Short Story 00 — Space Punk

Quentin RIBAC (Jirsad)*

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It was happening on the D-designated dock of the special projects warehouse of the Felmort Industries company, on station K50. There met in the early morning a group of young, crazy ones. Lead by none other than Georges Felmort, second son of the company's CEO, they were about to see the achievement of a dream they had built together. They were six of them: Georges Felmort, young, handsome, rich and with a mind for greatness; Çju, of the non-human fso species; Mell Robins, red-head with fuzzy eyebrows, expedition's head engineer; Kynt Dor-Nan, on-board mechanic; Rolly Mortens, cook; and Selness Lipsum, journalist for The Forest of Steel. Georges addressed his five comrades, happiness and love mixing in his voice:

"I am very proud and very glad to stand before you on this day, my friends."

Beside Georges stood Çju, whose blueish, lightly gleaming skin certainly intimidated some other members of the team. Georges began a long-winded speech summarizing their eighteen months of common work, and did not lack compliments for any one of them, but especially for his non-human comrade. He emphasized how much the two species' collaboration was necessary, even as the two had only met five human years ago. In the meantime, Mell was laughing under her breath. She indeed thought that the fso's arrival into the Free Persons Alliance (FPA)—thus named with a mind for being inclusive and welcoming of all various species and life forms that made it up—was a good thing, but she also thought Georges vastly exaggerated the importance of his project. Of course, there was the enormous weight of the Felmort family in the interstellar economy. Of course, Georges and Çju were one of the most popular inter-species couple in the media. But, had she been able to express herself freely without risking loosing her position in this still exciting project, she would have told this braggart to be quiet and climb onboard.

But there was the journalist. Selness Lipsum was a chubby little man about fifty years old, trying to appear a state-of-the-art investigator, however one could not help noticing how his raincoat—besides being completely useless on a space station where it never rained—was far from new and had its auto-adjust dysfunctional. The publication for which he worked, which was broadcast through the astronet, available in all stations and on all FPA's planets, was overtly advocate for the past and held many renowned investigator journalists. Lipsum was not one of them. He was a man who, even though he considerably valued and liked his job and social environment, had never been centered on his career. However lately he had had some significant achievements, so that his boss had sent him on young Felmort's uncanny project. Georges, having finished his discourse, came now towards him:

"Good day, Mr. Lipsum, he told him."

"Mr. Felmort."

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"I think I have heard of you in the past, haven't I? Weren't you the one to uncover the Pratt case?"

"Indeed I was. I'm honored you know of this."

"Yes yes... ah, what a scandal! I am quite outraged he was merely sentenced to community service."

"Oh you know, justice these days... but well! If we're here today, it's to be witness to your achievement, not to discuss this sad case."

As Georges stepped away from him to meet again with the rest of his group, the journalist took, on a small auto-rigid touch-screen integrated to his raincoat, some notes for his article. The Forest of Steel was one of the rare news medium that were still using this method, others preferring automated suggestion and description from a video shot. It was, indeed, this touch of authenticity that had convinced Georges Felmort to agree to the journalist's presence, when he ordinarily cared much for his privacy.

The latest adventure of Georges Felmort, Aldamar Felmort's famous son, stood in one of the company's numerous warehouses. It was not however meant to dwell there for long. Because this senseless project was nothing less than a spaceship. How is that senseless, you might say? We had them long before New Human Time began, that is almost 2319 years ago. But this ship, dear readers, is meant to reproduce an emblem of "Modern Times" civilization of the Planetary Era, because it is nothing less than a... steam powered spaceship.

So Georges told Kynt he left him the honor of lowering the footboard. Kynt was not flattered, but he pulled the lever anyway.

"A lever?" the journalist said, surprised, "No voice command? No integration with the screens on the team's members suits?"

Kynt kept from bursting in laughter, then said:

"Oh no! There's nothing inside this, nothing at all."

"Oh, alright now," Mell said, "Let me explain, Selness. I can call you Selness? Very well. What do you know of this project?"

"Actually, I was only told Georges Felmort and a fsa ¹ had built a steam powered vessel. This seemed completely unbelievable, but now that I am standing here..."

"Agreed," she interrupted him. "But what were you told of the technology behind it?"

"Only that the engine was steam powered, instead of antimatter powered like every last generation engines or atomic fusion powered as we've already had for generations."

"Agreed. Now imagine that this whole ship which I designed is fully analogical. It includes neither quantum processor, nor automated trajectory correction, not even a single digital screen! Barely manometers and light signals."

"Really," Lipsum said, wide-eyed.

"Levers, buttons, wheels... those are the only control equipments. Agreed?"

"There are also pipes, screws and bolts," Kynt cut in. "Oh, so many bolts."

"Would you mind if I took a holo of the ship before we step in, for the article?" Lipsum asked.

Georges Felmort did not miss the occasion and accepted with a wide grin, how proud he was of his project. So he stepped on the footboard, inviting Çju to stand by his side. Lipsum stepped back enough to take the holograph from his glasses. He pressed the button under the leg and saved the impression alongside, for it may be useful, the automated description, as bad

^{1. &}quot;fsa" is the singular form of "fso".

as it was.

A five-person group is standing in front of a large metallic contraption. The contraption, 20.53 meters in length by 5.18 meters in diameter, is designated by the user as a spaceship but cannot be identified to any known model in the TravMach database. On its hull is engraved a single word: "Hourglass". Besides, the quality of the soldering lines between the sheets of alloy which may be felmortium-24c lends a 87% probability of it being a hand-made machine. Hanging at the ship's stern are seven directional propellers, moved by flexible arms, themselves oriented by cryoresisting hydrogel flexible pipes. The ship's visible side, made up of soldered sheets and pierced with an open door and various panels, does not have visible windows or portholes, only the ship's bow being windowed with a 6.35-square-meter glass pane.

On the downwardly open door's footboard stands a human with a masculine body shape dressed in a manner latest fashion magazines would call casual chic. His facial features identify him as Georges Felmort, 27 years old. On the lower step stands a fsa, name unknown, supposedly 70 ± 4.8 years old. His lilac #8866ff skin tone indicates they are quite relaxed. Three other humans stand in front of the footboard. From left to right: Mell Robins, 32 years old, whose Work- $\alpha\beta$.ist profile indicates she was best of her class in the Interstellar Human Engineering School, specialized in Analogical Mechanics, a niche field of work; Rolly Mortens, 19 years old, cooking apprentice for the Felmort household for more than a year but whose Work- $\alpha\beta$.ist grade only went improved since; Kynt Dor-Nan, 25 years old, mechanics graded...

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Lipsum waved the advertising banner away and began to mutter. The app-given description was very accurate, a little too accurate even, but it was still a good base for his own writing. However, loyal to his medium's values he was advocate for the past and strictly opposed to citizenship for Without-Explicit-Purpose artificial intelligences. He did not know Georges Felmort's opinion on the matter and even if he was call a retro first name and regularly took up equally retro projects, he was still son to the Alliance's largest artificial gravity's company.

"Alright, all aboard the Hourglass!" Georges said gaily.

"Well finally," Kynt said.

"Agreed," Mell said.

Çju nodded, bowing their neck down so low their chin almost kissed their navel. Rolly said nothing but was attempting to hide a shy smile. Lipsum followed them, stepped onto the footboard and took a deep breath, as if this hand-made ship would swallow him whole or take all of his air away. After him Kynt who was standing in the narrow corridor pulled down the lever and the door went up, closed and locked with a metallic sound much too mechanical to the journalist's taste.

"Not even atomic lock for outside access?" he asked.

"Ha no," Kynt said and laughed. "As I and Mell told you, I mean Mrs. Robins, everything in here is 'old-style'."

Lipsum felt a shiver run down his spine. He looked at the corridor running from one end of the ship to the other and swallowed with difficulty. But Georges walked to him, and with a polite gesture invited him after him to the ship's bow. So all three of them met the rest of the group into the cramped control room, in the middle of which stood only three large seats bolted down to the metallic floor, other passengers seeming doomed to keep standing up at their work stations. Royally, Georges Felmort put himself down unto the central seat. He invited Lipsum to sit to his left, Çju to his right, and without standing up addressed the three

others who, them, stood in front of him.

"Mell, Kynt, Rolly, all three of you volunteered for this project and test-flight. We'll certainly need the best out of each one of you, and I don't doubt I'll be satisfied. Kynt, my child-hood friend, we have already done many things together, but this is with no doubt our greatest achievement, the most perfected one."

"The only one, you say!"

"Ha, no. Mell, as head engineer..."

"Could you stop now this head engineer thing? It's not as if there had been other engineers. Agreed?"

"Agreed," he answered with a smirk. "Well, what I wanted to say, it's that you're the person who knows this ship best, we rely on you in case of any technical issue."

"There won't be any technical issue," she said.

"I hope so. As for you, Rolly, we have not known each other a long time, but you also volunteered for the crucial task of keeping us alive."

"I'm only cooking," she said.

"This doesn't mean you're any less important than I am!"

Then he remained silent for a while. Lipsum wiggled uncomfortably in his seat. Georges finally stood up and said:

"Çju, would you honor Mr. Lipsum with a quick tour of the ship, while we check the equipments?"

The fsa stood up and waved his four-fingered hand gesturing for Lipsum to follow him. The intimidated journalist followed him, however lending an ear to Kynt who was beginning to say:

"So, do we start with the propelling engines on the gyro-stabilizers?"

Çju and Selness Lipsum stepped into the corridor and the non-human shut the door behind them. Without a word he started walking, and Lipsum followed him. Then, after they passed the door through which they had stepped in, they stopped at a second door, closed with a steel wheel. Without a word Çju opened the door and gestured Lipsum to step in. The journalist was wondering if they really could speak. So he asked them a question:

"Excuse me, Sir, what is your name?"

And with a high-pitched voice, the non-human answered:

"I an colt Çju."

The name was pronounced with a sort of wet sound, /cju/ really in the phonetic alphabet. As they had no upper lip, they were incapable of pronouncing the sounds /m/, /b/ or /p/. Besides, members of the fso species had a very elongated mouth, a tongue more flexible than that of humans and weaker vocal cords. They were thus incapable of correctly pronouncing voiced plosives such as /d/ or /g/, but many more intermediate fricatives between /s/ and /J/ (the "sh" sound) or even between /x/ (the "kh" sound) and aspirated /h/. In fact Cju had a strong accent and pronounced vowels discreetly.

"And," Çju added, "I an not a Sir."

"Oh, sorry Ma'am."

"I an not a Na'an either. Fso don't have two tifferent sexes as hunans."

Barely repressing a bewildered look, Selness Lipsum only said:

"I see. Where are we now?"

And the fsa, without speaking anymore—on the one hand they species was not very talkative, often preferring the written medium, and on the other hand Çju did not like to speak Udo, the new human language constructed a few centuries after the Planetary Coordinates' Loss and the start of New Human Time (NHT)—turned on the ancient light bulb that lit the place and

gestured with his hand a plate engraved with the word: "boiler". Lipsum had to admit it was indeed a steam powered ship. Everything was there, a gigantic box filled with hypercompact coal probably imported from a forestry planet owned by a branch of Felmort Industries, the boiler itself was made of five-centimeter-thick felmortium-24c. The boiler was filling a great share of the room and was almost four meters in diameter. On its front was a large manometer whose hand currently was pointing to zero.

Various metallic conducts were standing on top of the boiler, and must have lead to engines, passing through mechanical power distribution device. Then Çju made another hand gesture and Lipsum followed him into another room, even further back. This time, he faced the control transmission mechanical center. Indeed, a multitude of mechanical arms and crank rods and wheels and chain pulleys and cogs, filling the whole eight-meter-long room. He was startled as one of the arms he was bending above to watch its joint began to move to and fro.

"What's happening?" he asked, a little panicked.

"It iss the tests," Çju answered.

"Ah, alright, alright."

And as if it would make him look more confident he placed his hands on his waist and looked at the piece of engineering and nodded—but he took a step back nonetheless. Then he glanced at Çju whose single lip lowered, showing his two lines of lower lips, making him look like a predator, but maybe, the journalist wondered, the being was merely smiling. They walked out of the room and back into the control room to the front. Georges who was bent with Kynt over a control panel covered with three-states switches turned when he saw them come back.

"Ah, Çju, Mr. Lipsum," he said, "did it go well? Do you appreciate our small vessel?"

"I won't deny it," Lipsum answered, "it is indeed a quite beautiful machine you have here."

So Georges nodded at Çju when he saw what was indeed a smile. Çju went to sit down, awaiting what would follow. Young Rolly Mortens was busy in a corner where a stove had been set, underneath which a flame was lit, fueled by a small chunk of hypercompact coal not bigger than a thumb nail, and she was enjoying being able to use such an unusual equipment. Mell Robins, a few steps away, was making what seemed to Lipsum like technical drawings and enormous amounts of calculations.

"By the way," Lipsum asked to no one in particular, "why do you have a cook on board? How long is this flight meant to last?"

"Two days, agreed?" Mell answered without looking up.

"Two days?" he repeated.

"Yes," said Georges and turned to him. "In fact it's right that you ask. Kynt, it's time to summarize the flight plan."

Lipsum looked in turn at Georges Felmort, proud and shiny as a brand-new android, Kynt who was doing grand hand gestures while he explained, Mell the jaded engineer, Çju who was standing right next to Georges and who was ten on fifteen centimeters less than him, and finally Rolly Mortens, young and intimidated with the vastness of their project.

Then they all stood in a semicircle around Georges and Kynt. The mechanic began:

"Alright, we are currently sitting on level +2 of human station K50, so just above its equator. The station is slowly drifting in the void since the end of its construction, and is nowadays home to not much less than thirty-five thousand inhabitants. It is notably..."

"We said flight plan, Kynt, not Wikipedia 2 page, agreed?" Mell said.

"Hmm yes. So in fact station X42, which by the way will soon celebrate its three hundred and fifty years of existence, is passing near our own today, at a minimal distance of fourteen

^{2.} Wikipedia will survive (è_é).

thousand two hundred and seventy kilometers. To make this trip, we scheduled to depart this morning at seven hours NHT—that is, in eighteen minutes—and arrive tomorrow evening at twenty-two hours thirty minutes NHT, if all goes well."

"Thank you Kynt," Georges said, "The trajectory?"

"We'll descend to the south pole to latch onto one of the centrifuging arms and use the station's angular momentum, and then be catapulted towards X42. This should be a beautiful straight line, if we turn on the engines at the right time. Even if we have hypercompact coal, lack of quantum directional correction could have a significant impact. And that goes without saying we have no inertial dampeners: it's going to be quite a ride."

"And for the arrival at X42?" the journalist asked.

"Let's not get caught up in details," said Kynt and laughed.

"That's important, Dor-Nan," Mell said, "everything must be reviewed, agreed?"

"Yes, of course, well I mean, agreed. So for the final mooring, because we lack precision maneuvering capacity, we'll have to trust the dock's robotic arms, exactly like we're doing with the centrifuging arm of the current station, actually."

Lipsum nodded. Apparently it was time to take off, and they would take every supplemental minute they could get. Geoges ordered the shoes' magnetization, because there was of course no artificial gravity inside of the ship. The Felmort company was specialized in this field and could for sure have provided them with a solution, but Georges had refused, for sense of "authenticity". They could then walk without floating because of their shoes' magnetization, but the drawback was that without their legs' weight they would have to make the effort of pushing their feet to the floor.

Georges entered a command on his vest's arm and the hangar bay doors opened wide in front of the ship, unveiling the emptiness of space. In place of a take off, the ship's mooring slowly moved forward, and once they went passed the local surface gravity field holding the atmosphere inside the station, they were weightless. Slowly, led by another of the station's automated mooring's, the Hourglass descended to the south pole. Fifteen minutes later and twenty-seven levels lower, a centrifuging arm, long rod in auto-rigid techno-silk fiber, twenty centimeters in diameter, latched onto the ship instead of the moorings. It's flexible head held onto the ship's side with a *clang* and they started rotating. The arm straightened progressively as they were gaining speed, and Rolly Mortens asked politely:

"Wouldn't it be right to stand with our backs to the outer wall?"

Georges turned to her and said indeed she was right, but that at least one of them had to stay in command.

"Leave it to me," Mell said, "I can already see your arms go up because of the acceleration."

"Hmm yes, very well."

"Alright, you go and stand there, agreed?"

Georges nodded and went to stand with the others along the wall, between Çju whose hand darkened a little as Georges put down his own hand very close, and Rolly who was nervously removing the creases of her pants.

"I'm starting to feel movement sickness," Kynt said.

"We've already done worse than this," Georges said. "Mr. Lipsum, have you ever heard of the managers' great challenge to prove the pneumatic tube to be as effective as the forefidger?"

"The time when a man roamed the entire pneumatic network in six hours without a break? This must have been exhausting for the person in question."

"Well actually I was that person!" Kynt said. "And indeed, I was whacked after such a day. But so much action!"

Meanwhile, standing with her feet spread out for more stability, her shoes magnetized to

the floor, Mell Robins was with one hand holding a metallic bar underneath a control panel, and with her other one she would from time to time press a button, check a light, a manometer. Through the window shield stars were whirling in front of them. Their faster and faster rotation was gluing all five other people to the wall while Mell was holding on with all her legs' and arm's strength in order not to fall down to the floor or tumble towards them. She pulled down fully on a lever.

"I'm heating the engines!"

"Isn't that too early?" asked Georges, almost screaming.

"It never is, agreed? And we're really going fast enough already, the dial indicates an angular speed of 1.7π radians per second around the south pole. At 2.4π , we unhook the ship with the angle 38° east."

Awaiting no answer she focused on the control panel. From the back of the ship came a metallic growl and a wheezing of vaporizing water. The mechanical shovels were beginning to load the coal. They caught even more speed and it became difficult for Mell to keep her position. One of her feet detached from the floor and she almost fell over but caught herself with both hands onto the control panel's metallic bar. She held herself as upwards as she could and watched the angular speed dial. 2.2π . She set up a counter. A few more seconds and... she pulled a handle in a sudden movement and the Hourglass was freed and launched in space.

With a curve that quickly flattened, the ship was launched to a speed of three hundred kilometers per hour, which came down to two hundred barely a few seconds after they had crossed the atmospheric residue. Relieved from the centrifuge acceleration, the passengers met in front of the window shield.

"Thank you very much for your work, Mell," Georges said.

"That's right," Kynt said, "without you we wouldn't have much more than a pile of scraps by now."

The engineer only nodded. But Lipsum asked:

"What do you mean by that, Mr. Felmort?"

"It is Mell Robins right here who drew the Hourglass's plans and designed all the mechanics. It's almost even more her work than mine."

"Agreed," the journalist said.

"But don't you start speaking like her!" Kynt said.

"Hey!" Mell said.

As for Rolly, she was leaning next to Çju, and the two of them were having the sight of infinite void and deepest black the universe could offer them, but adorned with myriads of stars. In the room only the tools' self-lighting was on and they could barely see each other. Lipsum noticed how Çju was the one among them whose skin reflected the dim light best. Indeed they had darkened to a bluer, almost black hue, rather than their former pale purple.

"Çju," Georges now said, "could you turn on the light?"

"Wait," Rolly said, "while we can still see the stars, couldn't we take a holo?"

"Yes, you're right," Kynt said. "It really is a wholesome sight."

"Yes," Çju said, their voice deepened and their skin darkened by the emotion. "Let's take a holo."

And so the crew of the Hourglass, from Georges Felmort to Rolly Mortens, stood in a line in front of the window shield. Lipsum stepped back enough, just in front of the central seat, and took the holo from his glasses. He saved the abridged description again, but he did not read it. But stepping forward again, eyes fixed on his glasses' pictures, set for a focal distance of only a meter, he did not see Çju's foot which was laying further back than that of a human, and tumbled down. He fell forward, and attempted to grasp onto something to prevent his

fall. Unfortunately his hand met with a horizontal lever he pulled almost fully to the left, and a long metallic noise came shrieking from the back of the ship.

"Ah, what have you just done?" Georges said, putting his hands on his head.

"Pardon me Çju, I did not see you and..."

He could not finish his sentence because they all felt a rotating movement that pushed the ship to lie on its side. Mell hurried to the commands.

"Give me some space, agreed!" she said. "You disabled the back-left gyro-stabilizer. The trajectory must be adjusted right now."

"A... Agreed," Lipsum stuttered.

"And do not laugh at me!" she said.

Mell called for Kynt and ordered Georges to manage the others. Felmort nodded and told Rolly and Lipsum to sit on the left and right seats and to carefully check their shoes' magnetization. Then he asked Çju to follow him to the mechanical room. The journalist and the cook obeyed, each as worried as the other, while Mell muttered she had not asked the boss's son to check the equipment. But Çju and Georges were already in the corridor.

When they reached the second door, Çju warned their partner of the potential danger in their own language, a sequence of whistles and wet noises more or less soft or rough and interspersed with a few vowel sounds. Georges answered him in Udo, the standard human language:

"No, don't you worry my friend, we're safe. This ship was designed by Mell Robins after all, it's a quality brand." Then after a while he added: "Don't tell her I said that."

Çju answered with a slight smile unveiling their two lines of lower teeth and their skin tone changed to a lighter hue, but not yet as light as before their departure. They were still anxious.

Turning the wheel, Georges unlocked the door and opened it just a little. Bending their long neck, Çju took a glance inside, just for a moment.

"Something's broken," they whistled.

"Yes, but we can still get in, can't we?"

Çju looked at him, and nodded. Then Georges opened the door wide and turned on the light in the room. There was a rumbling noise of machinery shaking in every direction in an ineffable complexity. But Georges quickly noticed the problem Çju had mentioned: about the center of the room, behind rotating axis and underneath jerky pistons, a joint between two transmission rods had broken down. A nut had fallen off to the floor after Lipsum's sudden action on the gyro-stabilizer.

"Mell Robins, heh?" Georges muttered, then turning to Çju: "This has to be fixed as soon as possible, otherwise we'll drift away."

"The rest of the mechanism is moving, you cannot go there."

"Wait, I see where you're going with this. No, you can't do this! We'll stop the ship, make the repairs and start again."

"This would make us loose too much time and you know it."

"But it's too risky to go there while everything is still turning. Besides, you don't know how to do it," Georges said, raising a finger in front of him.

"Kynt can explain to me, he's the mechanic."

With a sigh, Georges had to agree the fsa was right. The two of them went back to the command room to tell others of the situation. When Georges was done explaining the problem, Mell did not hold back her anger:

"Kynt, you didn't solder all the bolts as I told you? That's how they stay you know, not just by screwing them, you know, agreed!"

"Yes, they're soldered, just... not all of them."

"What? But what made you be so lazy? I don't know why Georges is keeping you as a friend."

"Eh!" Georges said. "Don't talk to him like that!"

"I just thought there was a need for some wiggle room in some places in the machinery," Kynt explained.

"What, nonsense!" Mell said. "And now if we stop to make the repairs we'll be too lake and we'll never reach X42."

"I know," Çju said in Udo. "That's why I want to go there without stotting the ship."

To general amazement, Mell agreed to this. However she told Kynt to be most careful and to avoid letting Çju take any useless risk. For now she was staying in command.

Without further discussion, they all took their positions: Çju, Kynt and Georges who would not let his partner out of his sight, headed to the failure's location. Lipsum decided to stand in the middle of the corridor in order to allow communication between the front and the back of the Hourglass—Georges not having accepted electronic microphones and speakers system in such a small vessel. Only Rolly Mortens did not know what to do and was nervously fidgeting with a corner of her buttoned shirt.

"You should just sit there in the central seat, agreed?" Mell told her.

"The central seat? But that's Georges's seat."

"Georges isn't here, and his seat isn't going to write a report to dear daddy Felmort."

And so Rolly sat down, with her hands on her knees.

Away to the mechanical transmission room, to which Lipsum was regretting not having gotten closer, Çju was observing the situation. In front of him, two dozens of mechanical arms were twisting to and fro with the boiler's pressure and fueled the diverse propellers, stabilizers and their orientations. The broken arm was located to the back of the room, between a mechanical arm and a horizontal piston box. In this instant Kynt regretted a little not having followed Mell's order soldering all the bolts, but he thought that now that it was so, it was better to focus on how to fix the issue.

The mechanical arms were distributed at various heights in the room and their erratic movements, partly set on by Mell's own actions at this very moment, made the crossing quite hard. Çju stood straight, then with a shoulder movement of an inhuman breadth, turned their elbows inside out and went down on all fours. With their fsa flexibility Çju began the crossing and went first above one arm, then under another, but when reaching the third one this one had a sudden movement that hit him violently on the side of their face.

"Çju!" Georges cried out. "Are you alright?"

But he needed no response, as he could clearly see Çju's skin around their head become almost black and their hands almost white. This was an outside signal for the fact their body was trying to defend against an injury, focusing its efforts where they were needed.

Rolly started when she heard Selness Lipsum's creaky voice call from the corridor:

"Çju's injured!"

"What!" Mell said. "Agreed, but will they be okay? And is it fixed?"

Georges and Kynt entered the room a moment later, hauling on their shoulders the long arms that were only getting paler as Çju's head was becoming as dark as the bottom of the universe. Rolly jumped up and suggested to have them sit.

Once Çju was on the seat, they kept without speaking for a few moments while from the injured one's mouth came out a very pure high-pitched sound, and Lipsum could not help noticing his glasses which were telling him it was an almost single-frequency sinusoid. This

was but a wail of pain, and Georges knelt beside his partner, putting his own hand in that, so pale, of the alien.

It was finally Rolly who first broke the silence:

"What... what are we doing now?"

"We've already gone from K50," Mell answered, "and to go back there we'd have to contact an emergency pod, which would take quite a white to reach us. But this is still an option, agreed?"

"Would you stop it with your 'agreed's'!" Georges said, emotional. "You say that all the time!"

"It's me you're reproaching something to?" Mell said, fists on her hips. "It's Dor-Nan after all who didn't solder this bolt. Who knows what could still fall apart because of him!"

"Holy Blue, calm down," Kynt cut in. "I've already told you, *Robins*, some wiggle room is advised on some systems, it's how I've always done and it's always worked."

"But I drew the plans and you do what I tell you!" Mell said.

The journalist who was feeling guilty of the accident took a step back, this time taking great care to not touch anything. But behind him, Rolly put a hand on his shoulder. She looked at him with her mind suddenly set, and stepped in between Georges, Mell and Kynt who were exchanging fiery glares.

"Please," she said. "Since Çju is injured, could I have a try?"

Then all of them stopped and looked at her, even Çju who raised their head towards her.

"Well," Georges said, "you don't know how to fix a bolt."

"Not anymore than Çju," she said. "Besides, if we have to pass through all of your machines, I'm the smallest and certainly the most flexible, after Çju."

"If that's how it is," Mell said, "I'll explain it to you myself, I can still do this. Dor-Nan, you take command, agreed?"

Kynt nodded without arguing any more. Georges remained beside Çju, and Lipsum positioned himself in the corridor again. The two women went to the mechanical room.

Only when they reached inside the room did Mell open wide eyes and realized what the problem was. Rolly remained silent, but was watching carefully. Then she asked what had to be done:

"We must go beyond the mechanical arms to fix the last one. Don't worry, the corresponding system has been deactivated and it won't move. You have to put the joint back together and screw the bolt on top of it. And it would be good to solder it, after all. But for this task we'd better have an expert do it, like Dor-Nan."

Rolly seemed to hesitate, but ended up saying:

"It's a bit like making crême brulée in weightlessness? I've already made some, I can even shape it to a human figure. I just need a spoon and a hot needle!"

This reflection succeeded in making the engineer grin. Vanquished by the force of the argument, she opened a panel on the room's wall and fittingly fetched a nuclear powered cordless soldering rod.

"There are other such tools in the ship, but I'd rather not have Georges not any of it you see? It's all about his *authenticity*."

"Oh course," said Rolly smiling.

Then Rolly took a moment to look at the room and the distance between herself and the broken arm, then exclaimed:

"Well, there's a much better way than through all of the moving things!"

"But where?" Mell said.

"But you're forgetting we're weightless, only our shoes are keeping us to the floor. We have to go along the ceiling!"

And indeed, between the highest mechanical arms and the upper panel, there was a space about sixty centimeter wide, which Rolly said was large enough for her to crawl through.

"That's an excellent idea!" Mell admitted. "The issue is, we can only magnetize our shoes, and when crawling your soles won't touch anything."

"I'll be careful. Can you pass me the thingy, please?"

"What thingy? ...Oh this! Agreed."

So Mell passed the soldering rod to Rolly who began demagnetizing her shoes. Then, with a supple impulsion, she went up the wall, turned and crouched onto the ceiling. She lied face down on the smooth metal, flexed her knees against the wall and, with a sudden movement, pushed with her feet and reached forth.

She went above the mechanical arms, not touching any of them. Having reached the opposite wall she crouched onto the ceiling again and went down in the same manner to the damaged part.

Fifteen minutes later the two of them walked victoriously out of the room, and Mell did not miss the occasion to tell the journalist:

"You will definitely have to mention feminine ingenuity in your article, good Selness! Haha!"

Beside her Rolly was blushing, but equally smiling. When the three of them walked back into the command room, all smiles, they were quickly cut off in their joy at the sight of Georges's desperate face.

"Çju's really injured, we have to turn back."

"It'll be alright, we have to continue," Cju whistled.

"Georges," Kynt said, "instruments indicate we're already three hundred and fifty kilometers away, and we have good speed. Should we go full reverse, turn the ship around and go back to K50, given the Hourglass's low power, it may actually be just as long as going all the way to X42."

Georges Felmort nodded silently. They remained silent for a long while, Kynt and Mell sharing the controls, Georges beside Çju, Rolly and Selness standing in a corner, trying not to disturb anyone.

Then Lipsum murmured to the cook:

"Miss Mortens, I've heard Mrs. Robins mention contemporary technological devices. Do you think the Hourglass's steam engin is a joke?"

"No," Rolly said, "of course not, Georges would have noticed something so important."

"And would it be possible that Georges lie as well? After all he's known for his incredible projects, but this..."

"I trust him," she ensured him. "So should you."

Bothered, she walked away from the journalist and isolated herself in the corridor. For one thing this journalist would only take interest into brilliant and famous Georges Felmort, for another he would only look for his flaws. She thought she at least knew how to be useful, contrary to people of the media. However it was, she wished for the flight she had embarked into to be successful.

Time passed and Lipsum's glasses indicated thirteen hours NHT. He dared not ask but Kynt did:

"Mell," he said to his flight partner, "I'm hungry."

"Agreed," she without loosening her jaw.

"I'll make something," Rolly said.

So in the corner of the room, from under the hypercompact coal stove, she fetched from a cupboard a can of synthetic minced beef, and no less than six genuine piece of vegetable from 0G greenhouses. The unequaled roundness of these luxury foods, grown with imported water and compost, for the most snob and richest levels of station K50, was just as marvelous as the crimson of their fine skin. Rolly began to stuff the tomatoes.

The college upon which her apprenticeship depended had taught her about cooking in weightlessness, so it was for her an easy task to empty the tomatoes and spread as little juice and seeds in the room as she could, and in any case she was using a bowl to catch any bits that were running away. She lit the stove after she had locked the piece of coal into a metallic ball pierced with a single hole on top, in order to prevent the flame from growing in every direction, and cooked the tomatoes inside a locked container.

When the dish was cooked, they all gathered and were served into spherical glass containers pierced with a hole a few centimeters wide only. Georges remained beside Çju and took the stuffed tomato that was meant for them. He would help them eat.

"Bon appétit!" Rolly greeted.

"Bon appétit," Lipsum said.

He hesitated for a long time before he started eating, afraid he would spread his food all around in the cockpit.

"Mr. Felmort," he said, "couldn't we have consumed portioned synthetic food, as with all journeys in weightlessness?"

"Mr. Lipsum," Georges answered, "I fear not. It is mandatory in this challenge to show we can travel in style!"

"I see."

Then during their meal, a *beep* sounded, coming from the journalist's glasses. Flabbergasted, he exclaimed:

"Incredible, we're off network!"

Georges turned to him and explained:

"Yes, this ship isn't equipped with an astronet relay, and we just broke out from K50's reach. Some of your equipments must not work anymore, but don't worry, we still have a radio to contact the station if need be."

Selness nodded silently, looking disappointed. But Kynt said:

"There is however a side-effect here: for the first time in perhaps decades, people are isolated from the rest of the Alliance, by sheer distance from the astronet. We're alone, Mr. Lipsum, you should enjoy it."

Lipsum wondered how not being able to access the interstellar communication network, without which his clothes could only serve to cover his body, could be a good thing, or allow his to travel "in style".

"So what do you think?" Rolly asked.

"It's very good," Mell said.

"Yes," Lipsum said, "we really not often have the opportunity to eat non synthetic vegetable, I thank you for this honor you bestow upon us, Miss Mortens. But I wonder, how is your friend, Çju, going to be?"

Georges was helping Çju eat and the alien's head's hue had seemed to lighten a bit. Young Felmort explained:

"Fso's anatomy is quite remarkable. As you must have understood, as long as their skin remains dark, it means their immune system—or the equivalent of it—is operating. I hope Çju

gets better, but as Kynt told us we have to continue. Whatever happens, I think we should make haste."

"Isn't it dangerous to change our flight plan?" Rolly said. "I mean, Mell took so much time establishing it."

"I don't want Çju to suffer any hazard," Georges said.

"The most hazardous would be to go into the unknown," Mell said.

The bolt was not on its right position. A sound ringed from the back of the Hourglass. They felt a shake and a violent acceleration forward. All five humans came crashing to the command room's back wall, while Çju was pressed to the back of their seat. The stuffed tomatoes spread into the cockpit with an elegant Brownian motion.

"What's happening?" Lipsum cried out.

"I don't know," Georges said.

Mell took the situation in hand.

"Georges, go and take care of Çju. Kynt, to the controls, try to understand what's causing this acceleration. Rolly, with me, we'll have a look at the back. As for you Selness, try to keep quiet, agreed?"

"Agreed," Lipsum said.

"And stop it with this!" she said.

Following orders, Kynt and Georges climbed to the cockpit's front with help from their magnetized shoes, going up almost on all fours. Çju had darkened from head to toes, and young Felmort seemed panicked. The journalist lied onto the back wall and, discreetly, took a holo of the situation. Without the astronet, he could not have an automated description, but he thought: "Oh, bother." The scene was well worth the image, and The Forest of Steel would be glad to publish something that could go against a family as powerful as the Felmorts.

Mell and Rolly carefully went down the corridor, trying not to fall to the back. When the reached the mechanical room, they opened the door and discovered the problem: the soldering had been poorly done and had broken down as soon as the gyro-stabilizer had been constrained to an effort. The joint had unlocked again but this time, the freed arm had grabbed onto another.

"That's the boiler's input retroaction," said Mell to Rolly. "If we don't unlock this arm fast, all our coal will be consumed! Get back up there to inform Kynt, and tell him he must absolutely keep us going in the right direction."

"Yes. But for the soldering, I'm really sorry," she said almost in tears.

"It's okay," said Mell reassuring. "You must simply insist a little more than with crême brulée!"

Rolly had half a smile and went out the room and attempted to climb up the corridor which was getting steeper and steeper. Finally she did not go up to the top, screamed the instructions to Kynt who told her he would do his best but did not want, while maneuvering the stabilizers and boiler's input, to risk injury to them in the mechanical room. Rolly went back to Mell, though not without a worried look towards Georges who could be seen holding Çju's head so that it would not push onto the hard seat.

As for Kynt, he was doing his best to adjust the trajectory, or at least interpret it correctly. The ship was still gaining speed. He took a glance at Çju and saw the fsa was dark as the void. In the corner of his eye, he also saw the journalist taking holos, but said nothing. He did not want to upset Georges even more.

When Rolly Mortens came back into the mechanical room to meet with Mell Robins, she could not find her there.

"I'm here!" the engineer cried out from the room next door. "To the boiler!"

The cook went to her and saw her armed with a very plain adjustable wrench, and was attempting to loosen a nut to lower the pressure in the boiler and thus slow the ship.

"Are you sure of what you're doing?" Rolly asked.

"Not at all, agreed?" Mell exclaimed.

She tried desperately for a few more seconds, but in vain.

"Well this one was soldered! Let's go back to the mechanical room, we must fix this as soon as possible."

Rolly nodded and they both let themselves slide down along the corridor and into the other room. The youngest of the two women volunteered to make the repair again.

"I have to fix my own mistake," she said.

"I would not expect this from Kynt," Mell said. "But this is very dangerous, and I'd rather go there myself, to have a more experienced hand, agreed?"

"Yes," Rolly said regretfully. "You're right."

Mell wanted to go along the ceiling again, but this time the acceleration was pushing her towards the back wall. Nonetheless she managed to find herself a path thanks to her magnetized shoes. When she reached the damaged parts, she ordered Rolly to have Kynt deactivate the boiler's retroaction.

So the young apprentice went out of the room, climbed up the corridor and transmitted the message to Kynt. He answered:

"But with no regulation, we'll go even faster, this is unthinkable! And we're already almost two degrees away from our scheduled direction."

"This is what she ordered so that she can fix the failure. Without this she would be in danger. It's not as if there was an asteroids wall or something?"

Kynt sighed and agreed. Against the seat Çju seemed to soften and Georges was nearly in tears. Lipsum, as for him, had enjoyed taking holos but was finally beginning to worry.

The mechanic flipped a switch. A few seconds later, they felt an even stronger acceleration. Kynt could hardly hold his position, but Rolly went completely off and fell to the corridor. She held onto the door's side, her legs hanging to the back of the ship.

"Current acceleration 1.3G!" Kynt screamed, kneeling on the floor and holding onto the control panel bar with both hands.

"I'm going back to Mell!" Rolly screamed in return.

She let go and slid so fast along the corridor that her legs burnt her through her pants. With one hand she grabbed in her fall onto the mechanical room's door then hauled herself up with her arms' strength. She went in to face the machines and saw Mell in the back, where the broken joint was, trying as she could to repair it. Mell was standing on the back wall, her arms raised towards the broken parts.

"Are you not tall enough?" Rolly asked.

"No, it's difficult, agreed? I'm lacking fifteen centimeters, agreed?"

Mell was visibly angry, and Rolly offered to help. She stepped towards the ceiling to begin meeting her, but Mell made her stop and asked her, suddenly calmer:

"Rolly, will you promise me to keep something secret?"

"Well... of course."

"So don't tell anyone what you're going to see here."

The engineer then let go of her adjustable wrench which came crashing on the wall, and bent down and pulled up a leg of her pants. Rolly was then surprised to see her press on a side of her knee and there light up a small screen. Mell tapped a few instructions with her fingertips, then straightened up and, under Rolly's befuddled look, a metallic rod linking her

knee to her calf lengthen and Mell was raised by some twenty centimeters. She took hold of the joint with both hands and a crackling noise was heard. About ten seconds later, she let go and Rolly could see her adjust her hands' skin like gloves.

"What?" Rolly hesitated. "You're an android?"

"No, I'm human but, there was a fire, one day, I was very little."

"Oh, so you're not a W.O.E.P. then?"

"Just a little, agreed? And it's pronounced 'whop', not 'W-O-E-P'."

"Is that why you often say..."

"Yes, it is, I think so. Well, it's fixed now, let's go back up there. Agreed?"

Rolly took a few moments anyway to accept this and make herself a new outlook on these machines who claimed citizenship.

They both went up the corridor and even before they had reached the top they screamed at Kynt to start all systems again. He followed orders without waiting anymore and at once, the Hourglass slowed down. They all fell down heavily on the ground, but happy they were not stuck to the wall anymore. Mell however did not take any time to rest.

"Dor-Nan!" she said. "What's our situation?"

After checking a few dials, Kynt answered:

"We have deviated from our flight plan by five hundred and twenty three kilometers (and then some), in direction 1.7 degrees south-south-west in K50-relative coordinates."

"Alright, we can make it up if we hurry, but we won't be able to slow down during night hours as scheduled. We need twenty eight percent more in propulsion from now on."

"How can you know this figure?" Georges said, surprised.

Rolly lowered her head, guessing engineer Mell Robins's genius came from elsewhere.

"I've calculated some error cases before our departure," she asserted. "Do you want to see my sheets?"

"Olala, no thanks," Kynt said.

"Olali," Çju said, which made Georges smile.

"Well, let's get to work!" Mell said. "Georges, you know there's a universal first-aid kit under panel four?"

"Yes I know, but with all this agitation..."

"Go get it, and take care of your lover. Dor-Nan, are we sharing the controls?"

"We certainly are, Robins."

Felmort, Robins and Dor-Nan got in motion, while Mortens went collapse near her kitchen. Then she noticed the pieces of stuffed tomatoes that had crashed onto the wall and were now floating nearby. She started cleaning. As for Lipsum, he decided to take some notes.

The Hourglass's adventure—why not the Clepsydra, since it's steam powered?—is going on with much tumult. Because of the mechanic's fault, a mechanical trajectory adjustment system broke and had the ship drift by nearly six hundred kilometers!

Besides, the fsa—these new being of the FPA have only one gender—who is companion to the young Felmort was injured during a failed attempt of repairs and is at the time of writing in a quite dark situation.

And to top it all, this archaic ship is merely equipped with an ancient electromagnetic radio for all communication device and does not hold an astronet relay, "for style" [sic]. So may you excuse the poor quality of the included holographs' description, they were only written by yours truly, instead of a machine tool.

Lipsum congratulated himself for using the term "machine tool", as it was an accurate reflection of his thinking and that of his audience towards WOEP's and artificial intelligences in general. However since the beginning of the second decade of this twenty-fourth century NHT, this exclusive thinking was starting to decline, as among the Alliance's high-ranking personalities were emerging android robots and incorporeal WOEP's.

Some, like Mell Robins, regretted terribly the usual confusion between android and WOEP. She herself was discriminating between those of the machines, hardware or software, that had some amount of free will, that is, the WOEP's, and those who were, even though she did not like the term's connotation, "machine tools".

But in this precise moment Mell was focusing on piloting alongside Kynt. The Hourglass had been designed to be operated by two pilots, so they were never on top of each other with switches and buttons; however they lacked common guidance, which should have been Georges's or Çju's responsibility.

Anyhow they kept going as they could, and the afternoon passed.

At twenty-one hours NHT, Georges suggested a diner break. Mell agreed to diner, but not to the break.

"From the moment we had the breakdown, we've been condemned to no rest."

"At least not all of us at once," Kynt tried. "We can keep going while Rolly cooks one of her delights, and take turns when eating."

"Agreed," she said.

Then it was acknowledged, and Rolly went back to her stove. She tried to think of a less risky dish, that is with less juice or sauce, and finally decided for a meat pie.

Others went on with their business while she was preparing the meal. Çju, thanks to Georges's care, lightened a little. Lipsum measured with his glasses that their skin tone was an eggplant purple #3A2368, less black than before. Çju opened towards Georges their small and equally dark eyes, and asked him in their language, in a very deep voice:

"What do I know?"

"Be assured that I care for you," Georges answered.

Then Çju slowly and amply nodded, and closed their eyes for a rest.

Once the pie was cooked, they ate, Kynt, Mell and Georges taking turns in control of the ship. The rest of the evening was down quietly. Between their meal and one hour in the morning NHT, they regained sixty kilometers on their delay, which was nine percent below what was needed with their current speed.

So they sped up a little, however without risking another mechanical breakdown. The Hourglass went on with its course. Sleepiness first came upon Lipsum, who asked what was scheduled as resting place. Georges turned to Mell who said that the journalist could take an enveloping blanket under panel three. Selness helped himself, wrapped himself up along a wall and kept his feet in his magnetized shoes on the floor. Without gravity there was no need to lie down. He did not take him long to fall asleep, followed by Rolly who Georges encouraged to rest, as she was "not needed for the time being". Felmort himself wanted to take care of Çju for as long as possible. When Çju themselves fell asleep, Georges did too not long after.

Kynt and Mell took turns in control until seven hours NHT.

When Rolly woke she first saw the metallic bolted—and correctly soldered—wall in front of her. Then she turned to the window shield. Before them still spread the void of space, interspersed with lone stars seemingly randomly scattered. But she noticed a dot that seemed larger than others, than less luminous. Moaning from sleepiness, she squinted, and looked

again. She recognized an artificial construction: station X42 was in sight.

"How far?" she asked, springing out of her blanket and toward the control panel where Kynt was yawning, while Mell was mimicking sleep, strapped on one of the three seats.

"Morning," Kynt managed to say in a trailing voice. "It's indeed X42 you can see there. It's still almost nine thousand kilometers away, but you can start to distinguish its shape. Here, have a look through this."

He handed her nothing less than an explorer telescope.

"Thanks, this object is incredible!"

"An antique, belonging to Mr. Aldamar Felmort himself. You better not leave finger stains on it."

Rolly took a step back, then realized this was useless since she already had the object in her hands. She turned to the glass and looked toward their destination.

The space station nicknamed X42, whose letter meant is was open to all human nations—an archaism from before the Free Persons Alliance—and forty-two designating the number of levels, numbers from zero to forty-one, had a quite incongruous shape. Opposite to K50 of which equatorial (that is, central) levels were wider than the polar levels, giving it a roughly spherical shape, X42 was built quite variedly. To its base, low and wide levels had a gravity system that was weak and uneven, and was home to a variety of workers and repairers. Intermediate levels were the narrowest ones but held important and crowded places such as shops or entertainment places. On top of the station, arms that were several-hundred-meter-long were supporting modules for which rotation was source of gravity.

"Three hundred and fifty years!" Kynt said. "Well yes, I've already said it yesterday. But that's also there the Tree grows, you know Rolly. The last tree of a species from our original planet, the Holy Blue as they say."

"The top modules look white and shiny," Rolly noticed, "while the bottom ones look covered in rust."

"Rich people up and poor people down," Kynt said.

"Do you think we'll arrive on time tonight?"

"I think," Mell suddenly said, having stood up from her seat, "that if you two keep admiring the spacescape this ship will continue to drift. Dor-Nan, watch your instruments!"

Kynt took a quick look at the control panel, pulled a lever, pressed a button, then turned to Mell and told her:

"You see, it's all good."

Mell let out a long sigh.

"I'll wake the others."

And so she walked to Georges and Çju. They were both asleep together wrapped tightly into the same blanket. When Mell tapped on Georges shoulder he started and Çju woke at the same time. She explained that it was more than seven hours already and that one of them had to prepare to supervise the operations. Georges agreed with a groan and started to detach himself from Çju who had a much lighter shade, almost milk-white.

But when Georges tried to unlock from his lover, he realized the fsa's hand was holding firmly onto his left arm. He had not noticed because he could not feel his arm anymore.

"Çju?" he said.

"Georges, you're caring for me."

"Let go of me, please," he quietly told him.

So Çju let go of his hold on the young man, but on the skin of Georges's arm there remained marks of their fingers, two on top and two on the bottom. And to each end, there was a

puncture mark.

Çju helped pull away the blanket and tried to bend down onto Georges's arm, but he pulled it to himself with his other hand.

"What have you done to me?"

"Georges, you've been caring for me, as you told me."

"But what has it done to me? Why can't I move my arm anymore?"

"Humans are so fragile," they slowly whistled.

"Speak Udo, so that everyone can understand, and explain to me!"

Georges's nervous temper was beginning to show. Rolly, Kynt and Lipsum came closer to him and Çju. Only Mell judged it good that someone stay in control of the Hourglass.

"You helped to heal." And while speaking they were trying to find the right words and avoid letters they could not pronounce. "Georges, I an better thanks to you."

"But me, what's going to happen to me? Is my arm lost for good?"

"Georges," Kynt tried to appease, "You know that even if you temporarily can't use your arm anymore, we can make nerves grow back very quickly nowadays, mend bones and heal muscles, or even in the worst case put a prosthetic arm connected to your nervous system. You must not worry or be angry at Çju. Look, they're alright now."

But Georges did not want to loose his real arm.

"Is my arm lost for good?" he repeated. "Çju?"

Çju shook their head.

"No, only for a short time."

"A short time? How much time? Will it be good before our arrival?" Then he muttered: "Ah, how silly I was to bring a journalist on board with us too!"

But in this moment Çju lowered their head, bending their long neck, then softly said:

"A few years."

Georges took two steps back. Discreetly, Selness Lipsum took some notes.

The fsa traveling aboard the Hourglass and wooing Georges Felmort for a few months seems to have paralyzed his left arm, and for a duration of several years, or even a decade. Here is certainly a blow to the diplomatic relationships between the two species and the brand-new arrival of the fso into the FPA.

If an ordinary individual, unarmed, from this new race is capable of causing in a few minutes such a disabling injury as the one Aldamar Felmort's son has suffered, who know what their arrival into the Alliance could provoke.

Besides, the fso are known for having a life expectancy twice longer than that of men. In this Çju's life, is a young heir merely an affair?

"A few years," Georges was repeating, stupefied. "But that's impossible, I can't stay without my arm for years! What's my father going to say?"

"Georges," Kynt said and put a hand on his shoulder, "don't get angry, you're going to go and see your father, you're going to explain to him quietly, and tell him Çju didn't do it on purpose, that's it."

But then Georges turned to Çju with a black look.

"Is that true Çju, you didn't do it on purpose?"

"It was while sleeping," Çju said, "No."

But doubt had spawned inside of Georges's mind. He stepped away from Çju, then asked Kynt to help him set his vest's rigidity to maintain his arm across his chest. Çju's skin was

light, but darkened around the eyes and to the fingertips. Çju did not try to get closer to Georges, and instead went to lean against the back wall, away from the others.

"Dor-Nan," Mell called, "I am sorry, but can you come and help me?"

Kynt nodded and went back to the control panel. All this while, Rolly had remained silent. She wanted to take a step towards Çju to ask for more details but she did not dare. Instead she fetched from the cupboard six small cartons of sweetened, vacuum-sealed nutritive juice and handed them to everyone. Çju showed her the back of their hand as the fsa sign for thanking. She smiled to them and walked back to the stove to drink her own portion in silence.

The morning went on under this tense atmosphere, Georges remaining sit on the central seat and occasionally giving Mell and Kynt some navigational advice, but seemingly always nervous because of Çju in the back of the room. Selness was working on his article and would have liked to ask the crew members some questions but was himself petrified. Only Rolly Mortens seemed to bare the current state of affairs, and had begun preparing a voluminous dish that could only be prepared in weightlessness: spherical lasagna. Without really noticing she started humming a tune, and Georges gritted his teeth and restrained himself from telling her to stay quiet.

However when they tasted the dish, at thirteen hours NHT, Mell was glad to announce:

"We've regained most of our delay; if we continue as we've done so far, we should arrive in nine hours as planned. And by the way Rolly, your lasagna's really delicious!"

"Thanks," she said, all smiles, "The secret, in addition to the successive stretching of the dough, it's cooking the meet in tiny balls."

From this moment on, the journey went more smoothly. At sixteen hours NHT, they still had three thousands five hundred and eight kilometers to go. Mell reckoned they would be on time. Furthermore Kynt went to check the coal supply in the boiler room and came back stating there would be enough.

At twenty hours and five minutes NHT, they were back in the astronet. Lipsum hastily checked recent news that he may have missed on his coat's arm screen. Rolly was fascinated by the sight of station X42 of which details were now visible to the naked eye. She always marveled at those huge constructions, then came to ask herself a question:

"Hey Kynt, how come station X42 is upwards? I mean, if it's floating in space, it could very well be horizontal, relative to the Hourglass."

"Come one Rolly that's obvious: it's our ship that rotated during the trip. Thankfully, it went slowly and progressively thanks to the gyro-stabilizers, rather than brutally as yesterday morning."

"Oh, I see."

Çju stepped closer to Georges and told him in fsa language:

"Georges, I am sorry about your arm, but I want you to know that without this I would probably be unconscious, or dead, by now."

Georges looked at Çju, slowly nodded and greeted them with a slight smile. He was nonetheless greatly worried about what his father would say, his father who besides was involved in several important commissions of the Alliance.

"I only hope," Georges said, "that there won't be any negative consequences for your people, or mine."

A shadowy wave passed over Çju, as a black shiver. The two lovers exchanged an appeased look, sign of reconciliation. Then Georges received a message on his vest. It came from his father.

My son,

Today you distinguish yourself once more with one of your brilliant projects. What ever the general population thinks, the image I have of you will never be diminished. I am proud of you, for your multiple technological or social achievements, in particular your friendship with Mell Robins, who is an important asset for Felmort Industries. I also think of Kynt Dor-Nan, whose public performances gave credit to our dear Free Persons Alliance.

Unfortunately, I also think to your new fsa friend, whose name I cannot yet recall. We did not know how to contact your expedition without the astronet, you were out of reach when we heard the news and I above all did not want, by sending a ship to stop yours, give the impression that you failed or make our family company go through a scandal. Why did you not plan on another means of communication?

Georges, no non-humans are allowed on X42. It does not befall me to inform you whence this decision stems, but you should know it comes from the Alliance itself, not from the station's administrators.

I so pray you turn around and fly back to K50.

— Aldamar Felmort.

Georges checked the message's time. It had been sent at two hours and seventeen minutes NHT, and although his father was a very busy man, he would rarely contact his son during nocturnal hours. Not knowing what to do, Georges went to Mell and Kynt and explained the situation to them.

"We cannot go back now," Mell said. "We're almost there, agreed, and we do not have enough coal to fly all the way back to our starting point, except if we let ourselves drift, but that would take a very long time and in this case food would run out."

"Then we have to contact X42 through the astronet," Kynt said.

"No," Georges said. "Why do they refuse Çju on the station? We'll stay in the upper modules, or even in the Felmort Industries local warehouses, but we can't give up. And if the restriction to humans only is an order from the Alliance, X42's managers won't let us in if we ask."

"And you think they'll let us in if we try it now?" Kynt said.

"To my knowledge we haven't received any message from their part," Georges answered. "So yes, I think they will let us in."

"Georges," Mell said, "you know this expedition's responsibility weighs on you, and indirectly on your family, agreed?"

"Yes, I know. Let's go now."

Lipsum thankfully had not heard all of the conversation's details, but was guessing something was wrong. Rolly as for her had not missed a thing.

"Goodness tree!" she thought to herself and hoped to not be sent to jail for some discriminatory opinion toward fso. She also thought of Mell Robins, who was partly a WOEP. She wondered how grave was the fire she had gone through, but she remembered that during the few months she had been around her, she had never heard the engineer mention a romantic partner. Mell did not let anyone into her privacy, probably in order to protect herself. Rolly, who appreciated being around people, thought she must feel very lonely.

However the Hourglass went on its course and, at twenty-two hours NHT, having regained all of its delay, the ship started a slow deceleration maneuver. In thirty minutes they would have reached their goal, despite the mechanical breakdown, despite Çju's injury which had caused Georges's infirmity.

Lipsum came up to Mell and asked her:

"Mrs. Robins, I see you managed this flight with great care and great calm in spite of what came to be, and I commend you for it. What sort of welcome are we to expect on human station X42?"

Conscious of her words and facial expressions being recorded, analyzed or even transmitted back to The Forest of Steel's office, Mell stood as neutral as she could and answered the journalist:

"We will disembark on the Felmort Industries warehouse—there is only one on this station—and stay there, until further notice."

Then she turned back to the control panel and took back the control with Kynt. The mechanic as for him was nervous and doing his best to keep calm. Soon they would reach the landing control, mandatory for all vehicles penetrating under one hundred kilometers of the station.

When the moment of the control came, Georges received an astronet message directly on his vest.

"They definitely don't know how to use the radio," he said.

To the crew of the short-distance spacecraft identified as the Hourglass, please state your expedition's legal officer's identity as well as the titles and names of all persons on board.

After this identification phase please keep to an orbital trajectory around the station and wait for authorization to be directed to a standard landing dock.

"A standard landing dock?" Georges exclaimed. "But we were scheduled to go directly to the company's warehouse!"

"Hawking! 3" Kynt called. "They will definitely see Çju!"

Even Mell began to worry. However she worked on a few controls and said she had fixed the ship's altitude. All looks then turned to Georges, who was indeed the expedition's legal officer. He took a deep breath, then tapped an icon on his vest's arm screen to dictate his message.

Here is the response of the ship named the Hourglass, to entrance managers for human station X42.

Six persons aboard: Kynt Dor-Nan, on-board mechanic; Mell Robins, head engineer; Rolly Mortens, cooking apprentice; Selness Lipsum, journalist for The Forest of Steel; Çju, fsa. The expedition is legally headed by myself, Georges Felmort, son to Aldamar Felmort, himself president of Felmort Industries and commissioner to human industry and intercultural exchanges for the Free Persons Alliance.

We have set for mooring to the station's mechanical arms and dock into the Felmort Industries' warehouse, not in a standard landing dock. This is a sine qua non condition to our arrival, as our ship is not equipped for fine maneuvering.

Besides, being short in fuel and food it is impossible for us to go back to our starting point. We are waiting your authorization.

Then with a determined look, Georges swept a look across the five people standing around him as a court.

"Çju will enter X42," he said as a certainty. "I ignore why his presence upsets them, but I hope that for the Alliance, it will be a solution. Humans of this station isolate themselves, it can only be problematic."

^{3.} Customary interjection.

So they waited. Çju darkened progressively, sign of their nervousness. All the same Kynt, Rolly and Lipsum were becoming tenser and tenser. Only Mell was keeping her composure, focusing on keeping the Hourglass on orbit. They waited without daring speak, then at the moment Lipsum opened his mouth to complain, Georges received the managers' response. He read it in silence and simply said:

"We can go in."

"Agreed," Mell said. "Dor-Nan, with me."

"Alright," Kynt said. "Let's go."

They began their descent to the station. Rolly was marveling at the mechanical details, the myriads of propellers, stabilizers and mass attractors spread across the contorted station's geometry. As for the departure, they came close to a flexible auto-rigid techno-silk fiber arm. It grasped onto the ship's flank and, smoothly, following Georges's encrypted instructions sent on the astronet, it guided the ship inside the warehouse.

The hangar bay doors closed, the atmosphere stabilized, gravity took hold of them. The Hourglass had reached its destination.

They all let out a relieved sigh. The first steam powered spaceship in History had just achieved, not without trouble, an inaugural flight of almost fifteen thousand kilometers. As for the embarkment, Georges let the mechanic open the door.

"This time it will be my pleasure," Kynt said.

They all gathered in the corridor, Kynt, Georges and Çju first, and Mell last, saddened as she was seeing her work accomplished. Rolly gave her a little punch in the shoulder.

"Come on, you made it, don't be bittersweet like this," she told her.

"Yes, you're right, we made it."

All of them disembarked. Inside of the large white warehouse, the took a few steps and poised, smiling and their hearts beating, for one last of Lipsum's holos. But as soon as it was saved, a group of a dozen men and women in uniforms burst in through a door and started running towards them. Instinctively, Georges went to stand in front of Cju.

The journalist let the forces of order through and stepped back to the warehouse door. However he remained there, and recorded the scene that followed.

"Mr. Georges Felmort?" a bearded man asked, who stood at the head of the policemen. "We have to ask you to step away from the non-human. They will have to come with us."

Then Mell and Rolly both took a step towards Georges and Çju. Kynt was staring, wide-eyed.

"Who gives you authority to abduct a fsa?" Georges said. "Çju has traveled with us, Çju is staying with us."

"Your father, Mr. Felmort, this is on your father's authority. The Alliance does not wish for non-humans on X42."

"And why is that?"

"This piece of information has not been given to us. You should follow the Alliance's orders, as do we all."

The bearded man took a look at a tall woman with broad shoulders who must have been his second-in-command and they exchanged a nod. She told her men:

"Take them both."

What followed happened quickly. In a few instructions given on her uniform's arm screen, the women stiffened Georges's and Çju's clothes from a distance. When his arm unfolded with his vest's strength, Georges groaned from the pain.

"What's with your arm?" the bearded man asked.

"Nothing," Georges answered, "it was an accident."

"Has the fsa done it?" the woman said. "Here's why their entrance to the Alliance was so late. Almost as bad as WOEP's, this bunch."

Mell wanted to intervene to free Georges and Çju, because she knew she was physically capable of combating them all, even if her clothes were stiffened, but Rolly grabbed her arm to stop her.

"No," she told her, "think of the image it will give."

Kynt did not understand the two women but stepped closer to the policemen.

"Where are you taking them?" he asked.

"Decontamination, and then courthouse module," one of the men answered. "You three, you're free, but don't leave the station, you might be interrogated."

Then Georges and Çju were taken away, Lipsum vanished out of the warehouse, and Kynt, Rolly and Mell were there by themselves, puzzled. A few seconds later they received an astronet message with the arrest report.

Georges Felmort, human, and Çju, fsa, have been arrested at the Felmort warehouse on human station X42 as they let inside a member of another intelligent species, this Tuesday 11 December 2318 at 22:48 NHT, and will be decontaminated, interrogated and judged by the court this present day, in the courthouse module located on level 27, at 23:07 NHT.

"Twenty-three hours and five minutes!" Rolly exclaimed. "There's no time to loose then, let's go."

"I, I'm sorry, I can't go," Mell said.

"And why is that?" Kynt asked. "We have to help Georges and Çju."

"It's because of the decontamination," she explained. "It's mandatory before entering any Alliance building, agreed, and I can't let them know..."

But she did not finish her sentence.

"What is it?" Kynt asked worriedly. "You don't have anything to be afraid of."

She then felt obliged to explain:

"It's because I live with a WOEP inside of me, just to assist me in my work. They are not allowed inside this type of places."

Rolly took a long look a her, thinking how much she had to lie to protect herself.

"A WOEP?" Kynt started. "Couldn't you have said that sooner?"

"Think! If Georges, or even if Aldamar had known, they would never have given me the position I currently have in their company."

"But you're cheating being helped by an AI!"

"It's not just an AI, it's a WOEP, and we do not like being treated like cheaters, agreed?"

Kynt shook his head and let out a long sigh. He did not know where this was going to take them. But they had to act together.

"Well, if you say so," Kynt said, "I still consider you as my friend and a brilliant person, you know, but that won't be Aldamar Felmort's opinion when he knows your true nature."

"Because you want to tell him?" Rolly said.

"Of course! Georges took the risk to let Çju in, we all took this risk, because we didn't have a choice. Now we have to take responsibility for our choices and protect them whatever the cost."

The three of them looked at each other, nodded and walked out of the warehouse.

At this moment they came facing a huge glass wall, at least ten meters across, and behind it, in a location hidden to the general population, an enormous empty space, a void going from the Felmort warehouse to the station's heart. Several hundreds of meters away indeed, there could be seen a massive mechanical axis accompanied by various pipes for water, fuel, flammable gas, breathable air... There was also the pneumatic tube for people transportation that was going through the whole station, and the forefidger, monorail public transportation.

Rolly let out an emotional sobbing. The station's core was falling apart. X42, three-hundred-and-fifty-year-old, had been known for being overpopulated for over a century, and held a population twice as large as that of K50 with a much smaller internal surface area. From where they stood, they could directly see leaks of water and gas mingled together, risking a dramatic explosion every second. Then they saw descend, hanging with harnesses, two figures approaching one of the leaks and seemingly attempting to fix it. It was but a vain task, seeing how many fragile soldering lines there were, as well as various metal panels riveted on top of each other.

But they had to continue and find their way to level twenty-seven. They went through the huge room, then through a narrow corridor, and reached a small chamber outside the Felmort complex. There they found themselves in the middle of a scramble, of a dense crowd going through the place in every direction. This was one of the lower levels, which must have not been more than three meters high and it was impossible for them to distinguish anything beyond two or three lines of people. Some were dressed to the latest fashion, as Georges was, but most clothes they could see were still equipped with rigid screens, some even being several millimeters thick. When an older man fell down to the floor among the passers-by, they did not go out of their way but kept walking, avoiding looking at him, but not caring about bumping into him.

Rolly ran to him and offered to help him up. The man thanked her, then told her he was sorry he had nothing to offer her.

"I come from K50," she answered. "You should leave this station as soon as possible."

"From K50? But this station is all the way across the constellation!"

"Of course not, it's less than fifteen thousand kilometers away. What have you been told about it?"

"The managers haven't told us anything, you know. But excuse me, I must go and meet with my ladylove."

This word made Rolly smile, but she still went back saddened to Kynt and Mell. The three of them walked and followed the arrows indicating "forefidger". When they reached the platform, it was crowded. Aboard the transportation Mell noticed a man whose hand had been replaced with a multifunction android repair tool such as what had been offered to herself. She had had the chance to have a sufficiently wealthy family to access on the contrary a robotic, smart-assisted, natural-looking hand. She was sorry for the poor people who were forced to be modified to keep their jobs.

"This place won't keep standing for long," Kynt mumbled to the two women.

"This is why access to the station is forbidden to non-humans," Rolly said. "We thought it was because of fear or hatred of other people, but it's a security measure."

"Security for who, others?" Kynt said. "And what are humans living here going to do?"

"That's the problem, agreed," Mell said. "They are being lied to, told everything's alright, and that they are alone. From these lies come their specism ⁴. That's the source of their perdition."

"Let's go find our friends," Kynt said.

They got off the forefidger at level 27 and easily found the courthouse module. Its entrance was adorned with the traditional columns present in front of this sort of buildings for

^{4.} Discrimination between species.

millennia. Mell hesitated but entered the edifice anyway.

"What's your business with the courthouse?" a woman in her fifties asked them roughly from behind her desk to their right.

"We have come to attend Georges Felmort's trial," Kynt said.

"Very well, public hearings in room two, the door to the back and right."

They started to walk away, but the secretary called them:

"Have you gone through decontamination?" she asked.

"Y... yes, of course," Rolly said and put her hand on Mell's shoulder.

"Very well, go on."

"Thank you Ma'am," Mell said.

"Very well," the secretary said.

Then, after a few steps, Kynt whispered to Mell:

"You see, you're not the only one to repeat yourself."

"Oh, be quiet Dor-Nan, agreed?"

They entered the hearing room without a sound. It was completely empty. They walked along a row of benches and sat on the first one. It was twenty-three hours and two minutes.

Exactly three minutes later, as stated by the report, a judge, who was a man in his sixties in a red uniform, entered the room, and four policemen leading Georges and Çju followed him. They were both made to stand in front of the judge.

Both of the accused noticed their comrades' presence but did not utter a word, keeping their heads down. Georges' arm was still positioned by his stiffened vest.

"Mr. Georges Felmort," the judge began, "do you reckon the reasons for your presence here at this time?"

"Yes," Georges said.

"Do you reckon having gone against Alliance orders and a recommendation of your father when you let onto X42 a member of another species?"

"Yes"

"And do you reckon Çju of the fso species by your side is the cause of your left arm's disability?"

"Yes."

"The required condemnation for this action is a sentence to community service of a duration of one thousand days of New Human Time on a non-human planet of the Free Persons Alliance."

Georges and Çju turned to look at each other. "There isn't a human planet anyway," Georges thought to himself.

"Unless," the judge continued, "you have arguments for your defense."

"My father is Aldamar Felmort. Could he be sent for and heard?"

"Your father's identity is known to all, as well as yours. He has nothing to do with your actions nor is he responsible for them, therefore his action is not to be considered by the court." Suddenly Rolly stood up and took a step forward.

"Your honor," she began, "is humanity reduced to sell their own citizens to the Alliance?"

"Ma'am, you do not have the floor," the judge said loudly, then to the policemen: "Gentlemen, if you would?"

"Wait! Your station is falling apart, we could see its core from the Felmort warehouses."

"I know perfectly well of our situation, and I would really like for you to sit back down."

"No," Rolly said.

Kynt and Mell were staring at her, the judge was shaking his head with a tired look, but she continued anyway:

"X42 is old, poor, but historical. Its managers want to protect it above all else even though it is overpopulated and mostly unsanitary. It is because of the very danger it causes to its inhabitants that its access is restricted to humans only."

"Ma'am," the judge said, "can you do anything about this?"

"I cannot, but the Alliance can. How can it remain blind to this situation? There is a deadly peril to anyone remaining here. I implore you, your honor, as an independent representative of the FPA judiciary, open the station. Let truth be known."

"I am sorry, but that is impossible."

"It is possible," Rolly Mortens said. "It is possible if you make this choice."

The judge stepped out to deliberate. Under the policemen heavy looks, Rolly sat back down between Kynt and Mell. Georges and Çju turned to her and thanked her each with a nod. When the judge came back after long minutes had passed, the policemen ordered them to stand up to take cognizance of the sentence.

"Mr. Georges Felmort," the judge began, "for having let into X42 a member of a non-human species, you have been found guilty and I sentence you to a fine, of symbolic amount one Ballard. Çju, for the inflicted disability to Mr. Georges Felmort by your side, you have been found guilty as well and I sentence you to community service for a duration of one hundred days of New Human Time, to be carried out in one of the companies sponsored by the Free Persons Alliance. I could only recommend Felmort Industries."

Then he sighed and said:

"Ma'am, you who intervened in front of the judge without permission, I order you to declare your identity to these gentlemen of the police and to remain on X42 for a duration of ten days of New Human Time. Make yourself an idea of this station's worth and report back your observations to me at the end of this period."

Mell and Kynt let out a relieved sigh while Georges and Çju fell into each other's arms. As for Rolly, she remained facing the magistrate and told him:

"I hope so, your honor, I very much hope so."

</story>