersion. For both ships the damage from the explosive bolts is absolute with their forked MDDSH nacelles, canards and wings being swept away in a cloud of debris. Only the cockpits, encapsulated by the indestructible canopies, remain intact even though they now are covered with dozens of crush blemishes and star-fractures. These cockpits did their job and, like synchronized swimmers, they both detach from the tattered remains of their ships and drop to the ground with a controlled fall.

In space these cockpits function like a lifeboat and can operate for a month if need be, but since Peña and the Condor pilot got shot down in the atmosphere of a habitable planet they snap open and let the pilots eject free before touching down.

Peña and the other pilot, standing on the side of a small hill, and currently marked by IFF as non-combatants, both wave and walk towards the top of the hill to watch the action, and it is Peña who opens the conversation, "Lieutenant, that was a fucked up fight!"

The pilot puts out his hand with a smile, "Macquarie, Porter Macquarie's the name, and in fine company I am!"

"Oscar Peña..." Peña takes his hand with a firm shake, "And I have to say you're a hell of a pilot."

"I want to thank you, that was bonzer of a blue thar, mate!"

"Much appreciated here too." Peña has already fished out two 50ml airplane-bottles of Scotch he secretly holds onto for just these occasions, and hands one to Macquarie, "This requires a shot."

"The hell!" With a look of total surprise, Macquarie takes it in hand, "A lil' nip of Bowmore! I have to say we're cobbers to the end!"

Macquarie's three fellow Condors, overhead in a lazy Lufbery circle, suddenly break and race off. Seconds later Jacob's Thunderbolt streaks in and turns hard to orbit the downed pilots for a lap.

Peña asks, "Hey, your buddies, why didn't they jump in?"

Macquarie snorts, "I called dibs on ya."

"Oh, okay!" Peña smiles, "How much of a bonus do you get for shooting down my dumb ass?"

"A cool mill! Shite, I racked me up three spookys today, but that..." Pointing to Jacob who is now racing off towards Moloka'I, "It's ten to ground him and a hundred to scrub 'im for good."

Peña is amazed, "The Field Marshal?"

"Gob honest truth, mate!"

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This broadcast will be looked back on as a seminal moment in as-it-happens reporting. Everybody will remember where they were, and there are those that will swear that they could hear the collective gasp from the over three-billion viewers watching it all in real time, and with horror, as Victoria's ship goes down.

Opie and Oshiro have done an unbelievably heroic job keeping up with the fight. Not only did they place their spare octodroid camera forward between the two crash sites, capturing incredible footage of the gun runs by the Warthogs, but they themselves have moved up and became part of this story because they are in the thick of it.

Watching Victoria, Nicole and Michelle Kiel fling their gunships in alternating runs at the troops from Net Baha was eerily terrifying for most viewers because they simply cannot wrap their brains around modern combat. There is no frame of reference in 2D and interactive media where they can compare what they are watching and have some understanding as to what's going on. It is impossible for most viewers to comprehend and digest the extreme violence and the sheer volume of firepower being exchanged between the two sides. More so their minds cannot grasp that the Warthogs appear to simply brush off all the missiles and bombs that slam up against their armor-fuselage and, now thinking them invulnerable, are shocked when the inevitable

happens and another one of them gets shot down.

The viewers just didn't expect it to be Victoria.

As Victoria was flat spinning through the exit point of her run, and turning around to fly close in behind Maria's crash site, a centipede that was hugging the ground, and not seen by the AI, shot up and punched itself into the underside mounted plasma cannon in the nose. This missile, in unison with its four mini-missiles, all exploded at once shredding the entire forward third of the Warthog. The explosion was so intense that a secondary explosion of the hydrogen and oxygen tanks followed and that almost invisible fireball was highlighted by a supersonic vapor chine that flashed as the shockwave expanded. With this the forward momentum was virtually killed off as the rest of the ship skipped like a rock then plowed into a stand of trees.

Opie and Oshiro have already split with her racing towards Maria's crash site to get footage of that firefight while Opie and his octodroid rush up to Victoria's crash site, all the while reporting, "We have three of the Annex troopers crawling out of the wreckage and no sign of Major Wilson. Aaah, stand by, we have activity..."

The deck hatch is ripped open from the inside and an RAF crewman in a JACC steps out followed by Victoria in her JACC. The underside of Victoria's canopy is shattered and she has blood splattered all over the inside of the visor.

Victoria cries out, "Crickey, this is gonna hurt!"

As she bends over saline sprays the inside of the canopy, and as Victoria stands blood and water pour out of the breach. Opie's octodroid camera picks up her face that now sports a huge-ragged cut through the brow, past her eye and down through her cheek and into her jaw, but instead of bleeding profusely like it was the cut is filled with a metallic trauma compound. As if fixing a broken vase, this medical Kintsugi compound of silvery micro med-bot infused remedial mucilage fills the cut and tamps off the bleeding.

The SA Corporal says, "We need to get to the crash site."

The RAF crewman follows with, "I'll watch the Major, here."

Victoria protests, "No, Lieutenant, I'm coming with."

"You need to set this one out, Major."

Victoria snarls, "The fuck I will!" She pulls her BR1 railgun around and nods to the SA troops, "Corporal, lead the way."

As the five high-tail it towards Maria's crash site, under three-hundred meters away, Opie turns towards the octodroid camera and, with a totally surprised look, he says, "I guess we're goin' too!"

Opie and his droid are only thirty meters behind the five, and he continues to report while running, "If you just joined us, Major Wilson survived that crash! In fact, everybody on that ship survived that crash. Major Wilson received a severe injury to her face but, as you can see, she's still in this fight. Right now we are heading to the second crash site. That's camera feed number seventeen, Oshiro is filming that fight that's currently taking place...oh, shit!"

Victoria saw them first and opened up.

They ran in behind a nine man squad of enemy troops that were also moving onto the crash site. Victoria took to her knee and dropped three of them outright. The SA troopers dive to the ground and chew up the squad with the guns on their scorpion boom mounts. All of the nine were already dead when the plasma-pulse flail gun finally torches the whole area in front of them.

When Victoria fired on them one was able to get a few shots back and what was caught on camera was Opie getting hit in the helmet with a miniball. The round clipped his helmet and spun it around while knocking him off his feet. With the flail gun being fired a second time Opie stands and is bleeding profusely out his nose and from the large cuts on the side of his face and scalp.

With Victoria reloading her BR1, Opie, in the foreground, picks up his helmet and laughs as he puts his finger through the hole in it, "That was close!"

The SA troopers leap to their feet and skirt around the flames with Victoria and the lieutenant trailing behind.

Opie sees this and, without any hesitation, he beats feet after them with the droid on his tail, "Here we go!"

Seconds later they run into another group of enemy troops, and another exchange of fire, and the viewers are entreated to yet another amazing shot of Victoria fearlessly kicking ass while a few miniballs glance off the armor of her fighting suit.

On the now five-billion viewers this leaves an impression.

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At Maria's crash site, Oshiro has hunkered down near the back of the cargo door and is filming the exchange of fire between Maria and the squad that has crept in close. The gun mounted on her scorpion boom is the heavy barreled cyaxle cannon which is so lethal she has no problem keeping that enemy squad at bay. Ozo, on the other side of the cargo door, has the traditional five barreled scorpion gun. Maria and Ozo know that Oshiro is there but they are intent on

ignoring her and focus on their job. The odd thing is that the mic on her camera is so powerful that she is able to pick up on their small talk during the firefight.

Maria laughs while she continues to fire, "No shit! I didn't see you there, Sergeant!"

Ozo radio's back, ["Ya, my son was on the other team."]

"Which position does he play?"

["Third base."]

Maria lifts her right arm and sprays the foliage with 2.73mm bolts followed by two grenades, "That is one good looking boy of yours!" Maria then thinks for a second as the grenades go off, "Hey, wasn't he the kid hanging out with Diego on Second Hand?"

["Ya, I was there for three years, remember?"]

Maria is surprised as her cycaxle cannon continues to chatter away, "Oh yea! That's right! Growing your legs back! I remember now! That was a long haul for you."

Ozo mumbles, ["Take that, Homer! Ya bastard!"] Then perks up with, ["It was worth it. I got to know the Xhemal pretty good!"]

Maria's cyaxle cannon continues to fire small bursts as she smiles, "I'm glad our kids can stay in touch now that you're back."

Ozo laughs, ["I have to tell ya, Marshal. Now that Diego has made this change, Jose is totally in love with her!"]

"That's a scream!" There was then a huge explosion on the other side that shakes the ground and rattled the wreckage of the ship, "How's the misses?"

There was a lull, and suddenly two enemy troopers in ACE suits pop up over the berm Maria was crouched behind. She instantly let loose a barrage from the five-barreled penta guns attached to each of her forearms. At this distance the bolts cut right through the suits killing them instantly, and as the two bodies collapse she notices the emblem on their suits and suddenly realizes that they are fighting Security Services and not forces from Nufa.

"No shit!" Maria was wondering why they were so aggressive and got her answer, then radios, "Ozo, status?"

No response so she pops another three wonton grenades over the rise and slips in behind the cargo door. On the other side she finds the lower-half of Ozo lying beside a shallow crater. The upper half of his suit and body were tattered shreds of tech and gore spattered about in the interior hold of the ship.

Seeing this, two things come to mind: First is that she can't hold this position without Ozo and, Ozo getting killed like this really pisses her off to no end.

Desperate measures, thinks Maria when through the tacnet she commands the Warthog to eject a spider missile. As Maria slips back to her side of the cargo door she hears the missile hit the deck and roll down towards the front of the ship that's nosed into the dirt.

"Gun Crazy! Ozo is dead. I can't hold."

Kiel radios back, ["Hedgehog and her support team are almost there so if you can hold on for just another minute."]

Maria leaps up and empties her penta guns into the troops inching up to her position. She then lets loose with four grenades and drops back down behind the berm as miniballs from the tree line start to chew it up.

Maria squats in front of Oshiro, "You need to get outta here." Another ACE suit hops up and over the berm and, without looking back, Maria's cyaxle cannon blows him in half, "Yoshi, you've got twenty seconds to get clear."

Oshiro hops up and trots backwards all the while filming Maria swapping out the magazines of her penta guns while stepping around the ship. Her cyaxle gun continues to fire burst after burst at the enemy troops as she approaches the spider missile.

Maria calls out orders as she scopes the bar code on the missile and pulls up the menu in her JACC, "Gun's I'm gonna pop a spider! I need you and Red Hell clear by three clicks!"

Kiel radios back, ["You are fucking crazy! You know that!"]

"Get outta here!" Maria then notices Victoria and the others break free through the trees behind the ship and broadcasts to all, "Vic, everybody, get down now!"

Oshiro stops retreating and films what happens next. Maria launches grenades over the wreck and picks up the missile, cradling it in her left arm and holding onto the handle in the back with her right hand. She pushes the missile straight up into the air and it loses all weight as it starts to deploy. Maria anchors herself by hooking her left arm into the landing gear that is sticking out of the ship.

It took little effort to coax the missile to point out over the end of the gunship and towards the bulk of the troops from Net Basha. In that direction are all the transports and fighters that have kept their distance because of the Warthogs but are taking the opportunity to close in now that Michelle and Nicole's ships are streaking away.

The missile is pulling hard on Maria who is struggling to hold onto it, the very second she sees the transports and fighters lined up on the tacnet she lets go of it. As the missile starts to fly forward Maria throws herself onto the deck of the ship and rolls and slides down as fast as she can. At one-hundred and fifty meters away the missile snaps open and launches.

There was a strange breeze swirling around the missile as the MDDSH vanes blossom out, and in a thousandth of a second the thing attempts to go 300,000kps from 30kph. In atmospheric conditions, at that level of acceleration, basically from zero to light-speed, the 500 kilos of its mass converts from a construct of solid components—to a rapidly expanding degenerate mass that basically goes boom.

The event was approximately 1.2 megatons of explosive force but, instead of going kaboom all in one spot, that explosion was stretched out over five kilometers.

The compression and destructive force of the shockwave was devastating out along the axis of the explosion. Many of the troops from Net Basha outside the perimeter were killed outright, and all the transports and fighters that were racing in were knocked out of the sky. Maria knows that the Security Services troops close to the crash site will not be hurt by this blast but they sure as hell will be demoralized by it if they have half a brain.

With all the firing from outside the perimeter stopped, and Kiel charging back in at high speed, and with twenty-two seconds of rolling thunder shaking the ground, Maria turns to Victoria and the rest and thumbs back behind her, "You wanna get in on this?"

The corporal and his crew break left and Victoria and her Lieutenant head towards Maria on the right—and Oshiro captures the three of them charging the berm and firing as they do, which is made even more dramatic because Victoria and her Lieutenant are firing away with hand held railguns.

As they reach the berm, spraying fire crazily over the top of it, Maria first gets an alert that Jacob is calling her of all things, and another alert that the troops from Net Basha, what remains of them, have just broadcast a stand down order.

Maria waves her hand up and down, "Cease fire! Cease fire!" In the sudden stillness she looks around and then turns to Victoria, "Hold your position. Give me a minute." She then steps away and pulls up Jacob, "It had better be good, Chuckle-fuck!"

["I'm patching Hartcourt through to ya."]

Maria's mood changes, "Oh! Okay, thanks."

Maria looks to Victoria and shrugs with surprise as Hartcourt comes on the line, ["Maria, love, how are you?"]

Maria is amazed by how soothing his voice is, "Hey, Box! It's been a bang up day, if you know what I mean."

["I hear you're having a row with my Security Services."]

"Oh, ya know, differences of opinion and all that. I kind of got it all sitch-a-fuckenated for now."

["I hear you've also uncovered some more of those...children. Is that true? If so I have a modest proposal."]

"Tell ya what, how 'bout you give me the low-down-low, and give it PDQ before I start scrappin' the last of your people. I mean I'm on a roll here, Box!"

["A truce then. You take the children, all of them. Just leave me the staff. I will personally come deal with them."]

Maria thinks about what that means and wonders if leaving them here is the morally right thing to do because if Hartcourt is going to come interrogate them then you can guarantee that it's not going to be pretty. Then again, who else would take the short cuts necessary to extract what they need from these soulless degenerates and stomp the Geisha Huts out once and for all.

"Well now!" Maria snorts, "I guess it's best to leave that ugly interrogation business to the pro! You got yourself a deal."

Harcourt is obviously stewing on what she just said, and his response blows Maria away, ["Maria, I do know what people say about me but, just so you know, I personally abhor violence. (deep breath) Doing this...interrogation...I consider it my penance for ignoring the obvious. I hope you, of all people, would understand."]

Maria has the shocking realization that he's telling the truth, "Ya, Box, I do. Let's touch base when I get back to Sapphire. We can hammer out the ROE's then. Kewl beans?"

Harcourt gives a small, uncustomary and very subtle laugh, "Yes, Maria. Cool beans it is, and...what I extract from those bastards I will most definitely share with you."

Cutting the link, Maria then turns and steps up to Victoria, "It's over. We take the kids and we're outty."

"Mar, dearie..." Victoria surveys the destruction around them and shakes her head in amazement, "You *are* the dog's bollocks."

Oshiro caught that on camera and the viewers, especially in the UK, will be curious as to who this 'Mar' person is.

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["Mr. Graves, I was wondering if you can help me. I'm trying to get ahold of your Marshal Ramirez."]

Jacob grunts as he pulls a tight turn and dives after a Condor, trying to drive him away, "No problem, Mr. Hartcourt. (grunts) I'll be happy to put you through." In the video feed he notices the new Secretary General behind him, "Just let me talk to that guy behind you when I transfer you. Deal?"

Hartcourt glances behind himself for a second, ["Lebedev?"]

"That's the one!" Jacob then gets an alert that a cease fire has been called, "We get a cease fire?"

["Yes, Field Marshal. Orders have been issued."]

Jacob is sort of surprised, "Oh, okay! Thanks for that!"

Now in a leisurely turn, waiting for Maria to pick up, Jacob asks, "Mr. Hartcourt, if I may, Sir."

["May away, Mr. Graves."]

"Your pilots, they're good, but they are taking excessive risks. A little too aggressive! As an observation I would say that your bonus structure needs to be flattened out a little."

["And that would accomplish?"]

"They need to work together? Think wolf-pack."

["And you're telling me this?"]

Jacob smiles, "I prefer a challenge."

["You're saying it was a bit of a shooting gallery today?"] Jacob nods yes, so Hartcourt nods, ["I'll take it under advisement."]

Maria then comes on the channel with a little bit of a snarl, ["It had better be good, Chuckle-fuck!"]

"I'm patching Hartcourt through to ya."

Maria's mood changes, ["Oh! Okay, thanks."]

After a quarter minute Lebedev comes on line with a scowl, ["Da, Field Marshal."]

"Well, Vasily, you sure as fuck got there fast. I mean the shit just started and...here you are!"

["I am here to intercede for peace."]

"Really, you...a man of peace."

Lebedev admits, ["Peace will come. It always does."]

Jacob pushes his button, "So, you're there to broker the post war peace. I know what's up your sleeve."

Lebedev smiles, ["I am sure you have ideas."]

"You've been very vocal about your position on the FIS, so I don't think it's an idea I just pulled out of my ass."

["Makes sense to plan ahead, no? It's going to take time but not that much time."]

Jacob's eyes bore through his, "I just want you to know this, Vasily. I want there to be no misunderstanding. When this is all over I will be the one to lie in the grass."

Lebedev smiles, ["Whatever you say, Strelok."]

"The permanent members of the Security Council have always cock-blocked overreach by your types in the past. I expect this time to be no different."

["Jacob, that's the beauty of time."]

After a pregnant pause, "Okay, I'm on pins and needles."

Lebedev laughs big as he reaches out to terminate the feed, ["Given enough time things change. *Dos vedanya Tovarisch!*"]

As Jacob drops altitude, he has a light bulb of a realization, "Mutherfucker! So, that's what you're up too!"

01011001-01001101-01001101-01000011

The Mari Lug is a pocked mark moonscape around the two hotly contested crash sites. What trees still standing are stripped of bark and splintered beyond help. Oshiro filmed the SA load the children into the drop ship and left with them. The spare octodroid camera filmed the facility and the staff being handed over to Security Services, and with that done it zipped back to the crash sites.

Security Services have already cleared out the bodies of their dead that litter the berm and depression by Maria's downed ship. They are in a hurry because they've been advised that Pandemonium, now in orbit high above them, is going to vaporize those wrecks the second Maria and her people bug out.

The fire team that came with Victoria have already picked through the debris and collected what body parts they could of the support fire team that were blown up in Maria's ship. Maria herself reverently carried what was left of Sergeant Ozo onto Kiel's Warthog and put it with all the body parts that were forward in the hold.

Kiel's support team was already dropped off at the first crash site to recover Simmons herself. They also collected the remains of the other four and were waiting for Kiel to arrive.

When the Warthog touched down, with the ramp already open, they start loading up the dead before gingerly bringing Simmons up the ramp. They set her down gently across from the cockpit.

Kiel calls out as she takes off, "Red Leg Three-Three, we are out of here. You are clear to destroy the HWGs on your next pass."

On the radio they hear, ["Roger that, Gun Crazy. We are adjusting orbit and will initiate the fire mission in eighty-five seconds. Perigee will be two hundred kilometers with burns from west to east. Please confirm that you are north and clear."]

"Roger that. Egress is to the north and we are clear."

["Copy that, north and clear. Seventy seconds."]

This is the smoothest ride Michelle Kiel has ever given. Most everybody have already popped their helmet/visor assemblies and hung them on the racking.

Simmons is a mess. The lower half of her suit is gone from below the diaphragm and her right arm is also missing. The visor was shattered completely and half her face and throat is covered with the silvery trauma compound. The bleeding is under control but if you look closely you would see that her lower jaw and right eye are also missing. Maria kneels beside her and pulls up the suit trauma maintenance interface through the tacnet.

Simmons shouldn't be alive but she is—just barely. Her spine is severed and the suit is working her heart and lungs for her but they can do this indefinitely, and the three bleeds in her cranium has been stopped by internal micro-bots. The tacnet analyses the data from the suit and reports that it will take at least five years to rebuild her as good as new, and Maria just shakes her head at that last tidbit.

It was Victoria who realizes that Simons was conscious and aware when her one eye opened, "Angie, doll, you with us?"

There was an audible click when Simmons answers through the suit's speaker via the tacnet, <"How do I look?">

Maria is suddenly both pissed and worried sick. Pissed that Simmons has bypassed the chemicals that would put her out, and worried if she finds out just how bad off she really is. That last one being academic because Simmons suddenly pulls up the trauma Maintenance interface and looks for herself. Maria, in administrative override, cuts that access but Simmons already saw enough.

Simmons goes, <"Hey, I was looking at that.">

Maria grits her teeth, "Well, you don't need to be."

<"It's that bad, hu? Don't bullshit me.">

Maria then sighs, "Five years."

<"To make me whole again?">

"Show-room new, five years."

<"Oh, fuck me. I can't do five years.">

Maria tries to sound encouraging, "Yes, you can."

<"Ah, no. And that means fuck no, I can't.">

"You've done it before."

<"An arm! Three times and that's a cakewalk. What am I supposed to do with my little girl, hu? What do I say to her when she walks in on me while I'm layin' in a Petri dish?">

Maria asks, "Then what are we supposed to do?"

<"Let me go.">

"Just like that?"

<"Give me admin rights and it's out of your hands.">

"Okay..." Through the net, Maria releases administrative rights back to Angie and says, "It's out of my hands."

Simmons' one eye smiles at her, <"Thank you, Boss.">

Maria takes her hand and says quietly, "We love you, Angie."

Simmons has already cut stimulus to her heart and lungs, <"Look at the bright side. I'll be back to work by Friday.">

Maria smiles, and as Angie starts to slip away she asks, <"How many we lose today?">

Maria says, "Eight."

<"Ah...still single digits.">

A few seconds later her pupil blows.

Maria grimaces slightly and leans into Victoria while fighting back the tears. She breaths heavy a couple of times, sniffs hard and says to herself, "Okay."

Victoria pulls her hair back, leans over and gives Maria a little kiss on the forehead, "Sorry, Mar."

Across from them, sitting on the deck beside the cockpit is Opie and the octodroid camera, Opie reaches up and pushes the mic

button on his headset and asks, "Tell me you got that."

Over the radio he hears the anchor say, ["Every bit of it."]

One of the support fire team members on Kiel's ship squats beside Opie and says, "We need to take a look at that face."

Opie nods and looks at the camera with a mixed expression of both shock and relief, "This is Daniel Opie, coming to you live from the Mari Lug on Nufa, signing off."

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