

# **An Untitled Novel With Some Submarines in it. Also a Pigeon.**

**Pre-release version. This is a draft version of this  
book. For more information visit —  
[grannycart.net/subworld-pages/](http://grannycart.net/subworld-pages/)**

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# Preface to The Pre-release Draft

This first 500 words isn't the preface. It's the preface to the Preface to The Pre-release Draft.

But This book is going to need a preface.

The problem is it does not comfortably fit into one of the categories most books are jammed into. It is about submarines, but it is not about *war* submarines. It is not *The Hunt For Red October*. If what you want from your submarine story is a “taut political thriller,” you'll have to find it elsewhere. (Though you should still read this book!)

The main submarines in this book (the ones in the diagrams) are cargo submarines. This means the book probably has more in common with 1970s trucker movies than 1990s submarine movies — though with more women in positions of leadership than either of those genres. “Submarine truckers” is not a category that exists on Amazon (yet).

It is unquestionably speculative fiction. But it is not science fiction. (Science, such as it is in the story, is purely science-fact.) It is not an alternative history — at least not in the way that term is usually defined (that is, Hitler has not won the war in this book). It's also not steam punk. It might have submarines, but there's no steam. Maybe more importantly, the

alternative-history world it is set in is about 100 years later than the alternative-history world steam punk stories are set in.

Besides, I think genres should be defined more by aesthetics than technology. This story is entirely driven by the world the characters live in. A world of filthy, noisy, all-encompassing, mechanical machines, on which their lives and their livelihoods both depend. The grit and dirt permeate through. Maybe the genre could be “grime punk,” though that is not yet a real genre either.

With no genre that appropriately short-hands what the book might be about, the preface has to do a lot of work. It has to set up expectations for the story, without getting involved in the story itself. It is also the only place any intended meta-narratives (of which there are a few) can be made explicit. (I have nothing to say about *unintended* meta-narratives.) The following preface is merely a draft of one possibility for how to introduce the book. There’s a number of other directions that it could take. Read it, read the book, and then come back and check the preface again. Let me know if you think it is working.

One final note — on the number of literal “fucks” given: there is an excessive amount of cursing in the dialog of this early version of the book. It was an experiment. It’s probably not working, and a lot of the cursing will be first on the chopping block when the book goes through the next round of edits. But if you read it now, you can tell people: “I read an early version — back when it still had all the cursing in it!”

Without any further delay, the draft Preface to The Pre-release Draft...

Anyone who has ever had the pleasure of riding an old motorcycle has likely employed a device called the ‘petcock.’ The petcock was a valve that sat on the bottom of the fuel tank and when in its normal run position allowed fuel to flow through it to the engine via a small pipe that stuck up a bit into the fuel tank. As the rider rode and the fuel burned down, there was no way the fuel level could fall below the height of that small pipe. When the fuel reached that point, the motorcycle would cough, sputter, and for all intents of purposes be out of gas — even though there was still a pool of fuel sloshing around in the tank below the mouth of the little pipe. The sputtering motor made it exceedingly clear to rider that they were running low on fuel. The rider would then flip the petcock over and the valve would turn to open a hole at the very bottom of the fuel tank and allow the sloshing remains of the fuel to run down to the engine. The rider had the reserve fuel left in the tank to let them ride long enough to find a place to refuel.

The petcock was a super-simple mechanical device premised on the idea that the surest way to know you are running out of gasoline is to actually run out of gas. Any idiot who could manage riding a motorcycle could also manage the basic premise behind it. And most idiots could take it apart could see how it worked if they were so inclined. Today the same need — to know when one is running low on fuel — is met by a sophisticated sensor mounted in the tank, that feeds data to a black-box of a computer that calculates the remaining fuel and displays it on the dashboard in colored lights. The idiot riding the motorcycle needs to know less than ever about their bike to ride it. And the idiot is far less likely to be able to figure out how to fix it if something went wrong.

There was a generation that lived through a time up to, through, and a little beyond the great world wars. Like us, technology changed their world. They lived every day of their lives with

complex new industrial technologies. But the technology of that time was different than ours. It was rooted in mechanical and electrical things. In their time, anyone who wanted to understand how a piece of amazing new technology worked could simply take it apart. Most things had an intuitive structure — mechanical solutions based on logical processes. This is not the same as being *simple*. Many things from that era were in fact far more complex than today's equivalent devices. But learning how something worked — and how to repair it — only required a willingness to disassemble (and, following that, a whole lot of experience doing it). Most parts also had a macroscopic quality. They worked on a human scale. You could see the parts without magnification, you place a part by holding it with your fingers. If you take apart today's technology, all you will find is vanishingly small components that cannot be repaired, only replaced.

Because of its mechanical underpinnings, the technology of that first half of the 20th Century also just *behaved* more rationally. Even those who had not the faintest grasp of the fundamentals of how mechanical technology worked, would learn how their machine would behave just through the experience of using it. When something unexpected happened, it meant something was going wrong not that randomness in the system was manifesting itself. People could depend on their technology to behave intuitively when they used it. Unlike our modern digital-based technology, where even experts can be shocked by how it behaves and at a loss to explain why.

This old mechanical technology also came with an aesthetic. The mechanical nature of it made the stuff dirty, greasy, and grimy. It was powered by the air-fouling burning of things, kept lubricated by chemical greases, and cleaned with penetrating toxic solvents. This aesthetic permeated our culture. The rich found ways to constantly clean it. The poor and the technology maintainers simply lived in and among it. They were nothing but punks in

the grime, though they never would have referred to themselves that way.

It has often been commented that many of the stories from the great wars were compelling because they could be placed atop clear moral ground. But less remarked upon is that many stories from the wars were so gripping because they told stories of average people achieving amazing things with the exciting new tools available to them. Often those average people made their extraordinary tools and technologies perform far beyond their original intended use. To this day there seems to be no end to the delight people take in stories from the electro-mechanical age of machines. Indeed, we may even be more engaged with electro-mechanical stories than with stories derived from our modern technology. Nearly everyone would rather follow the building of a custom motorcycle than the latest achievements from a microchip clean-room.

The story told here is bracketed by technologies that anyone could understand with nothing more than a little armchair-pondering. The world this story lives in is confined to technology that is *non-magical* and accessible. Through that technology, I hope, an amazing story emerges. More than that I hope the reader who rides along with those who try to live and among those machines can *feel* how the machines behave, what they can and cannot do.

We now live in a world where technology has crossed a line into the magical, and there is no way to put that technology back in the bottle even if we wanted to. But it is possible in the context of fiction to imagine a world where the electro-mechanical remained the dominant root of our everyday technology for far longer than it did. It is possible to imagine that but for the geopolitical and economic winds blowing in a slightly different direction, the commerce and industry of our world could still be carried out by independent operators driving grease-coated machines steered by

mechanical linkages, rather than corporations watching global satellite tracking on digital displays. This book is dedicated to those brave women and men who plied their trade under the waves of a world that, through historical happenstance and the hubris of our own technological and political classes, never existed.

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# Chapter 1

The weight of the atmosphere pressed the black air of nighttime down onto the surface of the ocean. The atmosphere pinned the air under a murky dome of heavy cloud, and held it down like a schoolyard miscreant torturing some stick-armed runt. The weight compressed the air to complete stillness, and flattened the water, until it was unable to raise more than a barely perceptible heave under its glassy smoothness.

A distant moon — cast out by the atmosphere and not visible — dimly lit the clouds to the color of the charred edges of a coal. The moon reclined, above and beyond, tormented by the pressure of the atmosphere but unable to muster enough warmth to intervene. It merely stood by helpless, feebly attempting to stir the ocean out from under it by the force of tide. It was all it could do to provide even the coldest, dimmest light. The light filtered down through layer upon layer of gray cloud til it was so diluted and refracted that it left the sky only a few shades of black lighter than the water.

The ocean was unquestionably black. A blackness that came up from the deep. Beyond the atmosphere rode heavenly bodies that radiated light and heat, and the thick gasses of the atmosphere carried some portion of that warmth down to the surface. Below the water was darkness and cold, and the viscous liquid transported that darkness up to the surface, carried on vast swells of cold. As hard as the atmosphere might press down, the darkness yielded not at all to the pressure above.

On this surface, stretched horizon to horizon from the cupped edge of the dome in all directions without referent or feature, a point arose. A minuscule and meaningless point, like the first push of a needle through the underside of a new piece of fabric the workings of which would soon join the fabric irrevocably and forever to another with hundreds of gradually tightening, interwoven stitches. The point rose, a long thin wire sting extruded up, piercing through the surface. A thin V-shaped wake trailed behind it in the water marking its course. The wire bent back against the pressure of the air, as it grew up from the surface, it bent over more until its tip was nearly horizontal to the surface of the water, held there in a long gracefully arcing line.

At its base the wire rested on the top of a short mast which broke through the surface a moment later, accompanied by a series of a half dozen other masts, each leaving a more significant wake behind it. The low string of wakes carved up the black surface behind the path of the masts with their nested Vs. For a minute they moved alone on the surface, and the Vs grew longer and longer, stretching out behind them in a subtle but ever-widening trail.

An oblong pushed through the surface and rose up into the air. Water streamed across the flat top and down the smooth metal sides of the oblong. It grew upwards, like a rising column of soot from a factory, and became a curved vertical wall. It thrust up against the pressure of the atmosphere with the same manner that seismic forces raised up a new continent. Water shot out of vents in the side of the walls, draining out interior spaces that had been filled when it was submerged. The curved wall sprouted from a giant body at its base, which now broke through the surface lifting the wall up into the air above it. An enormous flat deck washed into existence in a long line far before the curved wall of the oblong. The sea water pushed back and forth across the deck, the pressure of the atmosphere finally yielding

to irresistible forces generated by a machine made by humans. Water ran from the deck, down the curved sides containing huge tanks that moments before had been filled with water, and now buoyant air displaced the water, raised the deck upwards. The surface of the black ocean gave before the unrelenting push of this leviathan, and a wake of dull gray broke out across the surface behind it.

At first it moved with near silence, other than the sound of the water pushing and running along its sides and the soft crash of the curling water it left behind it. Then it coughed, spat, and from two pipes that opened at the top of its oblong dorsal fin two arcs of flame burst orange into the surrounding night, spraying apocalyptic color across the landscape of pitch. The flames flashed over the reflective blackness of the water and bounced back from the low clouds, and then died back into the pipes from which they came. They left behind the rolling churn of exploding diesel and hot air pouring up through the pipes and forcing the shutters open that normally protected them from the influx of water.

The engines of the machine revved up, and then maintained a loud high pitch, generating energy to drive it forward with controlled and contained combustion trailed by blowing heat. The surfaced ship reached and maintained an unvarying speed.

Set into the top of the dorsal fin was a recessed platform. At the bottom of the platform was a black well of a hole that led further down into the fin. At the bottom of this well, a rusty wheel turned and creaked. It was followed by a crescent moon of red light that split the black well bottom and widened into a perfect circle as a hatch lifted open. The shadow of a small figure climbed through it and up a short metal ladder to stand upright on the recessed deck platform. This smaller first shadow was followed by another much larger shadow. Both figures looked around at the darkness, lit only by the red glow rising up dimly

from below their feet. They leaned forward and rested against the fairing. The smaller figure made some gestures to the darkness, and a match light glowed against the end of a stubby cigarillo.

The glowing coal of the cigarillo swept a thin line in front of them as she opened her arm to the darkness. The figure next to her, dwarfing her in size, just nodded. There was no need to describe the all-consuming blackness aloud.

“Perfect night for a surface run.” Said the giant figure, slowly pulling his fingers through his thick beard.

“Perfect night for contemplating your own doom, Hemi.” Said the smaller figure.

“If darkness stirs up feelings of doom, you should wear your doom like a blanket.”

“It’s probably best if you keep your imaginative comparisons to yourself. After all a blanket is for warmth — our doom is unlikely to be very warm.”

“Perhaps so.” Hemi paused breathing in the dense smell of the cigarillo; there was no reason to rush anything this night. “The usual plan for tonight then?”

“Same as every other fucking night. Charge up the batteries — run on the surface til the light cracks the sky, and then we’ll disappear back where we came from. Make sure your keep those insolent fucking pissants at the controls awake though.”

Hemi put one huge hand on her shoulder and turned to climb down through the hatch. She pulled on her cigarillo and the coal at the tip glowed in the darkness. Her doom would probably eventually be a doom of freezing water, she knew that, but at least tonight it was warm enough to be up on the top of her ship. The blackness lay on it, and she did indeed find some comfort

that in the blackness, nobody could see them. If she controlled all the levers of the universe, her boat would never be seen.

Captain Sylvia Percy stayed on the bridge of the her submarine's sail for hours, smoking her way through one cigarillo after another and watching the empty nothingness go by while her thoughts spiraled without direction out into the darkness. For a long time she was surrounded by an environment disturbingly deprived of sensory input. The diesel engines were loud enough, but unvarying. So too the vibration that the engines sent up through the steel-grated deck to shake the rubber of her boot soles without change in frequency or amplitude. The blackness around her was limitless, though the boat pushed relentlessly forward. It occurred to Percy that when her boat, the *Prospect* was submerged, this is what it must be like outside — light-less and unvarying. It felt like she had loosed the bonds of her corporal body and had floated beyond it, so she could experience what her boat was like when it was pushing through the icy blackness of an alien world where the pressure would collapse any body evolved for comfort on the surface into a sickening unrecognizable mush of hemoglobin and fats.

As with many things that seem interminable, the slow but persistent forward motion eventually forced the dome of clouds to relent. The boat pushed through to crawl out under a sky of stars and a weak, low moon. Captain Percy could see her hand holding her cigarillo now and the long shadow of the *Prospect* stretching out before her, parting the waters to allow her to pass as she rode astride this beast of hers. This was a pure and rare pleasure on a submarine, where she spent so much of her time in a steel tube staring at the same set of dials with few opportunities to focus her eyes on anything beyond a meter in front of her.

Captain Percy knew her boat well. She had spent enough time with it to have internalized its movements. She almost always knew what the boat was doing just by the feeling of it — the

angle of the deck, the vibrations of the engines or the electric motors, the subtle changes to the pressure of the air. Even at depth — when the hull and struts of the boat groaned under the weight of the water above — to her the sounds of the boat under pressure felt like the normal sounds of a huge human taking a great weight on its shoulders. The only time she ever worried was when the *Prospect* conveyed sounds, or motions, or input to her that she couldn't recognize. She had been through so much with this boat that it was only when it did something new that she got really scared.

And at this moment, she felt something new. A collection of haptic feedback to her senses made panic rise in her chest. The boat shuddered, as if the cold water it swam through all these years had finally chilled its core.

Captain Percy was thrown violently against the fairing.

She immediately dropped to her knees on the deck of the bridge, her fingers pushed through the steel grating and gripped. She stuck her head over the hatch hole and looked down to Hemi's large face looking up at her from a couple of deck-heights below.

"I don't know!" He yelled up to her before she could ask. She could hear him giving orders to kill the diesel engines and reverse the propellers.

The bow of the *Prospect* had come to a dead stop, but the stern still had forward motion. Captain Percy could feel the whole boat turning unnaturally around its center axis, like the experiment of some child: a magnetized pin through a cork floating in a bowl of water pulled around by the invisible forces of a planetary aura.

The deck under her began to lean to the starboard side. Captain Percy braced one foot against the inside of the bridge well wall. The boat listed sickeningly. Captain Percy got to her feet, still braced against the angle of the boat. The pads of her fingers

gripped the sharp rusted edges of the fairing, and she peered out over it into the night, scanning for what her boat had hit. The water remained black and calm, though not quite as glassy as it had been earlier in the night. They were far from shore, in fairly well-charted though relatively little-trafficked waters. The *Prospect* had clearly hit something, but in these waters there should have been nothing to hit.

For a few moments the *Prospect* hung at an angle, and then began to right itself, tilting slowly back towards the port side. As the fairing came lower, Captain Percy could see more of the sea off to port, and there appeared the shadowed silhouette of another submarine.

The bow rose up out of the water first revealing one of the rarest things seen on a modern submarine: a distinguishing feature. The bow of the sub had a modified and reinforced jagged point which swept back in long sharp blades to merge incongruously into the soft curves of the submarine's hull. A medieval-looking device intended for ramming ships. Captain Percy had never seen anything like it. It must be both a noisy and inefficient thing for a sub to push through the water ahead of it. Quiet efficiency was normally the top priority in a submarine's design.

From the bow followed the long black smoothly swelling curve of a military submarine. It came up from the surface with water streaming slickly down its sides. The sail came up with dive planes mounted to it, sticking out like small wings and set at an angle to raise the boat quickly. When the stern finally came up to the surface, it was mere meters away, its swirling wake washing white up the against the side of the *Prospect*.

"Might be our fucking doom a lot sooner than we anticipated." Captain Percy said to herself as she climbed down through the hatch and the red crescent of light waned out of existence behind her.

Captain Percy stood on the metal rungs of the ladder just under the hatch set in the ceiling of the cramped control room of her submarine, and with one hand quickly screwed shut the squeaking wheel of the hatch seal. With the hatch sealed, she dropped to the deck. Hemi looked down at her through his small-framed spectacles.

“Down.” She gave the one-word order as she pushed the button on the wall that activated the dive alarm.

“Give me full speed forward.” Said Hemi. He put one large hand on each of the shoulders of the two men who sat at the controls of the sub and gave them orders to dive the boat. One of these men was a stick-figure of a man who went by moniker Bastian. The other, Gregory, had a meaty square forehead that echoed his meaty square body. Of the two of them, only Gregory looked like he belonged on a submarine.

Diving the sub required delicacy even in the calmest circumstances. Now Hemi and the two men at the controls carefully timed their movements. Their eyes scanned continually over the wall of dials, gauges, switches and valves in front of them that reflected the red glow of the night lighting. This wall at the front of the con told them the *Prospect's* angle, depth, speed, systems settings, battery charge — the whole picture of the boat's orientation and movement. Indeed, this wall plus some of the panels situated to their right and left were the *only* way to know the status of the boat while it was submerged.

Gregory and Bastian made adjustments according to Hemi's instructions, choosing carefully which of the dozens of valves mounted on the control panels in front and around them to open or close, or which switches to flip on or off. The submarine let out a long exhale of breath: the air that had held it aloft in the water column being pressed out by an onrush of water from below into the flooding tanks.



“Flood the express dive tank.” Ordered Hemi. Bastian reached up and opened a valve and water thrust through thick old pipes into the deepest parts of the bow of the boat. It pitched steeply downwards in response and Captain Percy reached to grab cracked leather loops that hung overhead. She angled her feet against the incline and her eyes followed the needle of the depth gauge.

The ship-to-ship radio above Captain Percy’s head lit up. From the radio’s speaker a recorded voice began blating a warning that they were violating the territorial waters of someone they had never heard of; who were authorized by a series of treaties with titles that became acronyms that became words that contributed to further acronyms. The recording ordered them to surface and prepare to be boarded.

Hemi punched the mute button on the radio.

“Only on the surface do these territories and treaties matter.” Said Hemi. Captain Percy nodded.

“What the fuck happened up there? Gregory asked, his eyes never leaving the wall of dials and gauges in front of him.

“We were hit. Sub with a big ugly fucking ram mounted on the front of it. Totally fucking insane thing for a submarine to have.” Said Percy.

“Likely some specialty-built Authority enforcer boat.” Said Hemi.

There was barely enough space in the control room for 4 people. They were all breathing each other’s air and their breath condensed on the glass faces of the dials and gauges. Hemi took a rag from a hook and fastidiously wiped each of the little round windows clean.

“100 meters.” Said Gregory.

“OK. Level us off.” Said Hemi. Gregory and Bastian spun closed some of the trim tank valves and rolled the dive planes level. The angle of the boat slowly eased upwards.

Hemi stood staring at the dials in front of Bastian and Gregory, his massive arms crossed in the rough rough wool of his tightly-fitted tweed suit jacket. He tapped the thick fingers of one hand against the leather elbow patches while his other hand stroked his wiry black beard.

Running level at depth, they got the boat moving slowly and silently. The idea was to sneak quietly away — the most routine tactic of all submarines. But the routine of it did not reduce the feeling of being prey. Captain Percy pulled out another cigarillo and lit it. She sucked at it, and then ashed it into a tin cup that smelled of her stale coffee from three hours earlier.

Being underwater meant they had to run on batteries. The diesel engines the submarine used while surfaced generated power that drove the propellers and charged the batteries. But those engines breathed far more air than humans, and so could not be used underwater. Running on batteries with just the electric motors driving the propellers made the boat nearly completely silent. The electric motors produced a hum that was audible inside the boat, but barely detectable by another vessel. Eventually the batteries would run out though, and they would have to get back up on the surface to recharge the batteries with the diesels.

But Captain Percy’s intuition was plaguing her again. “Something isn’t fucking right.” She said aloud to no one in particular.

She could again feel something was wrong with her boat.

There was no single instrument that reported anything amiss. But then no single instrument on a submarine described the total status of the boat. All the instruments had to be taken together, internalized, and combined with what one physically felt the

boat doing. Percy would typically be holding the depth in her head, while taking also taking into account the dive plane angle, the speed, and the overall feeling of the boat. Normally this happened instinctively. She processed it all automatically, and she could just *know* what her boat was doing from a quick glance at this wall of dials combined with what her senses told her and dead reckoning from the accelerations she had experienced.

This feeling of internalizing what her boat was doing — something she did continually, to the point where it felt like the boat was part of her body — was not working right now.

Her eyes scanned back and forth across the dials, but the information did not come together. There was no way to make sense of the dials. In this steel tube with no windows, perhaps for the first time ever, she felt blind.

“Hemi... what the fuck is going on...?” She was turning red with frustration and she could feel her eyes watering. Fortunately in the dim red lighting, no one would see that.

“I don’t know. . .” He reached past Gregory and turned the rudder. The boat came along, slowly. “Sluggish?”

“I need to go look her over. Let me know on the PA if something happens.” Hemi nodded and Captain Percy slipped down the ladder to the deck below. She stepped to the front of the navigation and sonar compartment and climbed down a steel ladder to the middle deck of the boat. This was crew quarters. The *Prospect’s* third deck-crew member, Owen, was off watch and snoring in his rack behind one of the moth-eaten old bed curtains. She continued through a hatch at the rear end of crew quarters and down another steel ladder to the lowest of the three main decks. If there were something physically wrong with her boat, this deck was the most likely place to figure out what it was.

She flipped on the lights. There was no red night lighting rigged down here, it was just bare white bulbs behind protective cages. The lights stretched off in a line on the ceiling, forward and aft of her. This entire lower deck compartment was full of batteries, strung together with a rat nest of black cables as thick as her finger. The cables were grouped together with wire ties and slung along the racks in heavy bundles. The batteries were bolted with rusting steel straps to row upon row of steel shelves.

The deck was steel grating. She got to her knees. The steel grating pushing through her brown leather overalls that were cracked with age at the joints where her knees bent. She put her fingers through the grating and lifted it up and put it aside. She reached her hand down and felt the raw steel of the pressure hull. It was cold, damp, and greasy, but that was normal. She replaced the grate and went on to the next compartment forward.

More batteries here, though fewer. They lined the walls, but not as deeply at the previous compartment because there were trim tanks inside the pressure hull here. She checked below the grating again, but here too everything had the normal amount of greasy dryness. She passed forward from that compartment into the main cargo hold.

The main cargo hold was one giant void. More than thirty meters long, and almost ten meters wide. The air was still and stale and smelled of rust and petroleum-derived greases and oils. The overhead bare bulbs had a harsh jaundiced yellow color. The hold was mostly empty — they had been coming from their last cargo drop-off and were heading towards the depots in the north in hopes of being hired for another shipping run. A few wooden crates, stippled green and black with mold, were stacked up along the sides. And a pile of rusted bicycles were lined up in a corner and strapped down with leather straps to keep them from shifting with the movement of the boat. In another nook was stashed a couple of welding rigs chained to the wall and some bins of scrap

metal. It had always bothered Captain Percy that they couldn't find a more considered place to stash these sundries than the cargo hold.

She walked along the center line of the space, listening carefully. It seemed to her there was something wrong with the sound of her footsteps on the metal grating. As she neared the front of the compartment, she realized it was not the quality of the sound of her footsteps, it was that she could hear water trickling. She knelt down and pulled up the grating. There was a pond of oily black water just under the grating. In it swam a small school of old cigarette butts. Little ripples formed from resonance with the hum of the electric motors, their vibrations passing up the hull and encoding themselves on the scum of the surface here.

There should not be this much water. Percy now knew exactly what was wrong with her boat: the ramming had cracked the pressure hull, and the *Prospect's* cargo hold was filling slowly with water.

"Keep this depth, and course, I'll be down in sonar listening for that sub." Hemi climbed down from the cramped control room to the compartment below. From the sonar station below he could almost see up into the control room just behind and above him and could still tell the men at the controls of the boat what he wanted them to do. Likewise, Gregory and Bastian could still give him reports on the *Prospect's* status, albeit with a little more emphasis thrown into their voices so they carried below to Hemi.

Hemi didn't bother sitting down at the sonar station, instead standing behind the empty sonar operator's chair and slipping the old headphones onto his head. He covered one ear and left the other free. He spun the control wheel for the sonar around slowly, listening for human sounds out in the malevolent darkness of the ocean. There was nothing but silence.

“Hemi,” Gregory called down through the hatch, “I’m having trouble keeping the boat level. I find I keep having to give it more and more upward dive plane angle just to keep from gaining depth.”

“Let me come up and play with the trim tanks.” Said Hemi, climbing back up to the control room. He stood at the trim tank controls next to Gregory and his thick brown fingers spun one small steel valve-control wheel, then the next. Each was accompanied by the sound of water pushing through pipes, flowing from one end of the boat to the other. “How’s that?” Asked Hemi after a few minutes of adjustments.

“Better, but still quite a bit more dive plane angle that I would expect just to keep the boat level.” Said Gregory.

Hemi didn’t say out loud what he was thinking: they were sinking.

“Sweet fucking hell.” Percy said to herself. “Sweet fucking hell!” She repeated at a yell. She ran up the cargo hold, and back into the battery compartments. She pulled the heavy watertight bulkhead closed behind her with a loud metal-on-metal sound, sealing the cargo bay. She turned the wheel to seal it. It took all her strength — these seals were rarely used and they were planting themselves ever more firmly into a rusted stasis as time passed.

She climbed up a deck, and passed out the back of crew quarters, through the galley and into the engine room. The only sound there was the buzz of the electric motors running in the next compartment back, and a randomized clanking of tools from the deck below. She leaned over the open hatch to the lower engine room.

“Chips! Chips, come over here.”

The clanking sound stopped and the face of the *Prospect's* engineer appeared below the open hatch a moment later, peering up at her. Chips wore her hair tied back in a thick black braid, to keep it from getting into her work. Her hands were black with grease that had also created a grimy patch on the leather apron she wore. In her hands she held the body of a deconstructed piece of machinery the size of a baseball, as if she had been butchering some small game animal for dinner.

“What the fuck’s up?” Chips asked.

“There’s a leak.” These were words no submariner ever wanted to hear. But Chips had fixed leaks before. It was the answer to the next question that Captain Percy did not want to have to give her.

“I was wondering when someone would make their fucking way down here and tell me why the fuck the boat has been moving so fucking funny. Where the fuck are we leaking?”

“...In the cargo hold.”

“And it’s fucking bad, eh?”

“Pretty... bad. An Authority sub rammed us on the surface.”

“So we’re fuckin’ fucked then, eh? Fuckin’ fucked, because the cargo hold’s too fucking big, and the boat won’t fuckin’ float if it’s flooded, eh Capt’ Percy? Fuckin’ fucked!” She threw her piece of machinery at the wall where its loosely-held assembly collapsed and sent small part flying into the far black corners of the lower engine room.

“For fuck’s sake Chips, yes we’re fucked, but we’re not *fuckin’* fucked, yet... I need you to take one of the guys, go in there, and see if you can stop it and patch it so we don’t get to the point where we *are* fuckin’ fucked. Right?”

“Ah, fuck ya Capt.” Chips started climbing up the ladder towards Percy with a look of near-murder in her eyes.

“And fuck Chips: good or bad, I want regular reports. Get Owen up and get him helping you.”

“Eh fuckin’ okay.”

Captain Percy left Chips digging out hull patch kits from engineering storage compartments and returned to the control room.

Gregory looked at her as her head popped up through the hatch in the floor of the control room. “Wish we had something to shoot at those fuckers who rammed us.”

“Someday, Gregory, I’ll refit the *Prospect* as the first merchant sub with a torpedo tube, just for you. Til then our defense is the same as any prey animal: run and hide.”

“If you are back in the control room for the moment,” said Hemi, “I will go down to sonar to work on tracking that sub with the ram’s location. How is our boat, by the way?”

“We’re sinking. I put Chips on it.”

“If she can patch the boat with expletives and downright pissed-offedness, we will be in good hands.”

“What’s the state of my ship boys?” Captain Percy addressed Gregory and Bastian.

“Apparently we’re fucking sinking.” Answered Gregory.

“Apparently...” She agreed. She scanned the dials. There was nothing immediate in their impending doom. It was written instead in subtle ways, spread across the dials, and only when the readings of the dials were taken altogether. The dive plane angle was too steep for the amount of forward drive they were



giving the boat. The trim tanks too light. The depth deeper than she wanted to be.

“Since that sub is going to know where we are anyway, you might as well crank the bilge pumps up to maximum power. Making a bunch of noise is better than sinking.”

Gregory flipped some switches and another frequency of vibration was added to the regular background hum from the motors propelling the boat.

“How’s she handling generally?” Captain Percy asked.

“The boat just doesn’t seem fucking normal Cap. It doesn’t respond how I want it to.” Said Bastian.

“Here, let me try the rudder.” Captain Percy reached over him and turned the wheel hard over. The *Prospect* came about slowly but surely, leaning over slightly, as she should, but after a short delay the whole boat took on a sudden heavy list. Percy counter-steered and brought the *Prospect* back to the course they had been on.

“See? That doesn’t seem quite fuckin’ OK to me.” Said Bastian.

Captain Percy knew it was worse than that. The sharp list after the delay was the weight of the slack water in the bilge pouring over to one side of the boat and dragging the rest of the boat over with the weight of its movement.

“I... need to go check on fucking Chips.” Percy slid back down the ladder from the control room, passed Hemi concentrating on listening to the headphones at the sonar station and continued forward until she got to the stairs down into the cargo hold.

Chips and Owen were at the far end, with bright work lamps rigged up. Owen was dragging one end of a fat gray, grimy hose for an old mobile bilge pump from the pool of black water in

the bow of the ship up the middle of the cargo hold towards one of the trim tanks. Chips had a whole set of the deck grates out and stacked up to expose the pond of scummy black water under them. She was wearing thick rubber waders and standing directly on the inside of the pressure hull in the fetid water. The water had pooled up above the grating level and was almost to Chips' chest, a distressing sight that was tempered in Percy's mind by the knowledge that Chips was not a very tall woman. Chips had heavy rubber welding gloves on and a mask so she could see what she was doing under the water. Above the swim mask she wore another dark-lensed mask for welding that could flipped up or down as required for doing the work.

As Percy was walking down the cargo hold Chips' head was disappearing under the surface. Captain Percy stood on the grating above her watching. The welding rig next to her revved up with a groaning whine and a stream of bubbles and flashing blue light pierced through the turbid dark water. When Chips lifted her head up for air, water ran down her mask in rivulets, and drained in a greasy gray stream from her thick braid of hair. Percy asked her for her report.

"Fuck you, ya dominating fucking twat. This is delicate fucking work here, and it needs fucking time. The hull's got hundreds of tiny cracks. It's split open the way ya might break off a piece of cheese — tiny cracks all the fucking way along. If it were one big crack it would be much fucking simpler. Hand me that fuckin' patch piece by your feet."

Captain Percy spat, and her spit tasted oily and gritty. She handed Chips the flat piece of sheet steel, which was coated with a slippery residue. Chips held it against the side of the hull and pulled a hammer from a loop on her waders. She hammered it against the side of the hull with heavy, ringing smacks, shaping it to the interior curve of the boat. Percy was sure she could hear the ring of the hammer traveling along the steel pressure hull

all the way to the stern. She could imagine the sound going out into the water, which felt like a violation to her basic instinct to always keep her submarine quiet. Practically though it hardly mattered, since those who pursued them would already know their location anyway.

Chips took her now properly curved piece of patch steel and submerged into the filth again.

Percy watched her work for a quarter of an hour or so. Even in that short time she could see the line of water on the hull had visibly risen, crawling its way up the grated deck, slowly consuming her boat. Owen came back and started up the rattly old bilge pump, and with a whine and a rush of water that gave a serpentine life to its hose, it began a losing battle to take back some of the boat from the maw of the beast consuming it.

It was hopeless though. The water level in the cargo hold was rising more slowly, but still rose relentlessly. By the time Chips next brought her head above water, Captain Percy had made a decision she did not want to make. "Keep working." She told Chips. "I'm going to blow the tanks and bring us up to the surface."

"Ah, fuckin' smartest thing ya said yet this fucking day. This course we're pursuing right now is on a fucking trackway to the gates of fucking Hell."

Blowing the tanks was an emergency maneuver. It meant opening the valves that would allow air to flow through the convoluted paths of the old pipes of the ship and push into the tops of the main ballast tanks. The air forced in the top of the tanks would push water out the bottom. When enough water was forced out, the huge bubbles of damp, greasy air held at her sides would rapidly raise the submarine up to the surface, like a child being gripped by the armpits and tossed upwards. Fully blowing out the tanks was only ever done in emergencies and drills, and drills

were few and far between on a cargo sub like the *Prospect*. It put stresses on the old boat that it was designed to handle — when it was built more than 20 years ago.

Percy climbed back up the stairs to the third deck, moving towards the control room. As she passed Hemi at the sonar station she told him she wanted to blow the tanks. He nodded, as if he had expected that move. “What about the sub following us?” He asked.

“We’ve reached the point where we’re better off with them up there than fucking sinking down here.” She replied. “I’ll be in the control room to keep her stable during the rise. I want you to open the tank blow valves.”

“OK.” Said Hemi, taking off the headset as he stood up from the sonar station.

The emergency blow station was at the back of the sonar & navigation compartment, where the equipment made a subtle shift from the technical to the mechanical. It consisted of a number of pipes mounted up against the wall of the compartment. The pipes ran forward and aft from the blow station, off into the many deep, complicated parts of the ship that controlled buoyancy. The pipes had the diameters of large soup cans. They had been re-painted many times, giving them a thick smoothed-over texture, except where the paint had chipped off with flecks of rust. They were stacked up, more than a dozen. Some passed through on their way up to the tank control panel in the control room. Others routed through this compartment simply for the convenience of the engineering of the boat.

Four of the thickest pipes led from the high-pressure air tanks to the main ballast tanks. There were large valves set in-line in those pipes that could be opened or closed by turning a heavy nut. Turning the nut required a large wrench.

Hemi stood in front of the pipes and opened a long metal toolbox bolted to the wall between them. From it he took a wrench as long as a forearm — not Hemi's forearm, but the forearm of an average-sized human. The wrench was wrapped in a heavily-pilled rag that had been dyed a bland gray color from the decades of grease worked permanently into the fibers. He fitted the end of the wrench over one of the heavy nuts controlling the valves.

"I am ready to blow the tanks." He said with some emphasis, aiming this statement up to the control room hatch above. "At your service, Sylvia."

There was a pause while Captain Percy worked with Gregory to get the trim tanks and control surfaces of the boat configured the particular way she wanted them for this hazardous maneuver. Then: "OK Hemi, open the fuckin' ballast blow valves!"

Hemi pushed his fat finger against the cracked black rubber coating of the emergency blow alarm button set in an electrical box between the pipes. A klaxon wailed into the deepest corners of the *Prospect*. Then he turned the wrench until it was horizontal, aligning it with the run of the pipe. He repeated this action with the sister pipe running just above it. Accompanying each turn was a squeal and a hiss, and then a rush of air moving through the pipe, like the howl of the hunting hounds of an ancient god, riding across the sky.

The expanding air in the pipes forced their temperature to drop. Their surfaces were instantaneously coated in condensate, which froze and sublimated to vapor, rising up and away from the pipes like two long otherworldly fingers passing through the compartment and gripping the ship. From where Hemi stood, the air in the pipes felt like the shot of a canon moving past him, leaving a trail of smoke marking its path. He had the sense of it pushing out through the ship in every direction. The hissing, flushing sound of compressed air pressing water out

passed through the ship, and the very mass of the ship itself shifted under the force of it.

“Take us up guys. Set the dive planes, and blow any trim tanks you haven’t yet.” Gregory and Bastian turned the control wheels. But within seconds Percy again felt her boat moving distressingly like a wounded animal. The stern was rising faster than the bow. The angle of the deck under her feet was leaning in the wrong direction.

“What’s wrong?!” She shouted at Gregory. Her eyes scanning rapidly across the instruments. “Trim!” She started spinning open valves on the tank control panel, trying desperately to level the boat. Gregory’s arms were bulging with tensed muscles as he his hands gripped the dive-plane control wheel, trying to angle the bow upwards.

A hazard light lit on the tank status panel accompanied by a foul buzzer, the sonic equivalent of an odorized explosive gas. “Hemi!” Percy shouted down through the hatch. “The forward tanks didn’t blow!”

“The valve is wide open Sylvia.” Hemi said, looking at the indicator on the nut to double-check his work. “The ramming must have pinched closed the high-pressure pipes to the forward ballast tanks.”

The stern slowed its ascent. The *Prospect* hung in the water, the bow pitched downwards. “We’re no longer rising” said Bastian, looking at the depth gauge. His face gave away none of the terror he felt.

Hemi stepped under the hatch up to the control room and looked up at Percy through his the small frames of his glasses. With his height, his face only a few finger-widths from the hatch opening. “Sylvia,” he said, “I think we need to start thinking about more drastic measures to get us back on the surface.”

“The fuel ballast?” Percy asked Hemi. There was nothing else.

“Yes, I think we should dump the diesel. Even if we get to the surface, we could lose the boat if the cargo hold keeps flooding and we can not figure out how to empty it. That is a bigger risk than not having enough fuel to get to a port if we do manage to keep the boat on the surface.”

Captain Percy considered. But sometimes considerations are meaningless. They had passed the point of developing a strategy to evade their pursuers. For a submarine captain, the situation she now faced was reduced to a single factor: get to the surface at any cost. Knowing that, the decision to blow out the fuel ballast tanks — to dump all their diesel fuel in the ocean — did not require any time to weigh options.

“OK Hemi. Come up here. Keep her under control. I’ll blow the fuel ballast myself.”

There were in fact two long thin toolboxes bolted to the wall at the emergency blow station. One had the main ballast tank blow wrench, which Hemi had already used. The second toolbox was padlocked. It contained the fuel ballast blow wrench. Just like the main ballast, the fuel tanks could be blown out with high pressure air as well. The difference being that blowing the fuel out of the boat might give them an emergency pocket of air to lift them to the surface, but it left the boat stranded and unable to maneuver.

Captain Percy was the only person who carried the key to this second toolbox, to ensure the fuel tanks could never be blown accidentally. She unlocked the toolbox and withdrew another wrapped wrench the same length as the tank blow wrench. But this one had a special 5-sided socket that would only fit the nut to open the air line into the fuel ballast tanks — the fuel ballast could not be blown out with a normal wrench.

She pushed the emergency blow alarm button again and with the klaxon whining fit the wrench onto one of the special nuts controlling the valve in the air pipe. Percy was pretty sure these valves had never been turned before, not even in a drill. They had been painted over many times during the decades the *Prospect* had been operating. She put all of her weight onto the end of the lever and let out a long groan, but couldn't budge it. She reached for a spare length of pipe that lay mostly forgotten on top of one of the high-pressure pipes against the wall and slipped it over the handle of the wrench to get some more leverage.

It slowly turned under all her weight. One-quarter turn to the stop at the open position.

Another rush of high pressure air pushed its tendrils through the ship. Their precious diesel fuel — the only way to escape the lost emptiness of the ocean and return to port — was thrown away from them, out into the deep waters of the ocean.

Percy could feel the *Prospect* respond immediately. The angled deck under her feet leveled off, and the bow came up. She climbed up into the control room, which was extremely cramped with three people and one giant filling it.

"Now... now are we rising?" Percy asked after a few minutes. But she was looking at the same gauges as everyone else. She could read them as well as anyone else.

Gregory was tentative. "We're... holding steady." He could not keep the fear out of his voice.

Hemi made a few adjustments on the tank trim control panel, and managed to get the *Prospect* level in the water, but could not get the depth gauge to move. They were still more than 90 meters from the surface.



Hemi gave his pragmatic analysis. “The fuel ballast tanks just aren’t big enough to overcome half our main ballast being flooded.”

Percy scanned her eyes back and forth over the gauges, dials, and the settings of the switches looking for something, anything, that could move her boat upward. She pulled a rag from a hook on the wall and reached over Bastian to wipe at the dials. Her hand was shaking.

“Even if we escape from this pit down here, there’s fucking hunters waiting for us up there.” Gregory said quietly.

“They would have heard our emergency blow. They can see we aren’t surfacing, so they will believe we are fucking sinking.” Said Percy.

“We *are* sinking, aren’t we?” Said Bastian. “Small comfort that they know it too.”

Owen, the youngest of the crew, stuck his head up through the hatch while he stood on the ladder to the control room. “Captain Percy, Chips wants me to tell you that all the movement of the boat has split the cracks in the hull wider. The flooding in the cargo hold is getting worse.”

“The pit is black and filled with fucking poison spikes.” Said Gregory.

Owen looked at Gregory with a specific question on his face, but asked a different one. “Can’t we surface Captain?” Owen asked.

“Go back and help Chips. Do anything she asks of you. Get the cargo hold patched and the flooding stopped.”

“Alrighty.” And Owen’s head disappeared back down below.

Captain Percy was running out of ideas. It was easy to make the decision to get to the surface at all costs while there still remained some levers to pull and options to choose between. But now nothing remained that she could think of that could move them upwards.

She cleared her mind. The surface was less than 100 meters away — there were people who could throw a ball that distance — yet it seemed so far. The surface wasn't her natural environment anyway. Up there was war, borderlines, treaties, enforcers and Authorities. Up there was conflict, nations, and bureaucracy. Underwater was where she belonged, where she could steer her boat in whatever direction she chose, free to go where she liked, when she liked. This was a virtue of the exponentially larger amount of room provided by being able to move along the Z axis available only to submarines. Still, she had no desire to die down here. And no matter how safe and free she felt underwater, there was always that yawning gulf underneath. A black, cold, bottomless chasm. Once you go *too* far down, you go down forever. She enjoyed her freedom, but she didn't want to wallow in its icy depths.

She put the idea of the surface out of her mind. What if she did look downwards instead of upwards? What was down there in the abyss? What if they could find safety in the deep?

"Hemi, how far down is the bottom where we are now?" She asked.

"1000 meters, give or take. Essentially bottomless."

"Hmm." She slipped down the ladder from the control room and stepped forward to the navigation station located just behind the sonar operator's station.

The navigation station sat on top of a stack of flat files which held charts that were not of immediate use to them. Behind the flat

files, rolls of charts that were more commonly used were stacked between upright stakes. When they had the white lights on, the charts showed their age, yellowed and flaking at the edges.

Hemi had their current position marked with a grease pencil on a glass sheet laying over the chart showing the region they were moving through. The black smudges trailed up away from the shore they had left days before. They were in the middle of the ocean. It was a wasteland, far from any continental shelf or island that they could make it to on battery power alone, while slowly sinking.

She pulled down a magnifier that hung from the ceiling by a retractable string. She looked closely at the grease markings on the chart, and the depth markings around them. “Hemi. . . come down here.”

Hemi’s bulk eased down the ladder from the control room a moment later. She pointed to a spot on the chart. “Figure out how to get us here — assuming we can hold the boat over the pit and squeeze every last watt from our batteries.”

Hemi peered through the magnifier at the chart, then pulled his slide rule from his pocket. He made some adjustments and some marks with the grease pencil on the glass. He touched his fingertips with the point of the pencil while muttering some numbers out loud. “It’s too close to call, mathematically. I don’t know if we can do it.”

“If we can’t fucking do it, it’s a fucking long way to the bottom.”

“If I spend some time tracking our exact depth, speed, battery status, and most importantly the rate at which we are sinking, I can get a sense of our rate of, um. . . decline, I’ll better be able to tell you what our chances are in a short while.”

“No chances Hemi. I just want you to figure out how to make those fucking numbers add up so we can find the bottom with the boat in tact, and not a mile under water.” She climbed up to the control room.

Captain Percy gave Bastian and Gregory a new heading, and Bastian brought the boat limping around to it by applying some rudder.

“You guys have to do everything you can to keep us up,” she told the two men at the controls, “like gliding an airplane with a stalled engine. And I want to creep out of here. If we go too fast those fuckers above will hear us and know we are still moving. If we are slow and silent, they might just assume we disappeared down into the fucking hole. Three knots forward speed Bastian.”

His long skinny arm moved the throttle controls forward until the speed needle hovered a few hashes above its zero pin, indicating 3 knots. He withdrew his hands from the controls and attempted to lean his body back in the stiff control seat. He pulled a cigarette from a pack sitting next to the throttle control and put it to his lips and lit it.

“Hey Gregory, you ever think about what it’s like when a submarine goes the fuck down?”

Gregory glanced at Bastian quickly, but returned his eyes to the controls.

“Seriously.” Bastian continued in his droning quiet voice. “Fuck. The worst thing about submarining is if something goes wrong, it usually isn’t a fast fucking death. In an airplane, something goes wrong, you’re gonna splat against a fucking mountain in a matter of minutes — that’s if you don’t get blown to fucking pieces at 30,000 feet in the first place. But on a fucking sub, you usually know your fate long before it fucking comes for you.”

“Shut the fuck up Bastian.”

“It’s important to be ready for this stuff Gregory! You gotta steel your fucking mind, desensitize yourself to the possibility. Otherwise, you’ll be fucking panicking when the time comes.” Bastian put a reassuring hand on Gregory’s shoulder and sucked at his cigarette. “But that is the fucking horror of a sub. We watch these dials in front of us all fucking day and night, right? Those dials have our fucking fate encoded on them. Or, at least the fate of the *Prospect*. But at some point — maybe not so fucking far off — the fate written on those fucking dials might include our end.” Bastian tapped a long finger on the depth gauge. “The fucking dials is where we’ll see it first. We will be looking at them, and the arrangement will slip, just a few ticks probably on just a few dials, but there it will be — our fucking coming doom. And we’ll fucking know, every last one of us, and there will probably be shit all we can do about it.”

“But your point is that it takes a long time on a sub. . . ”

“It takes a long fucking time. From the moment we read it out of the dials, it could be *hours* before we sink below crush depth. If we go down *fast* it would still take the better part of a fucking hour. And we’ll be hearing the last throes of the boat the whole way down — the groans of the hull, the creaking supports, the collapsing trim tanks. . . I like to think the last fucking failure, the big one that sends the wall of water through the boat that comes so fast it smashes your skull against some rusty bit of steel and finally ends it for you — that last failure; I like to think it will be fucking silent. I like the idea that the last thing we will hear is rushing water. Somehow that’s a fucking comfort to me.”

“You are a motherfucker Bastian.”

“This is *your* fucking lifestyle too Gregory. You should accept it instead of being afraid of it. Because having your skull caved

in against the hull is the *good* way to die on a sub. Un-fucking-fortunately, these boats are fucking way stronger than the engineers give them credit for — sure the boat might get too deep, we might lose control of it, might sink to the bottom mostly filled with water. . . . But you might also get lucky — lucky enough to end up in a compartment that holds on to its precious bubble of air. And then you'll sit in that compartment for days, maybe even more than a week, sucking up the last of your breathable oxygen. And there's nothing to do but stare at the black, waiting to die."

"Goddamn, fuck off Bastian!"

"Bastian, lay off." Said Percy. "No fucking submariner is required to contemplate the worst possible fucking scenarios if they don't fucking want to."

Bastian grinned and sucked at the last of his cigarette before stabbing it out in an overflowing tray of butts.

"OK," Percy said to herself, "The most important thing I need to be able to tell Hemi: how fast are we sinking?"

Figuring this out was a matter of nothing more than reading their fate from the wall of dials and gauges in front of them, with their spindly little black fingers all creeping slowly one way or another depending on what each particular gauge was tasked with monitoring. The individual parts the dials had to play all came together in a symphony that marked time towards some unknown end. It could be their doom, as Bastian had been saying to Gregory, but Percy preferred to leave it unknown.

Nearly every gauge mattered to Captain Percy right now. Each represented a variable in the equation that controlled whether they lived or died: speed, battery charge, battery drain rate, the status of the trim tanks, course, rudder, ship angle, dive plane angle. . . . everything mattered. But as in every equation some

variables weighed more than others. The two that mattered most to Captain Percy right now were the depth of ship gauge — which featured in most submarine maneuvers — and the depth under keel, which told them how far below the ocean bottom was. It rarely factored into a submarine maneuver — at least in the deep ocean.

The depth of the boat was slowly, slowly creeping downwards. Percy stared at the black line of the needle on the dial, and willed it to stay still. She was pretty sure Gregory and Bastian were doing the same. But it never stopped its shaky wavering, and it persistently made gains towards the deep end of the dial. It had already crept three quarters of the way around — on a dial that was graduated in such a way that the far end, where its tiny steel bounding needle poked up, was theoretically beyond the capabilities of what the ship could survive.

They had watched the needle traverse that distance the way one might track a long journey on a map. It seemed they had traveled interminably far to get where they were now, and they looked back at the three quarters of the dial they had passed the way one remembers days and days on the road in a long cross-country journey.

The even more critical gauge at the moment was that depth-under-keel gauge. The instrumentation that fed that gauge had a limit to its sensitivity. It could show the depth of the bottom far beyond what the submarine was capable of, but nowhere near the actual depths of the deep ocean. At the far end of that dial, its bounding pin was labeled in an ancient naval tradition: “Bottomless.”

And it really did not matter that somewhere down there might be an actual bottom. For this sub, for their pursuing sub, for any submarine that Captain Percy had ever heard about, the deep ocean was in all practical ways a never-ending hole. Anyone

who went down there would never find a bottom, and could never come back up. They each lived much of their submariner lives floating on delicate bubbles of gas over that black hole that never ceased in its efforts to suck them down. The needle of the depth-under-keel dial had been pegged at “Bottomless” for days now as they have been crossing deep ocean.

Hemi came up through the hatch into the control room with a clipboard and a pencil, and leaned over the glowing red dials, raising the tiny lenses of his glasses with his fingers to bring them into sharper focus. He jotted readings off the dials down onto his clipboard.

Captain Percy fished her hand around among the joists that supported the pressure hull wall, and found a crumpled pack of cigarillos. She shook one out and lit it. “Are we going to make it Hemi?”

“It is razor work Sylvia. Numbers slide past numbers, and a decimal point worth of difference changes whether we live or die. And if the numbers *do* work out in our favor, there is no way to say whether — should your plan succeed initially — it does not simply perpetrate the complete failure of the pressure hull and leave us permanently on the bottom regardless.”

Percy sucked slowly on her cigarillo as she parsed Hemi’s assessment. “What you are really saying is that even though it looks fucking hopeless there is a goddamn fucking chance.”

“There is distinctly a chance, Sylvia.”

A third gauge now entered as an influencing variable in Captain Percy’s equation: the clock. In the dramatic submarine stories from the wars, everything happened in quick actions: emergency maneuvers, incoming torpedoes, plunging dives, and explosions. Despite having been in a number of dangerous situations in her years working on cargo submarines, Percy could never relate



to the speed of the old war stories. In her experience, most dangerous situations on submarines were like this one: permeated through with slow, grinding terror. There were certainly dramatic moments aboard submarines, but most of what Percy retained in her memory of the dangerous events she had lived through was a sensation of extreme slowness. In many cases it was not just a sensation. As in the current situation, many dramatic event on submarines *required* extremely slow movement. The *Prospect* was currently barely making headway at 3 knots. That slowness gave them the protection of silence.

Percy could not reconcile the clock's glacial movement with the steady driving movement of the other gauges that mattered. The remaining battery gauge appeared to be determined to get into the red zone. Their depth gauge found its way only towards larger numbers. These two gauges had apparently unmoored themselves from the restrictions of time. Meanwhile the depth-under-keel gauge and the distance they had covered — which Percy almost subconsciously tracked in her head — remained mired and unmoving.

For hours Percy's eyes blearily followed these tiny needles that wrote their fate as she sucked down one cigarillo lit from the budded remains of the last. No one in the control room would have been convinced that time was moving at all, except for the unassailable fact that the battery-remaining gauge had dipped into the red-hashed warning zone, and the depth gauge had passed their normal operating limit of 215 meters to find its own red-hatched warning zone. These two thin lines were undeniably converging towards an ending for them all.

Captain Percy's eyes wandered wearily back and forth from the clock to their depth, to the battery-remaining, to the depth-under-keel gauge. Their depth and battery were now squeezing hard up against the time they had remaining. She stared at the depth-under-keep needle and summoned all the superstitious

powers of the universe to move the needle up off the “Bottomless” pin. From the picture of their situation that the gauges wrote into her mind, she knew it had to happen.

For a moment, she thought she saw the needle writhe, like the flash of a small bait fish seen catching the sun in a shallow pool of water. But with slightly more sharply focused eyes, the needle remained sitting comfortably on the “Bottomless” pin.

She stood and took a rag from a hook and reached over Gregory to wipe the condensing droplets of water off the glass of the gauge, then circled around the aging pitted chrome casing for good measure. She could feel the little spots of rust and degrading metal catching against the fibers of the rag. She tapped the glass with her finger.

And the needle moved. It just wavered, hovered for a second, and then returned to resting wearily on the pin. But it had definitely moved. Her eyes went back to the clock, more minutes passed. To their speed: steady at three knots. To their battery charge: painfully low. To their depth: too deep for comfort.

But the depth-under-keel needle moved again, rising up and falling back, like a dying crone trying to raise herself for one last curse at the world. And then it was wavering unsteadily above the pin. The gap between the needle and the pin was tenuous, but real.

“Captain,” said Bastian, his eyes on the depth-under-keel gauge, “the bottom seems to be coming the fuck up.”

Captain Percy reached above her head for a strap. “Drive boys, Drive.” The sea floor was moving, but still far, far below them, so far below that if the boat went down now the *Prospect* would be crushed into nothing but a greasy stain on that bottom. But it was at least a measurable distance now instead of the unknowable nothingness of the hole.

Minutes later the depth-under-keep gauge started rising steadily, as if it had intention. It gave the impression that they were moving quickly, though in fact their speed remained steady and crawling, while the slope of the bottom had drastically increased, and was rising under them — a sheer undersea mountain wall. The needle accelerated to show a shockingly quick rise in the sea floor, in such a way that gave the impression they were about to smack into a mountainside, from where they would slide helplessly down into the black pit. Instead, the depth gauge needle rolled hard to the left and then rose back to show they had about 10 meters to the bottom. It stayed hovering at that level.

“OK Gregory, now the stupid part: give me a gentle dive plane down angle.” Percy said quietly.

“You want to go fucking *down*?”

“Down Gregory. Right fucking now. Take us to the sea floor.”

The dive plane wheel slipped through Gregory’s calloused hands, and the bow of the boat eased downwards. Captain Percy pressed the collision alarm button and a klaxon blared through the ship. She pulled the boat PA mic down from the array of radio mics whose cords swayed just above her head and pressed the talk button. “Chips: leave the leak. You and Owen get out of the cargo hold. Seal the bulkheads behind you. We’re going to bottom the boat, and there’s a reasonable chance it will split our wounded hull there wide fucking open.”

At the sound of the collision alarm Hemi came up through the hatch. His eyes passed over the gauges taking in their situation. “Gently Gregory.” He almost whispered.

“Yes fuckin’ gently,” followed up Percy, “as gentle as you’ve ever been, like you’re laying down a fucking fevered child. Bastian, disengage the motor. Lets use only what’s left of our forward

momentum, and let our leaking boat take us down the way she wants to.”

Slowly, slowly, the depth gauge needle rotated to the right as the boat sank. And equally slowly, the depth-under-keep gauge turned to the left as the bottom rose. The depth gauge showed 248 meters. The depth-under-keel gauge came to rest on its other limit pin, labeled ‘0’. And at that moment the whole *Prospect* trembled as the bow touched the bottom. Captain Percy felt the slight angle under her feet relax as the stern came down slowly to rest on the bottom as well.

“Fuck me.” Said Bastian. “248 meters down, on the bottom. A fucking undersea mountain. We landed on the top, like some damned Noah crashing his ark into fucking Ararat.”

“Technically a tablemount.” Said Hemi. “A relatively flat surface worn down from an ancient volcano. And yes, if you like, very much an antediluvian feature of the sea floor.”

“Quite a bit deeper than she’s rated for,” added Percy, “almost as deep as I’ve ever fucking had her. If the hull holds, we have bought ourselves a little time.”

“Seems just as fucking likely that the cargo hold is now completely split open and we will die here.” Said Bastian.

Gregory glanced at Bastian with a dark look in his eyes.

“...Regardless of the amount of time we need to spend here, being bottomed has the added bonus of rendering us nearly undetectable to active sonar. If the sub that rammed us is still searching for us, we will blend in with the bottom. They will likely assume we sank.” Said Hemi.

“Hemi, we *did* fucking sink.” said Bastian. “And I would not be the one to correct their potential fucking thought that they will never see us rise to the surface again.”

It was time for Captain Percy to survey the damage. She got on the ship PA and told Chips to meet her at the entrance to the cargo hold before heading down there herself.

Percy found Chips waiting for her at the bulkhead entrance to the cargo hold in the forward battery room on the bottom deck of the boat. Chips had a large wrench with her and as soon as Percy arrived she banged with it on the bulkhead. "Well Capt, it sounds fuckin' hollow to me. Still air on the other side of the fuckin' bulkhead at least."

Percy nodded and cranked open the hatch with the rusting sealing wheel squeaking painfully in her ears. The lights were out in the cargo hold, so they were looking into blackness. But the air smelled damp and they could hear dripping echoing in the huge empty space. This instinctively disturbed them both.

Percy reached around and flipped on the lights. The white overheads glared down on her cargo hold. The steel grating led down a gentle slope and disappeared into an oily, black subterranean lake. A couple of empty wooden crates floated like lost viking craft on it, accompanied by a film of black frothing grease that wafted by in patches like bergs among the viking ships. Any sound Percy and Chips made echoed back and forth from hull to hull through the air, and out over the water.

"That's a fuckin' nightmare." Said Chips.

"We probably did more damage to her when we pressed her bow into the sea floor — like levering apart the bones of a fowl. We don't have much time before this whole fucking hold is flooded and we'll never get off the bottom. What do you need Chips?"

"Ah, just fuckin' send Owen back down. And now it fuckin' looks like I'll be breathing through a fuckin' hose while I'm doing the stitching back together."

“Alright Chips. I’ll get Gregory and Bastian looking for more portable bilge pumps. They can run hose down and see if we can’t get some of this water into the trim tanks and back out into the fucking ocean where it belongs.”

“Fuckin’ right.”

Percy moved through the boat back up towards the control room. She found Gregory and Bastian crawling into their bunks in crew quarters having been released from control duty by Hemi. Their eyes were slitted and bleary and there was no grace in their attempt to climb into their racks.

“Come’on, you can’t fucking sleep yet. Get some coffee and then go find some portable bilge pumps. We need to get this boat pumped out, or you’ll never wake up from your little fucking naps.”

She left them groaning and headed to the galley, thinking coffee sounded like a good idea. There was a metal cup sitting upside down in the drying rack. It was one of those blue tin cups with the white flecks. The outside of it had been dipped in rubber for use on submarines. Even when well-washed, the cups always added a particular piquant of metal and petroleum to the coffee. The one in the dish rack was relatively clean, just retaining the usual semi-permanent coffee stains.

The coffee in the pot had been on the warmer for hours. Maybe days. She poured it into her cup and added a couple of scoops of sugar. The taste was foul, like what she always imagined “sweet crude” must taste like. Her taste buds rebelled, but the rest of her body knew better, and she felt an immediate wash of relief from the fatigue beginning to plague her.

Their situation was dire. If being flooded and bottomed had been the worst thing that happened today, she would have been upset. But somehow their relative safety now compared to where they

had been an hour before — when they were slowly sinking over a bottomless hole — made Percy feel surprisingly relaxed. Relaxed enough to enjoy a cup of burnt coffee at least.

Percy found another relatively clean tin cup behind the rails of the dish cabinet and filled it with coffee. She brought it to Hemi at the navigation station.

Hemi took the cup and held it to his lips blowing the acid smell off the surface. His glasses steamed up. “Does Chips have a handle on the leak?”

“Eh. It’s fucking deep under water in the hold now. She’s going to have to dive down there to weld it.”

“Unpleasant.”

“That’s one fucking word for it.”

“Even if we get it sealed,” said Hemi, “even if we can manage to pump out, even if we get to the surface, things do not look good. I looked at the chart, and we are nowhere right now. And we have no fuel or battery remaining to speak of.”

“Still’d rather be nowhere on the surface than sunk on the bottom of somewhere — in this case that ‘somewhere’ being a fucking rarely-charted and never-visited undersea mountain.”

“We are in a situation where we need to overcome a whole series of challenges, each in their particular order. I am just trying to get ahead of the problem.”

“OK Hemi, you do the fucking thinking ahead. You let me know if I’m not considering something that impacts our future survivability. Otherwise, I need to focus on surviving our situation right now. And that currently means getting some of this foul black water out of my boat. Right?”

Hemi nodded.

“OK. Back to the cargo hold I go then.”

In the cargo hold, Bastian and Gregory were laying out the heavy cloth-covered hoses down the center of the space and hooking them up to portable electric bilge pumps the size of small refrigerators.

Owen had his own electric pump — a smaller one that pumped air — down at the edge of the black lake and he was feeding an air hose to Chips who was wearing a diving mask connected to the air hose. She was kicking to keep her head above water while holding up a welding torch with one hand. The welding torch was connected by thick wires to the welding rig mounted in a rack on wheels propped next to the pump at the edge of the lake. The wheels had chocks keeping the rig from rolling into the water.

Chips dove down, and there was a quiet moment before a hot blue light lit up the surface of the water from below, wavered for a moment, and then died away. This repeated a few times before Chips’ head broke back through the surface. She ripped off the diving mask. “Owen! I need another fucking piece of steel plate, and — fuck it — another brace too.”

“Alright Chips!” Called the kid from the shore. Owen was wearing the same greasy-slick rubber waders Chips had had on earlier. He selected some metal bits from a pile of scraps on the grating next to the welding rig and waded into the cloying bilge to hand them to Chips.

Every sound in the cargo hold traversed from one exposed steel inner side of the pressure hull to the other, so everything was heard three times. That was normal, and Captain Percy was used to it. But the mass of water filling one end of the cargo hold changed the sound of the space. It ate at her instinctual sense that her boat was far from being healthy. It was hard to pin down precisely how it changed. It sounded like a room



dominated by an athletic swimming pool. It was a quality of sound that should never be heard on a submarine.

She sipped her coffee and watched Chips dive again with the steel plates in one hand. More blue light from under the water. Percy had an idea to go and track down a meter stick and prop it in the water, so they could all see when the water started to lower. But then thought better of it, considering the strong possibility of the water quickly rising over the top of the stick.

Instead she helped Gregory and Bastian get the bilge hoses connected to the trim tanks and got them cranking. The hoses inflated with the pressure of the water running up the gentle grade from the pumps. She could hear it sloshing into the empty trim tanks, and the sound of it echoed between the hull walls.

The next time Chips was on the shore of the little black lake trying to find a particular patch piece she wanted from the scrap pile, Percy took the diving mask from her and waded into the water to inspect the damage personally. The water was the freezing cold and never-varying temperature of deep ocean water. It had picked up an unpleasant array of smells: a mix of petrochemicals and solvents, refuse, and old grease — the stuff that always contaminated a boat's bilge — but that odor was lifted and strengthened to a nausea-inducing level by the sheer volume of water.

Plunging her head into the cold much, Percy could see the damage was bad. As Chips had said earlier: it wasn't one big split in the in the metal, it was a long string of short side-by-side cracks running in a line up a massive convex dent where the hull had been rammed. The thick steel of the hull had been bent to an astonishing degree, deformed without massive failure in a way that only high-tensile steel could be. But even steel could be pushed only so far without cracking.

She put her hand out in front of her mask, holding it over the cracks, and she could feel the onrush of the icy water pressing against her warm flesh. Chips' patches were pieces of curved steel that she was welding into place over the cracks. Chips was no expert at underwater welding, the welds were globulous and imprecise. It was starting to look like a mess, but there was hardly any other options.

She climbed back out of the water, shivering and dripping oily droplets that clung together in fatty globs. Percy always thought of herself as pretty tough. But in many ways Chips, with her foul language and bad attitude, was a lot tougher. Chips had never even mentioned the temperature of the water.

With the extra bilge pumps running, Captain Percy let Gregory and Bastian go stumble up to their racks to get some sleep. They slept through the next six hours or so of work while she, Owen, and Hemi did whatever they could to help Chips get the hull welded back together. Patching the boat was the only thing that mattered right now, and Chips was the only one who could do the welding. Percy, Hemi, and Owen found themselves standing around smoking and drinking coffee more than actually working, so Percy eventually sent Hemi and Owen to their racks too.

Percy needed sleep more than anyone, but she knew there was no way she could sleep. Maybe once they got to the surface, but that seemed far off now, both physically and temporally. She smoked up one cigarillo after cup of coffee after cigarillo. When Chips needed something she was there, but mostly Chips had her own method and did not want help. When Chips disappeared below the surface it became totally silent in the cargo hold. Percy looked at her watch — time had fallen to its knees and crawled forward only with desperate and gasping heaves. It took her more than an hour to realize that the water level had receded a bit, leaving an greasy black line on the pressure hull indicating its high-water mark.

Percy let herself have some small amount of hope.

The receding water level was everything. The boat didn't need power, or the high-pressure air system, or a running motor to reach the surface — all she needed was that water level to go down, physics would take care of everything else. The boat *wanted* to float the way it was currently set. It was merely being pinned down by a massive black liquid weight.

She waited for Chips to raise her head above the surface again. “Chips! The water level is dropping!” Percy shouted to her with one hand cupped to her mouth, while pointing at the black line of grit marked on the pressure hull.

“Ah fuckin’ sure. With the fuckin’ quilt of patches I’ve laid down it’s about fuckin’ time.”

“I have to go up to the control room — there’s really no way to know when we’ll get buoyant again, and someone has to be there if we do.”

“Aye!” Chips gruffed. She waved a hand at Percy and disappeared back under the surface.

As Captain Percy passed through the crew quarters she shook the kid Owen awake again. “I have to go to the control room. Go down and watch Chips and make sure she doesn’t fucking die.” It would be incredibly stupid to let someone, even someone as tough as Chips, do underwater welding without another person keeping watch for safety.

Owen didn’t say anything but resignedly rolled out of his rack to his feet, and rubbed his eyes before stumbling back down to the cargo hold.

Percy climbed up into the control room and sat at one of the maneuvering stations with the familiar dials and gauges spread out in front of her. The readings had not changed at all since she

last left them, for the obvious reason that they had not moved. She took in the reading from each gauge separately, adding it to her holistic picture of the situation her boat was in. But the gauges were not telling her anything new.

It suddenly occurred to her that the gauges were the wrong place to look for input. She would know the boat was rising before any of the gauges showed it. The water was being drained out so slowly that it wasn't like the boat would just pop off the bottom. She would feel the slight incline it had taken on settling into the bottom come off first. The boat righting itself would be the first indication it was rising, and she would not need gauges to know that was happening.

She returned to her feet, fished her control-room cigarillo pack from its nook in the wall and lit up. With nothing that mattered to look at, she started pacing unconsciously back and forth. How long now? She looked at her watch, but realized immediately that that particular gauge did not matter either.

She glanced over at the control gauges despite herself. This time, just as she did, she saw the angle-of-the-boat gauge waver slightly back and forth in its little glass tube. Ah! She was wrong. The gauges might know first! Seconds later she did feel it. The deck under her feet changed inclination every so slightly. She reached up and grabbed a strap, and then the whole boat slowly rolled a couple of degrees towards level, shaking off its lethargic repose. But coming up from a dead weight on the bottom of the sea was all she did. The boat hung there, relatively evenly trimmed, but the bulk of its weight still supported by the bottom.

"The fucking trim tanks!" Percy remembered they had been pumping bilge water into them, but that water was still physically inside the *Prospect*. She looked at the ballast control panel. The gauge for the high-pressure air showed the system was severely depleted after their ballast blows. But there was still some

residual pressure in the system, and the trim tanks were very small compared to the big ballast and fuel tanks. She put her hand out to the valve on the ballast panel that would blow bilge water out the trim tanks and opened it.

There was the usual loud hiss, Percy counted a beat, and then the bow of the boat jumped off the bottom, followed quickly by the stern. The depth-under-keel gauge snapped up to two meters. She could hear suddenly-wakened crew members cursing loudly up at her from the crew quarters. She grabbed the boat PA mic “Fellow motherfuckers! We have positive fucking buoyancy.”

The sensation of moving up instead of down felt oddly terrific. A relief in the change of environmental accelerations that only someone who has acutely attuned themselves to three-dimensional space would recognize.

As soon as Percy had blown out the trim tanks, there was no stopping the *Prospect*. It was a slow rise, weighted down by the tons of extra weight in water still sloshing around in the cargo hold — nothing like the violent rise that an emergency blow would illicit had the boat been functioning normally — but they were steadily moving toward the surface.

Hemi popped up in the control room and stood watching the gauges, smiling a quiet smile of intellectual and mechanical satisfaction.

“Hemi, don’t just stand there like a fucking giant cow.” Percy said to him. “Sit at the controls and make sure nothing stupid happens.”

Hemi nodded and lowered himself into the planes control chair while already turning the dive plane wheel for a more controlled angle of rise.

Percy balanced the trim tanks at the tank control panel to keep them as level as possible. “Keep the bow slightly down Hemi, otherwise all that water still in the cargo hold is going to wash right back to the engine room.”

A banging and cursing came up to them from the crew quarters, and a second later Chips climbed into the control room, leaving a small puddle of black water at the base of the ladder, and a thin trail of the foul stuff behind her as she stepped up to Percy. She was holding a length of steel bracing pipe in her hand.

“Ya torrid and rotting fucking twat! You gaping and pustulated fucking asshole! Ya almost killed me! What fucking stupid idea came to your head to blow the trim tanks with no warning? I was fuckin’ washed half-way down the fucking boat!”

“Back off Chips. I gotta deal with surfacing my boat. We can talk about your proper emergency procedures later.” Percy replied to Chips, trying to keep her voice calm.

“Ya fuck yourself and your fucking proper procedures. I’m talking about my fucking life you fucking swollen and carbuncled head of a syphilitic cock.” Chips raised the pipe and pointed it at Percy.

Percy didn’t even look at Chips, instead keeping her eyes on the depth gauge that was steadily showing the boat coming shallower. “Put the fucking pipe down Chips.”

Chips snapped. She rushed at Percy taking the piece of pipe in a long swinging arc across the control room, just missing Hemi’s head but connecting with Captain Percy’s stomach. She doubled over immediately and fell to the cold metal of the deck.

Hemi was out of his seat a second later, and had Chips’ forearms taut in his huge fists, like bracing on the cables of some massive suspension bridge.

Percy was not down long. She got up to one knee before she fired Chips. “You’re off the boat.” Percy said quietly between gasping breaths. “We get to a port, you take your gear with you when you get off, and never again befoul my boat with your black fungal attitude.”

“Ya? Fuck you, you vegetatively stupid sow. I’ll fucking be asleep in my rack while your fucking rusting shithole of a boat sinks around you. I don’t fucking care anymore. I’d rather die than save your bulbous fucking ass one more time.”

Hemi was steering Chips towards the hatch down out of the control room. He had to let her arms go for her to get down the ladder, though he kept the piece of pipe she had been holding. Hemi and Percy could hear her smashing and cursing her way forward to the crew quarters.

“We all need rest Sylvia.” Said Hemi.

“I need it more than anyone, but you don’t see me fucking swinging pipes at people.” She was furious.

Hemi nodded quietly. But he knew Chips was right on two counts: blowing the trim tanks without warning the boat was incredibly dangerous. And they would never get to a port without Chips’ continuous help to patch the leaking hull.





## Chapter 2

The *Prospect* rose slowly. It tilted a little on one axis, then the other as Captain Percy adjusted the trim of the tanks, but more or less the boat rose straight up, since they didn't have the motors running and it was being lifted by buoyancy alone.

Percy and Hemi watched the depth gauge slowly roll itself backwards, up past their test depth, up into what Percy would normally consider safe operating depth, then periscope depth, and then the sail broke through the surface. Those in the crew quarters could feel the boat bob like a cork to the surface, and at that they let out a small cheer and they arrived moments later at the bottom of the ladder up to the control room, obviously expecting to go out on deck.

At first, Captain Percy wasn't even going to think about allowing that. Years of experience had reinforced the routine that the first action on surfacing a sub was to scan around with the periscope, if not the radar. There was always a chance that the only safe move was to dive right back down. But she fought back this instinct within herself — there was nothing on the surface that could be more dangerous than attempting to dive her damaged boat again. She looked down at her crew — minus Chips — and waved them up through the control room.

Owen, with his scrawny youthful energy, led the way and charged up the ladder, struggled with the tightly closed and somewhat rusted hatch-seal wheel for a moment before squeaking it open, and pushing the hatch up.

On a submarine, one never realizes how stale and still the air can be until a moment like this. Daylight poured down through the hatch into the control room below. With it came cool air in motion. It was air that smelled of the open sea instead of the stench of warm human bodies, oil, and diesel exhaust. The crew followed Owen out onto the bridge of the sail.

It was a cool, breezy day. Gray clouds hung low overhead, and there was a mild chop on the water. It couldn't be more perfect, as far as they were concerned. Owen hopped over the fairing and down the rungs on the side of the sail to the main deck and ran up and down it shrieking like a small child.

After a few minutes of just enjoying the surface air, Percy got back to the situation at hand. "Hemi, you were looking at the charts: who controls this part of the surface these days?" Percy asked.

"Umm, maybe the Western Federated Socialists? At least, they did the last time I looked at a Territorial Authorities map. But that was more than a year ago."

"Those assholes are bad fucking news, and have no tolerance for surface transports — even ones that have papers." Put in Bastian. "We should not stay here."

"We would be on our way... if we had any fuel or power." Said Percy. "That lovely sound you hear of gentle waves smacking against our hull is the sound of a boat not moving. We're dead in the water, and we're still a bit fucked folks."

"Owen!" She called down to the deck. "Get back up here, we have to get back to work." As he ran over and climbed back up the side of the sail she laid out their next steps. "Hemi, get down to the navigation chart and see if there's any hope of any place we could limp to with what little fucking charge we have left on the battery."

“Bastian, get on the radio and see if you can raise anyone on the Independent Operators frequency. Maybe we’ll get extraordinarily fucking lucky and find some help from someone who won’t ask too many fucking questions.”

“Or try to sink us.” Bastian put in.

“Ya. If you do raise anyone don’t actually talk to them. And don’t fucking *tell* them anything. Just come get me and I’ll try to gauge their reliability myself.”

“Sure Capt.” Said Bastian.

“Gregory... I’m fucking starving, want to see if you can get something going in the galley?”

“Sounds good.”

“And put a new pot of coffee on too. The shit in there now has been on that burner so long it looks like bunker fuel.”

They climbed back down into the control room, but left the hatch open and for the next few hours a blessed breeze blew down through and reached occasional tendrils of sea air as far into the boat as the crew quarters.

Inside, Captain Percy joined Hemi at the navigation table.

“The most pressing problem” said Hemi, not even waiting for her to ask, “is the batteries are basically gone. Even running extremely judiciously, we have a range of a few nautical miles at best.” He used a compass to draw a dotted line around their position showing what was within range. It was a completely barren section of the chart in the middle of the ocean. It was nowhere.

“Not even close huh? Well, that just leaves us with the less than ideal option of accepting help from someone.”

“Most folks in these neglected waters are not much inclined to help those they do not know.”

“We’ll just have to hope we don’t meet most fucking folks then.”

She took a couple of steps back to look up through the hatch into the control room and see how Bastian was doing with his effort to achieve that goal. He had one stick-like arm up in the air, adjusting some dials on the radio mounted in the ceiling of the control room. His other hand held the mic that was attached by an ancient curling wire to the radio. He was giving out mayday requests on a couple of different frequencies known to be monitored by other independent shipping operators like themselves — both legitimate cargo haulers and smugglers. Those frequencies were also often monitored by Authority vessels that might be engaged in policing shipping and transport traffic through their control areas.

“Anything Bastian?”

“Fucking nothing. Nothing good or bad. This is one voided piece of open fucking ocean you raised us in.”

“Alright. I’ll check sonar and radar. Maybe someone’s listening who just isn’t interested in responding.”

She stepped over to the sonar station lifted the headphones over her ears. Without bothering to sit, she turned the directional control wheel with one hand, slowly back and forth, scanning for the sound of anything made by humans. One nice thing about being dead in the water was they weren’t making any noise themselves. She could hear even the small waves against the hull of the *Prospect*. It was a rare pleasure to have such clean and clear sound on sonar. But for all that silence, there was nothing to hear.

The passive sonar was safer to use than the radar because it did not send out any signal that could be detected. You just listened with what were essentially underwater microphones for the sound any other vessel might be making. It also had the advantage that it could be used while submerged. Radar on the other hand could only be used while they were on the surface, and it sent out a big loud radio beacon that could be seen by any other ship with a radar unit — basically all of them. If there were any ships out there, the signal would bounce back to the *Prospect* and they would know the location. But any other ship in range could detect the radar signal and also know the precise location of the *Prospect*. Generally when Percy used radar, her habit was to dive soon afterwards.

In this case she thought turning on the radar was worth the risk. But the radar swung around to show a completely empty scope. There was nothing for miles in every direction. She left it scanning and eased herself into the sonar station chair and tried to get comfortable.

For the next few hours she chain-smoked and listened to the emptiness of the ocean around them on the passive sonar. It was a mind-numbing task that required concentration to try and pick out a signal from the muted hiss and rush that came to her from the choppy surface. She swept the sonar mics in a circle covering every direction out from the *Prospect* and back again. Having not found anything, she would start again. The continual effort at maintaining her attention on the search butted against the complete lack of any signal to focus on or track. She was beginning to think the best move might be to go check that they had enough food and water supplies to survive weeks of drifting on open ocean.

Except then, way off their rear port side, a very soft throbbing came into her headset. She closed her eyes. It was faint and threaded, like the last heartbeats of a leviathan. She opened her

eyes and glanced at the radar sweep, but it remained completely clean.

She called Hemi over. "Listen to this, and tell me what the fuck you think it is."

Hemi had exceptional ears for sonar. He stood next to her and put the headphones on and his eyes lost focus as he listened. The tips of his thick brown fingers rested on the top of the directional control wheel and eased it back and forth across the contact's heading.

"Very small surface craft, and moving... unusual though — and not just because it is tiny and in the deep ocean. It seems like it has almost no hull sound. I do not hear any wake running along it."

"Can you calculate a range?"

"It is close. Let me see." He looked at the dials of the sonar unit and scribbled some numbers on a scrap paper. "2 nautical miles, thereabouts maybe? I think you should be able to see it with the periscope."

Percy nodded and climbed up into the control compartment. She raised the periscope up and spun it around to the bearing of the target. She rolled the scope barrel slowly back and forth along the horizon line, where the dark gray of the water press-fit up against the light gray of the sky. With the *Prospect* on the surface, and the scope up, she could see something like ten nautical miles on a clear day. This was as good as vision ever got on a submarine.

"Even if it were a fucking canoe... at two miles away I should be able to see it." There was nothing but unblemished gray fields in her scope. She double-checked the bearing with Hemi, shouting down to the sonar station below.

She was pointed in the right direction, there was simply nothing there.

She had a hunch though. She felt confident about the sonar target. She was sure something *was* there despite the fact that underwater sound can sometimes play tricks. The lack of any visual on the surface narrowed down the possibilities of what it could be.

“Hemi,” she called down again to the compartment below, “I want to motor over closer to it. Keep tracking it on sonar.”

Captain Percy put Bastian back in the rudder/throttle control seat. She gave him a heading towards the sonar target and they put the electric motors in gear. Her eyes locked on the battery gauge, which waved slightly as the motors started turning, drawing the last amperage from the depleted battery banks. The needles on the battery gauges were deep in the red now. There was such a very little gap of air between them and the zero mark. They would only get one shot at this.

They crept — two nautical miles an hour. After a quarter hour or so, Hemi called up from sonar, “We got lucky Sylvia. I am tracking something like an intercept course — it is headed towards us at any rate. At our current speed there is no way we would ever have caught them if the object were heading away from us. It is moving fairly quickly. But...” There was a gap, and Percy could hear him scratching a pencil on paper. “But, we need to go slightly faster, can you do four knots?”

Percy sighed. It did not sound like much, but it was twice as much power consumption. “You heard the man Bastian, give her a little fuckin’ gas.”

There was a burning cigarette between Bastian’s bony fingers as they wrapped around the throttle and eased it slightly forward.

A few minutes later Hemi called up, “Good. We will be within a quarter mile of it in a matter of minutes.”

“They must be able to fucking see us. They haven’t changed direction or speed?”

“No. They must not be looking, or they just do not care.”

Captain Percy stayed on the periscope, slowly tracking across the bearing. Still nothing.

“Sylvia!” Called up Hemi. “They are gone. No detectable signal on the sonar.”

“Stop the boat Bastian.” The electric motors were very quiet when running this slow, but she wanted Hemi to have total silence for listening. “What was the last fucking range Hemi?”

“About 500 meters. They are super close. I have to assume they are just sitting out there. We could ping them?”

“Ah, that would fucking scare the shit out of them. They might think we were armed and about to fucking fire on them. We’re trying to make friends here. . . . I’m going to try ship-to-ship radio. We’re just fucking close enough they might hear us, and the radio could be a little less threatening.”

Percy reached over her head and flipped on the ship-to-ship radio. It wasn’t really a radio, it was just acted like one. It used the sonar rig to push sound through the water to talk to other ships nearby. 500 meters was just about the limit of its range. Real radio transmissions were supposed to follow a set of protocols and rules, potentially enforced by agents of Authorities in their respective territories. Ship-to-ship had no rules other than an informal argot that had developed partially to obfuscate meaning for any other ship that might be listening, and partially just evolved from nautical cultural habit.



Captain Percy took down the mic from the radio and brought it to her lips. She pushed the transmit button, and the needles on the radio unit's gauges jumped to show how much power she was transmitting with. She whistled a series of five tones into the mic, and let go of the transmit button. The power needles died back to zero, and there was silence for a minute or two.

Then she repeated the transmission of the tones. Another minute passed.

Then a crackly male voice came over the radio. "I see you over there, you hulking ugly gray fuckin' submarine. And I guess you know I'm fucking here. Why are ya sittin' on the fucking surface, and what ya want with me?"

Percy hesitated, and then transmitted back. "Well, first let me state flat out that we're nothing but a cargo sub — and let me emphasize: un-fucking-armed. Second, we've been severely damaged, and swam through an icy hell to get back to the surface. We're out of fuel and extremely low on power. Long and short is that we're in some desperate fucking need of help, and you are the only contact we've seen in these fucking desolate waters."

Another moment passed. "Yea. Well. These waters are empty because the Authorities running this territory right now are a bunch of tight-sphinctered class-A holes who seem more interested in shooting down transports than letting any commerce commence. It's a fucking bad place to be not moving and on the surface."

"Not moving is hardly fucking typical for us. What are you sitting on there? We don't see any ship in the scope. Any assistance you can offer would be much fucking appreciated."

"Ehh, I'm not one who is much for offering fucking assistance, so for the next few minutes here I think I'm not going to show ya

what I'm running. But if yer telling the truth, I don't envy your fucking dire-ass situation."

"I absolutely fucking understand your unwillingness to not tip your hand. Anything I can do to reassure you we aren't anything other than we fucking say we are?"

"The territorial Authority motherfuckers around here generally just shoot first, check papers later. They're not much for mind games. So the fact that you haven't already shot at me says a lot."

There was a long pause of radio silence. Percy held the mic off-angle in her hand while listening. She began to worry that she had lost their only chance for help.

The ship-to-ship crackled back to life. "Alright. I think I can risk pulling the fuck alongside ya, and poppin' the hatch. Don't send nobody onto my boat without my say-so, or I'll dive straight out from under ya. Fucking' got it?"

"We'll look for you — for something — off the port side. Out."

"Hemi," Percy called down to sonar, "we've got ourselves something, though I'm not sure fucking what. You and Bastian come up on deck with me."

Bastian unfolded his long skinny legs from the cramped-looking position where his feet were propped up on the control panel and climbed up through the hatch and via the ladder to the bridge of the sail with Percy and Hemi following. The wind was blowing a little harder now and the chop had kicked up some more. Bastian cupped his hands and lit another cigarette. Percy and Hemi shaded their eyes, scanning the water. It was a few minutes before they saw a small gray oblong object cutting through the choppy little waves. It was a tiny submarine sail, no more than a meter long and high, with a couple of thin wispy antennas

trailing from the top in the wind. Unusual for a submarine, it had a small viewport in the front of the sail through which the pilot could look. At the rear of the sail a stream of diesel smoke floated up and away behind it. The deck of the small sub was totally awash, running just at the surface of the water.

As it got closer they could see the big splotchy patches of rust all along the hull of the mini-sub, and a slight oil slick of a trail that it left behind in its minimal wake. Bastian, Hemi, and Percy climbed over the fairing of the sail of the *Prospect* and down to the deck. Standing here, Percy was somewhat sickened to see the bow of her boat sitting much lower in the water than usual, still weighed down by the tons of excess ballast water.

A moment passed before a hatch opened at the top of the sail of the mini-sub and a head of a man with spiked yellow hair emerged. His arms were still inside the sail working controls and he was standing propped on something inside so he could get his head up high enough above the boat to see as he guided it alongside the *Prospect*.

Bastian opened the hatch to a wet-storage locker on the deck and pulled out some large white rubber bumpers that were flat and deflated after being subjected to the pressures of underwater. He connected each to a short hose that led to a fixture for the low-pressure compressed air system inside the wet-storage locker, and let a little puff of air into the bumpers until they had been restored to more or less their normal shape. Each bumper had a long line that he tied off on deck cleats and lowered down between the two subs.

“Toss a line!” The guy in the sail yelled as he let the engine run on idle and climbed up over the fairing. He was wearing rubber boots as he ran up along the washed deck of the small sub. They were pulled over black leather pants that were cracked and gray at the seams and joints. From the left side of his ancient brown

leather belt hung a couple of sizes of adjustable wrenches, the finish on the them beat away, matte and rusting in places from years of banging against each other like chimes. He wore a worn black denim vest from which the sleeves had been inexpertly removed leaving stray threads of denim trailing behind him in the breeze and exposing a pair of sinewy pale arms.

Bastian, still with a cigarette between his lips, threw across a line. The man made it fast to a recessed cleat in the hull of the mini-sub, and then repeated the move at the stern. He nimbly leaped across to the hand-holds on the side of the *Prospect* and climbed up the curving side to the deck.

He looked around with a nervous twitch, and then motioned to Bastian for a cigarette, who cupped his hand and lit it off his own before handing it to the man.

The man took the cigarette in a hand that shook slightly when he reached out, and brought it to his lips and sucked long and hard at it. "Ah fuck thanks. I ran out a couple of days ago. I go by Shakes." He held up his hand level in front of them and they could see it tremble slightly in the air. "Ya can see why." Shakes looked at Hemi standing just ahead of Percy with his black beard wafting in the breeze. "You the captain?"

Hemi nodded toward Percy who was still looking at the mini-sub. "That's a hell of a fucked-up craft ya got there Shakes." She said.

"Like it? I built it my fuckin' self. Welded it together on the top of a mountain coffee farm from rotting scraps of metal. They had a bunch of land higher up where the coffee don't grow, and it seemed like a good place to build a boat. It was. Cept it wasn't a good place to launch a boat from. Getting it down to the water was fucking way more difficult than the buildin' of it."

"I could imagine." Said Hemi.

“I’ve heard of this kind of thing,” said Percy, “the boat runs fast and just below the surface. Basically invisible to any kind of radar, and too quiet for most sonar. Good for... small shipments?”

“Aye, ‘Specialty shipments’ — when stuff has to be got somewhere fast with no fucking questions asked. Just not too much stuff. I also built in a few special modifications — this here boat is the fastest and most versatile in its fucking class!”

Hemi looked at the rusting bulbous hulk alongside and doubted there was any class of vessel that would accept it.

Shakes continued. “Most of these homemade jobs just run at the surface; I added some batteries and some trim tanks, and this here boat, the *Gnat* is the fucking name, can *dive*. Run a bit under water, just enough to get away from any curious onlookers.”

“How deep?” Asked Hemi.

“Maybe 30 meters on a good day. You don’t have to go very deep to hide in something so small.”

“How fast?” Hemi could not deny his curiosity now.

Shakes grinned. “Faster than this fuckin’ barge.” He said kicking the toe of his rubber boot against the hull of the *Prospect*.

Percy frowned. “Welp, that’s an impressive submersible fucking hobby you got there. But has anyone here got an idea how how we’re going to get my fucking boat moving? You ain’t carrying a load of fucking diesel fuel are you Mr. Shakes?”

“Captain Shakes, if you fuckin’ please. And I certainly ain’t got fucking fuel to spare. And I can’t say what I *am* carrying, ceptin’ that I can’t see how any of it could help you. Still, if I can do anything to assist, I’m game. I’m pretty convinced y’all ain’t

some Authority ruse, and we smugglers gotta stick together, I fucking say.”

“We’re not smugglers.” Said Percy, her eye firmly locked on Shakes. “We’re independent logistics operators.”

“Ain’t we fucking all!” Said Shakes. “Honestly, I ain’t got much in the way of ideas for ya. I was thinking maybe you was the smart ones. From what I can see y’all are fuckin’ fucked. Best I can say is I could run into my destination port and send some friendly bigger boat back out for ya. But that’ll probably take a couple fuckin’ days at least.”

“In a couple of days we’ll either be sunk or in some fucking Authority holding cell. There’s gotta be a better option. Hemi?” Percy looked at up at him.

“Well, nothing immediately comes to mind. But that is with limited information. If a new option has arisen, it will be aboard the *Gnat*. But to sort that out, I would have to get in there and take a look at what resources you have got aboard Shakes. I’m not sure how willing you are to let me do that.”

Shakes did not say anything, but pulled on his cigarette and watched the exhaled smoke quickly sucked out over the water by the breeze.

“Mind if we ask where yer headed Captain Shakes?” Asked Percy

“Aye, I was about to fuckin’ say anyway: there’s a mid-sea depot about 100 miles from here. It’s just over the line in the waters of a different Authority. Somewhat more permissive folks; bit more friendly to commerce. That’s why the Authority on this side of the line are such a bunch of aggressive motherfuckin’ assholes though — they don’t want shit running through here to there. If you can get this dumpster of yers to the depot, you can definitely

get fuel there, and probably some fuckin' poorly executed and overpriced repairs as well."

"Sounds like a fucking Eden." Said Percy. "Look, we aren't the type to ask for help, and I hate imposing on other folks' business, just as I don't want 'em imposing on mine, but you can see we're more than a little fucking desperate here. If you can allow Hemi — and just Hemi — aboard to take some specs of your boat, see if you're carrying anything he can use, we'll make it up to you at the depot. . . . Though at the current moment about all we can offer you is hot food."

Shakes eyes brightened at that. "Hrm. Well I ain't been eating nothing but cold chow straight from the can for days now. A hot meal is a strong offer yer puttin' on the fuckin' table there. Alright. This big guy, and this big guy alone. And he don't look at nothing I don't want him to look at, and he don't get answers to no questions I don't want to answer. No fucking pushin', right?"

"No pushing." Said Hemi.

"Right. Hang back a minute, let me go look around in there first, make sure all my fuckin' pornography is put away. When I give you the signal, come across."

Percy grinned as Shakes lowered himself down the side and leapt nimbly over the dangerous gap between the two boats where the chop occasionally ground the two walls of rusting steel against each other with nothing to brace them but the cracked old bumpers. He disappeared into the sail hatch of the *Gnat*.

"Interesting character." Said Hemi.

"Solo operators. . . nobody who is comfortable spending days or weeks at sea alone — eating cold canned food, no fucking less — ever totally has their head screwed on fucking right. Anyway,

it doesn't matter how pleasant a person he is. The question is, do you think there's anything you can do with that boat that's going to help us?"

"I'm not entirely hopeful. It's not much of a craft, and is not likely to have much in the way of resources aboard. Frankly, I am surprised he is not lost and dead in the water himself."

"Find us something Hemi. But don't do anything to set off that fuckin' tweaked motherfucker while you're over there."

"I shall be a lamb among the lions."

From the sail of the *Gnat* Shakes' head and arm popped up and gestured. "Come on over man-mountain. Mind the fuckin' gap!"

Hemi's size made for a thrilling thing to watch as he hopped the crunching span between the two boats, but he proved just as nimble as Shakes had been. Hemi was wearing heavy but conventional leather boots, and the water washing the deck of the *Gnat* was wetting the lower part of his legs, soaking the tweed pants of his suit to a dark and sagging color. He stepped up and over the open hatch into the sail, and from where Percy was watching, it seemed for a moment like there was no way his bulk would get down that tiny hole. But Hemi disappeared into the boat just as quickly as Shakes did.

Percy gave Bastian a pull on the sleeve, and he tossed a smoked-out butt into the ocean before they climbed up the sail and back inside the *Prospect*.

"So what do you think?" Asked Shakes. "Ain't it the finest fuckin' boat ya ever had the pleasure of dropping inside of?" Shakes seemed genuinely proud.

"It's certainly a masterpiece of the genre." Replied Hemi, even more evenly than usual.



Hemi had spent nearly his entire life among and inside filthy machines, but he had never seen anything where the grime lay down quite as thickly as this. There was literal garbage all over the deck: empty cans rolling back back and forth with the swell, candy wrappers, various greasy machine parts, and an ashtray that seemed like it had not been used for ash but merely as a target to toss used butts at, most of which had missed and lay scattered about.

There were stacks of pornography — Shakes had not bothered to hide any of it, or at least Hemi hoped that was true, because the stacks on display were of a class so deviant that Hemi could not imagine what Shakes would have deigned to feel needed hiding.

In one space, recessed between the supports of the pressure hull, were columns of food cans still unopened. The labels had been peeled off and the contents written on them in grease pencil. Most appeared to be of some variety of highly-salted pasta-and-sauce. In another recess was a bin with what must have been a hundred different types of puzzle games that all had the basic premise of requiring squares of color to be sorted alike. Every single last puzzle was solved.

The controls to the sub were aligned with and partially inside of the sail. Hemi noted that the controls were arranged airplane-style: with a single yoke that controlled both the angle and direction of the boat, a pretty sophisticated system for any submarine, but particularly a hand-built machine.

The sail was the only place with enough headroom to stand upright. Or, at least Shakes could stand upright in the sail, Hemi still had to crouch a bit. Through an open hatch leading forward, Hemi could see small wooden crates crammed into the bow section. More crates were arranged behind the controls located about the middle of the boat. Shakes had thrown what were clearly his sleeping blankets over the crates. There was

still a thin heavily-stained mattress to one side, which Shakes was raising to lean against the pressure hull so there was enough room to pass the crates.

“Y’all woke me from a fuckin’ nap with the ship-to-ship call. That’s why I didn’t see ya earlier. I suppose you want to see the fuckin’ engines and batteries and what-fuckin-not? They’re toward the back.” Shakes reached into his denim vest and withdrew a leather pouch. He pinched some dried leaves from it and stuffed them into his cheek and masticated them slowly.

“Yes, the engines first if you please.” Hemi squeezed past the crates and pulled a small notebook and pencil from an inside pocket of his tweed jacket. The engine was massive and took up the entire rear third of the boat. Now Hemi was genuinely impressed. “That’s a lot of engine for such a small boat.”

“Took the thing out of a fuckin’ tractor that had been rusting broken down in a field for years on the coffee farm. Had to build a gantry and borrow another tractor to haul it up the mountain to where I was building the *Gnat* and get it installed. Direct-drive to the prop, so it’s a genuine boat engine, not just a glorified generator to power an electric motor.”

The configuration was obvious to Hemi. The grease-covered steel drive shaft came straight out the back end of the diesel running along the center-line of the boat and out through the stern, like an egg on its side, pierced by a needle.

“But you said it has batteries too, the boat can swim underwater?”

“Ya, the direct-shaft-drive means I’ve gotta have a transmission of course, and I worked with a fuckin’ mechanical genius who lived on the coffee farm to build this fancy-ass transmission that lets me switch over to that electric motor to drive. It’s a fucking grind though, I try to avoid it, ‘cept in emergencies. I have to

leave the controls and come back here to the engines, switch out the diesel and manually engage the electric motor with these levers. And the electric motor is small — it's fuckin' slow; though silent as a sunken fuckin' graveyard."

"It is the finest piece of mountain-top engineering I've ever seen on the sea." Said Hemi, honestly.

Shakes grinned.

"And the batteries?"

"Batteries, fuel, ballast tanks are all below these deck panels. You have to pull them up to get at them. Since I rarely use the electric motor, the batteries almost always have a full charge on them — as they do right now — if that helps somehow. Obviously not enough juice to power your giant fuckin' washtub over there."

"No, not nearly. How much fuel do you have?"

"Maybe twelve hours worth left. Enough to get me to the depot."

Hemi scribbled some calculations. "How much standard horse power does that engine have exactly? No, actually, how much horse power does your electric motor have?"

"Fuck if I know. Hang on, I have a manual around here somewhere." Shakes pulled open the small steel door of a cabinet mounted on the wall and handed Hemi a manual covered with black finger prints and gray-stained pages. While Hemi flipped through it and jotted in his little notebook, Shakes took a comb from his pocket and dipped it in a bucket half-filled with oil that dripped from the diesel engine. He ran the comb through his hair, then teased it back up to a spiky randomness with the tips of his fingers. He wiped his fingers on his shirt.

Hemi looked up from the manual at Shakes through the small frames of his glasses. "Can I borrow this manual? And do you have one for the diesel too?"

"Ya here." Said Shakes, handing Hemi an even fatter manual that was stained far more heavily, and had a couple of thick black lines along the page edges indicating the most heavily used sections.

"Alright, I need to and sit down with my numbers and do some figuring. I also want to look at the charts with you so you can show me where this depot is. I think it is time to go back across to the *Prospect*."

After making the jump back to the bigger boat, Shakes and Hemi settled down over the *Prospect's* navigation charts. "OK, where is this depot Captain Shakes?"

Shakes pulled down the magnifier and scanned across the chart. "Wait, where are we now?" Hemi pointed to the obvious small x at the end of a string of grease pencil dashes. "Let's see.." Shakes tapped his black-stained, wavering finger against the glass covering the chart and rotated the magnifier around in slow circles. "Ah, here!" Shakes said pointing to a small island marked on the chart and labeled only "deserted."

"That is your major trade center?" Asked Hemi. "A deserted island?"

"Well, 'major' might be a bit fuckin' descriptive." Said Shakes. "But look." He took the grease pencil and drew a lightweight but long line across hundreds of miles of ocean. "The Territorial Authority boundary is roughly about here. With total fuckin' assholes on this side we are currently on, and only sort-of fuckin' assholes on the other. So you can see how it makes sense to put a depot on that deserted island just across the line to help facilitate trade in, out, and through Assholevania over here."

“That is true.” Said Hemi, taking a pair of calipers and measuring the distance from their current position to the deserted island. “I hope you’re right about a depot being there. We will not make it any further than that.”

“It’ll fuckin’ be there!”

Hemi sniffed. “Smells like the food may be ready. Want to eat?”  
Said Hemi.

“Shit yeah. My gut is fuckin’ gaping.”

Hemi and Shakes came into the galley of the *Prospect* with Captain Percy and Bastian already crammed into the tight seating around the table. Gregory was working a giant cast iron pan at the stove that was so heavy with frying rice that the wiry muscles of the arm controlling the pan bulged with the effort of shaking it — a gesture he felt was necessary to keep the rice moving and frying evenly without burning.

Gregory looked up when Hemi and Shakes came in. Hemi introduced Shakes.

“Fuck yeah,” said Shakes eyeing the pile of frying rice. “I ain’t eaten nothing but cold fucking canned pasta for a week.”

“None of your canned garbage food here, Captain Shakes.” Said Gregory, grinding the pan back and forth across the range in a way that set small sparks flying. “This is real fucking submariner’s food. Everything good that can’t go fucking bad: rice, eggs, cabbage...”

“Are you putting that fucking foul slimy-gray pickled cabbage in the rice Gregory?” Asked Bastian. “You’ll be killing submariners if submariner’s food is that fucking real.”

Gregory huffed. “My ol’ pap worked a submarine galley in the wars. He used to say ‘if you can fucking heat it, you can fucking

eat it.' And this shit's gonna be plenty fucking hot." Gregory dumped in an entire container of the questionable pickled cabbage, and stirred it around as the sound of frying drowned out any conversation. This process only lasted a few minutes more.

"Captain Shakes, for helping us out, you're up first." Gregory cracked an egg onto smoking smaller frying pan next to the giant one full of rice. As it sizzled on the creosote surface, Gregory dumped huge piles of rice into a big bowl and handed it to Shakes. The rice was browned by the black salty sauces Gregory had poured into it, and burned to a crusty-black crunchiness in places. Steaming bits of cabbage slithered throughout, flecked with red and black pepper. Shakes was about to dig a fork in when Gregory slipped the fried egg on top with a spatula. Its white was stained an oily, slightly gray color, and the glowing orange yolk was held in place by a wiggling skin on the edge of being burst from the pressure of the hot liquid inside.

Shakes grinned before plunging the tines of his fork into the yolk and letting it run into his rice. He then started working his way into his bowl with an uninterrupted shoveling motion of his fork from the bowl to his mouth.

Gregory served up the rest of the crew the same way. Captain Percy asked him to run up to the control room and get on the PA and tell Owen to come up for some grub.

Hemi sat at the end of the table with Shakes' electric motor manual open in front of him, eating his rice with one hand while scribbling down notes in the other.

Their hunger got the better of any conversation for a few minutes as they moved mounds of rice, egg, and cabbage. Gregory served himself and sat down, and got back up a few minutes later to fry another egg for Owen when he arrived. A few minutes later had to get up to make Shakes another egg. All told, every one of them had at least two servings and Owen and Shakes each ate

three servings apiece. Gregory never got to sit for more than a minute. And when no more eggs were being demanded, he got up again to put coffee on.

Between forkfuls of rice, Captain Percy tried to get an assessment of the situation on her boat. "Owen, have you been down in the cargo hold?" Owen nodded, his crop fully loaded. "How's the patch looking?"

Owen swallowed, and then swallowed again. "I'm hardly an expert on welding or repairs, but I'd say it looks pretty bad. The patches are an ugly mess, and I'm pretty sure the water level is rising again, though more fucking slowly."

"Can you work on it? Can you clean up those welds, get the leaking stopped?" Percy asked.

"I can try. But you know it's fucking delicate work that I'm just starting to figure out. There's a chance I could just make it worse — burn a hole right through the hull. If you're asking me, I think you need Chips to work on it."

"I didn't ask your fucking opinion you little shit. I asked if you can fucking fix it." Said Percy, aiming her fork at him. Hemi looked at his food instead of the manual.

"Yeah, Captain Percy. No fuckin' sweat." Owen poked at his food a little less hungrily.

"Finish your food and get your skinny ass back the fuck down there."

"Sylvia," Hemi said, not looking up from his food. "I really think you need to do what you can to get Chips back to welding."

She pounded the table, and looked up, breathing through her nostrils. "Fuck."

Owen took his coffee to go, and headed towards the cargo hold to try and keep reinforcing Chips' patch. When there was finally a cup of coffee in front of the rest of them, and the empty bowls pushed into the middle of the table, Percy brought them to order. "Next agenda item: assuming we don't fucking sink, how to get this boat moving again?" She looked at Hemi.

Hemi put his pencil down. "Perhaps in your time on the sea some of you became familiar with the Angler fish? In some species the female is enormous compared to the male, maybe a hundred times bigger. The females are complex, highly evolved organisms, with sophisticated traps for catching and devouring other fish. The males are nothing but tiny sperm repositories. They swim around until they find a female, attach themselves to the female's underside, and then fuse with her body, essentially becoming nothing more than a sperm organ for her."

"Hemi, let's try stepping around the fucking long-winded metaphor and getting to the fucking point." Said Captain Percy.

"Here is what I propose," Hemi continued unfazed, "The *Prospect* has a hatch with a mating collar on the bottom side of the boat. The normal intended use for it is underwater docking to another vessel's topside hatch. We could rig something so we could mate the *Gnat* to the underside of the *Prospect*, and then feed up fuel and power into the *Prospect* from the *Gnat*. Kinda like a male anglerfish. . ."

"Got it." Percy interrupted. "And you think there's enough juice left in the *Gnat* to take us both to the depot like that?"

"We have to cut everything to the bone, but the math says we could make it. *Could*."

"And what the fuck do I get from your little fuckin' biology lesson?" Asked Shakes. "The fucking fundamentals of this plan is really



me casting my lot in with you losers. Basically I'm donating all my fuel to you and hoping I can piggyback in, right?"

"We can pay you for the fuel Shakes." Said Percy.

"*Captain* Shakes." Said Shakes.

"Plus we will need to fit a nice mating collar onto the *Gnat*. You may find that to be of some use in the future." Said Hemi. "Think of it as a deluxe feature."

"And hot meals til we get to the depot." Added Gregory.

Shakes, perhaps more driven by his stomach than he cared to admit, considered. "I want double the value of the fuel."

"Absolutely." Said Percy.

"And you're buying a dinner of *good* food at the depot."

"Fuck you!" Said Gregory.

"Done." Said Percy.

"And... I want you to keep a line open to me on any future job possibilities."

"What.. like fuckin' partners?" Percy bristled.

"Fuck no. I work the fuck alone. But an operator has to have connections in this fuckin' game. You'd be a big fucking cheese for me, feeding me future prospects. That way I get long-term payoffs for my investment in your sorry-ass fuckin' futures right now."

"Alright. Any job that seems suitable for a specialty cargo hauler like yourself, I will fucking happily send your way."

Shakes grinned. Now they were working in a space he understood — most profit is future profit. “So, ah, Hemi, what exactly are ya going to do to my fuckin’ beautiful boat?”

“Well,” Hemi said, looking at Percy, “first, we need to rouse Chips. She is the only one on board who might know how to fit a mating collar that could work.”

Percy was holding her fork in her fist, and grinding the tines back and forth against the tin plate, leaving deepening scratch lines. Percy and Shakes both looked at her. “Alright, Fuck. Hemi, go see if you can rehire Chips on a *temporary* and ad-fucking hoc basis to do some of this welding we need. I don’t want to see her though. Tell her to stay the fuck out of my way or she’ll find herself swimming in the prop wash. . . once we’re fucking moving again.”

Hemi loaded up another bowl of rice and led Shakes to the crew quarters where they found Chips in her rack with the curtains drawn.

“Chips,” Hemi addressed the curtain, “I brought you some food.”

“Ah fuck you and your gestures Hem’,” came a muffled voice from behind the curtain. “Go spoon it into that twat you work for until she fuckin’ chokes on it.”

“Chips, you are certainly tough, no one would deny that. And I think that toughness comes partly from a genuine mean streak in you, and partly from the fact that you believe you know how to do things right. The problem is that Captain Percy has both of those qualities too, so just like you she is both sometimes mean and also not going to be the one to admit when she did something wrong.”

“Spare me the fuckin’ you’re-both-so-fuckin’-alike speech Hemi. Just fuck off.”

“I am just explaining *why* she is not going to come apologize, Chips. I am also going to tell you I believe she was entirely wrong, and risked your life by not warning you she was going to blow the tanks. You were right, and she *should* apologize, but you know her — she will not.”

“So fuckin’ what? You think I fuckin’ give a shit?”

“So I do not believe you want to die out here just because she is unwilling to ever admit you were right and she made a mistake. But that is what is going to happen Chips: we are going to sink and die on this bleak stretch of ocean right here if you do not help us. We need you to keep the welds on that patch of yours together. Please.”

There was a silence. Then a small, filthy hand stuck out from behind the curtain. “Give me that food, I’m fucking starving.” Hemi put the warm bowl of rice into the hand, and it withdrew. There was a clinking of the fork for a minute, and then Chips opened the curtain a little so she could look at Hemi and talk to him while she ate. That’s when she saw Shakes. “Who the fuck is that?”

“I’m fuckin’ Shakes.” Said Shakes.

“*Captain* Shakes.” Said Hemi.

“Is that your name or how you reproduce?” Asked Chips.

“Like you’re one to fuckin’ talk. Didn’t they call you ‘Chips’?”

“Look,” Hemi interrupted, “we found Captain Shakes here on the surface. He has a boat — a small boat. I want to weld a mating collar onto the sail of his boat. It has to fit to the *Prospect’s* bottom mating collar. I want to attach his boat to the underside,

and run with it that way. And this is another project we cannot do without you. Think you could rig something like that?"

"Well fuck. I might have some spare steel that could do that. Depends on what the hatch on his boat looks like, so I'll have to fuckin' eyeball that. Possible it could be done." She thought for a second. "But that's a fuckin' tricky bit of sonar listening to make that mating work, steerin' the boat up from underneath, like. You think you got the fuckin' skills to do that Captain Shakes?"

"I've squeezed that boat through any number of tight places, like narrow fuckin' gaps when pushing through Authority fencing. I'm as good a small-boat pilot as there ever fuckin' was."

"His boat, The *Gnat*, has a viewport in the sail. He should be able to see where he is to do the mating maneuver mostly without sonar." Said Hemi.

"A fuckin' window on a submarine. Stupidest fuckin' thing I ever heard. Fuckin' crazy shit ya want to pull here. Look Hem', you're right about me not wanting to die out here. Way I figure it is to best push that priority forward, I gotta spend my time workin' on my fucking patch in the cargo hold. I may in fact spend the rest of my fuckin' life working on that fuckin' patch. I ain't got time to be up there fuckin' around with welding scrap steel onto what — and I'm just taking a wild fucking guess here — is some barely-afloat rusting sea-tractor." She paused. "You might get Owen to fuckin' do it."

"The kid?" Asked Shakes, "Fuck that. If there's welding to be done, I'll weld my own fucking boat."

"She is right though." Said Hemi. "The patch in the *Prospect* needs more work. If it fails, it could take both boats down. Before you do go back to your patch though Chips, get Owen and go out with Captain Shakes and take a look at the *Gnat*. Make sure

they have what they need to get this done right. It is not going to help us much if the mating collar leaks and floods the *Gnat*. Have Owen haul up the spare welding rig.”

“Aye Hem?” She said, understanding that what Hemi really meant was she should instruct Shakes on how to do the job correctly. She swung down from her bunk handing Hemi her empty food bowl. “Let’s go find the fuckin’ kid, and have a look at this boat of yours.” She said to Shakes.

Hemi found Percy sitting at the sonar station with the headset on, listening. When she saw Hemi, she pulled one earpiece off. “That go OK?”

“Yeah, Shakes says he is going to do the welding on the *Gnat*, Chips wants to keep working on the *Prospect’s* patch.”

“I’m glad she came to her fucking senses.”

“Her senses had little to do with it.”

Percy ignored that. “What’s fucking next?”

“I wanted to look at the chart and run my numbers again.”

“Alright. We should put someone on radar, I don’t want any Authority craft sneaking up on us.”

“Put Gregory or Bastian on it.”

“Yeah. Alright, I’ll get Bastian in here. Better than fucking nobody.”

“Send Gregory out to help Owen and Shakes. Welding the mating collar on the *Gnat* is going to be a bit of a tricky operation.”

“Right.” Captain Percy headed to the galley to rouse the people from their cold and empty coffee cups.

On the deck of the *Prospect* Owen had raised the big cargo hatch, which opened a gaping hole down into the wide open space of the cargo hold. This was the only way to get the heavy welding rig out of the boat. He had assembled a small tripod gantry over the hole, from which was hanging a heavy block with a chain running through it. Gregory was down in the cargo hold hooking the end of the chain to a welding rig. When he had it secured, Gregory gave Owen the thumbs up.

“Hey Gregory,” Owen called down to him, “while I’m hauling the welding rig up take a look around: we still need the material for the mating collar, and the gangway so I can wheel this fucking thing across to the *Gnat*. Also some heavy clamps, and a welding mask.” Owen looked across at the deck of the *Gnat* with the chop washing over it where Chips and Shakes were drawing lines on the top of the sail with a grease pencil. “Uh, better get those fucking rubber waders too.” He lit a cigarette and started hauling the welding rig up, hand-over-hand. “This isn’t going to be fucking easy.” He said to himself through the cigarette hanging from his lips. Each long pull on the chain only eased the welding rig below up a matter of centimeters as the lifting capabilities of the chain were reduced by the blocks it looped through.

When he finally got the welding rig suspended over the deck, he gave it a little kick, and when it swung back he let the chain out and grabbed the rig as it touched the deck and tilted back toward the hole. This was really a two-person job, a mistake would mean a 10-meter drop into the cargo hold, and probably being maimed or killed. Transport subs were perpetually under-crewed leaving a lot of work being done by individuals that would be much safer with a few more people helping out.

Owen wheeled the welding rig away from the cargo hatch and aligned its wheels with the deck of the *Prospect* so it would not tilt off into the ocean. By the time he got back over the big open cargo hatch, Gregory had returned underneath with the gangway.

Lashed to the railings of the gangway were the various other things Owen had asked for. Owen dropped the end of the chain down to him, and Gregory clipped it to one end of the gangway. "Hold on, I'll come up and help you haul it up." He disappeared toward the stern of the boat.

With Gregory helping to pull the chain through the blocks, they hauled the gangway vertically up to the mouth of the cargo hatch, out onto the deck, and got it lashed into place connecting the higher deck of the *Prospect* to the low, wet deck of the *Gnat*.

Chips waved Owen over. "Thanks for doing that fuckin' gangway. It'll be a lot easier getting back to the *Prospect*." She grinned her rarely-seen, wide-mouthed, slightly gapped-tooth grin at Owen. "Alright, look here, this is the plan Shakes and I got worked out, and ya should be glad Shakes is doing it. It's going to be a fuckin' nightmare if it works, and like a fuckin' wet, squirtin', languish in the head if it don't." She pointed to the top of the sail. "We fuckin' lucked out though, Shakes here built the sail fat enough that we can make the welds fuckin' flat. Ya just need a piece of steel cylinder cut even, then weld it around the hatch opening, and then weld those spare male docking clamps we got onto the sides of the cylinder."

"How're you going to activate the docking clamps?" Asked Owen. "They're electro-magnetic, right?."

"Yeah," said Shakes, "we'll need to drill some fucking through-hull fittings. That sucks, but it shouldn't be too hard to make them water-tight to 30 meters, which is what I usually call the depth limit of the *Gnat*. And if they do happen to leak... well, they'll be pretty small leaks. A boat that don't leak isn't a boat, it's like, a fuckin' airplane, or something."

"Since we're going to be dragging the *Gnat* along by the mating collar," said Owen, "Seems like ya should also weld some supports on the outside of the collar, down the sail, and directly to the

structural elements of the hull. It'll be ugly as fuck, but less likely to leave the *Gnat* ripped away from the collar."

"Ugly-as-fuck is my other name." Said Shakes.

"Listen to the kid, Shakes. He's gettin' a fuckin' touch for this stuff." Said Chips.

"Hey, offer all the advice you want, but I'm the one who puts the fuckin' torch to my boat, ya?"

"Good by fuckin' me. I'll leave ya stupid fuckers too it. I got my own welding to do." Said Chips, giving them a casual salute and heading up the gangway to the *Prospect*.

"We'll need some more pieces of scrap steel to make this work, I'll get Gregory digging them up." Said Owen.

This was going to be an extremely tough job. Not as tough as welding the pressure hull back together under water like Chips was currently doing, Owen reminded himself — but nobody would do this job on the *Gnat* if they didn't have to. Owen had wheeled the welding rig across the gangway, and that had only been modestly harrowing. Lashing it to the sloshing hull of the *Gnat* had been somewhat more so. Owen set Shakes up with everything he needed, like a nurse handing a surgeon the tools for opening a consumptive rib cage.

The ocean chop wasn't horrendous, but it was enough that the *Gnat* rolled back and forth under them. Owen had locked huge iron clamps in place that held the work material to the sail. The water washing over the deck would sometimes smack up against the sail and shoot up right where Shakes would be welding.

Shakes stood astride his boat lolling in the surface of the sea in the same way one might stand on a mountain top. He took a pinch of dried leaves from the pouch in his jacket pocket and stuck them between his teeth. He lit a cigarette, and put it



to his lips. He leveled the mask on his head, and slipped the heavy welding gloves onto his hands. He picked up the torch, and standing straight up, opened his arms wide and closed his eyes. He took long slow breathes, gapping his lips next to his cigarette, and his breaths rattling a little with the spittle coming up to enzymatically dismantle the dried leaves. He cleared his mind, focused on his breathing. He felt the swell and rhythm of the ocean, the time of it marked out by the clink of the adjustable wrenches hanging from his belt. He called the gods of steady hands and perfect welds to him.

He opened his eyes, spit the remaining half of cigarette off into the ocean, leaned over, and flipped the welding mask down.

And he proceeded to lay down the foulest, globbing booger-weld Owen had ever seen. Smoking masses of material built up on top of smoking masses, curled over, and gooped around in carbon-coated black curves. Shakes gripped the welding stick fiercely, the muscles of his forearms tensed up. The tip wavered back and forth across the line the weld was supposed to follow so that it looked like he might be trying to sign the work rather than repair it.

Shakes welded, went back over his work, and welded more. It grew uglier and uglier, globs upon globs of congealed molten metal. The wash of the sea continually soaked the two men in cold water. Shakes had to constantly stop welding so Owen could move the clamps. Since the seam needed to be watertight, Owen wanted to keep it press-fit in place with the clamps at all times. Owen knew that that starting and stopping like that was bad for a welder who wanted to make a clean, strong weld. But since Shake's welds were about the worst he'd ever seen, that seemed like the least of his problems. The hot welds steamed when the water ran over them, which Owen was pretty sure would not contribute the strength of the weld.

“You... built this boat?” Owen asked Shakes, when he raised his head up for a break.

“Aye fuckin’ ya. On a mountain top.”

“And... it doesn’t leak... too much?”

“Ah well, ye know there’s always gonna be ‘nother leak. I just patch em and keep fuckin’ movin’.”

“Lot of patches?”

“Sometimes it seems like it’s more patch than original boat. But then, since the boat was built from scraps, it has always been a fuckin’ quilty kinda thing.”

By the time they finished welding the support struts down the side of the hull, the new mating collar looked like a bipedal birthday cake, frosted by a toddler using a cancerous mixture of coke and pitch.

“You think that’ll hold?” Owen asked looking at the mess doubtfully.

“Ah hell’s ya. Look at how much material we welded into that thing! See, an engineer can build a thing to an exact fuckin’ spec and — if they’re a real right good fuckin’ engineer — that thing will perform they way they expect it to, in all the situations they expect it to. The thing is, that don’t mean it will perform in situations the engineer *don’t* expect. That’s why I always *overbuild* things, far beyond any spec — so I’ll be ready for what I doesn’t expect.”

Owen wheedled his way up and down following the thread of that logic, and eventually decided it made absolute sense. “Well, nothing like holding a welding project underwater and dragging it along at a few knots to test the quality of your work.”

“Aye that’s what we’ll be fuckin’ doing fer sure when once we got the *Gnat* set up dragging under yer boat over there. Why don’t ya go tell that big Hemi guy we’re fucking ready here.”

Getting all the gear from the welding operation stowed back in the cargo hold took longer than expected. The chop was building a bit, and that made anything aboard the *Gnat* difficult to do. Once Hemi saw all the odds and ends stowed below and checked the main cargo hatch seal, he went to the forward end of the cargo hold to see how Chips was coming along on her work. She was welding yet more scraps of metal patches over the still-leaking wound in the pressure hull. Thankfully the water level was at least down enough that Chips was wading it instead of swimming in it.

Captain Percy came walking down the cargo hold and met up with Hemi standing at water’s edge in the forward end. Chips looked up when she arrived and glared at her, but went immediately back to her welding.

“We are ready to try this connecting up the *Gnat* move.” Hemi said to Percy when she stood next to him.

“Good.” Said Percy, through an exhale of her cigarillo smoke. Her eyes were bloodshot and her entire face drooping and wane from lack of sleep. She had another cup of coffee in her other hand. “Need anything else the from me when you try the fucking mating?”

“I do not think so. But it will go much easier for Shakes if we can put the *Prospect* in motion, and lower the deck under — just run sail-up. At that depth the waves will have a lot less affect on the motion of the boat.”

Chips looked up from her work again when she heard this.

“Do we have the battery life left for that?” Asked Percy

“Ten minutes at a creep speed maybe? I believe we can just manage it. I am more worried about whether we have enough fine control over the buoyancy to lower the boat just a few meters like that.”

“But if we can run at just sail-up depth, we’ll also be also be a much fucking harder to spot target as we head for the depot.”

“Ah fuck ya both, ya weeping cunts!” Chips interrupted from where she was standing in the water. “Yer determined to fuckin’ sink us! Are ya forgetting the high-pressure system is fucking depleted? I doubt there’s enough fuckin’ pressure left for a full blow if something goes wrong. Fuck — there’s probably also not enough fuckin’ power in the batteries to bring us back to the surface with the fuckin’ low-pressure system! We’ll be lucky to fuckin’ be leapin’ out the top of the sail as it lowers away under us heading for the fuckin’ bottom!”

Captain Percy just stared down into her coffee cup.

“I agree, Chips,” Said Hemi, “it is dangerous. But so is running slow with engines blaring full-up on the surface if we manage to get the *Gnat* attached. We’ll be a big fat radar *and* sonar target. We need the advantage lowering the boat down will give us.”

“Aye well, yer both fuckin’ suicidal, and murder-fucking-cidal — since yer trying to drag me down against my will. To lower the boat you gotta open the main fuckin’ ballast valves, of course. What the fuck happens if they don’t fuckin’ close again though, eh? Then we are just letting all the fucking buoyancy out of the boat with no way to put it back.”

“There is no reason to think the valves will not close.” Said Hemi.

“And you, Chips, will go double-check those fucking devices our lives depend on before we try this operation.” Said Percy, her eyes grinding away at Chips.

“The fuckin’ problem,” Said Chips, furious and exasperated, “is there’s no fucking back-up plan — no fail-safe, no redundancy. The boat works perfect like, or we all fuckin’ die. Submarinin’ is just too fuckin’ dangerous for no backup-system.”

“We’re not disputing that Chips. But sinking is only one risk we face right now.” Said Hemi, as calm as always. “Go check the ballast tank valves — make sure you are confident they will work they way they are supposed to. When you are happy with them Chips, let me know, and we will put the top deck underwater.”

Ten minutes later Chips climbed up into the control room and reported to Hemi, between much swearing, that the main ballast valves were working as expected. Hemi checked over the state of their batteries and other systems, and noted everything with a pencil on a clipboard. He got on the external PA and called Shakes to the control room.

Two minutes later Shakes’ was on the bridge at the top of the *Prospect’s* sail. He looked down at Hemi through the open hatch into the control room and called to him.

“Ya fuckin’ ready Hemi?”

“Just about. I need you to take the *Gnat* off a hundred meters or so. We are going to bring the *Prospect* down to just sail-out, and creep at two knots. We will hold it steady. Then it is all you: dive the *Gnat*, come up underneath, you should see the mating collar just about under where the sail would be on the bottom — about one-third of the way forward from the stern. Bring the *Gnat* up under, and *gently* pop your mating collar into ours, and if you boys didn’t miss on the location of the docking

clamps by too much, you should be able to lock into the hull of the *Prospect*. . . like a male angler fish.”

Shakes gave him the finger.

“When you are clamped on, bang on your hatch with one of those wrenches of yours. I will have Gregory down there waiting to hear from you. Do *not* open the hatch til Gregory bangs back, OK? Even in its current condition, the *Prospect* will do better if your welds leak than the *Gnat* will. Keep in touch over the ship-to-ship.”

Shakes pounded his acknowledgment on the side of the sail, and his head disappeared from the bridge. It was still so quiet aboard the *Prospect* with no engines and so few systems running that they could hear the *Gnat's* Diesels fire up, and inarticulate shouts from Shakes to Gregory on the deck as Shakes cast off the lines and Gregory retrieved them and pulled up the bumpers.

“Hey-fucking-ho!” Shakes voice came crackling over the ship-to-ship. “I’m fired up, buttoned up, and off fuckin’ motoring. Out.”

Hemi pulled down the ship-to-ship mic. “Got it Shakes. Remember, *gentle* is the word.”

“I’m alllllways fuckin’ gentle.”

“We are going to take the *Prospect* down to sail-out depth now. Hold tight until I give you the go.”

Hemi got on the boat PA, and flipped the switch for both internal and external speakers. “Gregory, lock down all the external hatches as you come back inside. Owen and Bastian, come up to the control room, we are going to dive the boat to sail-out depth.”

Moments later the entire crew converged on the control room. Gregory was climbing down from the sail, sealing the hatch above his head, Bastian and Owen were climbing up the ladder into the control room, and Chips arrived in the navigation and sonar compartment just under the control room with Captain Percy.

Captain Percy looked at Chips with the obvious unspoken question: why the fuck are you here?

“If we fuckin’ go down, I want to be here to say I told you fuckin’ so.” Said Chips.

“Chips, those are the ‘bon voyage’ words of every trip to hell.” Replied Percy. “If you’re gonna be up here, sit at the radar and let us know if we’re going to have a surprise audience for this operation.”

Captain Percy waited for Gregory to climb down from the control room — on his trip to the bottom hatch on the lowest deck of the boat with his instructions from Hemi — before she climbed up into the control room which was once again crammed with its full compliment of four people.

“OK, Bastian. Give us a 2 knot creep. We want just enough to keep us steady against the motion of the water.” Said Hemi.

Bastian nudged the throttle forward, and they heard the soft hum of the electric motors as they the propeller came under torque.

Percy pulled at the ship-to-ship mic. “Shakes, we are going to try this shallow dive now. If you see the sail disappear, this boat is never coming back up.”

“Fucking Right.” Shakes voice crackled. “I won’t wait around for another fuckin’ meal then.”

Percy hung the mic back up. “OK, you know what the old submariners say: always do the stupidest things on the smallest amount of sleep.” She nodded to Hemi.

“Owen, open the main ballast valves.” Hemi gave the instruction that would begin the maneuver.

Owen swiveled his chair to face the tank control panel, and turned the small wheels that opened the valves. A burst of air escaped up through the main ballast valves ahead of the sail as sea water pushed up into the ballast tanks from below and displaced the air out through the valves.

“Just a thin hair of down angle on the dive planes.” Said Hemi.

Owen was ready for this, his other hand still on the bigger wheel that controlled the dive planes. He rolled it a tiny amount around its circumference.

“As soon as you feel the angle on the boat Owen, level it back out again.” By the time Hemi had said this, the *Prospect* already had a slight angle down on the bow.

From the radar station below they could hear Chips muttering. “No fuckin’ redundant system, nothing at fucking all...”

Owen already had the dive planes leveled out again and the slight angle came off the *Prospect’s* deck. Owen and Hemi were watching the depth gauge closely as it slowly lifted up off its pin. When it was firmly pointing at one meter of depth, Hemi reached over and closed the main ballast tank valves himself. They all listened for the sound of the hissing, escaping air to stop. No one was breathing as the sound went on longer than it seemed like it should. But it wavered, slowed and ceased as the valves came to their closed position.

“Give it another minute... make sure everything is where it should be...” Said Hemi.



The boat held at a depth of one meter, the deck fully submerged, but most of the sail still sticking above the surface. Captain Percy reached up to pat Hemi's huge shoulder. In some ways it seemed like such a small thing — a basic maneuver they had done a thousand times before. But Hemi, at least, knew Chips was right: what was usually so routine was, in this case, incredibly risky. He felt a tremendous release of tension that He had not quite known had come on him when the main ballast valves closed. But everything had worked the way it was supposed to to.

“Good.” Said Percy, satisfied. “We didn’t sink her by flooding the fucking main ballast. Now let’s see if we can do it by opening a hole in the bottom onto a fucking rusted bucket of a home-made boat.”

Hemi got on the ship-to-ship. “Shakes, we are holding at sail-out depth, two-knot forward creep. I think you can begin your dive now.”

“Fuckin’ righto.” Came Shakes crackling reply.

Captain Percy raised the periscope and swiveled around until she could see the tiny, nearly-invisible gray sail of the *Gnat* bobbing in the gray water off their port side. It picked up speed, and a little wake formed behind it. Then it shrank down and disappeared under the surface like a sun winking out at the horizon. She lowered the periscope back down.

“I’m gonna get on sonar.” She said.

Hemi nodded.

Percy slipped down the ladder and tapped Chips on the shoulder. “Chips, I think it would be good if you joined Gregory in the bottom of the boat. Get a welding rig. . . just in case.”

“If you’re fuckin’ staying in this room, I’m happy to go somewhere fuckin’ else.” Chips left the sonar compartment moving forward toward the cargo hold to find her welding rig.

Captain Percy sat in the seat Chips vacated and glanced at the empty radar scope to make sure it remained empty. She put the sonar headphones on, and turned the directional control until she could hear the quiet electric motor of the *Gnat*. Shakes was lining up directly behind the *Prospect*, slightly deeper and with more speed, coming up underneath them. She could follow his progress with a fair amount of precision through the sonar and it’s range finder. But he disappeared for a minute when he moved into their wake where the sonar couldn’t hear anything. In another minute she expected to hear the *Gnat* directly underneath the *Prospect*.

On board the *Gnat* Shakes leaned his head down at a painful angle, looking up and trying to see exactly where he was in relation to the hulking gray wall slowly stirring the waters above him.

“Fuuuuuck. They should have mentioned that this would be stupidly fucking dangerous.” Said Shakes to himself. “Like a backyard bully in a pool, holding some scrawny kid’s head underwater... though I suppose some people must be into that sort of thing.” He glanced at his porno stacks, almost involuntarily.

“Shakes,” Hemi’s voice came over the ship-to-ship with all the bass notes stripped out of it. “Do not forget that since we’re moving, you are going to have to give your boat a little more motor when you get within a meter of the *Prospect* or so. We are going slow enough that it should not be too dramatic, but you also do not want to get sucked back into the *Prospect*’s propellers.”

“Aye, fuck you all.” He didn’t bother to respond on the radio, his hands too busy with the controls of the *Gnat*. “This little fuckin’

boat wasn't built for this shit. Handles like a fucking beach ball underwater."

He was pushing up from behind, moving slightly faster than the *Prospect*. He could just see the little black circle of the mating collar he was shooting for through his forward viewport. He realized he would lose the ability to see it when he was close to it though.

He squeezed the ballast blow handle in a very short burst, and the *Gnat* popped up an entire meter closer to the underside of the *Prospect*. "Ugh, too fuckin' much, too fast. *Gently* — was what fuckin' Hemi said — gently..." He got within a meter of the hull of the *Prospect* and lost sight of the mating collar just as he could feel the push of water from the moving hull of the big boat driving him backwards. It was also ruining his instinctive awareness of where he was, until the mating collar came into the narrow viewport in front of him.

He gave the *Gnat* a little more power to the electric motor, and it moved forward through the streaming water. He held very close to the *Prospect*. The *Gnat* crept slowly forward, the mating collar disappeared over his head again. He angled the small dive planes up a bit, and with a loud clang the mating collars of the two ships collided.

Shakes squeezed the ballast blow handle again, for as short a burst as he could possibly get. This gave the *Gnat* enough buoyancy to hold it firmly up against the bottom of the *Prospect*.

He visualized what was happening in his head: the two mating collars were pressed against each other, held together but not aligned. If Shakes could correctly guess which direction to move the *Gnat*, the mating collar would pop into place. If he guessed wrong, the *Gnat* would slip off the *Prospect's* mating collar and crunch up against the bottom of the bigger boat. If that happened — and he was lucky enough that his welds didn't get ripped apart

and sink him — he would have to being the whole maneuver over again.

He slowly eased the controls, a little rudder port, a little rudder starboard, a little forward power, a little off the throttle. He was moving the mating collar around in a circle, trying to get it to slip into the *Prospect's* collar. There was the sound of steel ring grinding on steel ring, until with another big clang, the whole boat popped upwards. All he could see out of his viewport was the long undistinguished gray hull of the *Prospect* stretched out in front of him. Either he was in the mating collar, or had slipped off the front of it.

But it felt right. Shakes gave a tiny further squeeze on the main ballast blow so that the *Gnat* would have good strong upward buoyancy against the bottom of the *Prospect*. He was pretty sure the two rings were mated, but the way to know for sure was the docking clamps. He flipped the exposed switch he and Owen had installed, and with a small blue electric spark it connected the circuit that ran up the heavy wires through the holes they had drilled and sealed into the sail to the mating clamps. He heard a third loud clang, and a green bulb next to the switch lit. If he had missed the mating collar, the clamps wouldn't have closed, so he was on. To be sure he disengaged the electric motor to let the prop spin freely. When he did so, he could feel the bow of the *Gnat* bend downward a small amount in a way that slightly sickened him, but the speed indicator didn't change. The *Gnat* was being dragged by the *Prospect*.

He picked up the ship-to-ship. "Hemi, I think I'm fuckin' on."

"Yes. We can feel the drag up here. We are going to trim our tanks to adjust for the *Gnat* hanging on, and then shut down our engines to save our batteries. I think you can give a bang on your hatch now, and see if Chips can open up the junction between us."

In the deepest part of the *Prospect*, in the narrow hall between the forward and rear battery rooms with heavy water-tight bulkhead doors on either side, Gregory and Chips sat on the deck on either side of a well where they had pulled up the grating between them. Their feet dangled down into the well and Gregory tapped his toes lightly on the still-closed hatch while they waited for the signal from Shakes.

Gregory seemed a little nervous. “Ehhh, Chips, should we close and seal this watertight bulkhead door behind me here? Seems like if Shakes’ welds fail completely when we open this hatch — and worse case, say, the *Gnat* tears the fuck away or something — we’ll be flooding the whole fucking *Prospect* from this hole we’re opening in the bottom of the boat, eh?”

“I got my fucking bulkhead hatch closed and fuckin’ sealed on this side. If it starts fuckin’ flooding fast, we are going out your door and closing it the fuck behind us. There’s no fuckin’ way we’re sealing our fuckin’ selves in here and risking being fuckin’ heroes to save this fucking ship.”

“Alright, I’m following you then Chips.”

“Keep that fucking portable bilge pump ready though: if there’s a small leak then some modest fuckin’ heroics will be required of us.”

At this point they could hear the *Gnat* grinding against the mating collar of the *Prospect*, screeching metal-on-metal moving back and forth trying to find the docked position. And then there was the loud crunch of the two boats coming together.

“Sound’s like he’s fuckin’ on.” Said Chips. “We wait til we get the OK from fuckin’ Hemi though.”

Gregory nodded.

They could feel the shuddering vibrations of the *Gnat's* motor through the hull of the *Prospect* for a few minutes, and then that died away as Shakes shut it down. A few moments later the *Prospect's* motors shut down too. They heard Shakes bang out a ringing shave-and-a-haircut on the top hatch of the *Gnat* — below the still-closed bottom hatch of the *Prospect* — with one of his wrenches, and then it was quite silent until Hemi came crackling over the ship PA. “OK Chips, open it up.”

Chips nodded to Gregory, and he reached down into the hatch well, and cranked open the sealing wheel. He pulled up the hatch and water steadily flooded up around their feet. Gregory jumped up, as if bitten. But Chips lay out flat on the grating, and reached her hand down into the pool of water. She felt along the welds until she could feel where the water was pushing in.

“The welds are *mostly*, but not totally, fucking failing. You can see it's fuckin' leaking.” Said Chips. “Get the pump hooked up Gregory, and let's get as much of this fucking water out of here as fast as fucking possible. Then I'll see if I can weld it decent fuckin' like.”

While Gregory got the hoses for the bilge pump connected, Chips got on the PA with Hemi. “We gotta fucking fix these shitty fuckin' welds or it'll flood the fucking *Gnat* when we open its fuckin' hatch, Hemi. Tell Shakes to sit fuckin' tight, and not to do a fuckin' thing.” Hemi acknowledged, and she started putting her welding gear on.

It was cold, frustrating, cramped work. But such had been all of Chips work on this trip — maybe her whole life, she reflected. She let out a never-slowing stream of curses, attempting to damn down to a permanent watery hell not just all materials and work processes, but all the societal systems and turns of fate that had conspired against her to bring her to this particular misery.

Shakes' welds were horrifically ugly, like stitch work on a revived 19th Century cadaver. Stopping the leaks required hammering metal sheet patches into place, and welding them until they no longer leaked. Chips felt nothing but lucky when the leaking started to slow without her having made the situation worse by cutting through the mating ring or the hull of the *Gnat*.

Eventually Chips had welded enough patching material in place that the leak slowed to a seep, and then finally stopped altogether. The pump sucked the last of the water out the well, leaving them looking at the domed top hatch of the *Gnat* down in the recess. The whole mess was holding, though Chips hoped she would never have to test it at any depth deeper than they already were.

Chips banged on the hatch with the end of the welding stick. "Eh Shakes ya fucker. You can open this fuckin' thing up now." She yelled into the empty metal well, her voice bouncing the curses back at her. There was the sound of the rusty sealing gears squeaking open and the hatch lifted up.

Shakes was grinning up at them as residual water rained down on him. "Who's a fuckin' anglerfish now, eh motherfuckers?"

"Don't touch them fucking welds when ya come through, the fuckers are still hellish fuckin' hot."

Shakes put his arms up through the hatch hole, found a place to grab that wasn't warm from welding, lifted his foot to some protruding bit of steel in the sail of the *Gnat*, and stepped up into the *Prospect*. Gregory pushed the ship intercom button and told Hemi they had Shakes aboard.

"Right. *Now* the hard part." Said Hemi over the intercom. Then got on the ship PA, and asked everyone to meet him down at the hatch to the *Gnat*.

“So basically we are going to suck the life out of the *Gnat* to keep the *Prospect* going.” Hemi told them when they were all assembled and standing crammed in on both sides of the open hatch to the *Gnat* below.

Shakes squirmed.

Hemi continued. “I am going to set up some heavy jumpers between the *Gnat’s* battery banks and the battery rooms of the *Prospect*, where we are standing right now. That should be pretty straightforward, and give us access to the *Gnat’s* remaining battery power. Though not much, in terms of the *Prospect’s* power consumption.

“Chips, I need you to do the harder part and figure out how to get the fuel that is left in the *Gnat* up into the *Prospect’s* engines. I’m not sure if it would be better to try to pump it into the *Prospect’s* fuel tanks, or run it straight from the *Gnat’s* fuel tanks to the *Prospect’s* diesels.”

“Be fuckin’ easier to just run a long hose up to the fuckin’ *Prospect’s* fuckin’ fuel pumps. Won’t have to fuck around with the trim as much.” Put in Chips.

“If you think that will work, it sounds OK to me.” Said Hemi. “Sylvia, you want to weigh in with anything?”

“This fucking project is all you, Hem’.” Said Captain Percy.

“From this moment,” Hemi went on, “we need to shut down absolutely everything we are not using. We really should have done this already. We will need every bit of power we can suck out of the *Gnat* to get across the Authority line into vaguely friendlier waters. I am even shutting down all the lighting, so you will all need to carry a light around with you. The good news is, if we get the diesels going, you can all take some rotations in the



rack, since there will be no power to do anything else but sleep anyway.

“Chips, you take Owen and Gregory to work on fuel lines. Bastian, we will go dig up those jumpers. Try to stay out of each other’s way everyone.” Hemi Finished up.

Grabbing Bastian’s skinny arm, Hemi led him away to stowage where he hoped to find the long heavy jumper cables he remembered seeing there sometime in the past year.

Chips took Owen and Gregory off to the engine rooms to get the long fuel hoses they normally used for refueling down off their racks on the wall and rigged up through the boat down to the *Gnat*.

Captain Percy looked down at the mess of patches and foul blackened welds that lined the passageway down through the hole in the bottom of her boat, and for a moment could not believe they were still afloat. “Shakes,” she said to the only person left with her, “let me buy you a cup of coffee.”

In a matter of a couple of hours they had a series of umbilicals running through the *Prospect* and down into the *Gnat*. The big submarine was parasitically sucking the small supply of nutrients the little sub had in reserve: the power wired into the *Prospect*’s battery hold so that the *Gnat*’s batteries were now no more than an extra battery bank for the *Prospect* — conveniently with a nearly-full charge; and the thick fuel lines running up to the engine room, where the fuel pumps were engaged and tuned to gently suck the fuel up from the *Gnat*’s fuel ballast tanks.

To conserve fuel they started only one of the *Prospect*’s multiply redundant diesel engines. And likewise started only one of the electric motors, driving only one of the *Prospect*’s two propellers. This continually pushed them to one side and they had to compensate with some angle on the rudder, but that was a minor

annoyance. Normally they would also be charging the battery banks up while running on diesel, but they needed to put the all the fuel they had into forward motion.

It was a filthy inelegant mess, but they were making headway.

Captain Percy insisted everyone who was not doing something actively should be in the rack. Chips, Shakes, and Hemi didn't argue when they were assigned first shift in bed. She had Bastian and Gregory, who were more experienced with the controls of the boat, at the helm seats. They shut down the sonar figuring with the diesel running they would not be able to hear the approach of any kind of threat until it was too close to do anything about it anyway. Particularly considering they could not dive or perform any other evasive maneuver.

But as a safety measure, Percy put Owen on radar. It would be just stupid to run into a fleet of Authority surface enforcement ships. So Owen sat in the dark with his eye on the glowing radar screen, his mind turned to mush by watching it circle around endlessly, reflecting back nothing.

Percy made everyone in the control room drink two cups of coffee, which she fixed for them in the dark galley by the light of a penlight.

After a few hours of running like this — the ship humming and vibrating under them, the superstructure groaning with the stress of dragging along the *Gnat*, and the continual course correction necessitated by running on a single propeller — Percy decided she needed to see how far they had managed to travel. At the navigation table, she measured with the calipers and laid down a string of hashes from the X that marked the spot where they had mated the *Gnat*.

They were making terrifyingly slow process. With the calipers, Percy spun out the remaining distance to the line Shakes had

drawn marking where they would move into the territory of a different — hopefully safer — Authority. She estimated they still had something like eight hours to go. And that was assuming Shakes' line was at all accurate. In addition to just being a rough mark Shakes had laid down from memory, for all she knew the Authorities might have battled or treatied the line into a totally different part of the ocean. They would not be truly safe until they were docked at the depot. And even then, who knew what the depot folks would be like. Somewhat friendlier to commerce was about all one could hope for with any confidence.

After six hours listening to the uninterrupted engine-drone in the darkness, Percy made another pot of coffee, and brought it down to the crew quarters along with a few tin cups tied together with a small bit of wire. She used her flashlight to hunt her relief crew out of their respective racks, and forced coffee into them. Chips strung curses at her, but as red as Chips' eyes were they weren't even close to the bloodshot droop that Percy was dragging around in her own eyeballs by now.

"Chips, go up and relieve Owen at radar. Hemi you're with me at the controls." Shakes had pulled the blackout curtain aside and was peering blearily down at them and their coffee from a top rack. "Shakes, you can go back to sleep."

"*Captain* Shakes. And no fucking way. My boat's on the fucking line here too. I can help y'all drive this fucking conglomeration of scrap."

"I won't fucking insist otherwise. Have a cup of coffee, we'll put you on the throttle/rudder."

With Hemi and Shakes at the controls, and Gregory, Owen, and Bastian stumbling off wearily following the arcs of their flashlights to their racks, Percy lit up a cigarillo and sat down next to Chips at the radar station. Neither of them said anything, they were both too tired for conversation or fighting. It looked like it was

taking all of Chips' remaining aggressive energy to keep her eyes following the sweeping line of the radar around the scope.

Captain Percy jumped to her feet. Sitting was not going to work. She realized she was falling asleep despite the discomforts of the chair designed to keep a person upright and alert. She flicked her flashlight on and leaned over the navigation table. She again measured the distance to Shakes' imaginary line in the ocean. Their progress was merely hobbling along.

Chips broke the numbing silence. "Fuckin' got somethin'."

Percy stepped back to the radar/sonar station and lowered her head over the scope. A small and distant blip was appearing and fading away with each pass of the *Prospect's* radar. "Fuck. Well, it was probably too fucking much to hope the ocean would remain empty for us. OK, shut down the radar, switch to sonar. They are pretty far fuckin' off. Hopefully they will just drive on by."

She watched to make sure Chips shut down the radar completely. It was possible for a surface ship to see their radar when it was running and not only discover they were there, but calculate their exact location. On the other hand passive sonar was just microphones in the water — it did not send any signal out by which they could be tracked. Of course their noisy diesel engines were sending out plenty of sound at the moment, if anyone got close enough to listen for it.

"Won't be able to hear fuckin' much on sonar with the fuckin' diesel running." Complained Chips.

"That's why you're going to have to really fucking focus, try to pick out any change in mechanical sound above the diesel. If you think you hear something, we'll shut it down and have a quiet listen. Otherwise we'll stop every half hour or so and see if we hear that contact on the sonar — or anyone else — coming

towards us. Can you handle that Chips without fucking blowing up?"

Chips groaned. "Ya fuckin' smart fuckin' pisswad."

Percy pointed her flashlight towards the galley. "Have another fucking cup of coffee Chips."

Captain Percy called to Hemi through the hatch up to the control room. When his face appeared squinting into the beam of her light, she told him they had a distant contact so they shut down the radar and switched to sonar. Because of that contact, he should be ready to shut down the diesel on short notice. He nodded and turned back to the dive plane and tank controls.

While Chips was in the galley setting up some coffee, Percy sat down at the sonar station and put the headset over her ears. The headset was full of the heavy droning hum of the diesel engine, moderated by some swish of water running along the hull and the grinding wash where the water split against the sail of the *Prospect* moving through the surface.

Captain Percy flipped some switches to engage filters, and the texture of the sound in her ears changed. She blocked out some of the lower frequencies of the engine, and tried to imagine if she could hear the higher pitch of a ship screw spinning in the water. But the sound was relentlessly undifferentiated and unchanging.

Chips came back holding one of the tin coffee cups. She put on the second sonar headset and remained standing a few steps from where Percy was sitting.

After half an hour of this silent watch, Percy called up to Hemi to shut down the diesel so they could have a better listen, and a minute later a blessed silence came into the headset. A feeling of genuine relief flowed through her as the silence filled her ears.

Sometimes she wondered if the eternal hum of machines that accompanied life aboard a submarine subtly and slowly chewed away at her soul. On top of the silence, there was no apparent sound of any other ships within sonar range. Percy flipped through a few filters, and the quality of the silence changed, from a deadening whoosh to a soft hiss.

And then she heard a pulse. A distant, faint heartbeat in the ocean, accompanied by the sloshing flow of circulation. She touched Chips arm, pointed to the softly fluttering signal-strength gauge.

“Aye.” Confirmed Chips. “That’s the right direction for our fuckin’ radar contact to approach us. They just fuckin’ moved into fucking sonar range.”

“Fuck. We’re gonna have to do something. Stay on it Chips.”

“Fuckin’ aye.”

Percy scaled the ladder up to the control room, and raised the periscope, twisting it around as it rose to aim it at the heading of the contact — somewhere on their rear starboard quarter. She did not expect to see anything, and there was nothing to see — the distance was still too far. But a visual check was the practical and right thing to do first. She lowered the periscope.

“Hemi...” Percy hesitated, “I think we gotta submerge to periscope depth — get the sail underwater — and shut down the diesels. Run on the *Gnat’s* remaining batteries. How long can we fucking last like that?”

“Well, putting aside the risk of again opening the main ballast valves to lower us even further into the water, the *Gnat* has maybe an hour of battery we could use at this super-slow creep rate we are moving at. And I should also point out that once the *Gnat’s* batteries are fully depleted, we will have no more options

for underwater maneuvering if we do not lose this contact. Or if we come across another.”

“I know. I’m going on instinct here, and fuck me if I’m wrong. Especially considering I haven’t slept in days and my head is fucking killing me from eight cups of coffee a day. But I got a sense we don’t want to see that fucker coming towards us up there.”

“Or: we do not want them to see us, you mean.”

“Fucking Right.”

Hemi nodded. “Alright. I’ll open the main ballast valves.” He reached up and pushed the dive alarm.

“Ah fuck ya all,” Chips yelled up to them, pulling one earpiece of the headset off her ear when she heard the dive alarm, “yer fucking taking us down to periscope depth, ain’t ya? We can’t run the diesels at periscope, there’s no way to feed ‘em oxygen. So how the fuck are ya planning to get back on the surface if the batteries fucking die, eh? We’ll have no way to steer the boat up to the surface, and we got no fuckin’ way to pump the water out! We’ll just be fucking sitting there with one fucking eyeball view above the surface, effectively fucking drowned.”

“Thank you for keeping us apprised of the risks Chips.” Percy yelled back. “I’m still fucking in charge though. Hemi, take us down to periscope.”

Hemi flipped open the main ballast valve switches and there was again a rush of air as more of it was released from the top of the ballast tanks, and water eased in from the vents open to the sea on the bottom. Hemi watched the glowing depth gauge until the needle got into the range marked ‘periscope,’ and then flipped the ballast valve switches closed again. There was a clink that echoed through the hull and the rush of air and water stopped.

“See Chips, the fucking valves are still working as they are supposed to, which we knew because of your inspection earlier. We aren’t fucking sunk yet.” Captain Percy gave the aside with enough volume that Chips would be able to hear her in the compartment below.

“Depends on what ya fuckin’ mean by ‘sunk’.” Said Chips quietly to the sonar station.

“We can’t afford to take an evasive route to the depot Hemi, we gotta go straight at ’em. So we’ll just have to hope our contact up there wasn’t able to track us long enough to figure out our course. Put us back on the electric motors — so they won’t be able to hear us unless they get right on top of us.” Said Percy. “Um... also keep what Chips said in mind — make sure we have a little something left in the batteries to get us back to the surface.”

“These battery gauges are hardly very precise Percy. I would not push it beyond ten minutes remaining on the battery.” Said Hemi.

“Make sure I know when we’re about 20 minutes from empty batteries.” Said Percy. She raised the periscope and aimed it again in the direction of the contact they had heard on sonar.

Sometimes new crew members thought it must be something of a mental relief to be able to look through the periscope after days or weeks inside a submarine — the opportunity to have even a brief glimpse of the surface world, and to look off at range instead of objects that are never much more than a meter from your face. Captain Percy remembered believing this herself when she first started working on submarines as a teenager. And honestly, she would give her crew shifts on the periscope if she believed it would actually help keep them mentally steady. But the control room was already cramped, and more than that, she knew from the years of experience she now had sighting through periscopes



that it did not do much for the clarity of one's mind. Sometimes it even made the claustrophobia of the sub worse. At periscope depth, the viewport end of the device could never be more than a meter or two above the surface. There was rarely anything to see except a world entirely made up of an undifferentiated horizon of lighter gray against dark gray. It was almost always like that, except during the brief periods when they were within sight of land, and this moment was no exception.

On the surface, it was night. A waning moon above the cloud layer gave enough light to see the ocean swells. The swells were moderately significant, which was good — the *Prospect* would be harder to hear on sonar and almost impossible to spot visually. Through the scope Percy watched the black swells rise and fall around her, pushing up and easing down the lighter gray field of the sky with a steady cadence. It was a little dizzying and almost nauseating. Every so often the swell would pass over the top of the periscope and she would have a few seconds of blackness as a relief.

“Chips!” Percy gave her voice a little more emphasis because she didn’t remove her face from the periscope frame. “Make sure you stay on that fucking sonar contact. Track the direction and range. Let me know if they get within something like visual range.”

“Aye, I’m-a fuckin’ trackin’ their fucking course already. Fuckin’ surprise! They’re fucking coming towards us. Still out ten fuckin’ miles or so.”

“Fuck.” Whispered Percy into the greasy steel column of the periscope in front of her face. She swung the scope slowly back and forth across the bearing of the contact.

Minutes passed in silence, except for the faint hum of the electric motor pushing them forward slowly through the water, and Chips occasionally calling out ranges. The contact was quickly marching towards them.

“Fuckers are moving fast and loud.” Called up Chips. “Like they ain’t afraid of no fuckin’ shit.”

“That is how armed ships behave.” Said Hemi from the control seat. “Probably caught a whiff of us at a distance, and they are charging fast into a range where they can quiet down and take a listen; try to acquire the sound of our electric motor on sonar.”

Deep within Captain Percy she pushed down a primitive instinct urging her to run. A fresh young sub driver might crank as hard as she could on the throttle to get away from a threat. But evolution had moved submarines toward a different escape tactic: slink away silently. They were in a very, very slow-speed race: get out of range of the pursuer’s sonar, as slowly and quietly as possible.

After a few more minutes of staring at an empty black sea, seeing nothing and at the same time knowing they were out there, Percy could no longer stand just relying on Chips’ range estimates. She lowered the periscope and slipped down the ladder and stepped over to the navigation table. Chips immediately understood what she was doing, and without saying anything handed Percy a piece of scrap paper on which she had written a list of ranges and bearings for the contact in pencil.

Captain Percy leaned over the navigation table, holding her flashlight pointed at their location on the chart with one hand. At the same time she read the markings on Chips’ paper and used her other hand to lay down the contact’s course and times on the chart with a grease pencil. She then marked out their own progress since they picked up the contact on sonar, but it was so short it almost didn’t merit marking on the chart.

“Fuck they’re moving fast.” Said Percy to herself. “We might be able to fucking see them already.”

“Fuckin’ possible, ya.” Agreed Chips.

Percy scaled the ladder up to the control room quickly, and raised the periscope, spinning it to look out over their rear quarter as it rose. She scanned for just a moment, and then she saw a long, low dark shadow running across the black surface of the water. It kicked up whitecaps where it plowed through the swells, and left a string of white wake behind it. A large black fin rose from the body of the black shadow and from that fin a soft red glow followed by a long black stream of soot marking its passage through the air in parallel to the wake it left marking its passage through the water — a sub running on diesel. Even as Percy watched, the red glow faded, and the white wake died away. They were shutting down their diesels so they could hear better.

The pursuing submarine was two or three miles off, and running crosswise across the path the *Prospect* had traveled along. So from where Percy was she could see the whole length of the boat. And mounted to its bow was the same medieval ramming contraption she had seen before. The same that had ripped a wound in her boat.

“It’s that same sub that rammed us! Power down the motor Hemi. We’re going silent, and hopefully they’ll miss us.”

Hemi flipped some switches and the hum of the electric motors died away. Captain Percy watched the sub with the ram through the periscope. They had engaged their own electric motors and were moving forward again. The bow suddenly sank under the black swells of the ocean, and the rest of the deck followed a few moments later. Streams of misted water were shooting up from its deck as Percy watched the sail sinking into the black line where the surface met the sky.

“They’re diving.” Percy told Hemi. “Chips! They went down. With our motors off, you should still be able to follow them on sonar. Track ’em, and let me know what the fuck they’re doing.”

“Aye fuck.” Chips called back up from sonar.

Percy let the periscope sink down to its recess.

“Should we get moving?” Hemi asked.

“No. Let’s see if we can figure out what they’re doing first. We’ll hide silently and cower for the moment.” Percy lit a cigarillo and pulled at it between her lips. “We’ll wait.”

They waited. It took maybe twenty minutes for Chips to give a report. She called Percy down to the navigation table.

“Fuckin’ look here,” said Chips “I tracked the fuckers down from where we first fuckin’ heard ‘em. They shot right to the last location we were running the fuckin’ diesel. . . a few fucking miles behind us now. But, after they submerged, they didn’t fuckin’ turn to follow us, they turned the other fucking way, and then kept turning.” Chips marked out their path in a circle away from them on the chart.

“Search pattern eh?” Said Percy.

“Fuck ya, if I ever seen one. They’re lookin’ for us, but don’t know where to fuckin’ look, is my fucking thinking.”

“Good. This is our chance. We gotta get out of range before they complete their search circle and start a new circle in our direction.” Percy called up to Hemi. “Get us moving again Hem’. Back to a creep, same heading — toward the depot.”

The hum of the electric motors came back up, and the *Prospect* steadily moved on. Percy sat with Chips at the sonar station and listened to the sound of the pursuing sub’s screws off in the distance. The signal grew very weak as the submarine got off to the far end of their search circle, but grew stronger as they returned towards their starting point. Percy continually marked

their track on the navigation chart according to their range finding calculations.

“We’re not out of this yet.” Percy said to Chips. “They’re moving fast. Makes it easy to fucking track ‘em, but their next search circle will almost certainly be the other side of a figure-eight, directly the opposite direction of their first — and directly towards us.” Chips nodded. “We gotta be out of range of their search circle before they go past.”

“They could fuckin’ ping us with active sonar and fuckin’ find us that way.” Pointed out Chips.

“And they might yet. But they might be not want to risk us being an armed enemy ship. They’re trying to get a soft sense of their target first, if they can.”

“We’re fuckin’ screwed if they fucking ping us then.”

“Hopefully they won’t. Give me a new batch of ranges to them.” Chips read out the ranges, and Percy marked them down. The sub with the ram had completed their circle, passed through the point they had started at, and had turned in the opposite direction now. “They’re coming towards us.” Said Percy.

Captain Percy did some quick math. She knew the pursuing submarine’s speed, and with a few more ranges from Chips, she knew the arc of their second search circle. The *Prospect* was cutting almost directly across that circle, but so slowly compared to the speed of the other sub that there was no way the *Prospect* was going to pass out of the pursuing sub’s search circle in time. At their current rate, both subs might arrive at the far point of the circle at the same time. Percy stood back from the navigation table, holding her flashlight on the chart with one hand and sucking at her cigarillo with the other. The coal of tobacco glowed in the dark with each puff. She leaned over and put a small x at the *Prospect*’s current location — almost

exactly in the middle of what would eventually be the other sub's completed search circle.

"Hemi," she called up to the control room, "shut her down again. Let's make a hole in the water."

The electric motors faded off leaving the *Prospect* completely silent. Hemi came down from the control room and ran his light over the chart, and immediately understood. "We were not going to make it outside their search area in time, so instead we will hide in the middle of it?"

"Could be a stupid move." Percy replied. "Nothing preventing them from taking on a zigzag course all of a sudden."

"We're essentially counting on their sheer sense of symmetry."

"You put it that way and it gives me a wisp of hope. Symmetry can be a powerful thing sometimes."

Chips, for once, was not listening to their conversation and instead had both headset pieces over her ears, concentrating on the contact. Every minute or so she scratched down range and bearing data on the greasy-fingerprint stained pad in front of her, while her callused free hand slowly slipped the sonar directional wheel along to follow the contact.

Percy tapped her on the shoulder, and Chips pulled back one of the earpieces. "I'm gonna have Hemi take over sonar tracking. We need our best ears for this. Go make sure everyone in the boat knows we need to stay absolutely silent. I don't want anyone deciding now is the time to take a huge shit and start flushing the head repeatedly trying to wash it down."

"Fuck and good riddance. I fucking hate fucking sonar anyway. Melts yer fucking mind into a fucking lump of inanimate fucking rock." She set the headset down and picked up her nearly-empty

tin cup of cold coffee and her flashlight and headed forward toward the crew quarters.

Hemi sat down, and slid the sonar headset open as far as it would go before the earpieces went over the ears on his huge head. He handed the paper with Chips' bearings so far listed on it to Percy. She started plotting them down on the chart, the other submarine's search circle making its way steadily around in front of their location.

"Give me bearing and range every minute or so, Hem?" Percy stretched the second sonar headset wire over to the navigation table, and put an earpiece over one ear so she could hear what Hemi was hearing. She left the other ear open so she could hear Hemi's direction and range readings.

The boat now was totally silent in a way that only submarines could be. Surface ships were constantly swamped with sound — water moving, the never-ceasing racket of the wind passing over the boat, and of course the loud rumble of the engines at an unvarying pitch that was rarely ever stopped at sea. A submarine was held suspended in a medium that ironically both transmitted sound better than air, but also isolated human ears evolved for sound that moved through air. It was silent enough that Percy could hear Hemi controlling his steady breathing to keep it from impinging on the sounds of his contact.

With the boat shut down and nothing to do, Shakes sat on the deck of the control room with his legs dangling down through the hatch, smoking a cigarette. Percy could hear his long draws on the cigarette, and the paper crackling as it was burned away by the coal lighting Shakes' face in the dark.

Hemi had shut off all the sonar filters they normally had enabled to filter out any contact signal from the *Prospect's* own noise. In the earpiece, Percy could hear an unusually rich cross-spectrum white noise that was the background sound of the deep ocean.

Smack in the middle was the whirring and crackling of the contact's propellers stirring through the water. Hemi was extremely good at keeping the sonar mics tracking the source, so the sound rarely wavered in intensity. The signal was so clear she could almost see the propellers moving, her mind playing a strange game of converting sound input into a visual stimulation.

With syncopated regularity, Hemi broke the silence to give her the range and direction. Every time he did, Percy added a small dash to the chart. The sub with the ram had moved directly in front of them, only a few nautical miles ahead. If the *Prospect* had still be running her motor, the other sub would definitely have heard them. And if that sub out there was willing to risk an active ping at this range, they would discover the *Prospect's* location instantly. Percy had her boat hiding in plain sight, in submarine terms. The only tactic the *Prospect* had available at the moment was grinding, tense patience.

Percy matched her breathing to Hemi's. She focused on the sound of the searching submarine's propellers in her ear piece. She raised up her own calm, and pushed down all the fear she had. She slowly grew the dashed line on the chart as it lassoed them in, placing each dash with deliberate precision. Each time she put the point down the pencil created a long thin shadow across the chart in the light of her flashlight. The little x marking their location on the chart made it look like she had rendered the eyeball of a cartoon dead man. When the sub with the ram had passed in front of them, and was moving on the final part of the arc to complete their search circle, she decided it was time for them to sneak away.

She put her hand on Hemi's shoulder and he looked over at her. "Get us moving."

"Same heading — towards the depot?" Hemi asked.

"It's our only option. Keep it slow and quiet though."



Hemi stood, pulling off the sonar headset. He tapped Shakes on the foot, and Shakes' dangling feet withdrew up into control room. Hemi climbed up and a few moments later, the hum of the *Prospect's* electric motors returned, accompanied by an extremely mild sensation of acceleration.

Captain Percy stayed at the sonar station. She tracked the progress of the sub with the ram which had begun a third clover-leaf searching circle away from the *Prospect*. That sub was still moving relatively fast, and in 20 minutes they were far enough away that she was not able to continue tracking them over sonar. Their own track on the chart had pushed them out beyond the range of the other sub's circle pattern. It was always possible it would swing back around and intercept them, but Percy's breathing had returned to normal. Her guts told her they had sneaked out from under that one, though they still had to limp a bit of a distance further to get across Shakes' supposed Authority control line.

It was not long before Hemi called down to her again. "Sylvia, we do not have much battery left. Roughly, maybe 20 minutes."

"Fuck." Said Percy, standing at the navigation table. By any sane margin 20 minutes of battery was already too little for safe underwater operation. She used the calipers to measure their remaining distance to the Authority Control line that Shakes had left on her chart. "We're still at least 10 minutes from getting under that Authority Control line."

"Eh," Shakes called down, "I wouldn't put too much stock in that line. Could be plus or minus by, like, eh, 50 fuckin' miles ya know."

Percy climbed up to the control room. "Wherever the actual line is, we can't fucking risk staying submerged anymore. Give us some upward dive plane Hemi, put our sail back over the surface."

We'll have a good fucking listen and then start the diesels back up."

Hemi rotated the dive plane wheel and indicated to Shakes he should give them just a little bit more throttle. The bow of the *Prospect* rose, and the depth gauge worked its way down toward its zero pin. Percy had Hemi go listen on the sonar rig, and when he reported no contacts, she shut down the electric motors, and pressed the starter for the diesel. With the extra power of the diesel running, she had them run the air compressors and pump air back into the main ballast tanks and trim tanks until the boat had enough buoyancy to stay at the surface even without the motors pushing them forward and the dive planes driving them upwards. With the sail back above water, she had Hemi go down to the crew quarters and wake Owen who she wanted up in the lookout ring above the sail.

"With some luck boys, we can be at the depot in a few more hours, and maybe still with a few whiffs of fuel left to pump from the *Gnat*. Shakes, we're gonna owe you fucking big for this."

"Normally I'd say I'm just happy to help, but fuck that," said Shakes, "y'all sucked the life out of my little boat. A little financial help when we get t' the depot would be genuinely fucking appreciated."

"It's going to be something of a layout for us to get the *Prospect* repaired, refueled, and fitted up for another cargo run. We'll do what we can for the *Gnat*, but don't expect a major reward or anything. It ain't like you rescued some fuckin' Authority oligarch yacht out there."

"Ya, fuck, I'll keep that in mind next time I'm fuckin' stupid enough to stop and to help folks in need."

When they crept under the place where the Authority Control line vaguely might be, Percy opened the hatch above the control

room and climbed up to the bridge of the sail. Up in the light breeze she scanned around the horizon with a pair of binoculars. She saw some aircraft off in the distance, but they were not coming towards the *Prospect*. Soon, Percy felt like they must surely be in the new Authority's waters. But there was really no way to tell.

They cruised easily with the sail up and the diesel running for the next few hours. Hemi repeatedly made the trek down through the *Prospect* and into the *Gnat* to check the remaining fuel. He did not trust the *Gnat's* fuel gauges. So each time he went down there he opened up the fuel tank and put in a dip stick and held it up to his flashlight by an oily rag to note the fuel level remaining.

On one of these trips through the boat he found Chips asleep in her rack and woke her up. "Chips, I need you to tune those engines to within a inch of their life for efficient fuel consumption." He told her. She spent the rest of the trip to the depot deep in the ship, carefully and continually trimming the diesel engine's fuel intake.

No matter how parsimonious they were with the power usage and the fuel consumption though, the *Prospect* was so much bigger that it was eating through the remaining fuel in the *Gnat* at an insatiable rate. Back in the control room of the *Prospect*, Hemi calculated their fuel consumption rate by hand, and measured it against how far they had to go. He could not promise Percy that they would not be rowing the *Prospect* the last few miles.

By this time Hemi, Shakes, and Percy were exhaustedly staring at the wall of gauges in front of them. Most of the gauges were completely unmoving as they were not varying speed, direction, or depth, and the fuel gauge simply read zero, since it could not reflect the fuel they were sucking up from the *Gnat*. Other than Hemi's occasional forays down to the *Gnat* to check the hard

numbers, they were simply going on hope that they had enough fuel to make it to the depot and not get left stranded once again over an empty — and very deep — part of the ocean.

Hemi finally broke the bleary, smoke-filled silence. “Something bothers me Sylvia.”

“We’ve been scraping our way on our bellies under the razor-wire fencing of hell’s fucking perimeter for days now, and *now* something bothers you Hem’?” Percy chuckled at him.

“I think that is part of it — we have been so on edge and so burned out that I have not had a chance to step back and consider things.”

“Well, what the fuck is it that’s eatin’ ya big guy?”

“The sub with the ram. You said the one hunting for us in circles back there was the same that rammed us, right? You are sure about that?”

“Abso-fucking-certain. Lotta subs look the same through the scope, sure, but that ram is unique. Some kinda custom job, without the sleek, expensive quality of gear ya see on military machines usually. Looks like it was worked up as some ancient siege engine, for storming a stone fortress or something. And some crazy motherfucker bought it as scrap and welded the whole fucking heavy water-dragging thing onto the front of their submarine.”

Hemi nodded. “So if it is the same sub, which seems likely, it seems very *unlikely* to me that they just happened on us twice. This is what is bothering me: do you think they are specifically pursuing *us*?”

“I had the same thought.” Said Shakes. “But I didn’t want to put my fucking nose into your business, just as I wouldn’t want you askin’ about mine. But since yer asking Hemi...”

“It does seem odd. We’re just a fucking cargo sub.” Percy said, looking steadily at Shakes. “Of course we’re always being harassed by various Authorities in general-like ways — that’s just part of the business. But who among them has the inclination to *pursue* a cargo sub? We’re fuckin’ small potatoes by any measure you care to put fuckin’ to it. They have wars to fight and borders to defend up there. They spend their concentrated long-term resources on their never-ending fucking conflicts with each other. Harassing commerce too much is bad for, well, fucking business.”

“And we are the commerce.” Said Shakes.

“Even if that sub with the ram was pursuing us particularly,” continued Percy, “seems most likely they won’t fuckin’ follow us across Authority lines, and they’ll lay off the pursuit at this point. We’ll just avoid coming back this way any time soon.”

“Leaves ya with a big fuckin’ mystery as to *why* though, don’t ya think?” Asked Shakes.

“Indeed.” Said Hemi. “Though sometimes the pragmatic course of action is to leave the questions aside, and move in a different direction.”

“And the direction we’re moving in right now is towards that depot, and away from the fucking mystery of the sub with the ram.” Said Percy.

The silence settled back in on them. Captain Percy lit up yet another cigarillo and puffed away at it steadily until she had filled up the small space of the control room with smoke. Hemi slid back down to the navigation chart with his flashlight, and a few minutes later called up to Percy. “Sylvia, you should be able to see the depot island from the bridge in a few minutes.”



## Chapter 3

“About fuckin’ time.” Said Percy. She planned to climb up to the bridge and check with Owen in a minute, but first she wanted to look through the periscope. Since it would be higher up above the surface, she would potentially be able to see further. The bearing was obviously straight ahead, so she swung the barrel of the periscope around while looking through the viewfinder. The cigarillo still hung from her lips, with smoke rising up to her nostrils. “Aye. Fuckin’ dawn’s cracking up there... and I see a blot of an island ahead of us.” She watched it for a while. It slowly, slowly came towards her and details came into view. It was a rocky, slightly-cliffed shore with some sparse vegetation on top.

“Uh, Shakes,” she said with a sinking, somewhat terrified feeling, “there’s nothing on that island.”

“Naw!” Said Shakes. “Course not. The depot is for, uh, discreet fucking operations. It’s entirely underwater, built into the side of the seamount.”

“Ah.” Said Percy. It was fairly common for a depot that handled sensitive cargo to be build partly underwater — particularly the submarine docking area. Doing that kept Authority eyes off comings and goings. But usually there was a small surface component too for handling completely licensed and permitted cargo, and for the convenience of being able to operate without the complexity and care underwater fittings required when it was

possible to do so. But she could see how if a depot were located close to the border between two very aggressive Authorities, as this one was, it was clearly logical to keep the whole operation off the surface. On the other hand, it also meant these might be rougher and less agreeable characters than the typical scum they dealt with in the submarine cargo industry.

“So, how do we...” Percy started to ask.

The ship-to-ship radio lit up over her head. “*To approaching submarine: stop your motors and prepare to be boarded.*”

“That’s how.” Said Shakes.

They shut the *Prospect’s* motors down, and Percy headed up to the bridge on the top of the sail. A mini-sub, maybe 15 meters long, had surfaced off their starboard side. A couple of large men, almost as big as Hemi, were climbing into an inflatable boat. They motored across the gap between the two subs, and climbed up the steel rungs on the outside of the *Prospect’s* sail.

“Transport sub?” Were the first words from their mouth. They wore old moth-eaten wool clothes: tightly worsted slacks, and cable-knit sweaters, like old North Atlantic fishermen.

“Ya.” Said Percy. “We’re unarmed: no tubes.”

“Right.” said the other of the two and spat on her deck. “We just gotta do a quick check if ya want to come any closer to the fuckin’ island. Otherwise, ya gotta go back the way ya came.”

“Well, we got no fuel left, so we’re not going fucking back anywhere. Get your check over with.”

They climbed down the hatch. They spent the next 20 minutes crawling through the *Prospect* with Shakes and Hemi. When they got back to the control room, they were a little less gruff. “Eh, fuck. Sorry, but being fucking careful in these waters is how



we stay in fucking business. Y'all seem harmless enough, though it's fucking weird coming in hauling another sub under ya."

"Not exactly my fucking original plan." Said Captain Percy. "So what's the docking procedure here?"

"Well, first fucking step is the dock fee. You pay that to us before you dock."

Percy suddenly regretted her comment that they were out of fuel. She had accidentally given them a lever to extract whatever they wanted from her for this "docking fee." And extract they did. Based on her experience, she estimated that probably 15% of the price they quoted her was legitimate. The rest they would pocket. She asked them to wait while she retrieved a stack of coins from her cabin.

They split the coins between them, barely even pretending that it was a legitimate transaction. Shakes watched the transaction with a slightly nervous look escaping from his face.

With the coins stashed in their pocket, the depot men very friendly. "OK boss. You can get on your ship-to-ship and contact the docking control office. They'll give you a docking assignment, and turn the sonar beacon on for ya. If there's anything else we can help you with, you can ring us up on ship-to-ship as well."

"Fuckin' thanks so much." Said Percy.

Percy followed them as they climbed back outside on the bridge. They pattered their little inflatable boat back to their small patrol sub. Percy could see them sharing a good-natured laugh between themselves even from the height of the *Prospect's* sail.

"Don't worry," Said Shakes when she got back to the control room, "they might be total fucking assholes, but we should be able to get everything yer boat needs here."

“If I have enough fucking coin left to afford it.” Percy replied.

Percy picked up the ship-to-ship mic and raised the docking control office, now within range of the ship-to-ship radio. They got their docking port and, sealing up the *Prospect’s* external hatch, they used the last remaining few minutes of their batteries to dive the boat.

The docking bay was located about 20 meters down underwater. It was typical underwater docking bay for cargo — a long cylindrical tube of curved and welded plate steel. It stuck 100 meters out of the side of the seamount and was supported by a hazardous and seemingly randomly placed array of bracing bars that ran from the tube back to the seamount at an angle. There were docking slips of a wide variety of sizes placed on all four sides of the tube along the entire length of it capable of docking all manner of sizes and orientations of cargo subs. There were between a dozen and two dozen slips, and maybe half of them had submarines docked at them already, arranged at various angles, like leeches with orifices sucking at a giant limb.

The *Prospect* followed the sonar beacon to docking slip four, located on the bottom of the docking bay tube. It was the largest size slip this depot had available — or even widely used in the cargo sub industry. It was something of a standard size for large cargo hold hatches. They carefully eased the *Prospect* up under slip four, until the big cargo hatch on the *Prospect’s* deck came up under the docking slip and connected to it — essentially a scaled-up maneuver of exactly how the *Gnat* had mated to the underside of the *Prospect*.

Hemi went down to the cargo hold and walked, hunched-over, out across the catwalk that hung maybe two meters down from the ceiling of the hold. Captain Percy could walk fully upright on the catwalk, but not Hemi. He made his way to the large cargo hatch above the far end of the catwalk. He picked up a rubber

mallet that was left hanging on some hooks by the catwalk for this purpose and banged on the big cargo hatch with it, setting off a pleasant low gong sound that reverberated for a full 20 seconds. He waited a few second more and then heard the pop of the dock crew unsealing the hatch into the docking bay above him, the whirl of an electric pump sucking the residual water out of the slip well, and then a few minutes after that came the answering pounding on the *Prospect's* cargo hatch letting Hemi know it was OK to pop it. He released the hatch locks.

Two winches were set on either side of the cargo hatch along the catwalk. The big hatch was closed by two curved and concave doors that lay one over the other to form a low dome. The upper one needed to be raised first. Hemi grabbed the wheel that turned the winch and put a good portion of his straining and powerful muscle into it, but it would not budge. This sometimes happened when the air pressure between a sub and a dock wasn't exactly equalized. Hemi was trying to push up the door when there was slightly more than an atmosphere of pressure weighing on it.

He picked up a breaker bar that hung next to the rubber mallet and set it over a fat pin of steel welded to the column of the winch wheel. With the extra meter or so of leverage, he easily turned the winch wheel a few degrees and there was an audible pop and hiss as the extra pressure of the air in the depot pushed through the slit in the cargo hatch and into the *Prospect*. Hemi pinched his nose and cleared his ears with a pop that sounded like a small version of the sound of the hatch opening.

Once the seal was broken he stowed the breaker bar and easily, but somewhat slowly due to the gearing, winched open one cargo hatch door and then the other. When the doors were fully opened, he extended a steel ladder — its pawls clanking on the locking teeth — up into the docking bay so a person could climb up and down from the *Prospect*.

Hemi climbed up the ladder and was greeted by two more men who Hemi would swear were clones of the men who came out to inspect the *Prospect* before they docked. The same enormous bulk, the same worn wool clothes, the same gruff look. The two men lit up cigarettes and spat bits of stray black tobacco out on the deck while they waited for Hemi to come up the ladder.

These guys did give Hemi a rough handshake when he stepped off the ladder, but offered little more in the way of welcome. Hemi managed to get some monosyllabic directions from them to the dock boss, and the impression that she would be able to set them up with repairs and refueling and their other boat maintenance needs. Hemi thanked them, gave them a little money for their trouble. With money in hand, they quickly wandered off without any further pomp.

Hemi lowered himself a few steps back down the ladder until he was enough inside the *Prospect* to use the intercom to raise Captain Percy. He gave her his impressions of the docking bay and told her they needed to talk to the dock boss.

“Stay there Hemi. I’ll be there in a few minutes with Shakes.” Percy responded over the intercom.

The two of them appeared a quarter of an hour later. Captain Percy was carrying a beaten and cracked leather folio in which she kept the ship’s books. Shakes was empty-handed, but had apparently freshly greased and pointed his hair for the big outing on the depot dock.

Hemi had been waiting out on the deck of the docking bay. He gave Percy and Shakes a hand up the ladder. When they were all assembled, they started off towards the far end of the docking bay where they saw a wooden sign painted white and with square hand-painted black letters said “Dock Office.” Actually getting to the dock office was a matter of navigating around the big open holes in the deck which led down into the cargo holds of other

docked subs. There were other obstacles too, like the ladders hanging down from the subs docked above, or stacks of crates waiting to be loaded into subs docked on either side. The places where no submarines were docked were typically used as staging areas for cargo that was making its way down the docking bay in steps towards whatever sub they were destined to be loaded onto, or otherwise up the dock from where they had been unloaded. It made for slow progress, since they had to watch every step and stop to wait for workers who were in the process of moving cargo. The docking bay was bigger than any space on a submarine — maybe 12 to 15 meters in circumference — but still cramped and grimed. They felt right at home.

They picked their way through the docking bay to the dock office. This was simply a partition made of cheap painted wood built in front of the disused space of the first docking slip in the docking bay. It was brightly lit. Both sides were lined with metal chairs on which were stacked folders and binders of paper. The center of the office was mostly taken by a large steel desk with a rusted and chipped enameled surface. It too was covered with papers: loose, stacked, on clipboards, and in binders.

Behind the desk sat yet another huge person, also dressed in similar heavy wool garments that had been aerated in places by moth larva. Hemi would not have tried to guess, being the parsimonious fellow he was, but the men who had met him on the dock had referred to the dock boss as ‘she.’ She tipped back her cap when they entered the office, and held a clipboard out at arm’s length in front of herself, trying to get a little better focus on what was written on it.

“You must be from the boat that just came in on slip four, eh?” She asked.

“That’s right. I’m Captain Percy. She’s my fucking boat — The *Prospect*.” The dock boss squinted up at her.

“Actually, there’s two fucking boats.” Said Shakes.

“Ah, hmm.” Said the dock boss. “There’s a note here that you have a mini sub mated on the bottom of the big boat. That’s a pretty unusual fucking docking arrangement.”

“We Would not normally come in that way,” said Hemi, “but we are in pretty bad shape. We had to rig up a whole complicated situation with the smaller sub to have enough power to get here. We have basically got no power, no fuel, and we need repairs, restock, and hopefully some new employment.”

“Hmph. Well. We’re full-service here. We’re pretty isolated, so we keep a lot of stock and parts on hand. Having a deep supply is the good side of being isolated. The bad side is that shit’s going to be pretty fucking expensive. It costs a premium to move it out here. I give folks honest assessments — hell that’s how I got this shitty dock boss position — but most of the goods around here are sold from the crew of one independent operator to another. I can’t control what prices those fucking connivers might try to get from those who might be a little desperate.”

“Well, that’s a reason why we’re also looking for a job. We could use some inflow of some fucking cash. Are there any leads on cargo that needs hauling?” Asked Percy.

“Can’t help you there. I’m the dock boss, I just handle the dock. Work is found further up the tunnel. There’s a market and exchange floor up there. Because we’re the only depot out this way, enough stuff moves through here that you should be able to wrangle up something that pays. Me, I’ll give ya a list of contacts up and down the dock who should be able to set you up with fuel and repairs and the like. I’ll try to give you the least-worst of that bunch of bone-scraping, marrow-sucking dickheads.” She started scribbling down a list of names and associated slips on the back of a used enveloped.

“That is certainly our first priority.” Said Hemi. “What about Authorities? Much activity from them around here?”

“Mostly they leave us the fuck alone. As I say, this is one of the only places you can move goods for cash in this part of the ocean, so we end up being a small but critical operation. The Authorities on one side want their people to be able to trade goods, and the Authorities on the other side want that too — even if they would never admit it, and endlessly skirmish over where exactly the fucking line lies. It’s a good, quiet operation here, far from the fucking noise and crush of all the meaningless action and events that seem so important to those folks trying to carve up pieces of the surface for control. It’s pleasantly remote here, it is. While it fucking lasts anyway.”

“Sounds like a nice place to retire.” Said Shakes. “No sun, no wind, nothing to keep you from happily living out your days in a dark grimy hole.”

“Anyway..” Percy interrupted, “thanks for the orientation. Hemi can you get that list of contacts for repairs and refueling? Shakes, you probably want to go with him and make sure you get the *Gnat* fucking fueled back up?”

Shakes nodded.

With a list of contacts from the deck boss and a few more passing words of thanks, they cleared out. Hemi and Shakes returned down the docking bay in the direction they had initially come from to start talking to vendors about refueling and repairs. Percy went the other way, up off the docking bay.

The welded steel plating of the docking bay tube extended 10 meters or so beyond the dock office which marked the close end of the docking bay, where it was set against the sea mount. Just beyond the dock office the tube angled upwards, and Percy had to walk up a steep ramp. Then the tube narrowed to five or six

meters wide, and passed through a thick bulkhead with a large watertight door that could be closed by massive hydraulics. Most underwater docks had some kind of system like this. Small leaks on the docks could be repaired while pumps moved the water out. But if a something major happened — say a docked submarine ripped away leaving a giant hole in the dock — this door could be closed, divers would go in and make repairs, and they could then blow the water out of the dock with a high pressure system. Of course, that wouldn't save anyone trapped on the other side of the door when it closed, or keep any open cargo holds in docked subs from flooding. These underwater docks were in fact incredibly dangerous, and the stories of failures — more of them than anyone would care to admit — were the stuff of submariner's nightmares. The repressed fear of a dock failure was an odd sense for a seagoing person, since traditionally ports were associated with safety for ships.

A little further up the ramp from the watertight bulkhead, the steel plating ended where it was bolted and sealed into the raw rock of the seamount. The space widened here. This whole part of the depot was hollowed out of the underground stone and the walls were left as raw, cut rock. In places the lines of drill holes could still be seen where explosives had been placed to more quickly open spaces for the chamber during its construction. This was all pretty unusual and expensive. Most depots with an underwater dock kept the underground construction to a minimum and moved as much of the operation to the surface as was practical. Percy guessed there must be some discreet Authority funding behind this place.

The upward slope became far less dramatic, just a slight upward ramp. But the ramp was maintained for an obvious reason: few underground spaces were totally dry and this one was not an exception. The ramp slowly drained a fetid and oily moisture down the middle of the open space of the upper parts of the



depot. And the water carried along with it the accumulated grime of a working floor of industrial and commercial projects: metal shavings, coffee grounds, oils and solvents, and random bits of floating garbage. It was all collected in a sluice-way covered by choked and rusting grating that was supposed to keep any of this stuff from running further down to the docking bay.

The wet grit ground under the hard soles of Captain Percy's boots as she made her way up the length of the merchant exchange floor, stepping around the places where oil or garbage had pooled on the uneven rock of the ground.

The main hall was lit by bright bars of harsh light overhead, which illuminated the center of the space fairly well. The center of the entire length of the hall was being used for the activities that required the most space: stacks of wooden crates containing cargo that was being actively exchanged, repairs on large metal machines that were in some places slung from the ceiling by heavy chain run through blocks, and the parked heavy equipment used to move all this tonnage up and down the space.

The lighting did not do much to illuminate the deeper sides of the space. Back in those corners were shadows created by smaller stacks of crates, punctuated by the occasional table set up by a trader and lit by a lamp. In some places there were alcoves carved back into the rock for a more formal shop space.

There was a fairly loud wash of sound: the snap of arc welders liquefying bits of metal, traders negotiating the value of crates and where they would be moved from or to, and the clinking of chains rolling through blocks, straining to lift the mass of some metal object. There was also the inevitable and unintelligible shout of panic as some other massive metal object suddenly moved in a way it was not supposed to. Her nostrils were assaulted by the smells of sweat, tobacco smoke, oil, and sharp ozone.

About a third of the way up the hall, her eye was caught by one of the bigger shops cut back into the wall. It was better lit than most, and the proprietor had taken the time to crack open a number of the crates stacked up in the shop and create an arrangement of some of the more attractive goods.

Percy turned into the shop. It sold hardware. A wide array of tools and parts were stacked up among the hay and batting used as packing material in the crates. Some of the packing material had inevitably escaped the crates and was crushed into the grime on the floor.

Larger items were stacked towards the front of the store, Percy realized that was probably because they were harder to steal. The crates at the front of the shop were left open face-up, and she could look down into them to see large motors, piping, valves, and hundreds of other large elements that went into making a submarine work.

As she moved towards the back of the shop, the crates tended to be laid on their side and opened. Many of the crates had dozens of hooks nailed into them and smaller tools and parts for sale hung from the hooks.

The shopkeeper somehow both managed to both show very little interest in the few customers poking around in the crates, and yet never stopped watching them.

Percy had a perennial list of hardware she needed for the *Prospect*. It was one of those lists that only ever seemed to grow, and rarely got things crossed off it. She almost immediately found a box with a range of sizes of screw-tightened clamps that was being sold as a single unit and looked incredibly useful. It was not on her hardware list, so she regretfully wouldn't get to cross anything off. On the other hand, she would already have the clamps aboard the *Prospect* when they needed them, rather than waiting to be purchased on the list at the next stop.

Percy picked up the box of clamps and moved to look at some of the larger parts. She looked down into an open crate and there was a beautiful pump motor. It was in factory-new condition a rarity these days when most machines — even excellent ones — had been rebuilt a dozen times over. It was the kind of motor used in dozens of places and applications on the *Prospect*. It was another item that was not actually on her list of needed parts, but potentially so useful that she couldn't imagine not buying it. In the condition it was in, however, it would not be cheap.

She leaned over the crate and ran her fingers under the cover to check for hidden grit and make sure it was actually factory-new, and not just well-cleaned old junk. As she did so, an old crone who had been looking at a box of steel piping near her leaned in her direction to admire the pump motor too. "That's a fine-looking piece of machine." The lady said to Percy, her voice croaking softly so it took Captain Percy a second to interpret what the lady had said.

"I have a boat where I could use ten more of these." Percy replied.

"Pretty expensive element for buying multiples of." The lady offered. She was frail and small. In this depot full of huge people, she was certainly the tiniest Percy had seen, or would even expect to see. She had big rubbery ears and a heavily-lined face with a tiny nose that wiggled when she talked. She was dressed in a wool cloak that was worn thin but clearly made of what was originally a high-quality material. Over it, she wore a fraying shawl with an intricate fair-isle pattern. She looked like a person who would never be quite warm enough in this hole-in-the-rock they were currently in.

"The cost is the reason I'll be lucky to get a single one of these." Said Percy.

“Hrmmm. . . what if I told you I could set you up with a little cash?”

Percy looked at the tiny stick-figure-in-a-sack skeptically. “Like a loan?” She asked. Loan sharks certainly came in all shapes and sizes.

“No no. I don’t go in for usury. That’s for the real criminals. I’m offering a job. But one that would pay exceptionally well.”

“Well, that’s certainly a unlikely fucking coincidence that you happen to offer me work when I was about to go groveling for some up and down the hall out there. . .”

“You did mention you have a boat. This job requires a boat.”

Percy nodded.

“To be transparent” the old lady continued, “I did receive a note that you might be a good fit for this particular work. It’s not exactly coincidence that I found you in here.”

Percy put a couple of things together and realized the dock boss must have sent word to this lady. An awfully nice gesture — if they weren’t setting Percy up. She wondered what she had done to deserve a kind move from the dock boss. “Thanks for the transparency. I don’t like the suggestion of a benign universe that coincidence would have fucking suggested.”

“Ah,” said the lady, “yes, it’s easier to believe the plot and the happenings are motivated by someone’s will, eh? That it isn’t all just random chaos, and the coin-toss sometimes comes up in your favor?”

“Oh I believe in the chaos,” said Percy, “I just don’t believe it comes up in my fucking favor.”

The lady grinned a wide gapped-tooth smile. “I think I can work with such a person. Would you be interested in coming back to

my office and hearing the offer I have? It's... not really fit for public spaces."

Percy again put aside the suspicion that she was being set up. She needed the work. "OK lady. I'll hear whatever the fuck is you've got to say." Percy put down the box of clamps, and noticed that the shopkeeper watching her do so.

"My name is Trinity." croaked the old lady as she hobbled along next to Percy.

Percy took her arm to help her along. It was a thin little stick of bone in Percy's strong hand. "That's an interesting fucking name."

"I had a very devout upbringing. Your name is Percy, right?"

"Captain Sylvia Percy, ya. So you know all the fuck about me already?"

"My dear Captain Percy, would you mind toning down your colorful language a bit during our interactions?"

"I'm a fucking sailor lady, what do you expect?"

Trinity walked on silently — and Percy thought somewhat reproachfully — for a minute. "Anyway. In my line of work, it is best to know a little something about those you hire. Though again, in the interest of transparency, all I really know is your name and that you have a boat."

"What's with all the transparency?" Percy asked.

"Ah yes. Typically I play my cards somewhat closer. But this job is of some urgency, so I am hoping to build some trust with you quickly. I can only hope you respond reciprocally.

"Well then, in the interest of transparency you should know that my boat, as solid as she is, is currently in desperate need of some

downtime for repairs. There's a limited amount of urgency we can put into picking up a job."

"With the amount I'll be offering you, I think you will be able to make the shortest possible downtime a priority."

Percy did not respond to that. This seemed too good to be true. This old lady was either senile, lying, or there was a catch yet to be revealed.

"Here we are." Said Trinity, steering Percy towards a low creosoted wooden door set into the wall. The inside of Trinity's office had the same bare rock walls as all the other spaces, but was more warmly lit from sconces in place along the walls. Many wooden filing cabinets arrayed under the sconces also softened the feel of the space. The center of the space had a few large heavily-stuffed leather chairs and a small table between them that appeared to be constructed of some exotic wood.

"I can offer you tea or coffee, Captain Percy."

"Coffee please. A good amount of sugar."

"Cream?"

"Holy fuck — pardon my language — you have cream? Real, liquid cream?"

"It's extremely expensive but, as with most things, it can be had here for the right price. I am happy to share a few drops with a business prospect."

"By all means then."

Captain Percy sat in one of the leather chairs and accepted a ceramic cup with mud-colored contents with one hand. With the other hand she took a metal clipboard with chipping black paint and oil-stained pages that Trinity was holding out to her. She scanned it while taking her first sip of coffee.

It was the best coffee Percy had had in months.

Trinity lowered herself groaning into the chair opposite Percy.

“So you want us to transport magnetic mines?” Percy asked.

“Please,” said Trinity, “the shipping of mines is extremely restricted and mostly illegal. These are magnetically-activated industrial explosives.”

“...For which the primary use would be mines, and thus still illegal to ship.”

“The units are absolutely agnostic in their uses. They don’t have to be a mine: could be a torpedo, missile, suicide-bomber, sling-shot, whatever. The oceans teem with rusting hulks of ferrous metal, grinding their way back and forth — and under, of course — the surface of the sea, leaving their foul trails of oil, carbon, and noise. There is quite a bit of demand for units that can help clean up the mess.”

“Is that why you need us? You can’t get an Authority seal to ship these because they are going to a group that’s trying to ‘clean’ up the oceans?”

“You know as well as I do that the seal of one Authority just aggravates the aggression of another, regardless of where, or whom, they are going to.” She sighed. “Unfortunately these days conventional shipping ends up being an unwinnable game of tic-tac-toe with a high chance that no matter how well stamped, sealed, and authorized a shipment like this might be, it will simply never arrive at its destination due to interference from another antagonist. The most reliable way is to use a specialty shipping services unit like yours, with your professional expertise at clandestine maneuvering and your discreet interests. It’s simply a matter of reliability, you know. Nothing more.”

“Certainly if we were any less reliable, I wouldn’t be standing here talking to you right now.”

“There’s also the matter of speed. I really need to get these units out of this depot in the next couple of days. I’d rather not say why, so do not ask. But I believe it will benefit us both if you do as I suggested earlier and make the repairs to your boat as quickly as possible and move on with this cargo.”

“Well, that brings us to the price. To make the repairs a priority is not going to be cheap, especially from what I hear about the workers available on the dock.”

“Captain Percy, in this particular case money is a secondary consideration. Name your price.”

Percy hesitated. “How about... three times a standard hull-load fee?”

“Done. I can pay you two-thirds now and the remainder on delivery. I assume coin will be satisfactory?”

“Absolutely.” Said Percy, kicking herself that she didn’t ask for more. Still, she have never been paid triple for a hull load before.

Trinity stood and shuffled over to a sideboard where an enormous ledger book was laid out open. She made marks with a large fountain pen in it between counting out heavy coins and placing them into a soft leather satchel. While watching Trinity’s fingers pick apart the coins, Percy noticed for the first time that she only had three fingers on her right hand.

Trinity continued the conversation while counting as if it were no effort. “This must be quite a bit of money for you Captain Percy. Tell me, have you thought about selling your boat after you make the delivery and taking all the profit you will have and settling down with a nice man somewhere?”



Percy smiled at the matronly side Trinity had suddenly revealed. “Well, you know what the old cliché says about captains: I’m married to my boat. There’s no man who could compete with her. Besides, you know how the surface life is: where it isn’t chaos, it’s bureaucracy. I’d rather stay underwater.”

Trinity nodded. “Unfortunately there’s some truth to that. There’s no sure future anywhere on the surface. Makes it hard to commit to settling down anywhere particular.”

“Not to change the subject Trinity, but how likely is it that we’re going to have some kind of Authority interference while trying to move this shipment of yours?”

“You know how the Authorities are Captain Percy. In some places they pursue everything. An honest logistician cannot ever promise they won’t interfere. That’s why we move things by submarine: interference is a lot less likely if they don’t know the shipping is happening. In this case, I would suggest that you do your absolute best to make sure no Authority finds out this particular shipment is happening.”

Percy looked into her nearly-empty coffee cup, and then savored the last sip of its creamy sweetness. “Well, I guess you get what you’re paid for.” She stood. “Thanks for the coffee with cream.”

“You are most welcome. I’ll have my men down on the dock by the end of today with the cargo, if you think you could be ready to load your boat by then.”

“Thanks.” Percy turned to go.

“Captain Percy, If I were you I would definitely make sure you are gone from here before the next 48 hours goes by.”

Percy nodded towards Trinity and closed the heavy door behind as she left the office.

Captain Percy hummed to herself as she left Trinity's office and walked through the main hall of the noisy depot. She realized that her humming was resonating in her skull in harmony with the ever-present background hum of the machinery that kept the place functioning. She followed the trickle of oily water down the slope a little way until she noticed a kind of canteen or saloon carved back into one of the walls. She walked in and stepped up to a bar at nearly the height of her chest. It was broad and made of dark wood from which decades of drinkers had worn away the original shellac coating. A universe of spilled drinks had stained it to a mottled gray color. As in all the remote places of the world, the bar was well stocked. Rows and rows of partially empty bottles of brown liquors were lined up behind it.

The man behind the bar was yet another giant, though more fat than stocky like the others Percy had seen. He was grizzled about the face, like a piece of meat that hadn't been cleaned properly before being laid down in the frying pan. He was missing an eye which he didn't bother to cover with a patch, and wearing a stained leather apron. "What cha need there lady?" He asked Percy.

"Give me a house drink." She took one of her heavy new coins from the leather satchel Trinity had given her and laid it down on the wood of the bar.

As the bartender set up a glass and was leaning to pour it Percy continued the conversation despite the fact that the bartender did not particularly look like he would want to. "Actually, I'm looking to hire some crew. I have a boat, and we're short a few fucking people. Thought you might be able to steer me in the right direction to where the fucking hiring is done around here."

"Most of the steering I do it towards the bottles." Said the bartender. "You want crew you're better off down on the fuckin'

dock. Usually there's some fuckin' greenies hanging around, going boat to boat and just askin' for work even. Useless fuckers, skills wise, but always seemingly around." He thought for a few seconds while he finished off the pour. "On the second hand, a lot of big boats have come through in the last week or so. It's possible they've hired up all the greenies. *Big* fuckin' boats. 200 meters and more."

"Yeah, that kind of boat is always hiring. Shit, that doesn't sound good. I'm a little fuckin' desperate."

The bartender squinted up the side of his face where his eye would have been considering for a few seconds. "Hrmm. Well, if yer fuckin' desperate... Bartendin' is my side-gig. My main business, and much more profitable I might add, is pimpin'."

"You don't fuckin' say." Said Percy into her drink.

He pretended not to hear her. "Thing about pimpin' in a place like this is sometimes you gotta take risks on the folks ya bring over from the mainland to work. Beggars can't be choosers, ya might say. So once in a while I end up with whores I can't pimp out. Or at least not at a price that makes them worth the food they eat."

"Always difficult to balance those books, I hear ya." Said Percy.

"Anyway, right now I got me this waif that got off a boat a few weeks ago. But she's skinny and small. Waif-life, I say, you know what I mean?"

Percy nodded.

"The tastes of most of the folks who come through here are into something a bit... harder. And also whiter. You know what the inability to market an off-color whore tells me about this place?"

“What?”

“It tells me there’s a bunch of racist motherfuckers in these waters that’s what.”

“And here we are thinking we’re a modern people.”

“A modern people! That’s fuckin’ right.”

“What else can you tell me about this promising young prospect?”

“Well, that’s the other thing: she’s got the just the saddest fuckin’ face. And she’s too shy. Even I can’t bring meself comfortable-like for pimping her out. A pimp has got to have a heart you know.”

“So you’re saying you’ll let me hire her off you because she makes you too fucking sad?”

The bartender shrugged. “Plus a finders-fee like.” He said, and Percy knew she had made another negotiating mistake in letting the bartender see the heavy satchel full of coins she was carrying.

“Thing is, I need a sonar operator. Do you think this waif has good ears?”

He shrugged again. “Well, I’ll tell you this: those whores of mine have a record player in their quarters. Drives me fucking crazy, but when I tried to dispose of it I had a large-scale fuckin’ whore-revolt on my hands. That little waif in particular, I noticed, listens to the fuckin’ records all the time. Does that suggest anything about her ears?”

“Might mean she’s fuckin’ deaf already.” Said Percy. She sipped her drink. “Fuck it. It’s not like I’m going into battle. If she’s not completely deaf, we can have her sit sonar watch during long runs. She won’t be completely useless.”

“Swell.” Said the bartender. “I need that depressing little shadow out of my life.” He called down the bar to where a small group of skinny girls and a couple of boys were milling about aimlessly. “Cassandra! Come over here. I have someone I want you to meet.”

A tiny girl with stick arms and huge brown eyes under tight curls of black hair walked towards them. She was wearing a short slip of a blue dress made of worn cotton, and had long fingernails, brightly painted but chipped in places.

As she got closer the bartender said flatly, “This lady might want to hire you.” And turned away to deal with some other customers.

“Fuck.” Said Percy. “Can you see in the dark with those eyes girl?”

“I don’t know.” Said Cassandra quietly, looking down.

“Look, I’m not trying to fuck you here. I’ve got a boat, and I’m leaving in less than 48 hours and need to crew up. Your friendly bartender-pimp says you might be willing to work on a boat instead of whatever it is you do now. You ever work on a boat before? Or anything technical? Maybe sonar or something fucking sonics related?”

“Hell no. I’m a whore. Or, supposed to be. Apparently I’m not very good at that.”

“On a boat nobody cares how good you are at fucking. All I need is someone who is good at being alone for long periods of time and listening to mind-numbing ambient noise on the sonar for hours on end without going insane. Think you could do that?” Percy looked at the skinny young girl skeptically, though in the back of her mind she remembered that her start on submarines had not been very much different than this.

Cassandra nodded without saying anything, still looking at the floor.

“Good.”

“But... isn’t working on submarines dangerous?” Cassandra wondered. “In general, I think I’d rather live in this hole than die in a hole in the sea.”

“It’s incredibly fucking dangerous. I won’t lie to you about that. But we’re compensated for the danger: it pays very well, enough for us to live by our own terms. Enough to buy you out of your current job. There’s also the fact that there’s a limited number of people willing to go out there and carry out their lives while being encased in a steel tube and all-around surrounded by dangers and fears that would liquefy the guts of most folk. Submariners are an elite class, in their own filthy way.”

“Why good is wealth and freedom if you are dead though?”

“Look, there’s dangerous and there’s really fucking dangerous. You’d be mostly working sonar, at least at first. That’s about as dangerous as tuning your stereo. You wouldn’t have to work down in the engine room or throw lines or anything like that. Heck you couldn’t lift a line even if I needed you to.” Percy glanced at Cassandra’s skinny arms. “You’d be facing the same base-level danger we all face on a submarine. If we are in a situation where you might die, we’ll all be in that situation together. My boat has been running for decades without taking the whole crew down, and I expect she’ll run for a couple more decades. That means you aren’t going to die any time soon on this boat. Can you live with that?”

Cassandra nodded slowly.

“Now I’m only giving you this little motivational speech about the glories of being a submariner once. If you take the job it’s on

you to make it a part of yourself, and keep your fear bottled and your mind clear when you are working. Understand? Running a boat is a lot of work and more than anything else I need a crew that can motivate their own fucked souls to do their jobs. It is not war, it is commerce.”

Cassandra looked around at the dingy canteen and then directly at Percy for the first time. “OK, I’ll do it.”

“Fine. Get your things together and come down to slip four this evening ready to leave this place behind you. At the slip ask for Hemi. He’ll get you settled and explain how the pay rates work for a greenie new crew member. We’ll train you on board after we’re underway in a couple of days. For now, just stay out of the way and keep your mouth shut until someone specifically asks you to do something. Make sure you’re always nearby to help the crew, but don’t volunteer for anything since you don’t know how to fucking do anything. The crew know how to ask for your help when they can use it, and they don’t want your help doing things you might fuck up.”

“I understand.”

Percy put a heavy hand on Cassandra’s shoulder and then turned away from the bar.

“Ahem!” The bartender fake-cleared his throat as he turned towards them and looked at Captain Percy with one eye and one socket. He rubbed his forefinger and thumb together in the air in front of him.

“Right.” She pulled a stack of coins out of the leather satchel, counted out more than a fair amount and stood them on the bar. She looked at Cassandra. “That was your first paycheck. Sorry it had to go to that fucking asshole, but it’ll be the last one that does.”

The bartender put a knuckle to his gristly eyebrow in a mock salute as they turned away again.

“Here,” said Percy handing Cassandra a few coins, “that’s an advance on your next paycheck. Buy some tougher clothes.”

With a shy smile Cassandra turned and walked up the ramp towards the stairs to the next level up, where the barracks were located. Percy turned down the ramp feeling like it was probably time to get back to her boat and see how repairs were proceeding. She was warm from the liquor and had a bit of a sweat breaking on her skin in the still and humid underground air.

Walking down the ramp in the direction of the docks she saw the now-familiar clanking gait of Shakes climbing up the ramp. The collection of wrenches at his belt made him always walk like he had a limp. He put his hand up when his eye caught Percy coming towards him. “Captain! I was just coming looking for you. I wanted to talk to you about settling up and getting my boat off your tub.”

“Yeah, it’s about time for it, eh Shakes? Let me buy you that fucking meal I promised you first.”

“Not going to say fuckin’ no to some grub.”

Percy turned to join Shakes in the upward direction on the ramp, and they walked a short way back up the exchange floor. Across from the saloon, set back in the opposite wall was a small eatery. It glowed with orangish-red light that contrasted with the cold blue light of the hall.

Inside they got in line behind some other patrons dressed in dingy shades of wool. “Chicken or creamed spinach?” asked the short man with a large gravitational mass behind the row of steaming trays of food while tapping a long stamped-steel serving spoon against the greasy metal tray.



They got some of each, a mounded plate full of steaming long-grained rice with bits of clove and chopped peas and cardamom scattered in it. The plates were stacked on steel trays splotched with rust, and a couple of pieces of large crispy flat bread were piled on. Percy handed the tall man at the end of the counter a couple of coins from her satchel and they sat down at a chipped Formica table amid the mild roar of basso-voiced dock worker conversations.

Shakes ripped off a piece of the bread and passed it to his other hand while he blew on the tips of his fingers. He passed the bread back to the first hand and then piled a good amount of white rice and green spinach onto it before leaning in and shoving half the wad into his gaping mouth.

While he was chewing, Percy brought him up to speed. "So I've fallen ass-backwards into a job Shakes."

He grunted acknowledgment and nodded, too busy eating to look up.

"It pays well. . . . really fucking well."

That got Shakes to look up at her, but not to stop eating.

"Thing is, it's fuckin' kinda risky. Might attract some attention from one Authority or another."

"Mmmph," said Shakes through his mouthful of bread, "that's usually how it goes. I assumed some kinda job in that class is why that sub fuckin' rammed you."

"Actually, I still don't know why they rammed us. The hold was fucking empty at the time! We were on a dry run. And we haven't been mixed up in anything questionable for a while. . . ." She drifted off a bit pondering that mystery that had been at the back of her mind while she ate her way along a bone of dry chicken.

“Anyway, this next job is going to require being a little more fuckin’ tactical, I think. A little more forethought and planning than the usual just trying to sneak under the radar and not be noticed.”

“I’m not much for fuckin’ tactics myself. I have just the one: stay small, stay low in the water, don’t get fuckin’ seen. It’s simple and it works. Not much to think about, and I like it that way.”

Percy nodded. “Something like that has always been my strategy too. But for this next job, I think I might need to add a somewhat more complex facet.” She shoveled a little rice into her mouth. “Remember part of our deal was that if I knew of any work I could connect you with I would?”

“Sure. You got something already?”

“Here’s what I’m thinking: As I said, I’m gonna be hauling this risky fucking load — I won’t get into details about it right now, just remember that there’s certain to be some Authorities who would be interested in checking the manifest. Now, I will, of course, deploy the usual tactics of keeping my boat on the down-low, running quiet, staying submerged during the day and only running on the surface at night, and so on and fuckin’ whatnot.”

She paused for a second, considering how to best present this idea she had to Shakes.

“But I thought: what if in addition to keeping the *Prospect* stealthy, we also had a partner with another craft of some type. And the partner’s job was to be un stealthy. To run as a decoy around and above the *Prospect*. Draw the curious eye, or ear, away, so to speak. And they would be fuckin’ clean of course. Any Authority inspection would turn up an empty hold or a dull cargo of stamped cigars or something.”

“Interesting. You want to buy some kind of surface transport or speed boat then?”

“Naw. Surface craft are fucking useless. The authorities have different methods for monitoring surface vessels and submerged ones. It has to be something that could be mistaken on sonar for the *Prospect*. Possibly a boat like the *Gnat*.”

Shakes swallowed. “So... what? You want me to juice up the *Gnat* so it fucking sounds like it could be a big ol’ fuckin’ cargo sub — and then you want to hire me to run around and get caught and inspected by various Authorities that might be hunting for the *Prospect*?”

“Or maybe *not* get caught... you said the *Gnat* was fast, right? You could outrun them when they started pursuing you... and at the same time lead them away from the *Prospect*.”

Shakes started chewing again while he thought. “There is something appealing about the idea of being loud, fast, and — what’s the fuckin’ word? brash —after all these years of trying to sneak around and stay quiet. I can’t say I have much experience at that kind of thing though.”

“I have a feeling you’d be a fucking natural at it.” Said Percy.

“It would require a little work on the *Gnat*. I’d have to undo some of the dampening I’ve put in over the years. And I’d need to tune it up for speed.”

Percy dropped the heavy satchel full of coins on the table in front of Shakes. Though when a couple of other patrons turned around to look for the source of that particular sound she realized it was stupid move, so she leaned in and whispered the next bit so only Shakes could hear. “Not to be dramatic, but this is only two-thirds of the payment for this fucking job.”

Shakes eyes widened. He poked at the satchel with the handle end of his fork. “Better put that the fuck away. What the fuck are you offering me exactly?”

“How about two deck-crew share’s worth? And a deck-crew share on this run should be pretty lucrative.”

Shakes nodded slowly, while chewing through another piece of bread. “Alright. Fuckin’ alright! But I want a stipend on top of that to cover the costs of any modifications to the *Gnat*. And enough to reverse them after we complete this run.”

“Done. I’ll give you one share right now, and the other on delivery. You can write up the cost of the fucking stipend at delivery too.” Said Percy.

Shakes grinned through a mouthful of food. “Well — partner — who knew picking up a bunch of fucking dirty marooned scumbags in the middle of the ocean would lead to anything profitable! Fuckin’ Sweet.”

“Well if that’s fucking settled, I’ve been away from my boat for a couple of hours now, and that is enough for some serious fucking damage to have been done. I feel like I need to be getting back there.”

“You go Captain Percy. I’m going to finish loading up on this chow.”

At docking slip four, the hole in the deck that led down to the cargo hold of the *Prospect* was like a giant black maw, whose lips were pursed and sucked against the airlock dock of the depot. It now had a number of heavy black cables and hoses arcing into the hole, making it look a little like some kind of enormous dental maneuver was being worked on it. Captain Percy’s eye scanned from where the hoses and wires were attached to pipes and terminals mounted on the walls of the docking bay over the

edge of the hole. She leaned over and looked down into the cargo hold where the cables and hoses were lashed together and ran in a hulking pile up the middle of the cargo hold back into the deeper parts of the ship where they were hopefully connected to the battery terminals and fuel tanks that so desperately needed to be topped up. At the front of the cargo hold, Chips was overseeing a repair crew from the dock that was working on redoing and reinforcing the desperate and messy repair welds Chips had made earlier.

Percy climbed down the ladder to the catwalk and made her way over and down to the deck of the cargo hold. From there she went aft into the forward battery room where she found Hemi with a dock worker trying to get cables hooked up to the battery bank so they could recharge the batteries from the docking bay power system.

“Hemi!” Percy yelled at him. “What is that fucking woman still doing on this boat?” She said pointing forward to where Chips was standing. “Didn’t I say she was to be off as soon as we hit the fucking dock?”

“Come here,” Hemi said calmly, leading her further back into the battery room. “I convinced her to stay long enough to oversee the repairs. She did not want to be blamed if those guys did a lousy job and the seam burst open again later. So she is just making sure they fix it right.”

“Fuck Hemi! When I fire someone, they stay fucking fired!”

“Captain, we need her. I cannot do all these jobs myself. I am a middling welder at best. And I can not tell the difference in someone else’s work between a good weld and a pile of dog waste.”

“Owen can take over the welding.”

“Owen is just a kid. He can not tell these dock trolls what do to, even if he does know any better than them.”

Percy considered. “OK... she oversees the repairs, we pay her up to date, and *then* she’s fucking gone.”

“Percy,” Hemi said looking directly at her, “we need her. You need to apologize and re-hire her. We can not leave this depot with no engineer and no welder aboard. And in case you had not noticed, there is not exactly a surfeit of talented crew waiting to be hired around this depot.”

“Motherfucker.” She kicked the battery shelving with her boot. “Fuck! You’re right. You’re always fucking right and I fucking hate it when you’re fucking right. I’ll go see if I can re-hire that little fucknut.”

“Do it humanely. We need her to actually *want* to stay and work.”

“Speaking of work, the other reason we need to re-hire her is I fell into a plum job for us up on there on the exchange floor. For the moment, we’re fuckin’ flush.”

“Yeah?” Said Hemi skeptically, knowing that a cargo job that paid well was likely to be neither easy nor safe.

“Yeah. We’ve also got some free advice to be out of here in 48 hours.” She handed him the leather satchel full of coins. “Here’s the money. You know how this goes. Spend what you have to to get us out of here quickly.”

“It’s going to be tricky in this place to throw money around without also getting a bunch of useless hangers-on and value extractors.”

“But you’re the best Deck Boss there is for people management Hemi. I’m sure you can walk that line between getting it done

and not getting completely fucking bilked. I should also let you know I hired a new kid to work sonar.”

“I am amazed. Seems like there is an unusual lack of green folks on the docks. Does she have any experience?”

“Not a bit. But who trains people better than you Hemi? She should be by the boat later, if she doesn’t fuckin’ skip out from fear.” Percy gave him a light punch in the arm as she turned towards the cargo hold. “We can talk details over dinner later. Just keep things moving for the next few hours.” She was already heading out of the battery room into the cargo hold.

Percy picked her way around gear being prepped moving forward up the cargo hold to stand next to Chips, who had a foul look on her face and her arms crossed as she watched a crew of over-sized dock workers sloshing around in the bilge water in tall rubber boots. A couple of them were working a welding rig and bent over the repeatedly stitched and patched gash that ran from the bottom of the boat up the curve of the inside of the pressure hull.

“I’m collecting my fuckin’ pay and fuckin’ leaving as soon as I see that these fuckheads do a job that will hold. You’re not pinning any fucking further leaks on me.” Chips said to Percy.

“Yeah. Hemi said you would do that. Thanks. How bad is it?”

“When we was on the surface I had it patched up pretty fucking OK despite half the welds still being under the bilge water. But now the fuckin’ boat’s under ten or 20 meters of water, and the pressure is causing it to seep, like a fucking wet, oozing wound.”

They watched the dock workers go at it for a couple of minutes. Then Percy said quietly to Chips, “Umm, it kinda looks like they’re making it worse in places. Kinda fucking up some of your work.”

Chips cracked her knuckles and breathed heavily through her nostrils. “Fucking useless fuckin’ shit clods.” She said under her breath, then: “Hey you fuckers, don’t just fucking re-weld the failing fucking patches. Take them out and put *new* fucking plate steel in. Motherfuck!”

There was an incoherent grumbling from the men standing in the puddle.

“Chips,” Percy hesitated, “look, I need an engineer. And I need a welder. You’re both of those things and I can’t get either of them on this forgotten rock. I need you... at the very least for the next run. Maybe you could stay on until we hit a major port, and then you can find new work there...”

“What the fuck makes you so arrogant to fucking think I would go back out with a stubborn fucking ass-reamer like you?” Her face was flushing. “Fucking fuck! You’ll fucking get me killed with your fucking stupidity, and is if that wasn’t fucking bad enough, you would tell the story that it was my fucking fault somehow. You fucking twat.”

“Fuck Chips! Look at the work these fucked meatheads are doing — if we don’t have you aboard, we’re going to fucking go down when it fails and there’s nobody who can fix it! Now, I’ve got a new job coming in, it pays really fucking good. I can offer you a fucking *double* engineer’s share for this next run. I’ll even pay you half right fucking now.” Percy said, reaching for her satchel full of coins.

“Ah fuck you Percy. You can hold the fucking money. You’re a fucking shithead, but an honest fucking one and always fucking paid smartly.” Chips pushed at the bilge water edge with the toe of her rubber boot. “Ah fuck. Look at this fucking work they’re fucking doing. Y’all going to fucking die without me on board. You, Percy, I don’t give two shits. But I couldn’t live with



fucking Hemi or Owen going down when I could have stopped it.”

“Well, me fucking neither Chips.”

“OK you fucking cunt. You got me. I’m in for the next run — double fucking engineer share. Now get the fuck away from me before I start looking for another piece of pipe. Actually I might need one for these fuckers in the puddle anyway.” She said looking around.

Percy walked away thinking she would do her best to just stay out of Chips’ way on this run — as much as one could stay out of anyone’s way on a sub. But it was also reassuring to know she would be aboard.

At the other end of the cargo hold Captain Percy found Shakes had made his way back from the cafe and was having a conversation with Hemi through the hatch into the forward battery compartment. He stepped a little to the side as she came up so she could join in.

“Captain Percy. Hemi and I are talking about disconnecting my boat from the *Prospect*.”

“You got the *Gnat* refueled already?” Percy was a little surprised they had been able to move that quickly.

“Fuck naw.” Said Shakes through a mouthful of oozing leaves. “But if you look back toward the end of the battery compartment, to the hatch down to the *Gnat*, you can see we’ve still got the *Gnat*’s batteries connected up to the circuit. That means since we’ve been charging the *Prospect*’s batteries,” he nodded toward the heavy cables hanging from the *Prospect*’s cargo hatch and running up the middle of the cargo hold, “we’ve been feeding the *Gnat* juice too. Hemi here figures there’s enough charge on

now that I could move the *Gnat* to its own slip, and refuel there. ... Sending the fuckin' bill to y'all of course."

Hemi nodded.

"And bonus," Shakes continued, "with that fancy fucking mating collar added to the *Gnat*, I can dock in a regular slip for small boats instead of using one of those ridiculous universal docking tubes that they charge extra fuckin' dock fees for."

Percy looked at Hemi. "Do we have more use for the *Gnat* now Hemi?"

"As a spare battery bank? No. In fact keeping it connected it just slowing down our own charging process."

"Alright then." Said Percy. "Get that leech off my fuckin' boat."

Shakes grinned. "Applying that leech *saved* your fuckin' boat."

Percy grinned and patted him on the arm.

"Hemi," said Shakes, "don't forget to return those fuckin' manuals."

It didn't take too long for Hemi to seal Shakes into the *Gnat* with his engine manuals and get it disconnected from the *Prospect*. Though Hemi wanted some help coiling and stowing the heavy jumper wires they no longer needed, and it took a while to find one of the deck crew to help him.

Shakes steered the *Gnat* further down the docking bay, and got it mated up to slip fifteen. After popping the *Gnat's* hatch at that slip, he started the process of negotiating with the dock workers for finishing the job of getting the batteries charged up, and refueling the fuel ballast tanks. Pretty soon, the *Gnat* was gorging on its own set of umbilicals running down through its sail hatch and into its belly.

Refueling, recharging, and repairs were busily carried out over the next six hours or so. Captain Percy was uncomfortable with how many people were coming and going and crawling around in her boat. In the long expanses of time that she lived inside this steel tube, during most of it she knew exactly who was aboard her submarine. In dock like there was an unusual and discomfiting open access to her boat. Just another reason to be on the move, as far as she was concerned.

All of the activity meant that Hemi was probably spending heavily to get things done quickly. Considering the condition they came in, in normal circumstances they would plan on staying on the dock for a week or two. Hell, with the damage to the hull the *Prospect* should really go into dry dock for serious repairs — but that required a monetary flushness that was far beyond a single well-paid job.

Getting the boat ready to go out again so quickly was not just expensive, it also meant cutting some corners that Percy was not happy about. The repairs to the hull continued to be a foul mess of patches and half-competent welds. Through Chips' streaming curses from the bow Percy got the impression that Chips felt she had done a better job welding underwater while the boat was moving than this whole team of ruddy thick-fingered men were doing with the boat dry and steady.

The only fuel Hemi could contract for on the dock on such short notice was a gritty and sludgy bunker. Chips was also not going to be happy about feeding that stuff to her engine when she found out about that.

By dinner time most of the critical repair and refueling work was wrapping up. Most of the crew took off for the cafe on the exchange floor to find some grub. Hemi and Percy stayed behind and ate in the *Prospect's* galley, though they prepped dinner from

somewhat fresher food items they had bought off the dock that included a cabbage head and a bit of gristly meat.

“What’s left for us to do Hemi?”

“We still have to charge the high and low pressure tank systems. It would be better to do that from the dock rather than from diesel while we are moving, if we can.”

Percy nodded.

“And we should take on some more food, refill the fresh-water tanks, and lay in a normal spread of spare parts. . .”

“I did try to start buying parts earlier today but got sidetracked by the job offer. Put Gregory on securing our food stocks.”

Hemi nodded and jotted a note on a scrap of paper clipped to a clipboard that lay next to his plate. “You are sure about this job Sylvia?”

“You saw the fucking money! And that’s only two-thirds of it.”

“I do not trust jobs that pay *too* well. Cargo?”

“Weapons parts — magnetic warheads.”

“Had to be something like that did it not? You have no problem with Authorities breathing down our necks and risking blowing the boat in half if someone drops a crate full of explosives?”

“We’re on the fuckin’ Nitro Express now Hemi. *Someone* has to move this stuff. Might as well be pros like us. The cargo is supposed to arrive for loading any minute now, actually. Is the hold ready for it?”

“Chips finished up repairs an hour or two ago — at least as good as they could be with the resources available here — and the bilge is pumped dry. I think we can start loading cargo. Though

if we are hauling explosives you might want to pack in some soft padding first.”

“I’m sure they have been thoroughly fucking packed and duly deactivated... though it would be good if you took a peak at them before they get settled so you’re sure they *won’t* go off if someone walks by a crate with a heavy socket wrench or something.”

There was a tap of someone’s bony knuckles on the hatch to the galley, and Gregory swung it open a bit. He downed the last of an ice cream sandwich he had been working on and tossed the wrapper in the sink. “Back from dinner Cap. Bunch more of those fuckin’ big trolls up at the slip with crates they say are to be loaded into the *Prospect*.”

“Thanks Gregory.” Said Percy. “That is indeed our cargo. You can come help us get these things stowed properly. Hemi?”

Hemi forked his last bite of meat, and squeezed his bulk out of the tight galley seating.

They climbed up the ladder from the catwalk to the depot docking bay to find dozens of large and molding wooden crates stacked up around the open hatch into the *Prospect’s* cargo hold. The sides of the crates were stamped with “XL Industries” and “CAUTION!” Apparently XL Industries knew better than to put the word “EXPLOSIVES” on their packing materials with the risk that would bring of attracting unnecessary attention during an Authority inspection. But XL Industries still felt that anyone handling their products should have a heads up that they should not just be tossed around casually.

Making their way among and about the crates were a half dozen or so dock workers — more huge swarthy men wearing moth-eaten tweed and leather suits and chomping on various forms of tobacco or seeds. They swarmed around a large push cart

stacked high with the wooden “Caution” crates, and swinging crates off it from chains connected to a sliding block hanging from anchor points welded to the roof of the depot’s docking bay tube. This sliding block would be used to lower the crates down into the cargo hold of the *Prospect*. A couple of men climbed the ladder into the *Prospect* to make their way down to the deck of the cargo hold where they would receive the lowered crates.

A dock worker approached Percy. He was wearing a worn bowler hat and was among the smallest men Percy had seen since they docked — his eyes were almost even with hers and were surrounded by round-framed glasses.

“You’re Captain Percy, right?” He asked.

She nodded.

“This shipment is from Trinity. Sign here.” He held out a pen and handed her a clipboard he was carrying that had a long sheet of tiny type printed on it with a signature blank at the end.

Percy took the pen and scrawled her illegible name into the blank.

“This document should have a witness too. Can he witness?” The dock worker asked, motioning his head towards Hemi.

“Yeah, Hemi put your scrawl on that fucking thing.”

Hemi adjusted his thin-framed glasses and more studiously scanned over the contract before he signed the witness blank. The man tore off a carbon copy and held it out to Percy. Hemi took it and folded it and put it into his inside jacket pocket.

By the time this was done the dock crew already had the first crate suspended by chains in a sling and hanging out over the *Prospect’s* open cargo hold. The chain passed through a series of heavy iron blocks to a fat winch mounted to the wall of the

docking bay. The chains looked like they were straining with tension at the edge of their capacity — explosives were never a light cargo. One of the big fellows was at the winch. “OK, I’m letting out some of the fuckin’ winch now!” He yelled over to his mates at the cargo hold entrance. They relayed the update down to the men on the deck of the *Prospect*’s cargo hold.

“Gregory,” Percy said, “go down to the cargo hold deck and make sure those goons are stowing things in a way that won’t leave the boat totally fuckin’ untrimmable.”

“Sure Cap.” Gregory disappeared down the ladder into the cargo hold.

With much relayed yelling, the men got the first crate lowered down into the hold, then cranked the chains back up, slung the second crate, and repeated the process. Soon they had a clanking and yelling rhythm going and the hold of the *Prospect* steadily filled with crates. Hemi and Percy watched, looking down through the hatch into the hold. As the dock workers moved the crates into the sub, they arranged them like puzzle pieces, and then lashed them with thumb-thick hemp rope to fixed loops welded to the pressure-hull walls.

Gregory was making sure the crates were being stacked, stowed, and lashed down in such a way that the boat was not going to dive bow-first into the globigerinous ooze as soon as they separated it from the docking bay. But he was doing the job maybe a little too quickly, and Percy and Hemi knew even if Gregory stowed the crates carefully the crew would likely have to make some adjustments to the balance of the load later to get the boat trimmed as efficiently as possible. The key priority for Gregory was simply to make sure the crates were organized so that making those adjustment later while they were underway would not be too difficult.

In the middle of the loading Cassandra approached, a large canvas rucksack slung on the thin frame of her body. She also held large overly-stuffed canvas satchels in each hand. She had apparently taken Percy's advice, and now wore thick duck pants and a button down shirt made of thick cotton, though the new clothes hung loosely on her. Percy was happy to see she had also procured some thick rubber-soled shoes. That Cassandra had managed to put together some reasonable work wear in such a short time suggested good things to Captain Percy about Cassandra's future aboard the boat.

Percy was always on the lookout for little signs that a crew member might last beyond a single run. Green crew came and went on submarines like late-spring snows. A captain could hire a few in one port and they would all leave at the next, replaced by equally unskilled new crew. It was an incredibly tough job, and only those with a certain hardness of character managed to continue in the lifestyle. The others gave up eventually, and, presumably, they made their way back to the surface world to see what kind of life they could eek out under the domination of one territorial authority or another.

Captain Percy tapped Hemi and nodded in the direction of Cassandra huffing her way down to the docking bay. "That's our new sonar watch person." She said.

Hemi looked up from his clipboard and sized Cassandra up for a moment. "I hope she can steer or hear, because I do not know what else we could do with her."

"We could make her Deck Boss."

"Or Captain."

Cassandra made her way up to them, weaving through the remaining crates.



“Cassandra.” Said Percy. “I’m glad you made it. This is Hemi Howell, Deck Boss, First Mate, Navigator, Crew Trainer, and whatever the fuck else needs to be done. Basically he’s the one who does all the actual fucking work.”

“Nice to meet you Hemi.” Cassandra said politely. Percy could have sworn if she were wearing a skirt and unburdened by all the possessions she owned she would have curtsied.

“Genuinely glad to have you aboard.” Said Hemi. “We desperately need more hands, and with you taking a watch we all might actually be able to get a little sleep on this run.”

Cassandra smiled up at Hemi.

Hemi gestured with the end of his pencil. “Down that ladder into the boat. Walk up the catwalk til you get to the main decks of the boat. Introduce yourself to anyone who does not look like one of these mounds.” He nodded towards the men working on loading the explosives. “Ask them where the crew quarters are. You should be able to find an empty locker to stow your stuff in there. Then make your way up to the sonar compartment and hang around until someone asks you to do something.”

“Alright.” Said Cassandra. “And I’ll get some training at some point?”

“Not until we are under way. Getting the boat ready for a run takes a lot of prep, as you can see, and there is no extra time for anything but prep. Once we are under way there will be some downtime and I will sit with you at the sonar and show you how it works.”

“Sounds good. So I’ll see you both later. Thanks again for the job.” She gave a little wave and looked down the ladder into the cargo hold before tossing the bags in her hand down the catwalk, and then swinging her tiny self out onto the ladder with her big

pack behind her like some kind of distended insect. She lowered herself down to the catwalk.

Percy watched this approvingly. It was another good sign that Cassandra seemed so intuitively comfortable with the vertical up-and-down lifestyle of a submarine.

Hemi did not fail to notice either. “Maybe...” was all he said before looking back down at his clipboard and counting how many more crates remained to be loaded.

They finished loading the crates of explosives that evening. Hemi had Bastian, Gregory, and Owen go over every crate and make sure it was lashed securely enough that it could not shift once the *Prospect* started moving.

After that, most of the crew headed up to the canteen on the exchange floor to indulge in the kind of heavy drinking rarely on offer to a submarine crew, though Cassandra excused herself from this opportunity to get to know her new crew mates better, suggesting politely that she had seen quite enough of that canteen. Hemi and Percy also skipped the canteen and were up late in the galley going over the state of their supplies and some questions Hemi had about the details of the job contract that Hemi wanted to be sure Percy had considered.

## Chapter 4

The next morning, Hemi was up first, and dragged a bleary and aching Bastian out of the rack to help him track down some dock workers who would have the rig to get the compressed air tanks of the *Prospect* recharged. This involved setting up a length of expandable rigid pipes that ran down the docking bay, through the cargo hatch, and were connected up to pipe fittings mounted to the ceiling of the *Prospect's* cargo hold. It had to be rigid pipe the whole way because Hemi wanted to recharge the high-pressure tanks in the *Prospect*, and that air was under such an immense pressure it would blow apart any kind of flexible pipe material. Once they had the high-pressure tanks filled, Hemi could recharge the low-pressure tanks as well by utilizing some valves on the tank ballast panel in the control room to bleed off air from the high-pressure system to the low-pressure tanks.

The docking bay had high-pressure pipes that were fed down from tanks and compressors in some equipment space up above the exchange floor of the depot. Mostly the depot's tanks were just kept ready for an emergency — if the docking bay got flooded and the water needed to be blown out. Most subs that docked there already had their high-pressure tanks fully charged, since they had to be ready for their own emergencies at any time. Refilling a docked submarine's high-pressure tanks was an unusual operation. The docking bay had equipment for it, but only a handful of people knew how to use it. So Hemi spent the first few hours of the morning wandering around the docking bay and the exchange

floor with Bastian and a bag full of money looking for those people.

By the time they got back, the rest of the crew had managed to crawl slowly and painfully out of their racks, got themselves fed and coffeed, and were doing odd jobs around the boat while waiting for Hemi to return with instructions for things that actually needed to get done. Hemi sent Gregory and Cassandra up to the exchange floor with a stack of coins to track down enough food and consumable supplies to get the crew through the run ahead of them. He figured Cassandra had been in this depot long enough that she might be able to help Gregory acquire some better-than-average submarine grub. Chips had Owen down in the engine room going over the diesels and the motors very carefully and Hemi was neither going to disrupt Chips in that process, nor take Owen from her for something else.

Hemi and Bastian worked with the two men from the depot who knew how to rig the high-pressure pipes until they had a spindly and unwieldy-looking hook of pipe that arced through the air from the docking bay down into the *Prospect*. It took a while to get all the piping set up and double checked so that everyone working on it was confident it wasn't just going to explode and blow every submarine off the docking bay when they let the high-pressure air into it. But once it was set up, charging the high-pressure tanks only took a few minutes.

With the compressed air systems recharged, the only thing left was to get food aboard. Gregory and Cassandra returned a couple of hours later with a cart full of yet more wooden crates, though these were filled with food stores. Gregory and Bastian got these crates lowered down to the cargo hold deck with Cassandra watching and learning, but staying out of the way. Once they were in the cargo hold, Bastian stowed and lashed the crates full of non-perishable and dry goods — cans and dried meats, oatmeal, cornmeal, flour, apples, rice, eggs, cabbage, jars of spices,

and citrus — with the rest of the cargo, figuring they could move the contents up to the galley after they were under way. The frozen and perishable items — sides of beef and pork, a couple of waxed-paper boxes of leafy vegetables they would need to cook in the next few days, frozen chicken carcasses, and ice cream sandwiches among other things — were all laboriously pulled from the crates immediately and carried up to be stowed in the galley and freezers by the crew.

With food aboard, Hemi found Captain Percy in the sonar compartment around midday and reported that all the various umbilicals had been withdrawn, and the *Prospect* was ready to swim under its own power again. They could expect to be ready to embark from the depot sometime that day.

“I do not know if you have any business left to take care of up on the exchange floor or anything,” said Hemi to Captain Percy, “but the cargo is loaded, all the critical supplies are aboard, Chips says the engines are running cleanly enough, and the boat is more or less repaired.”

“Nice fuckin’ work Hemi. Do we have any fucking money left?”

“Well, we have been spending coin with a shovel to get this all done quickly. But even after covering Shake’s costs, we should still come out a bit ahead.”

“Clandestine work does fuckin’ pay, don’t it?” Percy smiled.

“If it does not kill you in the process.”

Bastian’s tall skinny form suddenly filled the hatchway forward to the next compartment. He stood aside and one of the scruffy young teenagers who hung around the depot looking for various quick jobs they could take on stepped into the sonar compartment.

“Captain Percy, this kid says he has a message for you.”

The kid did not say anything but handed Percy a scrap of paper and then stood to one side looking at the deck.

Percy unfolded the paper. Written in a slightly wavery hand with printed capital letters said: IT'S TIME TO LEAVE.

Hemi put a couple of things together. "A message from our employer?"

"Indeed." Said Percy. "Raise the Blue Peter Hemi. I think it's time we fuckin' moved on from this place."

Hemi nodded and climbed up to the control room. A second later his voice reverberated through the ship as he told the crew to prepare to embark over the PA.

"Bastian," said Percy, "get on the sonar rig and have a fuckin' listen."

Bastian sat down at the sonar station, and put the headphones over his ears, and flipped on the power to the unit. "Is there anything in particular I'm listening for here Captain? We are docked after all. Probably not fucking much out there to hear."

"It's just a feeling, not something particular. But I'd like to keep the surprises to a fucking minimum." Percy looked at the messenger. "Hang out a second kid. I think I've got another job for you."

The kid spun the chair next to Bastian around and sat down in a long-legged slouch.

"Hemi!" Percy called up to him in the control room. "Start working that embark checklist."

"Already started it Sylvia." He called back down.

Gregory and Cassandra showed up in the sonar compartment a minute later, ready for instructions for prepping the boat to leave.

“Gregory, take Cassandra and go find a dock crew who can work the other side of the slip hatch. Be ready to seal the *Prospect’s* cargo hatch when you hear from Hemi.” She jerked a thumb at the messenger. “But make sure this kid is off before you do.”

As Gregory and Cassandra made their way forward, Bastian broke in. “Captain Percy, There’s definitely something happening out there.” He paused for a minute, listening. “There’s a fucking torpedo in the water!”

Percy pushed past the messenger kid and put on the spare sonar headset. She stood behind Bastian, concentrating on the sound in the headphones.

She could hear the unmistakable high-pitched whine of a torpedo prop spinning quickly. She reached over Bastian, and adjusted the direction of the underwater mics. She looked at the readings from the sonar panel. “It’s running just at the surface.” She said. “It’s not coming towards us — or the depot... some other target...”

She slowed her breathing and listened to the sounds in the headset. It was a confused mix of white noises layered on top of one another. But there was more than one prop spinning in the water. Below the whine of the torpedo, she could hear the slow revolutions of a ship screw. It was nearly silent, and difficult to hear. She leaned over Bastian and flipped some switches adjusting the filters to try to muffle the torpedo whine.

She could tell by the revolutions and the pitch that the other prop belonged to a relatively small craft. It was so quiet it could only be an electric motor — that made it a submarine. It took

her just a second longer to figure it out. “Someone fucking fired on the depot’s little inspection sub.” She said.

“Maybe someone wasn’t enamored with the quality of their hospitality.” Said Bastian.

The little inspection sub was pretty maneuverable, and they were taking evasive action. Percy could hear the pitch of their screw change in her headphones, as they put on speed, turned and dove to try to escape the path of the incoming warhead. Then she heard the ping of the torpedo’s sonar and the echo off the small submarine.

“The torpedo found them. It’s homing,” Bastian commented. A slow minute ticked by, every second the bouncing ping of the torpedo got faster in Percy’s headset. She motioned to Bastian and they both took their headsets off. There was silence in the sonar room. The messenger kid managed to look bored.

Then they all heard a low-pitched rumble echo through the hull of the *Prospect*.

“Sounded like they were hit.” Hemi shouted down from the control room.

Percy put the headphones on and made some further adjustments to the filter switches. She could hear the creaking hull of the small submarine. She could hear welded seams splitting, and the streams of bubbles pouring out of it. She looked at the ranging readout on the sonar rig. The water was deep where the little sub was. It was going down into the hole.

“They’ve been fuckin’ sunk.” Percy said, turning her head slightly and pitching her voice loud enough for Hemi to hear.

In her headphones the groaning hull’s pitch changed as it dropped further down the water column into the colder, denser water where



sound found new rules by which it could propagate itself. The groan turned to a low rattling whine.

And then Percy heard a crunching pop. She could hear a huge bubble of air escape, the life-bubble of whoever was inside that submarine, squeezed out of it instantaneously as the broken little sub sank beyond its crush depth. The compressed carcass of sub made no more sound, but she sat listening for a few seconds to the rushing sound of the huge bubble climbing the distance to the surface.

Captain Percy took off the sonar headset and laid it on its hook. "We gotta get the fuck out of here." She said. Then louder, so Hemi could hear. "Hemi! We need to get out of here!"

Bastian nodded, the other sonar headset still on his ears.

"Right Sylvia. I concur." Said Hemi from above.

"Here kid." Percy ripped a piece of scrap paper from the pad at Bastian's elbow. She scribbled on it with a pencil and handed it to the messenger. "That's for a guy who goes by 'Shakes.' He's got a small boat at one of the slips. Find him and give him that message." She dug a few coins from her pocket and handed them to him.

The messenger was off with an energy one would never have suspected by the lethargy that had engulfed his sitting form just a few moments before.

Hemi's voice came over the PA. "Everyone be ready to toss lines. Gregory, get the cargo hatch buttoned up, and let me know when you are ready. Owen, come up to the control room."

"I hope we didn't fuckin' forget anything." Bastian said.

"I'd rather leave some stuff behind than be sucked onto a fuckin' slip when whoever fired that torpedo arrives here." Said Percy.

Gregory's voice came over the ship PA. "Hemi, the cargo hatch is sealed and flooded. You can let go the docking clamps whenever you're ready. Cassandra and I will head towards the sonar compartment."

Percy could hear Hemi's voice take on a soft professional tone as he got on the ship-to-ship radio and notified the docking control office they intended to depart.

A minute later Owen appeared. He took a rag from a hook on the wall and wiped his hands that were blackened with grease.

Percy motioned him up the ladder. "I think Hemi wants you in one of the control seats. We gotta get the fuck outta here. Is Chips ready to go down there?"

"Well, she's got all the fuckin' compressed air lines off one of the diesels to check and clean 'em." He answered her as they were both climbing into the control room. "She's not going to be thrilled about finishing that job up while the boat is moving. And she cursed Hemi up and down the meridian for requesting me up here."

"That's a minor job, she can handle it on her own. And we'll be running on batteries for quite a while, so she can take her time getting that diesel to start again."

"Owen, I need you up here in the throttle seat." Hemi said when they were standing in the control room.

Gregory arrived a few moments later and Hemi gestured him into the other control seat.

"No problem with the dock crew getting the hatch sealed?" Hemi asked Gregory.

"Well, after that explosion sound, the whole dock went a little crazy. I think a lot of submariners took that as a sign to leave."

But for a couple of coins I got that messenger kid to seal up the dock side hatch and flood it for us.

“Nice work.” Said Hemi.

Percy looked down through the hatch to the sonar compartment and saw Cassandra standing quietly off to the side. Captain Percy leaned down and motioned to the second sonar operator’s seat and the spare headset. “Sit over there Cassandra. Put that headset on, and start to familiarize yourself with the sonar rig.”

Cassandra moved to sit down next to Bastian without a word.

It was time for Captain Percy to get her boat out from under the docking bay. “So we’re ready to fuckin’ go, right?” She asked Hemi.

“Correct.” Replied Hemi. “I have been keeping the tanks trimmed with just a bit of positive buoyancy while we have been docked to keep us pressed firmly up against the mating collar of the slip. So we will have to take on some water after we release.”

Percy nodded. It was a standard maneuver for a docking situation like this one. “OK, let go the fuckin’ docking clamps.”

Hemi picked up the ship-to-ship mic and told the docking control office they were leaving. He did not wait for them to reply before reaching over and flipping the switch that operated the powerful electro-magnets in the docking clamps. The clamps reversed with a loud clunk that echoed up the length of the *Prospect’s* hull.

“I am going to open the main ballast vent valves.” Hemi warned the control room. He stepped up to the tank trim control panel, and flipped the switches for the main ballast valves.

There was a hiss of air escaping from the boat and the *Prospect* fell slowly downwards under their feet.

“We are off the docking slip. Put us in reverse and back us away from the dock. No reason to risk hitting the sail trying to swim under the dock tube.” Hemi said to no one in particular, but since Owen was sitting at the throttle controls, the implication of who was responsible for this maneuver was clear.

Owen pulled the throttle controls backwards, and they felt a small acceleration towards the rear.

“Control room!” Bastian shouted up from the sonar station. “There’s fucking boats everywhere in the fucking water! Seems like no one wants to be hanging around this fucking shithole anymore. You’re going to have to move slowly to get out of here without fucking hitting one of them.”

“The last thing any of them want is to move slowly and cautiously right now, of course.” Percy said to Hemi as he hung on to the leather strap over her captain’s station.

“That might be exactly what whoever fired that torpedo was thinking.” Put in Gregory. “Scare all the fuckin’ rats away and take the cheese for themselves.”

Hemi was too busy considering his options to respond. He was counting seconds to himself, reckoning how much time there was until the *Prospect’s* bow was backed out from under the dock. As soon as he was sure they were clear, he leaned over Owen and put the throttle slightly into the forward position, waited until the boat slowed to nearly a stop and then backed off to no throttle. It was too dangerous to keep reversing — there was no way to know if another boat was behind them. “Bastian,” Hemi called down to sonar, “I need sea room — some safe space to maneuver in.”

“Right Boss, hang on.” A full minute passed. “It sounds like you can come about to 180, nobody moving directly to the south of us.”

“OK then. Owen, creep forward, port to 180 degrees.” Hemi said.  
“Bastian, continue to ensure we are not headed into anyone.”

“Right Boss!” Bastian repeated.

The *Prospect* put a tiny, silent amount of speed on. They crawled out of the docking area, with Bastian, swinging the sonar mics back and forth rapidly, trying to make sure he was hearing every contact, and understood where each was going. It was a good first lesson in sonar for Cassandra, though she found herself wildly confused by all the different sounds, their meanings, and their correlations to the range and heading calculations. She listened with a anxious look on her face.

“You’ll get the fuckin’ hang of it eventually,” Bastian said to her quietly so as not to lose track of what was happening in his earphones. “Or... you fuckin’ won’t. Seems to me like people either get sonar, or they don’t. There’s no in-between.”

Cassandra hardly looked reassured.

“Hemi!” Bastian called up. “New contact. Coming in fast from the east, port-side.” A few seconds passed. “I’d say, fairly big sub, pretty noisy amount of fucking water running along the hull. Fully submerged, and just charging towards the docking area.”

“That’s probably the one that did the firing.” Said Hemi to Percy.

“Let’s put some distance between us and that boat.” Said Percy.

Hemi, with the intuitive three-dimensional thinking of an experienced submariner, understood immediately that when Percy said ‘distance’ she did not mean horizontal distance, like on a chart. To achieve that kind of distance would require increasing speed, and increasing speed would create enough motor noise that they could be heard and tracked. Hemi looked at the depth-under-keel gauge, already showing a hundred meters or so to the bottom

and dropping fast as they moved away from the seamount the depot island was built atop of. “Some distance it is, Captain. Gregory, down plane please.”

As Gregory turned the dive plane wheel and steered the boat into the depths, Hemi stepped over to the tank control panel and opened the valve to flood the forward fast-dive tank. Water sloshed through the ship, and the bow pitched downward. Percy and Hemi, standing, tightened their grips on the overhead straps.

Percy reached for some switches on the wall that changed the lighting to night lighting. The white lights faded away and red bulbs came on bathing them all in a sanguine glow. It was not strictly necessary — night lighting was really to preserve the night-vision for anyone who needed to look through the periscope — but Percy was of the school that believed in switching to night lighting in any situation where she needed her crew to remain alert. The red light served as a constant reminder that they needed their sharpest skills and tactics.

“Keep us close to that fucking seamount.” Said Percy. “It will give us extra cover if they decide to use their active sonar.”

“No reason not to make a tricky operation even trickier.” Said Hemi. “Bastian, are we clear of the traffic abandoning the depot?”

“Ya,” said Bastian, “they all scattered pretty fuckin’ quickly.”

“Any of them going deep?”

“Doesn’t sound like it. I think we’re the only ones who took that fucked-up route.”

Hemi had Owen bring the bow around, and they sank obliquely, traveling close to and across the sloping wall of the seamount.

“200 meters down. Depth-under-keel: 20 meters to the wall of the seamount.” Said Gregory.

Hemi looked at Percy. He was not going to level off the dive until she said so.

“210 meters. Still descending.” Said Gregory.

“Ah ya fucking fuckturds!” Chips voice came up from the sonar compartment where she had just entered. “Is your fuckin’ goal to see if you can split open that fucking weak-ass seam those fucking mountain trolls welded in the cargo hold? Because that’s what it fucking looks like to fucking me. The very first fuckin’ thing you do off the dock is push the boat into the fuckin’ hole!”

Captain Percy pulled out a cigarillo with the sudden realization that she had not had one since the last time the *Prospect* was moving. “For fuck’s sake Chips! If it’s a choice between going deep or being fucking torpedoed, we’re going deep.” She sucked on her cigarillo and thought came to her that Chips probably was not totally wrong about the quality of the welding work in the cargo hold. “But... let’s level her the fuck off Gregory.”

“Ah fuck! Ya fuckheads are going to want the fuckin’ diesels any fucking minute now too, I’m sure — and they’re in fuckin’ pieces.” Chips smacked her hand against the bulkhead and crawled back down towards engineering.

“Leveled out at 220 meters.” Said Gregory. “I’m going to make some adjustments to the trim tanks, see if I can get us floating evenly.”

As Gregory started opening and closing valves on the trim tank control panel, the hull of the prospect let out a long groan.

“Easy my girl.” Percy whispered to her boat.

Hemi watched Gregory's work on the trim, and when he was satisfied, he got them moving slowly and silently out into the deep ocean. "Creep speed — three knots Owen. You can steer us away from the seamount wall now."

They crept away from the depot through the pitch deep. The depth-under-keel gauge rapidly climbed until it pegged itself on the 'bottomless' pin.

From sonar, Bastian reported that he thought he could hear some disturbing sounds from the depot, but couldn't pin down any specific thing that might be happening up there.

The *Prospect* continued on its course, slowly, silently, and steadily through the blackness under more than two hundred meters of water. After a couple of hours of creeping, Percy flipped the white lights back on which everyone understood to mean the situation had returned to something like normal, even though it remained nothing like safe to be running beyond the edge of their operating depth.

"Hemi, join me at the navigation station, it's time for us to figure out where we're fucking going." Said Percy.

They climbed down the ladder and turned the lights on over the navigation table. Hemi unsealed and unrolled a new chart, and laid it down under the glass. He wiped the old grease pencil marks off the glass with a rag.

"I picked up a more up-to-date chart at the depot." Hemi said. "Look, the depot is here. And..." He looked over some notes on their current course and speed from a clipboard he had been updating over the last couple of hours, then put a small x on the glass, not far from the deserted island that held the depot. "I estimate we are about here now."



Percy pointed to a hashed arc that ran across the chart passing by one side of the depot island. "Is that the actual fuckin' current Authority demarcation line?"

"Yes." Said Hemi. "Western Federated Socialists on the east side of it, Consolidated States of the Archipelago Islands on the west side of it." He looked at the date printed in the corner of the chart. "At least as of the printing of this chart, eight months ago."

"So Shakes' line wasn't that far off. Not bad for off the top of a fuckin' twaker head like that."

"Not bad at all." Hemi agreed.

Percy indicated an arcing course on the chart with the tip of her finger. "We should head that way, I think." She indicated a point on the arc. "And I asked Shakes to fuckin' rendezvous with us here. I hired him to help us out on this run."

"Good. And yes, further into the Consolidated States waters will be better. They are far less likely to bother us, and we can travel for a few days while remaining in their waters. But..." He took another chart from the stack of rolled charts and unrolled it in front of Percy. "We have to head through these waters in the south. A highly contested area. At least three, up to five Authorities all claiming parts of it."

"Well, we'll just have to be fucking careful when we move through there. We'll be disciplined about running on the surface only at night, and max out our underwater time during the day."

"...In addition to the regular trouble we might encounter with Authorities, there is also that sub with the ram."

"You think they are specifically after us?"

“My guess is they are the ones who fired on the depot patrol sub. It is possible they followed us there.”

“Ah, you’re paranoid. Why would the fuck would anyone be after us?”

“Because we are hauling weapons parts?”

“They rammed us before *we* knew we’d be hauling fucking parts that *could* be used in weapons!” Percy said exasperatedly. “Either it’s something else, or, more likely I think: it was all just coincidence.”

Hemi nodded, but did not look convinced.

“This isn’t a rush job Hemi. We have the time to take it slow and do the stealth thing right. Let’s just be fuckin’ careful, be silent, and not be found. We’ll deliver the cargo, collect our money, and by that time we’ll be a few territories away — an entirely different part of the world — from wherever that sub with the ram came from. I’ll bet we never see that ugly fuckin’ boat again.”

“I hope you are right.” Hemi paused, running through his mental checklist of all the things that kept the boat going. “Another thing I wanted to bring up with you is that while we were adjusting the trim it looked like the boat is a little by the bow.”

“Hardly surprising, we never seem to be able to load cargo in a way that doesn’t throw off the fucking balance.”

“True. I would like to bring some of the crew down to the cargo hold and shift cargo back towards the middle of the boat. See if we can get it stowed so it trims more evenly.”

“Sure, but lets run a little longer first. At our current rate we’ve only made maybe a dozen fuckin’ nautical miles from the depot so far.”

“Think we can risk a little more speed yet?”

Captain Percy considered. “I think so. Take us up to six knots. Only top sonar people deliberately looking for us could hear us at six knots at this range and depth. In a few hours more, we’ll come up a bit shallower and you can start rearranging the hold.”

“Sounds good.” Said Hemi as he started climbing back up to the control room to have Owen put a little more speed on.

Six knots was still slow, but twice the speed at which they had crawled away from the depot. With three more hours of cruising, they were out of range of all the but the very best sonar gear and ears in the world. Percy had them come up to 100 meters to take some of the strain off the hull.

At this shallower depth, Hemi stood at the tank trim control panel and made adjustments, pushing water back and forth across the boat. “Sylvia,” he said to her as she stood behind him smoking, “I think we can certainly do better with the trim if we move some of the cargo around down in the hold.”

“OK. Take Owen and Bastian down there with you. I’ll watch the fuckin’ trim with Gregory in case she starts to lean or something. Keep in mind that it might be bad if you drop any of those fucking crates.”

Hemi tapped Owen on the shoulder and they climbed down to the sonar compartment where Bastian joined them on the trip down to the cargo hold.

When they stuck their noses into the cargo hold and Hemi brought the lights up, it still smelled a little damp. Hemi was certain the quilted patchwork of steel and frozen slag that covered the split seam of the hull was continuing to seep. They might never have a completely dry cargo hold again. That was OK, that is

what bilge pumps were for. But the accumulating bilge water was another good reason to shift the cargo and get some play in the boat trim.

Gregory had stacked the wooden crates into the hold inexpertly. There was a bit of an art to it, and Gregory had only the beginnings of the skill needed. The crates had been initially laid down all the way up and down the length of the hull along the sides. This was a good start, forming the base for putting the rest of the crates on the top. But then Gregory had gotten lazy and stacked the additional layers of crates mostly towards the bow. That was easier to do and kept the crates out of the way for crew moving in and out of the cargo hold, but put more weight in the bow than Hemi wanted. They needed to move some of the upper layers of the crates in the front towards the rear of the cargo hold while still leaving enough room for the crew to get through the crates.

Hemi had Owen rig a block and chain to sliding fixtures on the roof of the cargo hold. Then Owen would climb up on the stack and throw straps around each crate they wanted to move. Hemi and Bastian would pull the chain through the tackle while Owen guided it off the stack. The individual crates were only modestly sized but were surprisingly heavy, requiring Hemi and Bastian's full combined power to lift them even with the mechanical advantage of the block. The three of them would then drag the airborne crate up the length of the cargo hold suspended from the sliding block, and Owen and Bastian would push it with poles while Hemi lowered it to its new place.

It took a few hours to make a first pass at rearranging the crates. When Hemi felt like the weight distribution might be good, he left Owen and Bastian smoking in the cargo hold while he ran up to the control room. There, Hemi and Percy made slight adjustments to the trim of the boat, before Hemi returned to the cargo hold to move a few more crates around. It took another

hour and three more trips up to the control room before Hemi was happy with the way the cargo sat and the boat was trimmed.

“Fuckin’ eh Hemi,” said Gregory when Hemi was finally settled back into the control room, “seemed like the boat was trim enough when we left the fuckin’ depot. Didn’t slow us down none.”

“A submarine is like the hairs on the back of your neck, Gregory. It *always* needs a trim.”

Hemi knew Captain Percy would keep the same course, depth, and speed until well after dark, and that was still a few hours off yet, so there was little for him to do for the moment. He took the opportunity to start training Cassandra on sonar. In the sonar compartment, he sent Bastian off for coffee and a smoke and sat down next to Cassandra.

“You have been listening for the last few hours while Bastian worked the sonar, correct?” Hemi asked her.

Cassandra nodded.

“Any of it make any sense?”

“Do you want me to lie?” Cassandra asked.

“There is nothing to be concerned about. It is not as complex as it might seem. Except for the parts that are, but we’ll get to those as we come to them. Put your headset over both ears... You need both ears to get a full sense of what any sound you hear on sonar is doing.”

Cassandra adjusted the headset so it sat evenly with the headphones covering both her ears. The band matted down her little curls where it crossed her head.

“OK” said Hemi as he began adjusting and tuning the sonar unit “this is the ‘passive’ sonar rig. You can think of it as being nothing more than microphones for listening underwater. There’s

‘active’ sonar too – that’s a lot more complicated: active sonar sends a ping out and we listen for its echo. We do not use that very often so do not worry about it for now. Passive is simpler, you are just listening, passively. Get it?”

Cassandra nodded.

“The main thing you need to know for operating the sonar is that you can aim the underwater microphones in a specific direction using this thing that looks like a steering wheel.” Hemi turned the stainless steel wheel a half turn. “See that dial there? That shows you which way the microphones are pointed. It goes around 360 degrees. At some point someone will ask you to listen in a specific direction. They will give you the degrees and you just turn the wheel until the needle on that dial shows you are aiming the mics in the direction they are asking about. Make sense?”

“That seems simple enough.” Said Cassandra.

“That part is. It will get a lot more complex when we start using the filters and transducers to tune in on a contact later. The thing is, the ocean is never absolutely silent. Let’s start by just listening to what we hear on the sonar where there are no specific contacts we are trying to focus in on.” Hemi and Cassandra both remained quiet for a minute with the background sound of the ocean washing through their headphones. “OK Cassandra. What do you hear?”

“I don’t know...” She waved one small hand around in the air absently. “A hissing sound — white noise?”

“Almost anything could be white noise. Describe it with more detail than that.”

“There’s... a low rumble, a bit of a swishing sound...”

“Good. We are running on the electric motors, underwater, at a modest speed. That is what it sounds like when the boat is

moving while submerged. Later, when we are near the surface with the diesel engines running, it will be a lot louder and you will not be able to hear much in the water beyond the engines. But while we are on the electric motors, we can hear more on sonar.

“Sonar requires imagination. You have to put your mind out there in the water. When you hear a sound, you have to match it to an image in your head that shows how the sound could be made. The more detail you can imagine in the image to fit it to the sound, the more accurate your assessment of the contact will be. That is what makes a top sonar person.”

Hemi pointed to the largest of a set of gauges further up the sonar unit in front of them.

“Now, the gauge above the directional indicator is the main signal strength indicator. All those smaller gauges above that show signal strength at different frequencies, but you only need to worry about this main signal strength indicator for now. Watch that needle, if you see it jump, there is a significant sound out there in the water, and you will want to focus on it, listen to it, and try to figure out what it is.”

“Let us see. . .” Hemi turned the direction dial slowly. About a quarter of the way around the strength indicator dial moved up a little and wavered there. “So see by the needle that there is something to hear in this direction. What do you hear in your headset now?”

Cassandra listened, her eyes watching the signal strength indicator needle wavering like a humming bird feeding. It was moving in response to another kind of white noise, higher pitched than the sub’s engines, which she could still hear rumbling in lower frequencies. This sound was familiar, a washing, churning sound with an occasional rumble mixed in. . . She smiled, “it’s breaking surf isn’t it?”

“Correct! There is a small atoll a few miles in that direction and waves are breaking on its shore. Let’s see what else is out there.” Around the directional needle went, and Hemi slowed it, and stopped with the strength indicator needle throbbing slightly, like it had a pulse.

Cassandra closed her eyes. In her headphones she could hear a distant clicking, slow and regular. The clicks had a strange kind of richness to them. They bounced around the underwater landscape, and she could hear not just the clicks but also the echoes of the clicks. The dark world out there lit up in her mind, and she remembered storybooks about sea life from not so very long ago when she was a child. “Is that the sound dolphins make?” She asked.

“Very good! Dolphins use active sonar, bouncing sounds they make off of underwater objects to locate them. They are much better at it than we are. Did you notice that you could hear the dolphins in one ear slightly before the other?”

Cassandra nodded again.

“That is because the sonar uses a couple of sets of microphones, one on the front of the boat, and one at the rear. Sound coming in hits one microphone before the other, and the sonar rig puts the difference into the earphones for you. With practice, you can use the difference in how long it takes to estimate how far away a contact is, for instance, I can tell you these dolphins are about a third of a nautical mile away. That only works if the contact is close enough that we can hear the difference though. If you think about it: a contact that is farther away will send out a sound that will hit both the microphones on the bow of the *Prospect* and the stern at basically the same time.”

“OK, ya, that makes sense.” Said Cassandra, picturing the sound waves bouncing off the boat in her head.



Hemi smiled. “Miss Cassandra, you may have a career ahead of you. Keep practicing until we surface and start the diesels later tonight. You will not be able to hear anything after that.”

“OK Hemi. Thanks.”

Hemi left her there listening to the dolphins and climbed up next to Percy in the control room.

“How’d she do?” Asked Percy.

“We may have a pair of ears yet.”

“That would be a nice fucking change. Most of these fuckers are OK at rudimentary steering, but they’re fuckin’ useless on sonar.”

A few hours later the clocks and sun charts coordinated to tell them that it was well after dark on the surface. Percy had the boat come up to periscope depth and she put the scope up to check the surface. Finding an empty black horizon in all directions, she had Gregory blow air into the main ballast tanks from the low-pressure system and raise the *Prospect* fully up to the surface.

Captain Percy’s standard strategy for a cargo run was to stay underwater and run slow on the batteries during the day, and surface to run on the diesels at night. Running on the diesels meant moving much faster and recharging the ship’s batteries at the same time. Even with all the shipping traffic these days, the oceans were still mostly huge open spaces. A submarine running with no lights on the surface at night was a dark and tiny target, unlikely to be spotted by anyone. The main risk was being tracked by radar — on the surface they created a fairly strong radar signature. But they ran their own radar receiver while on the surface. If anyone else was tracking the *Prospect* with radar, the *Prospect*’s crew would see the signal and know

they were there, usually with plenty of time for the *Prospect* to disappear underwater and change course.

The only other way they might be found is if an Authority ship heard the *Prospect's* rumbling diesels on sonar. But to do that they would have to be within ten or twenty nautical miles of the *Prospect*. Not an impossible scenario, but unlikely on any normal night of a cargo run.

Captain Percy also always kept one more ancient backup system for spotting any trouble early going: she put someone up in the lookout ring with binoculars. As soon as the deck was above the surface of the water, Percy and Hemi went up through the top hatch in the control room and climbed to the bridge at the top of the sail. Percy had the radar mast raised, which had two lookout rings mounted to it, one on either side, and called Owen up. As he came up onto the bridge she handed him binoculars and pointed to the lookout rings. Owen kept climbing.

Percy looked at Hemi. "Be glad you don't have to do fucking lookout duty anymore."

"I am." Said Hemi. "I remember it well. At night, you are just standing up there in the wind, like you are swimming through pure blackness. Your mind starts to play tricks on you when you most need to keep your mind clear. It is a young person's job."

"Reliable young people, anyway." Said Percy. "Hey down there in the control room," she shouted down through the hatch, "you can start the diesels."

There was a moment more of the quiet of the water sloshing down the length of the hull pushed by the electric motors before the diesels deep in the belly of the *Prospect* coughed and fired. Black smoke streamed out behind the sail. The vibration of the engines carried up up through the deck and shook the soles of their feet.

Hemi called down to ask for their new speed and to confirm the heading. He marked the answers down carefully on his ever-present clipboard.

"I heard that some boats like the *Prospect* are being fitted with snorkels now." Said Hemi.

"That's what they're calling those masts you can raise for feeding oxygen to the diesels while underwater, right?"

"Yes. The diesels exhaust out of them too. A boat with a snorkel never has to come up to the surface, you can recharge the batteries from periscope depth."

"We should look into installing one at some point. Maybe after this run. It seems like it would be worth the investment. The nighttime surface runs are starting to require too much care and caution for me to feel safe."

"The funny thing," Hemi continued, "is I also heard that a snorkeling diesel is actually louder on sonar than one running on the surface."

"You're fucking kidding?"

Hemi looked at her incredulously. Hemi was hardly ever kidding. "Apparently with the whole boat underwater more of the sound of the running engines goes into the water. On the surface, some of it escapes into the air. Nobody expected that when they came up with the idea of the snorkel, but the boats out in the ocean were suddenly detectable 40 miles off or so on sonar."

"So once again the newfangled technology doesn't solve a fucking problem, it just creates more options for a captain to have to make fucking decisions about." Percy spat.

"It is certainly not a job I would ever want. I prefer a measure of certainty in my work."

Percy lit a cigarillo. Hemi looked up at the dark gray sky, mostly obscured by cloud cover.

“How’s the fucking navigation going?” Percy exhaled a long stream of smoke that was caught up by the wind and tied into the diesel exhaust behind them.

“I have been keeping very close track of our time, direction and speed, as usual.” Said Hemi. “But you know that is only as good as guesswork can be. If these clouds break up tonight and we get some stars, I would like to fix our position on the chart. When is the rendezvous with Shakes?”

“At dawn. It will certainly be fuckin’ easier if we know where we are with some precision.”

“And if we can rely on Shakes to know where he is. . .”

The night ground on with the unvarying drone of the diesel engines always under the foot of any crew members on deck, and relentlessly surrounding anyone below deck. Since the diesel engines of the *Prospect* were just generators that created electricity to charge the batteries and run the electric motors that actually propelled the boat, they were always run at the same, RPMs of optimum-efficiency for spinning the generators. Even when the boat changed speed, the all-consuming hum around them never changed in pitch or amplitude. For the crew at the controls, with no depth to control while they were on the surface, and a steady course, there was almost nothing to do. The needles of the rows of gauges all stood steadfastly at their marks.

Percy knew that this was the hardest part of the job — remaining always ready to take action when there was absolutely nothing to do. The crew had to stay focused on the job during hours and hours of virtually no sensory input at all. It was far too easy to fall asleep at the controls, or let one’s mind wander off to a place where everything was not just a grime-coated gray

accompanied by a background of lush and never-changing noise that managed to be the exact auditory equivalent to the bland color that surrounded them.

She put the crew on rest rotations. Every three hours three of them would get three hours off. This kept two people in the control room at all times, one on lookout, and one at the radar/sonar station. The off-duty crew were free to spend their time on deck if they wanted. But since there was little to see up there but a black horizon tapped against a dark gray one, most of the crew came back down after a few minutes and ended up in their rack sleeping. Except for Bastian. He wrapped his long thin form in a rubber foul-weather slicker to keep the wind off and lay out on the forward deck, apparently finding sleep there as easily as warm puppy.

Hours later, sometime during the third rotation, Hemi found Cassandra in the navigation and sonar compartment, listening intently to the sonar with the headphones on and her eyes closed.

Hemi tapped her on the shoulder, and she jumped a little before smiling when she saw it was him and pulling back a headphone.

“Aren’t you supposed to be in your rack?” Hemi asked.

“I volunteered to take two rotations in a row — to keep the rotations even for everyone else...and since I’m new.”

“Are you hearing anything?” Hemi asked.

“No. I try to imagine my mind going out into the water to listen to what’s around us, but I can’t get past the sound of the diesels.”

“Sonar is extremely limited with the engines running. But...” Hemi flipped some filter switches on the sonar control board, and adjusted some tone dials. These were familiar settings he used when he was on sonar while the engines were running. “Try it like that.”

Cassandra set the headphones back into their comfortable position on her ears, and listened for a minute. "That's much better. It's like the engines are at least not distracting my attention." She made some notes on a pad of the settings Hemi had made.

"You are keeping an eye on radar too, right?" Hemi asked. "That is actually maybe more important while we are on the surface."

"Yup. Owen showed me what to look for. The radar... has not done anything at all."

"That is good."

"I didn't realize when I agreed to come on board that this job would be so mind-numbing... and boring."

"That is what makes it so hard, and why only a certain type of person makes it as a submariner. I think on land the culture has a perception that it is this glorious job, where you are out from under the thumb of Authorities, free to pursue your own career, and helping to make world commerce go around. The people on land know it is dangerous, and that gets mixed into the legend of who a submariner is. But in reality, the people who make good submariners are the ones who can handle being in a cramped space for days on end with no changes in their environment at all, and still manage to keep their mind sharp enough to snap into action when a situation presents itself. It is not a job that is an expression of physical acuity. It is a job that puts your mental toughness to the test."

"I certainly don't have much to offer in physical strength..." Said Cassandra.

"People on land think it is a job for tough guys. We are always getting men looking for jobs on submarines. Men who look like, well, like me. Hefty guys with a lot of muscles. And some of those guys are fine. But Captain Percy and I have realized over

the years that the mental toughness we need is not correlated to physical toughness. We hire people who we anticipate might have that mental toughness, at least when we have an option in who we can hire. And we find that mental toughness in all kinds of people. It is not just me and Percy, most of the people who actually work in the submarine cargo industry these days look for that mental toughness in all types. The Authority subs are still full of big men, but the commercial subs are a pretty diverse crowd of workers.”

“The depot was full of big men...”

“You know how that happens? Those men go looking for work on submarines thinking it is a good job for a strong fellow. But they find out they can not handle the mental strain, and they wash out. They end up working the next job out from what the center of what they went looking for: *servicing* submarines instead of working on them.”

Cassandra’s eyes widened. “Ah...” She said as large piece of her world that didn’t quite make sense before fell into place in her mind.

“Unlike work on land, there are few regulations or rules controlling our work out here. The job has strong evolutionary forces in play. The only people doing the work are the ones who *can*. Everyone else goes home, back to their Authorities, and policies, and networks of contacts. On land you get a job based on what you look like, and who you know. Out here, you get a job if you can do the job. We do not care who you know, where you came from, or what you look like.”

A smile cracked across Cassandra’s face. “That’s why you hired me?”

“No, no no. Captain Percy hired you because she was desperate for someone to sit on sonar. But you should know that you have

just as good a chance at doing this job well as any other person. And... you have done well on your first day working."

Cassandra nodded.

"I want to learn as much as I can." Said Cassandra. She paused, thinking about her future. "What are you up to at this hour of the night Hemi?"

"I am catching up on navigation. I have to do this every few hours. Come over here and look at the chart."

Cassandra hung the sonar headphones on the hook and joined Hemi at the navigation table. She looked at the big chart, and the dotted line marking their course from the depot island, and the little x marking their current position. "How the fuck do you know where we are?" She asked.

"Honestly, it is mostly just a guess. I keep track of our speed and direction very carefully. Then I just plot that onto the chart based on how long we have been traveling. That is called dead-reckoning. If the chart is accurate and there are not too many mitigating factors, like, say, a strong current that I can not account for, then we know roughly where we are and that we will not run into anything."

"What happens if there is a strong current that pushes you off course and you don't realize it?"

"That is why we need to sometimes fix our position. If we pass by an island or other feature that we see while on the surface or with the periscope, and that feature is on the chart, then we know where we are. Sometimes there are undersea features that we can hear on the sonar, or we know are there by changes we read in the gauge that measures how far down the bottom is. If those are on the chart, we can fix our position that way. Normally, we do not have to be super-precise — the ocean is large and mostly



empty water — especially this early into a run. I know exactly where we started from at the depot, so our position should not be too far off. But we need to rendezvous with Shakes at dawn, and being precise about our location will help that go more smoothly. So I am going up on the bridge to get a fix by the stars. Want to join me? If the stars are out, it might be worth the trip up the ladder.”

“Is it OK for me to leave the radar?”

“Just for a few minutes. Make sure to check it as soon as you come back down.”

They climbed up through the control room and up the interior ladders of the sail to the bridge. Owen was back up in the lookout ring and greeted them when their heads shadowed the red light coming up from the open hatch, happy to have something to break the monotony of being on lookout.

Overhead the clouds had blown off leaving a clear night sky with no moon. Hemi often remarked that the number of times the *Prospect* surfaced and he came out on deck to find a low, blanketing cloud cover occurred far more often than was statistically probable. He could hardly recall the last time they surfaced to a clear sky and his deeply-rational self was challenged by the sense that being on the open surface was in fact nature’s opportunity to oppress them. He had begun to prefer being submerged, where instead they had control over the pressure and depth of the atmospheres laying upon them.

But not this night. The sky was clear from one horizon to the other, and the stars glowed in their visible tens-of-thousands, their appreciable numbers a heuristic suggesting the reality of the uncountable multiples of billions of other stars that existed invisibly in the universe above them. With no light over the horizon, the stars came right down to the surface of the water

in every direction, an infinity compressed to a perfectly smooth dome that lay over them.

“Wow.” Said Cassandra.

“Yes, that’s the mariner’s privilege.” Said Hemi. “And the lucky submariner occasionally gets to dip in as well.”

Hemi took out his sextant, clipboard, star charts, and graphs. He took sightings on three or four know stars, measuring their precise height above the horizon. He scratched a number of notes onto the clipboard with a pencil.

“How does that thing work?” Cassandra asked.

“This is a sextant. It measures how far above the horizon a particular star or the sun is. That will let me fix our position on the chart. If you are interested, I can train you how to use it. But not tonight.”

Cassandra nodded.

“Unlike mariners, the submariner does not often have the luxury of visual references to find their place in the world,” Hemi continued, “we wander under the ocean, feeling our way by sound. And every once in a while poke our head up to secure our location in the swirling mass by judging ourselves against the stars.”

“That’s poetic.” Said Owen, listening to their conversation from the lookout ring.

Hemi smiled. “And just a little bit of a cliché.” He said more loudly for Owen’s benefit. “I find a touch of the poetic gives some much-needed meaning to this black and gray metal world of ours. But if you let it go to your head, it could keep you from making the clear-minded assessments of situations that are necessary to remain alive as a submariner.” Hemi took a sighting of another star and marked its altitude down on his clipboard.

“OK Cassandra. Back to your radar scope. I need to make some minor course adjustments in the control room.”

Hemi and Cassandra climbed back down into the *Prospect* leaving Owen alone to occupy the center point on a circular field of blackness under the perfect half-sphere of stars.

Early in the pre-dawn, Bastian was up in the lookout ring when the sky began to lighten in the east, blacking out the stars in that direction and creating an echo of light on the black disc of the ocean. When Bastian could see his hands gray in the gloom in front of him, he climbed down to the bridge and cupping one hand around his mouth shouted down to the control room that it might be time to dive.

Captain Percy climbed up to join Bastian on the bridge and looked around for a few minutes. She took some long breaths, taking in the last of the fresh air before the next twelve hours or so below deck, and then told Bastian to follow her back down into the sub.

They buttoned up the *Prospect* and when all the hatches showed green lights on the board in the control room, they shut down the diesels and dove the boat down to 50 meters. When they had leveled off, Hemi had them adjust their course. After fixing their position earlier in the evening, Hemi had slept his three hours, and then returned immediately to the control room. Now that they were submerged again, he wanted to take the boat in a new direction as a precaution against the small chance that anyone had been tracking their course on the surface that they had not been aware of. With the cargo they were hauling, Hemi felt there was no reason not use to every stealth maneuver they had.

He had them bring the boat about nearly 100 degrees to starboard. This was backtracking a bit, but they were now aimed directly at the rendezvous point for the *Gnat*, which they would reach in another two hours at their current speed.

Those two hours remained nearly silent and uneventful. Everyone had low early-morning energy and no one felt like much of a conversationalist after a long night with short sleep. This was improved after Gregory brought up the first pot of coffee and passed around tin mugs to the crew in the sonar compartment and the control room.

They cruised to the rendezvous point, and then came up to 30 meters of depth. They shut down the electric motors entirely, and Hemi trimmed the boat until it sat hovering perfectly still and silent in the water.

Cassandra was just waking up from her sleep rotation, and groggily making her way from the crew quarters to the sonar compartment where she found Hemi. He handed her a tin cup full of sweetened black coffee.

“Time to get back on sonar Cassandra. We have reached the spot where we are supposed to rendezvous with Shakes. I need you to listen for his boat. It is quite a small boat, so it may be challenging to hear. But since we have got the *Prospect* completely shut down you will have total silence. If you hear Shakes — or anything else in the water — come get me. I will be in the galley. The rest of the crew is going on break while there is nothing to do, so it is all you right now.”

“That makes this sound important... you trust me with this?”

“It’s good practice for you, and the worst that could happen is if you miss him and we are a little delayed in the rendezvous. I would be happier if we got moving again soon though, so... try not to miss him if he goes past.”

“OK Hemi.” Cassandra sat down at the sonar rig, put the headphones on, and took a sip of her coffee before passing the mics around in a full circle to get her bearings.

Hemi went off to the galley with his clipboard and notes, and the rest of the crew hit the racks to catch up on much-needed sleep, leaving the *Prospect* dark and absolutely silent.

Cassandra turned the directional control of the mics slowly around. She completed another full 360 circle, and then came back the other way. Her eyes closed and she could see the sounds in the water coming towards the *Prospect*. The water had slightly different qualities in different directions, so after a few times around she could tell generally which way the microphones were pointing without looking at the directional indicator. When they were forward towards the bow, she could hear the bilge water sloshing in the lowest parts of the ship. Towards the stern, she could hear clearly without the annoying interruption of the propeller sound that was always in that direction while the electric motors were running.

The *Prospect* was currently at absolute maximum sonar listening capacity, but there was nothing out there. The ocean was completely empty in every direction. Cassandra focused her mind and kept it out in the water. Every time she felt some subject other than sonar intruding on her consciousness, she took a deep breath, and forced her mind back out into the water. It was incredibly tiring work.

Two hours later, there remained no sign of Shakes. Captain Percy could never sleep for very long, and so was soon back in the control room with a cup of coffee from the galley, smoking and making small adjustments to the trim of the boat. Each of these adjustments was adjustments by a brief rush of water or air through the piping of the ship, and each time this happened Cassandra got completely distracted for a few frustrating moments. Cassandra did not yet realize that the sonar operator could, in some instances, have some authority over even the captain on a submarine and request silence be maintained.

Another hour went by. Cassandra thought she was starting to crack. She considered asking Hemi to take over. She was worried that somehow Shakes had sneaked past her in his little boat. That she had missed him and screwed up her first real job. Rationally, she knew that was unlikely though. She pushed herself to keep listening to the silence.

Then, far off their port side, she heard an engine in the water. It was not like the other sea craft she had heard thus far in her limited experience on sonar. It had a continuous popping sound, like a machine gun being fired off in the distance, accompanied by a low-frequency roar.

“Captain Percy!” Cassandra called up to the control room where Percy still sat still fiddling with the controls to her boat. “I hear something.”

Percy slid down the ladder and picked up the second sonar headset and put it on. Cassandra, rotated the mics back and forth across the direction of the contact, and settled them in on the strongest signal.

“Is that Captain Shakes?” Cassandra asked doubtfully.

“That can’t be fucking Shakes.” Said Percy. “That sounds like a supertanker or an aircraft carrier or something. Go get Hemi. I think he should hear this.”

Cassandra went off to the Galley leaving Percy listening to the contact. She came back with Hemi holding a tin up with the dregs of cold coffee in the bottom. He slipped the headphones on and stood there hold his coffee cup, staring at the gauges on the sonar and watching them bobble up and down. He flipped some filters on, and listened again.

“Well.” Hemi said. “That is strange. It does sound like a tanker or something big just from sheer volume. But it is moving very

fast, too fast for a big ship. . . .” He paused listening again. “It is closer now, and I can hear the prop revolutions. . . the frequencies are all wrong. The prop is spinning too fast, and sounds small, not like a big ship screw.”

“Shakes was planning to modify the *Gnat* to be fucking louder, you think that’s him?” Percy asked.

“If that is Shakes, the job has been overdone. . . .”

“Really? You think it’s possible *Shakes* fuckin’ overdid it, do you?” Percy grinned at Hemi. “Maybe instead of the sound of the *Gnat* masquerading for the *Prospect*, the *Gnat* will just fucking drown out *everything* in a 10 mile radius.” Said Percy.

“I just. . . .” Hemi started, “just cannot believe that such a small boat could. . . .” he paused listening again. “No, I am more sure of it now. The more detail I can hear, the more it makes sense that it is a very *very* loud, small boat, not a big ship. Though he does have it tuned so low that from a distance anyone who is not skilled on sonar might easily be fooled into thinking the contact is displacing an enormous amount of water. Good job with the identification Cassandra.”

Cassandra held onto a large and genuine smile.

“OK then. So now what do we fuckin’ do?” Asked Percy. “If we were on the surface, I’d try to raise him on the radio. But I arranged with Shakes to rendezvous at depth, so no one fucking sees us. I’d hate to blow our cover by surfacing now.”

“I do not know.” Said Hemi. “The contact is well out of range of ship-to-ship. I would guess something like still 20 nautical miles off or so. We could hit it with active.”

“If it turns out you’re fuckin’ wrong and the contact is actually that sub with the ram on its bow tearing its way towards us, then active pinging them will be sending a loud fucking signal

telling them exactly where we are.” Percy paused. “We have the advantage of being completely fuckin’ hidden at the moment. I hate to just fucking hand that away.”

Hemi shrugged. “That is why I leave that decision to you.”

Percy considered her options. “You are fairly certain it’s fuckin’ Shakes?” She asked Hemi.

“I am fairly certain that contact is not the big ship it sounds like.” Said Hemi.

“OK, fuck it. Ping it.”

“OK. Cassandra, remember I mentioned ‘active’ sonar during your training session? I am going to use that now. Follow what I do.” He powered up the active sonar unit. “Passive sonar is like listening quietly in a dark room to figure out where other people might be standing. Active sonar is like quickly turning a bright light on and then off again to see where people are standing. The principles behind it are much more sophisticated than passive. But it is easy enough to operate.” He set the direction indicator to point towards the contact. “Push the PING button Cassandra.”

She held her small finger out flat, so as not to let the long fingernail on it get in the way, and crushed the button home. Even without the sonar headsets they could hear the ping echo through the hull and off into the water. A few seconds later the active unit calculated and displayed the range and direction to the contact.

“The active sonar figures out very precisely where your contact is by calculating how long it takes for that ping sound to bounce back from the target.” Hemi said, pointing to the readout on the active sonar unit. “That is very useful if you have to do something like aim and fire a torpedo. But since the *Prospect*



does not have torpedoes, we do not often have reason to use it.”

“The active ping also tells the target exactly where *we* are.” Added Percy. “Normally, we would not want to fucking do that — never use the active sonar without an explicit instruction from me or Hemi — but assuming this contact *is* Shakes. . .” she looked at Hemi, “then we just deliberately let them know exactly where the fuck we are by hitting them with that active ping.”

“We shall see what the contact does now.” Said Hemi, putting the sonar headset back on.

Within a minute of the *Prospect’s* ping, the contact went silent.

“They’re gone?” Asked Cassandra, still listening to the other headset.

“They have shut down their engine.” Hemi said. “Which does not tell us anything.”

“Well how the fuck were they supposed to respond?” Percy asked Hemi.

“Can he just ping us back?” Asked Cassandra.

“I am not sure the *Gnat* has an active sonar system like that.” Said Hemi. “We could ping them again? It would let them know we are not going anywhere.” He looked over at Percy.

“And then what? What’s the full fuckin’ plan here Hemi?” She asked.

“Well, without surfacing, I think we wait until he moves into ship-to-ship range. Then we can confirm it is Shakes over ship-to-ship radio.”

“A quarter of a nautical mile? If it’s someone who wants to do unpleasant things to us instead of Shakes, that’s awfully fucking close.”

“If they want to do unpleasant things, they are likely to begin them long before they are in ship-to-ship range.” Said Hemi. “I advise we ping them again. If the contact does anything that seems suspicious, we will move off from this spot — quietly.”

“... Alright.” Said Percy. “Fucking ping them again. What the fuck do I care, it’s just my boat and all our fuckin’ lives.”

Hemi caught Cassandra’s eye and pointed to the PING button. She reached out and pressed it again. Another resonant ping left the *Prospect* and soared through the water. The range and direction displayed on the active sonar unit.

“See Cassandra, it was like they were invisible while they were being silent, but bouncing the ping off them let us know they are still there. ... And they know we are still here.”

Cassandra nodded with one hand on an earpiece. She listened quietly for a minute. Then: “I think I hear something.”

Hemi listened closely. “OK, the contact is running on electric motor now. And I can tell by the pitch that it’s definitely a small craft moving quickly... Towards us.” Hemi listened for a moment longer. “It is definitely the *Gnat*, I recognize it now.”

“Thank fuckin’ hell.” Said Percy. “That was ridiculous Hemi. We’ve got to work out a better fucking way of communicating with the *Gnat* if we’re going to keep working with that guy. We can’t be pinging every tanker that goes over us hoping it’s actually a tiny friendly submarine.”

“I’ll talk to Shakes about it when we get him on board.” Said Hemi.

Within an hour, Shakes voice lit up the ship-to-ship radio in the control room. “Break. Break. This is the mighty *Gnat*. Were those fuckin’ ear-splitting pings coming from the folks I’m looking for?”

Hemi climbed up to the control room and took the mic from the overhead radio. “Indeed *Gnat*. This is the *Prospect* and we are glad to know now that we were not pinging an Authority battleship.”

“Ah.” Said Shakes. “So my subterfugal modifications were effective? Wait til you see what I fuckin’ did Hemi. You’re going to fuckin’ love it.”

Hemi smiled into the mic. “Sounds good Captain Shakes. You did not break off your mating collar while making those modifications did you?”

“Nope. It’s still riding with fucking pride atop the *Gnat*’s sail. Mating with the *Prospect* should be at least as fuckin’ smooth as last time.”

“I hope it does not go that badly.” Said Hemi. “OK, we will put the *Prospect* in gear, and drive forward slowly. Just like last time, you can come up underneath, and put the *Gnat* on the mating collar.”

“Roger that. But... you’re going to have to fuckin’ come up shallower. The *Gnat* can’t fuckin’ reach you as deep as you are now.”

Captain Percy had been listening to the conversation from below at the navigation station. Now she climbed up to the control room to sort out the details of this maneuver with Hemi.

Hemi caught her eye while she was still on the ladder. “Shakes needs us to come shallow.”

“How shallow? I’d prefer to keep her as deep as fucking possible.”

“I believe the *Gnat*’s maximum depth was around 30 meters — according to Shakes’ estimate that was unchallenged by anything like an engineering background.”

“Can we do it with the *Prospect* at 20 fuckin’ meters?” She asked.

Hemi thumbed the mic on the ship-to-ship. “Captain Shakes, what if we make the *Prospect*’s keel 20 meters down. Can you do the mating at that depth?”

“I think so.” Shakes voice crackled in reply. “But you’ll have to also remember that while the *Gnat* is attached, you can *not* go any fucking deeper. Beyond 30 meters or so and you’ll crush the *Gnat* and, you know, probably flood the fuckin’ *Prospect* as well — not that I’ll be giving two shifts about your ugly barge after you beer-canned my baby.”

“I got you Captain Shakes. 20 meters maximum depth it is.”

They carried out the maneuver without incident. Shakes brought the *Gnat* up under the *Prospect* and connected back up to the mating collar. When he popped the hatch, Chips was there waiting for him, just like last time.

“Ah fuck ya Captain Shakes. At least I didn’t have to weld your fuckin’ boat back together to get ya on board this fuckin’ time.”

“Good to see you again too Chips. I’ll have you know my boat has been adjusted and tuned to an absolute fucking precision-meister’s peak of fuckin’ performance. The *Gnat* is now faster, more maneuverable, and louder than any other boat of its size and displacement.”

“Ah, yer the first fucker I’ve ever fucking met who is proud to have a loud fucking submarine Captain Shakes.”

They made their way up to the galley, where Chips left Shakes to go continue working on the efficiencies of her own engines down in the engine room. Shakes poured some stale coffee from the pot into a mug and sat down.

Hemi and Percy joined Shakes in the galley as soon as they got the *Prospect* settled back on course, leaving Gregory and Bastian at the controls. The boat would spend the remaining hours of daylight running underwater. Hemi did not neglect to warn Gregory to keep a very close eye on the depth and ballast control panel and not let the boat dive any deeper than they already were while the *Gnat* was attached.

“So Captain fuckin’ Shakes,” said Percy, settling next to him with her own stale cup of coffee, “you made it out of the depot without causing a fucking problem?”

“Well... there was in fact a little fuckin’... drama. I’m sure you heard some of it.”

“We got a tip to leave before anything very dramatic happened.” Said Hemi.

“So I gathered from your note Captain Percy. Unfortunately I was in the middle of some work on the *Gnat* when I got that note, otherwise I would have left right then myself. The *Gnat’s* engine was in fuckin’ pieces — I was putting a new exhaust in that I got in a deal in one of the parts shops on the exchange floor. So I was stuck on the fucking dock when that fuckin’ Authority sub arrived.”

“What sub? Was it the sub with the ram?” Hemi asked.

“Well, I couldn’t very well see whether it had a ram from inside the docking bay, could I? But if you made me guess, I’d say sure:

it was that same fuckin' sub that kept showing up in your 'scope. ... Word from some of the dock workers was they specifically asked about y'all."

"They asked about the *Prospect* by fucking name?" Percy was horrified that any Authority would know the name of her boat at all, never mind going around asking about it.

"Yep. They docked and unloaded a bunch of big fucking goons. Bigger even than those who worked at the depot. Or, better fuckin' armed and armored at least. The goons tore through the whole fuckin' depot checking papers at every slip with a sub docked, questioning every person they saw in the docking bay."

"Including you?" Percy asked.

"Including me. That was no trouble, I've got quality fucking papers and stories to put off any Authority inspection long enough for me to tiptoe away."

"They asked you about the *Prospect*?"

"Indeed. A couple of those goons stood over the slip to the *Gnat* and asked me if I knew anything about a boat named the *Prospect*; small lady captain, big fuckin' first mate, and a small crew that included a young man among them."

"Strange." Said Hemi. "And you did not find out specifically what Authority they represented?"

"No fucking way. They did not seem fuckin' forthcomin' with that information, and I wasn't about to fuckin' ask. By the time they got far enough down the dock to talk to me they had already found out from other sub crews that you had definitely been there... And that you left with a load of magnetic warheads."

"They asked you about our fucking cargo too, eh?"

“Ya. Fortunately, they didn’t seem to know anything about me coming in with you. I guess the other sub crew are afraid enough of Authority goons with guns to give up someone who isn’t around, but aren’t such cowards as to go so far as to pointing at someone they can actually fuckin’ see in the same space.”

Hemi picked up a spoon and stirred his coffee.

Captain Percy lit a cigarillo. “Shit.” She said. “If they know we’ve got weapons parts on board, I’m sure they’ll consider that justification for shooting to sink us rather than trying to get us to surface for a fucking inspection.”

“Oh,” said Shakes, “I didn’t tell you the best fuckin’ part yet... So after they finish questioning me, I discreetly — and as quickly as I could — started prepping the *Gnat* to leave. And as I’m on the dock getting some cans of food to load into the hold, I see the commander of the Authority sub climb up out of their sub at the slip they had commandeered — the commander is a real round guy, with only one fucking arm. He wears an Authority uniform with all the trimmings — it looks as if he wears his full fucking dress uniform every day on board the sub! He takes a squad of goons — maybe twenty of the fuckers — and they go up the dock and out towards the exchange floor.

“Here’s the good fucking part: while he’s up there on the exchange floor, the watertight bulkhead between the docking bay and the upper levels goes into an emergency-close procedure. You know, the whole fuckin’ shebang — the klaxon is blaring, the red lights are spinning. The fucking Authority goons start running around in a panic, probably most of them think the docking bay is flooding, hell I thought that myself for a minute.”

“Fuckin’ wow.” Said Percy half-grinning as she exhaled smoke.

“Fuck Yeah. But it doesn’t take long for the fuckin’ goons to figure out that the docking bay *isn’t* flooding — someone had

just triggered the big watertight bulkhead to close just to fuck with all these Authority toughs. The meat shields weren't much less panicked at that though because half their fuckin' muscle and their fuckin' commander were now separated from them by half a meter of air-tight steel doors!

"So I wasn't going to miss this fuckin' wonderful opportunity of confusion — I dumped whatever I could find laying around on the dock down into the *Gnat*, buttoned the boat up, and took the fuck off right then. Ran on battery as far as I could, then put the rest of the exhaust back together. Fortunately the diesel fired up no fucking problem and I made my way here."

"Hmm." Said Hemi curiously. "Who do you suppose was willing to anger them further by closing the watertight bulkhead?"

"My guess," said Shakes, "is that it was that dock boss lady. She was the first one the Authority goons questioned, of course, and she didn't look very fuckin' happy about it afterwards."

"If that's true," said Percy, "then I fuckin' owe her a couple of times over now."

"It is possible you made a friend of some subtlety there Sylvia." Said Hemi.

"That watertight bulkhead did not look like the kind of thing that was open and closed at the drop of a fuckin' hat." Said Shakes. "I suspect it delayed that Authority sub leaving by a couple of hours, all told. I'm not sure I could have gotten the *Gnat* away — presumably unnoticed — without that bit of fuckin' luck."

"Which brings up another thing I wanted to ask you about Captain Shakes," said Hemi, "that boat of yours certainly is... loud now."

"Yup! I told you I put in a new exhaust. Straight pipe. Wedged it right up against the hull so the sound goes directly out into



the fuckin' water. I also tuned it for power and made some adjustments to the gear box. The *Gnat's* diesel now puts out far more torque than just about any other boat of its fuckin' size, I'd say. And that torque is converted to unbelievably fast prop speeds."

"And a fast prop and new exhaust mean exceptional noise." Said Hemi.

"I'd say just about the loudest sub in the fuckin' water!" Said Shakes proudly. "'Cept maybe some of those old coastal tug subs. That was the fuckin' plan, right Captain Percy? The *Gnat* runs loud and fast interference for the *Prospect*."

"Yes," said Percy, "though I was sort of expecting we could make the *Gnat* sound like another big submarine, not an ocean liner."

"The fuckin' louder the fuckin' better, I fuckin' figured." Said Shakes, popping a wad of dried green leaves into his cheek. "Oh! I almost forgot: the other modification I made to the *Gnat*: I got a fuckin' pigeon."

"A pigeon?" Asked Hemi. "I have never heard of that. Some new kind of sonar unit?"

"No no, like an *actual* fuckin' pigeon-bird. A homing pigeon. Goes by the name of Herschel."

"Oh, so you got a fucking pet..." said Percy, "to keep you company during those long hours alone aboard the *Gnat*. To keep you from going fucking crazy... er?"

"Naw, Herschel's not a pet, I told ya — he's a fuckin' upgrade to the *Gnat*! See I got him from a guy on the dock. He's specially trained to look for his home roost on a submarine on the surface of the ocean. His roost is on the *Gnat* now, and I've been taking care of him. Soon he'll realize the *Gnat* is his fuckin' home. Then

I just give him to you guys, and when you need me, you can send Herschel out to find the *Gnat* with a message tied to his leg.”

“Umm. Why would we use a pigeon instead of, say, the fuckin’ radio?”

“Well, I realized that with the modifications I was making to the fuckin’ engine, the *Gnat* is now so loud inside that I can’t hear the radio while the diesel is running. I needed another way to communicate with you guys and Herschel seemed perfect. Messages by pigeon are also more secure than radio.”

“A fucking pigeon. . .” said Percy skeptically.

“But if you have the *Gnat*’s hatch closed, how will you know when Herschel has returned to you?” Asked Hemi. “It is not like you will be able to hear him tapping on the hatch with his beak. . .”

“An astute fuckin’ question my large friend. I don’t want to leave the hatch open all the time. So I’m going to add a small hatch in the sail — a hole just big enough for a pigeon. When Herschel has a message for me, he can just come in through his hatch. I only need Herschel when I’m running on the surface with the loud diesels, underwater we can just use ship-to-ship and I can keep Herschel’s hatch closed.

Hemi grinned. “I cannot wait to meet Herschel. I volunteer to take responsibility for him while he’s on board the *Prospect*. And I will ask Chips to help you with your pigeon hatch.”

“This seems fuckin’ ridiculous to me.” Said Percy.

“Sylvia, this pigeon goes a long way towards addressing the problem we had with communicating with Shakes. You asked me to talk with him about that, and here is an answer. . . maybe not a great answer, but I think Herschel could work. If we could figure out how we could launch him from the *Prospect* while we

are submerged, he would be a perfect communication medium. . . .” Hemi trailed off, envisioning some kind of pigeon buoy they could release at depth.

Captain Percy rolled her eyes. “Whatever. Don’t ever say I’m a captain who isn’t willing to give new technology a fucking try. We’ll take the pigeon aboard as our eighth crew member on a trial basis. Captain Shakes: how about a meal?”

“Abso-fuckin’lutely.” Said Shakes.

Percy called Gregory down from the control room and sent Owen up to relieve him. Gregory fired up the cooking range and soon had canned salmon simmering in a slightly sweet dark sauce with bits of ginger in it. He put a big pot of rice on to steam.

“That smells fuckin’ astonishing Gregory.” Shakes said. “I eat that canned salmon all the time when I’m alone on the *Gnat* — usually just cold and straight from the can though.”

“That’s. . . pretty fucking foul Captain Shakes.” Said Gregory from the range, stirring his bits of fish around.

“You know, I always wondered why those salmon cans are tapered like that. Why don’t they just run straight fucking up and down, like all the other cans?”

“Actually, now that you mention it Captain Shakes, I always thought that was weird myself. There has to be 300 cans in the galley, and all of them are perfect cylinders except for the fuckin’ salmon.”

“I wish all cans were tapered.” Said Shakes. “Sometimes I knock a fucking stack of cans over on the *Gnat* and the regular ones will run off under some piece of equipment. I’m pretty fucking sure there’s some cans in the bottom of the boat that rolled there years ago and I never fuckin’ saw again. But the taper on the salmon cans makes ’em roll around in a tight circle. They stay

roughly where they fall no matter what the boat is doing and I can pick them right up before they get fucking lost.”

“Maybe salmon manufacturers know mariners and submariners have a lot of salmon on board, and they shape them like that so our seagoing friends don’t lose their precious fucking cans in the corners of ships.” Gregory suggested.

Hemi chuckled. “If you want to know the real reason, it is because the salmon canneries are all in remote parts of the north. The cans are shipped up there empty to be filled with fresh-caught northern salmon. The tapered cans let them stack far more cans into the hold of ships moving the empty cans by nesting them.”

“Oh.” Said Shakes, somewhat disappointedly.

In another twenty minutes or so Gregory had steaming piles of rice on their plates smothered in bits of fish and ginger. He stir fried a couple of boxes of frozen spinach and scooped them onto their plates to supplement the black and white mush with some dark green.

Percy called the rest of the crew in to eat in rotations that always kept one person in the control room and another listening to sonar. Shakes, as usual, ate twice again as much as anyone else.

“Sweet Fuck.” He said. “If you keep feeding me food I want to eat instead of forcing myself to eat cold shit from cans, I’m going to get fucking fat.” He reclined in his chair and closed his eyes.

“Nothing stopping you from equipping your boat with a hot plate Captain Shakes.” Said Gregory.

Shakes waved his hand in Gregory’s direction lazily without opening his eyes.

“Shakes, when you regain yourself from your crapulence,” said Hemi, “join me at the navigation station. I want to make sure you understand our plan for this run.”

Shakes nodded sleepily as Hemi and Percy headed up to the navigation and sonar compartment.

“It’s probably time for more fucking coffee.” Said Gregory reaching for the pot with the dregs of the previous batch slowly embalming a permanent black-brown stain on the bottom.

Shakes joined Hemi and Percy at the navigation table a short while later, somewhat revived by Gregory’s coffee, and carrying two more tin mugs filled with coffee for Hemi and Percy. They received them gratefully.

“Here’s what we’re thinking Captain Shakes.” Said Percy. “We’re well fucking into Consolidated States’ waters now. I think trouble from them is unlikely.”

Shakes nodded.

Percy placed a steel straight-edge dappled with rust patches down on the chart which showed their proposed course in a hashed line of grease-pencil marks. “Barring any unforeseen distractions, this is our planned course. We will be heading into an area that a number of Territorial Authorities claim control over.”

Shakes reached into his denim vest and withdrew a small pencil and a notebook covered with black and smudged fingerprints. He began to scratch down notes in a fast, unreadable scribble.

“That’s unfortunate, but fucking unavoidable since we’re heading for the mainland port of Stilt City.” Said Percy.

“... The locals do not call it that.” Put in Hemi.

Percy waved him off. “We estimate it will take three or four days and nights to fuckin’ get there. That’s running slow and deep

during the day, and fast on the surface at night with all things fuckin' nominal."

"And what's the fuckin' plan for the *Gnat*?" Shakes asked.

"Generally, we'll have you run on the surface during the day. You can shut down the diesel maybe once a fuckin' hour or so, and we'll check in on ship-to-ship."

"That will also give us a chance to listen for any contacts without being swamped out by the noise of your boat." Added Hemi.

"At night, the *Gnat* is less useful as a decoy, since the *Prospect* will be on the surface anyway. I think then you can mate up the *Gnat* and get some sleep and a meal aboard the *Prospect* — at least for a few fucking hours each night."

Shakes grinned at the thought of hot meals. "What happens if someone comes the fuck up on us in the night?"

"Well, we'll emergency dive to periscope depth, drag you out of your bunk and throw you into your boat, and make sure the *Gnat* is off before we do a further evasive deep dive. I hate the fucking delay getting the *Gnat* disconnected will cause, but I'd hate to deprive you of your fuckin' precious hot meals."

Shakes grinned. "No fucking doubt! Just don't fucking forget that if you dive too deep with the *Gnat* attached, I'll have a bunch of wet scrap metal instead of a boat hanging off the bottom of this rusting fat cigar." He scribbled a few notes. "What about sub with the ram and those fuckin' guys who were after you? What if they are still fucking following you?"

"I figure since we're well into another Authority's territory now, it's unlikely they are still coming after us. It's one thing to raid a depot just on the other side an Authority line. It's another to pursue an unarmed cargo sub across the middle of another fuckin' Authority's area of control. Having said that, did you

get any sense while you were at the depot that they knew our destination?"

"I have no fucking idea." Said Shakes. "It entirely depends on who the fuck they talked to while they were up on the exchange level. I didn't get to observe any of that."

Percy nodded.

"What about Herschel?" Asked Hemi. "When will he be ready to come aboard the *Prospect*? The *Gnat* could potentially be a long way off pretty quickly if we get into this situation where you are leading a contact away from the *Prospect's* location. It would be nice to have Herschel ready to go find you, if that happens."

"Is that what you are really thinking Hemi?" Percy asked with a grin. "Or are you just looking forward to having a fuckin' fluffy new crew member to take care of?"

"I'm hoping Herschel is acclimated to the *Gnat* in another day or two. Then we can move him aboard the *Prospect*." Said Shakes.

"Alright," said Percy, "bring the fucking pigeon over whenever you are ready Captain Shakes. Right now let's get the fuckin' *Gnat* running up on the surface, and get the *Prospect* further down. I don't like being this fucking shallow during the day."

With a fake salute, Shakes went rearward toward the galley to take a refill of coffee with him, and then climbed downward to the deepest part of the *Prospect*, and then even lower to get back aboard the *Gnat*. With the *Gnat* off and surfaced, the *Prospect* dove down to 100 meters where Percy was more comfortable with a heavier cover of ocean above her.

The rest of the day went as planned. The *Prospect* moved slowly and silently through the deep, while the *Gnat* ran just at the surface with its diesel emitting a long shit-string of exhaust into

the clear ocean air. Shakes had to keep the throttle back on the *Gnat* to keep pace with the much slower *Prospect*. At the slower speed, the *Gnat* was not obtrusively loud, about the same as an average surface cargo ship. That was to their benefit because Authority enforcement craft were less likely to pursue a target that sounded like a surface cargo ship — at least during the day — since anything on the surface was likely to be moving with the full blessing of the Authority.

Shakes shut down the *Gnat's* diesel once every hour or so, and checked in over the ship-to-ship. He had nothing to report but clear weather, modest swells, and open ocean. A white ball of sun pushed its way slowly across a flat white sky. And the two boats droned their way across the curve of the globe. The only thing that changed was the sun's slow fall to the horizon. Shakes had the hatch of the *Gnat* open and he watched the sun swell up all orange and bloated as it bounced on the perfectly flat table-top off in the west, like it was going to expel a flatulent burst of world-ending fire over the surface of the planet before it was snuffed out by the force of night pressing down on it.

The dark spread slowly from behind, catching up to and overtaking the *Gnat*. When it did, Captain Percy raised the *Prospect* to the surface and they began their night crew rotations with someone always on the radar and someone always in the lookout ring. A filet knife of a moon came up behind a thick, oppressive haze, its sharp points dulled as if they had been poked one too many times through a heavy fabric or leather.

Shakes ran the *Gnat* off at some distance for the first half of the night, and then dove and brought it under to mate with the *Prospect*. This dramatically slowed the *Prospect's* speed, but Percy figured this was worth the trade-off of keeping Shakes alert and relatively sane during the day. He came on board and ate a couple of large bowls of a hot brown soup Gregory had left simmering on the range, accompanied by thick slices of a stale



and grainy bread which Shakes would cover in butter and soak in the soup until each bite softened. He slept for a few hours in one of the *Prospect's* comfortably padded racks. As the sky lightened in the east, Captain Percy woke him and told him it was time to get the *Gnat* off.

Shakes stumbled to the galley to pick up his morning coffee. There he found Hemi who accompanied him down to the open hatch leading to the *Gnat*. Shakes disappeared down through the hatch and returned holding a small wire cage with a splotchy gray bird. Herschel was sleek and trim, with an unmistakable intelligence to the eyes.

"Hemi meet fuckin' Herschel." Said Shakes holding the cage up for Hemi to take while he climbed up out of the *Gnat*.

Hemi poked a thick finger between the bars and rubbed Herschel's head gently. "Captain Shakes this bird looks perhaps smarter than you."

"Maybe you should hire him to drive the fuckin' *Gnat* for you." Said Shakes.

"Is this cage not too small for him?"

"That's just his fuckin' travel cage. I have a nice comfy roost installed for him down in the *Gnat*. You don't want him to forget where his home is, otherwise he won't return there when you fuckin' release him."

"Can I let him out of this cage?"

"Sure, if you — or Percy — don't mind a little pigeon shit around."

"I believe I shall give this fellow the run of the boat."

Shakes handed Hemi a small leather case with tiny papers and a steel band. “This is his leg band. It’s pretty fuckin’ self-explanatory. Just write your message, attach it, and toss Herschel in the air. He’ll find the *Gnat*, if it’s anywhere on the surface within maybe a hundred miles or so.”

“How do we get him *back* though?” Asked Hemi.

“Well. . .” Said Shake scratching his grimy neck with black fingernails. “It’s kinda a one-fuckin’-way thing. I have to give him back to you in person. We might be able to get him to fly over to the *Prospect* from the *Gnat* if you were within sight. . . and maybe he knew you had some fuckin’ food.”

“I understand. It’s a ‘homing’ pigeon. It only goes home.”

“Right.”

“Well, welcome aboard Herschel. Captain Shakes, have a good run today.”

“I expect to, though I’ll miss having my copilot with me.”

## Chapter 5

The *Gnat* was off and the *Prospect* submerged and running at depth before the first molten blob of malevolent red sun percolated up on the horizon. Shakes was running the *Gnat* hot and loud. He was standing up in the pilot's chair with head above the hatch in the wind, trying to blow the bleary sleep out of his eyes. He sucked on a cigarette, but the wind was making the coal on the end glow in a fashion not totally dissimilar to the sun coming up on the horizon behind him. His cigarette was quickly disappearing into itself. A long shadow of the short sail of the *Gnat* with his round head on top stretched out in front of him on the slate-gray water.

One hundred meters below him in the *Prospect*, it was nearly silent as the crew eased into their more relaxed daytime shifts. Captain Percy was in the control room smoking with Bastian, and Cassandra had just woken when the boat dove, and was making her way with a coffee to the sonar station for the long day watch.

The first few hours passed with dull regularity. Shakes had nothing to report during diesel stops, and by her third cigarillo Percy was settling into the comfortable state of mind-blanking boredom that she was her most familiar association with life aboard submarines.

By mid-morning of the third day out from the depot, Shakes was shutting the diesel of the *Gnat* down for the third time that morning to check in with the *Prospect*.

On sonar, Cassandra could heard the *Gnat's* diesel putter away to a halt — leaving a silent relief in her headphones. As usual, she called up to the control room to let them know the *Gnat* was shut down for a listening and check-in session. “Captain Percy, the *Gnat* just went silent.”

“Alright. Thanks Cassandra.” Percy called back down to her. Percy took down the ship-to-ship mic. “Captain Shakes — the usual: how’re things fucking looking up there?”

“Well, for lack of anything else to report, I’ll tell you that the fucking weather is thickening up a bit. The haze has really set in, and there’s a bit of a fuckin’ chop coming on. It looks to me like the kind of things that could turn into real weather later.”

Weather was not generally a concern for Percy, submarines could pass under even the worst weather at depth. But she could not guess at what the *Gnat* was capable of handling. “Does that give you anything to worry about with the *Gnat*?”

“Naw.” Shakes voice crackled. “The *Gnat's* been through the very fucking worst. If it gets bad, I’ll dive and ride it the fuck out underwater. With all this running on the surface, the batteries are always fully fuckin’ topped up.”

Knowing the *Gnat* could not dive very deep at all, Percy was unconvinced that this was a solution to big weather, but she also knew Shakes had taken the *Gnat* back and forth across deep ocean many times. She decided to trust his experience. “Alright then Captain Shakes. If you...”

“Captain Percy!” Cassandra interrupted with a shout from sonar. “I think I’ve got a contact.”

“Hold on Shakes. We might have a fuckin’ contact. Don’t start your diesel.” Percy hung up the mic and slid down the ladder.

Cassandra had her eyes closed and was concentrating intently on the sounds in her headset. She had the mics pointed towards the *Prospect's* hard rear starboard quarter, and the signal strength indicator gauge was nodding weakly just a bit above the pin. "It feels like I'm only on the edge of the signal. They might be directly behind us."

"Bastian," Percy called up to him, "throttle down. Stop the fuckin' prop. Cassandra needs to hear what's behind us."

A moment later the perennial resonance of the electric motors died away. Cassandra turned the sonar mics back to face the dead stern of the boat. The signal strength indicator immediately shot up to a definite contact. "Absolutely confirmed Captain Percy. I can hear the engine in the water. Sounds like another diesel."

Percy looked at the signal strength dial and knew immediately that the contact had subversively crept closer to them under the sound of the *Gnat's* diesel when it was running, and then even a bit closer than that by aligning themselves dead astern of the *Prospect* where Cassandra could not hear very well over the sound of the *Prospect's* own prop turning. Based on the signal strength indicator, the contact was likely far closer than Percy was comfortable with now — maybe twenty nautical miles. "Fuck." Was all she said.

She climbed up to the control room and got Shakes back on the ship-to-ship. "Definitely a fuckin' contact Shakes. Now it's your turn. Fire up the *Gnat* and see if you can lead them off and away from us. Let's see if this fucked up scheme of ours works!"

"Absolutely! Motherfuck. . ." The end of his oath was cut off by the whining start of the *Gnat's* diesel engine which came blaring over the ship-to-ship radio for a moment before Shakes took his thumb off the transmit button.

Percy flipped on the red night lighting. “Bastian — don’t move the fuckin’ boat. Don’t trim anything or let her make any fuckin’ sounds at all.”

“Dead silent crypt-drift, got it Captain.” Said Bastian.

Percy slid down to the sonar compartment again and tapped Cassandra on the shoulder. “Stay on both the new contact and the *Gnat* Cassandra. I’m going to wake Hemi.” Percy disappeared down the ladder to crew quarters and returned a minute later with Hemi’s big form following her up from below. He was still pulling on his tweed jacket and fixing his spectacles while he sat at the sonar station and put on the second headset.

Cassandra looked at him, and pointed at the signal strength gauge and the bearing without saying anything. Hemi nodded while listening intently.

After a minute, Percy broke the silence. “Well, Hemi... is that our fucking creepy sub with the fuckin’ ram?”

Hemi sighed. “It is. Absolutely. The ram gives it a distinctive and entirely identifiable hull noise.”

“Fuck me!” Said Percy. “So much for the theory that they wouldn’t fuckin’ follow us this far into another Authority’s fucking territory.”

“For all we know,” Hemi pointed out practically, “this is their area, and they were crossing someone else’s line earlier to find us.”

“But,” protested Percy, “that’s totally fucking irrational — we didn’t have a job or fucking plan until we got to the depot. We didn’t know what we would fucking be hauling, so how does it make any sense that an Authority boat would be after us when we have no fucking job and an empty fucking hold?”

“They are not acting rationally.” Said Hemi. “They are acting like they have a grudge. Some crew pissed off by some action of the *Prospect* in the past has come back to find us?”

“Ah fuck. It doesn’t fucking matter — what matters is our current fucking situation. Next order of business you two: are they following Shakes the fuck away from us.”

Hemi took over the sonar directional control wheel from Cassandra and made some slight adjustments to center the signal. He flipped some switches to engage filters, and a moment later turned them off again. “You see Cassandra,” he explained pointing to the switches and dials, “with these filters engaged I can better hear the *Gnat* and with them disengaged it is easier to focus on the pursuing sub.”

She nodded.

After a few minutes of listening Hemi reported to Percy: “it... seems like it is working Sylvia. The sub with the ram is definitely following Shakes. And...” He paused for a moment to listen, “Shakes seems to be able to stay well ahead of them.” He pointed to the mic directional indicator. “They are already 10 degrees off our course, and moving away quickly.”

“That’s fucking excellent Hemi.” Percy Said.

“Can’t they like, shoot at Captain Shakes or something?” Asked Cassandra.

“It is very difficult to hit such a small fast-moving target as the *Gnat* with a torpedo. Though the *Gnat*’s engine is so loud that it is doubtful Shakes would hear an incoming torpedo. Hopefully he is experienced enough to make random course changes every 5 miles or so to make aiming a torpedo more challenging...” Hemi looked doubtful.

“Well, keep the fuck on them.” Said Percy. “Let me know if anything changes, or what the final fucking result is.” She stuck a cigarillo between her lips and started climbing the ladder to the control room.

“OK Captain Percy.” Said Cassandra.

“Cassandra, keep tracking them.” Said Hemi. He stood up, still wearing the second sonar headset, and leaned over the navigation table. He measured the angle of the bearing to the contacts off their current position marked on the chart, and then drew a line marking Shakes and the pursuing sub’s course. By listening carefully to what the sonar was picking up in his headset he estimated their distance from the *Prospect*.

He and Cassandra tracked the two sound sources like this for over an hour. Then he stood to his full height and stretched. He took off the headset and hung it on the peg, and patted Cassandra on the shoulder before climbing up to the control room to talk to Percy.

“Shakes and the sub with the ram are far out and moving further out of range. I can no longer estimate distance on the sonar.” Said Hemi.

“What’s the end-game in this maneuver for Shakes?” Asked Percy. “He can’t just run for fucking forever.”

“Well, hopefully the pursuing sub realizes they are on the wrong target at a good distance away from us. They will likely leave off chasing Shakes and turn around to try to reacquire us here where they lost us. We will, of course, be long gone by then.”

“So now it’s time for us to make a fucking course change.”

“Indeed.”



“And how do we find Shakes again? You think you can raise him with that pigeon?”

“I think Herschel will be a just as good, if not better, option than trying to get Shakes on the radio. To get him on the radio, we both have to be on the surface at the same time, and he has to have his diesel off. Not to mention the radio could be monitored. We can let Herschel go with a message and dive immediately, and the message is extremely unlikely to be intercepted.”

“OK. We’ll surface tonight, and you can send the fucking pigeon out after Shakes then.”

Cassandra kept listening to the sonar for another half hour, occasionally reporting that she thought she could still hear them when the conditions were favorable. At that point Percy decided it was time to leave, and had Bastian throttle the electric motors up to 15 knots. They moved off on a southerly course that Percy randomly selected to move them away from the area.

The rest of the hours of the day ticked by with nothing to break the monotony and no changes to make other than occasional minor adjustments to the trim of the boat. Whereas earlier Cassandra had been cursing the noise of the *Gnat’s* engine polluting the water, now she found she missed it. Somehow it had been comforting to know Shakes was up there on the surface. Not to mention that his hourly check-ins were at least a way to mark time and shift her attention. Now they were down in this dark cold pit of water, blind and alone, and it began to feel like they were doomed to remain like this until the end of their days.

Hours later, when the clock said it should be early evening on the surface of the world, Cassandra’s eyes were bleary and drooping as she stared blankly at the sonar console. Captain Percy and Hemi were having a discussion behind her in the sonar compartment about whether it was time to surface and begin their nighttime run.

“How’s the fuckin’ charge on the batteries Hemi?” Percy asked.

“OK, but getting low. We’re at maybe 10 percent capacity.”

“So, we could stay under maybe another 4 or 5 hours at a creep.”

“Yes. We took a big chunk out of the batteries by leaving the area where we contacted the sub with the ram at such a high speed.”

“I know, but fuckin’ strategically, putting on some fuckin’ distance was the right thing to do.”

“I do not disagree.” Said Hemi.

“So when should we surface? We definitely want to run the diesels and put a charge back on the batteries, but it opens us up as a radar contact for those fuckers following us. They could easily still be within range to detect us on fucking radar.”

“And if they do, the whole move with Shakes would have been wasted.”

“Fuckin’ right. So, do you got a recommendation for me?” Percy asked.

Hemi turned to Cassandra and tapped her on the shoulder. “Any contacts on sonar Cassandra?”

She pulled back a headphone. “Nothing... mechanical. But the background noise of the ocean has changed Hemi. It sounds... weird.”

“Hmm.” Hemi picked up the other headset and made some adjustments. He listened for a moment and pulled the headset off. “Well, that complicates things. Seems like we drove right into that storm Shakes was predicting.”

“Fuck.” Said Percy.

“Ohhh. . .” said Cassandra to herself, “so that’s what a churned up surface sounds like.” She filed away in her mind another almost-magical aspect of sonar. “But I don’t feel any storm affecting the *Prospect* Hemi?”

“Even bad storms do not stir the water this deep.”

“On the surface though,” said Percy, “it’s another fucking matter.”

“... I hope Captain Shakes is alright.” Cassandra muttered a little blessing for his well-being.

“How bad does that storm sound Hemi?” Percy asked.

“Pretty bad. Like there could be 10 meter waves up there.”

“That’s the kind of weather we’re better off staying the fuck under.”

“At least while we still have any battery left.” Hemi agreed.

“Normally, that’s the obvious move. But we need to be thinking ahead as well: staying down now could force us to the surface in daylight with no charge at all on the battery. We could end up a helpless target. If we go up now we can get the batteries charged up with very little chance of being found.”

“Running on the surface in the storm does provide a lot of cover — the radar will be swamped and the ocean makes enough noise to cover our running diesels. . . But it could also swamp us or crack the *Prospect’s* spine.”

“She’s a strong fuckin’ boat Hemi, and with good pilots I think she can handle it. Let’s prep to surface.”

Hemi and Captain Percy climbed up to the control room. Bastian and Owen were in the control seats watching the unmoving gauges with bored and sleepy eyes.

“We are going to surface.” Said Hemi. “And there is a pretty serious storm up there. Owen, I am going to sit in that plane control chair. I need you to go down to the navigation/sonar compartment and get ready to blow the main ballast tanks.”

“You’re going to do an emergency blow?” Owen asked, surprised.

Owen stood and Hemi slipped his bulky form around him and down into the small boat planes control chair.

“Not a full blow. On my signal I just want you to open the high pressure air into the main ballast for a few seconds. I want to pop the boat up onto the surface. If we use the normal low-pressure system to ease up, there is too much of a chance for the intakes to be swamped in these seas. You all understand the procedure?”

Owen and Bastian nodded. Owen slipped down the ladder to the sonar compartment and they could hear him opening the toolbox that held the emergency blow wrench.

“OK Bastian, give us a little more throttle. I am adjusting the planes for some up-angle.”

The bow of the boat rose slowly ahead of them, and Percy, being the only one standing, leaned into the angle. She found her pack of cigarillos tucked into the wall joists, and pulled one out to light it. Bastian slipped a cigarette from his shirt pocket and lit it off Percy’s coal.

“Hemi, Another degree on the fuckin’ bow, I should think.” Said Percy.

Hemi turned the plane control wheel slightly, and the boat eased to a somewhat steeper angle. He made some small adjustments on the trim tank control panel to make the front of the boat a bit more buoyant so it did not have to put quite so much energy into lifting the bow.

"I am going to come level at just about 10 meters, then we will have Owen blow air into the main ballast tanks." Hemi kept his eyes locked on the depth gauge, watching it crawl slowly back around towards zero as the boat rose. Just as it passed the 10 meter mark, Hemi turned the plane control wheel and the bow of the boat came down to level. At this shallower depth, the boat took on the motion from the waves on the surface, slowly listing from one side to the other by 10 degrees or so. "OK!" Hemi yelled down to Owen. "Open the air into the main ballast Owen!"

Percy punched the emergency blow alarm, to be sure that this time everyone on the boat was aware they were performing a dangerous maneuver.

From below they heard the squeak of the turning valve, and a loud hiss. Air rushed through the pipes below them and down into the ballast. Hemi started counting to himself. There was a pause where nothing happened and then they all felt the upward acceleration of the *Prospect* lifting.

Hemi's count hit 5. "Close it down Owen!"

The hiss stopped, but the upward motion did not. Percy wrapped her fingers in the leather strap hanging over her head. They rode the force of the expanding air upwards for a few seconds and then the boat went weightless for a moment as it reached the surface. They could feel their stomachs rise within, and Hemi and Bastian's knuckles went white as they tightened their grip on the control wheels.

The depth gauge landed firmly on its zero pin and sat there. The boat rolled slowly and heavily with the surface swell.

All of these movements were well beyond the everyday range of motion for the *Prospect*, which typically experienced little more than a gentle roll in the course of a normal day of travel. But

Captain Percy knew her boat very well after all these years. Even during a dramatic maneuver like blowing out the main ballast tanks the boat was well within its capabilities. Hemi and Bastian might have nervous looks on their faces, but Percy gripped her strap and casually smoked her cigarillo as they took the express route to the surface.

When the boat bobbed back downwards and began to settle on the surface, she was about to raise the periscope and have Chips prime the diesels for starting when she felt the deck below her feet move in a way that she was not expecting.

It was nothing very dramatic, just a slight roll and yaw that Percy's whole being knew simply was not right. If the *Prospect* was a haptic extension of Percy's own body, this was like she had just tripped over her own feet. While she had no worries during the rise to the surface, this sudden strange motion of the boat made her break out in a cold sweat. Nobody else seemed to even notice it.

"Hemi... something's wrong." She said, but even the time it took to get the words out had been too long of a delay. A second motion that was far more dramatic had begun. She punched the collision alarm and the klaxon sounded to the lowest depths of the boat.

The *Prospect* started to list to the starboard side. It was the motion of some sky-scraping giant lifting them closer to his near-sighted eyes for inspection without regard for the orientation of the strange object in his hand. The giant was, in fact, a huge wave.

The *Prospect* rolled hard over to starboard, and it did not stop rolling.

"Hemi! You brought us up in the ditch of a wave! We're going over!"

The port wall became the ceiling. The boat was rolled over 90 degrees on its side by being caught in the wrong part of a huge wave. It kept rolling even past 90 degrees. Captain Percy crashed into the starboard wall. Hemi put one arm out to brace himself, and the other arm against Bastian to brace him. Hemi's enormous strength rippled through his body and held the two men firmly in place at their control stations, defying gravity. Throughout the boat the shifting, crashing sound of previously carefully stowed objects falling hard against the starboard side that was now acting as the temporary deck.

As on all ships, the crew generally kept objects secured by strap or rail against the roll of the vessel. This both kept things from falling out of place with the normal motion of the boat, and on a submarine prevented a falling object from potentially making enough noise to give their position away on sonar. But objects were secured against maybe a 20 degree roll, not a 90 degree roll. At that angle nearly everything in the boat found itself yanked free by malevolent gravity.

The lights blinked a few times and then shorted out as bilge water made its way to places it did not belong. A few moments later the control room and sonar compartment were lit with the harsh white glare of the battery-backup emergency floodlights.

From the sonar compartment, Cassandra screamed. "Holy shit. Holy shit. Holy shit. Is this it? Are we fucking going down?"

Hemi responded to her with forceful strain, "Cassandra! Do not panic. Submarines are designed with all the weight at their bottoms. They always come upright eventually."

"Except when they fuckin' don't." Said Bastian, but only loud enough for Hemi to hear.

"Hemi." Said Percy flatly to him. "What about the cargo?"

“We will put our faith in the packing material.” He said. “If one of the warheads does explode, we will know it immediately. And a few seconds after that, it will not matter.”

Bastian coughed.

“We could open the main ballast valves, try to submerge again.” Suggested Hemi.

“I’d be too worried about the tanks flooding unevenly. We could end up turning fuckin’ turtle.” Said Percy. “We need to ride it out. She’ll come up again. . .”

The boat rocked on its side for terrifying minutes on end, sometimes rolling in the wrong direction far enough that it seemed impossible they would not end upside down. Occasionally the lights would flicker, but continually shorted out. They listened to the ongoing sounds of the boat’s stores crashing and sliding through all the compartments.

As Hemi strained to hold himself in place and support Bastian in his, he began to doubt his own words. Maybe this was one of those times that the boat was not going to come back upright. And even if it did, coming upright could always be the final motion that set off one of the magnetic warheads. Cassandra had been reduced to whimpering on the deck below them, though they could hear the Owen had made his way over to her and was telling her things in a low voice they could not hear but clearly had a reassuring tone. Bastian just kept saying “fuck!” every few seconds, with more and more frustration.

Captain Percy lay against the starboard wall. She spat, and her deeply-held expectation of watching it arc to the deck was defied by gravity which pulled the brown goo back against the side of the ship.



But as she was the first to feel the boat go wrong, Captain Percy was also the first to feel it begin to right itself. There was the slightest relaxing of the angle, she could feel a tiny bit more pressure from the deck through her boots, and somehow she knew it was the beginning of a more substantive movement. The *Prospect* was telling her it was coming back up.

At first it was just a slow rotation, but then it gathered speed and soon the control room was whipped up into the air, and then came back again as the *Prospect* found its upright footing.

“Fuck!” Bastian said. “Now what?”

“Forward throttle Bastian!” Said Percy. “Do the motors have power?”

From far below decks came the ramping-up hum of the electric motors spinning the props. The boat’s capabilities were severely limited without main power, but power between the batteries and electric motors that drove the props was isolated from main power its own circuit as a safety precaution for an emergency situation such as this.

“Fuckin’ motors do have power, Cap.” Said Bastian.

“Small favors.” Said Percy to herself. “OK Bastian, pick a bearing and keep us moving on it. Hemi! Get up on the bridge — with a fuckin’ lifeline — and get us steering into the waves so we don’t roll over in the fuckin’ ditch again.”

“You do not want to dive?” Hemi asked.

“Not without main power through the boat.” Percy said.

Hemi nodded, and slipped down the to the lower decks to go after the gear he needed.

Percy grabbed at the boat PA mic and thumbed the transmitter, but there was no power to any of the radios. She leaned over

the hatch to the sonar compartment. “Owen! Go find Chips and help her get the power back on.”

“Right Percy.” Owen headed off quickly, nearly running into Gregory who was stumbling up from crew quarters.

“You alright Gregory?” Percy asked.

“Ya, I fucking fell out of the rack when we rolled, but I’m O-fucking-K.”

“Good. Go down to the cargo hold and check the cargo — make sure nothing’s about to fuckin’ explode on us, and get it re-stowed, OK?”

“Ya, I’m on it.” Gregory pushed his way forward through the compartment against the sudden mountain grade he faced as the boat rocked. Now that it was on the surface, the *Prospect* was clearly taking a beating from the weather.

Hemi returned wearing a full-length rubber foul-weather slicker and carrying a coil of heavy rope over his arm.

“We will not be able to see much up there Sylvia. We need to rig some floodlights.”

“I know, but we can’t do that without fucking power. Just do your best to feel your way out of the fucking ditch. As soon as the main power comes on, we’ll send some clamp-lights up.”

Hemi opened the hatch at the top of the control room, and wind immediately whipped into the boat, driving rain with it. Hemi climbed up and tied the heavy line around himself and hitched it to secure rings behind the fairing of the bridge. The topside world was an environment of darkness pressing against blackness. Hemi was surrounded by huge moving mountains of pitch, rolling upwards and trying to touch the black sky that hung just over them, pressing down.

“OK Bastian!” Hemi shouted down to the control room. “Left-rudder, three degrees.”

Bastian shouted the order back up to Hemi, repeating it like the pilot of a military ship would, knowing that Hemi had to be sure he was executing exactly the move Hemi needed.

“I think you can try starting the diesels Percy.” Hemi shouted down a moment later.

She stepped up to the engine control panel located just behind Bastian. This panel was showing no power to the lights and indicators that usually glowed comfortably as they showed the core propulsion systems of the boat were working. Percy flipped the switch to turn on power to the diesels regardless — that circuit was also isolated from the main power circuits as a safety precaution. She pushed and held the starter buttons for the diesels. These were mechanically rigged to valves in the high-pressure system that let air flow into the engines with enough force to turn over the crankshaft and the big cylinder bores. The diesels required no external electricity source to start or run. They were nearly entirely mechanical devices.

After a few seconds of listening to the high-pitched hiss of air flowing through the boat and down to the engines, Percy heard the rumbling vibrations of the diesels firing down in the deep parts of the boat and released the starter buttons.

“A little more throttle Bastian!” Hemi called down after the diesels started bellowing their confident exhaust behind him. Now he felt like the *Prospect* had the power to confront this big weather they were driving into.

A few minutes later the regular lights came back on, and the harsh shadows of the emergency floodlights faded away. Power returned to the ship panel by panel, along with the reassuring

hums of all the electric motors, circuits, and filaments that bathed every moment of their lives onboard the boat.

Percy picked up the PA mic. "Nice fuckin' work Chips." She waited a second but there was no reply over the ship PA. "Bastian, I'm going to the cargo hold to check on the fucking load."

The ship was a mess. Percy made her way stepping over all the detritus of a working sub scattered over every deck: tools, bedding, cans of food, cleaning supplies, scattered stacks of papers, half-unrolled charts, pencils, rags, parts, and steel-encased equipment. For all the mess in the main decks though, the cargo hold was not too bad. Hemi's careful re-arrangement of the cargo crates earlier hand included strapping the crates hard up against the wall, and the old cotton-web straps had mostly held. Only a couple of crates had broken loose. Gregory was using the block and tackle to move them out of the center area of the cargo hold. Chips had joined him, and was stowing equipment that had been shaken loose. She had one of the broken bicycles that had escaped from the rusty bicycle pile in her hands when she saw Percy.

Chips' face immediately went red. "That's the second fuckin' time Percy. Two fuckin' times you almost fuckin' killed me now. You fuckin' surface the boat in a fuckin' storm? Fuckin' damn you to a cold fuckin' watery hell you fuckin' shit-faced twat."

"Fuck you Chips! I'm the fucking captain of this boat. I have to make these calls. They aren't always going to be fucking perfect or safe."

"But with a hold full of fuckin' explosives? You fuckin' ride out bad fuckin' storms submerged. Every stupid-fuckin' green boat driver knows that. But apparently, you fuckin' think it's fine to surface with a hold full of fuckin' TNT. We were a fuckin' mite's-dick away from being blown to the bottom of the fuckin' hole!"

Percy leveled her emotions. "I don't fucking need this right now. I have bigger problems than you. Go cool the fuck down Chips." Percy turned and walked away.

Chips threw the rusted bicycle frame into the corner with the other bicycles. The hollow tubes of thin steel crashed and locked together.

With the power restored, Captain Percy tracked down some powerful floodlights in the storage hold. They were designed to be clamped onto the fairing of the sail for situations like this, where the boat needed to be piloted visually from the top of the sail, but visibility was nearly zero. Powering the lights required running heavy weather-proof electrical cables up from the control room to the bridge.

She called for Owen to come help her on the PA. Together they managed to get the heavy lighting units hauled through the control room and up to the bridge of the sail. In the slashing rain Percy held each of the four lights in place while Owen clamped the lights onto the fairing by bolts tightened with a wet and slipping wrench. Owen draped the cables down through the sail and into the control room where he connected them to high-amperage power sockets.

So far, Hemi had been mostly guessing from which way the big waves were coming at him, and having Bastian adjust the course to to keep them moving laterally across the trough of the waves, where they faced the most risk of rolling over again. The powerful lights pushed back the darkness to reveal the black throbbing landscape surrounding him and stretching out in front of him. Huge mountains, the color of crude, slipped towards him and under the boat, lifting it high up among the spindrift blowing white from their peaks and violently twisting off deep into the ferocious darkness.

Hemi tried to spot the big ones coming at him from a couple of waves away. When he saw one, he would have Bastian steer into them, driving up their sides splitting through the top and crashing down into the valley below. The wind blew without relent, carrying a mix of rain and blown water from which no distinction could be made whether it was moving upwards or downwards.

To the uninitiated, this was a hellscape, an unstable surface on an alien world. Any ship in weather like this was a tiny figure on a vast plane, roamed by monsters the size of apartment buildings that arrived with stealth, and an ability and intent to crush even the most formidable intruders and drive them down into the bottomless hole they effortlessly strode over.

But Hemi felt no fear as long as the hum of the diesels shook his boots, and the heat of the exhaust bellowed from the pipes behind him. He had been through weather like this many times over the years and knew a well-found ship with a strong engine should have no trouble. As old as the boat was, he had all faith in the *Prospect*. The storm could try its evil best to do them down, but Hemi was not going to go without a fight.

After an hour of firing into the storm the giant on the bridge was starting to feel the wear of it though. Hemi was not a loud man and his voice was already cracking from shouting directives down to the control room. It also took an enormous amount of energy to keep his concentration focused on the nearly-featureless black seascape. Wild as it was, it became debilitating repetitive in a short time. It also took physical stamina just to stay standing on the bridge against the wind and roll of the boat. The most distressing thing to Hemi though was that he had only been at this for an hour. There was a chance they could be running through this storm until dawn — something like 10 hours away.

Gregory, dressed in a black foul-weather slicker that covered him

from crown to calves, where it draped over heavy rain boots, climbed up through the sail to join Hemi on the bridge.

“Captain Percy sent me up.” Gregory shouted to Hemi through the wind. “She wants me in the lookout ring. Seems fucking stupid to me.”

Hemi nodded. “The sour prospects of fortune are determined by the winds that blow out of hell, Gregory. I do not believe there is more to see from the lookout ring than down here on the bridge. Still, I will be glad to have help spotting incoming big ones... and someone to witness my end if I get blown overboard.”

“Maybe that’s the real fucking reason she wanted me up here!” Gregory grinned at Hemi as the rain soaked his face.

Gregory clipped on a lifeline and climbed up to the lookout ring, his meaty hands almost glowing white where they peaked out from under the black slicker and gripped the wet steel ladder. In the lookout ring, he doubled up his safety line. From that modest height it looked like he could reach up and touch the long drifting tendrils of the low scudding clouds above his head. He withdrew a pair of binoculars from under his slicker, but they were nearly useless in a matter of seconds. He reverted to holding the brim of his hood down to shade his eyes from the water that came down at him. Though little good it did against the water that rose up at him.

Down in the sonar compartment Cassandra’s eyes were watery and red. She had been on sonar watch for more than 12 hours. 12 hours of staring at the same screen and set of gauges, which never showed the slightest change. While she had quickly adapted to the typically very gently motion of the submarine, now it was moving like the worst kind of low-riding surface ship. It lifted her up, and dropped her down, sometimes hard enough to lift her from her chair. Unlike a surface ship, there were no windows though. There was no way for her to see any kind of horizon by

which she could orient her confused inner ear. Sickness rose up in her again and again, and she kept forcing it back down. The only relief was the occasional cool, wet breeze that found its way all the way down through the open hatch in the control room to her far corner of the sonar compartment.

She had expected to be in her rack hours ago, but Captain Percy had come by and asked her to stay on sonar. She had told Cassandra that, while it was unlikely they would meet any other vessels in a storm like this, sonar might be the only way they would know if another ship was coming at them, despite the noise of the storm.

So Cassandra literally hung on. She gripped the handles on either side of the sonar unit in her small hands, her fingers curling around the cold painted and chipped steel, her fingernails digging into the soft flesh of her palms. The tension in her arms had passed from a searing ache to a dull background pain hours ago.

She slowly closed her large eyes and focused on the sounds in her headset. She left her body behind in the boat, and moved her mind out into the water. This had become easier and easier with practice, though overcoming the exhaustion and pain of a long shift made it more challenging now.

The ocean was overwhelmed by the sounds of the storm on the surface, and the heavy drone of the diesel engines reverberating through the hull of the *Prospect*. With the diesels running up towards their maximum RPMs, the whole boat shook with the vibration of the grinding cylinders. The engines provided a low frequency bass note that cut a never-varying line of deep sound through the sonar.

Above the engines in pitch was the sound of the waves. This sound was white, but unlike the drone of the diesels was constantly changing and shifting. It was a heavy sound that curled and



rolled, until a wave broke. When that happened, the sound would change to a rushing wall which would overtake everything until it receded a few seconds later and the low drone of the engines came back up underneath.

When she concentrated, Cassandra could hear the whistle of the wind itself, pressing against the surface of the water and driving it with its vicious will.

Those sounds all combined into a heavy repetitive groan that rose and fell depending on which source was taking over at any moment. But cut across that was the sound of the motion of the boat itself. Every minute or so, the bow would break out of a wave, accompanied by a new rush of wind on the sonar mics. Then it would be followed by the crunching sound of the boat plunging back under the water, which would run out in the long stream of the sound of water rushing along the side of the hull.

All of this came together to form something that, to Cassandra's ears, sounded like an almost spiritual music — a drone music from the culture of some remote land, with variations that held one's interest as they carried you off to some distant plane, but then always came floating down to return to the same home place. The grinding roll of it all seemed like some animistic entity's effort to raise the consciousness of someone lucky enough to be listening to a place in the mind where one could see out forever, out through thousands and thousands of miles of empty ocean, and pick out some particular particle or source, and understand what exactly its intentions were: the mind of a sperm whale 3000 meters down in the blackness, closing its jaws around the expelling sweet juices of an enormous cephalopod, or the byzantine economics that led to the churning roll of a machine bit boring into the ocean floor, or the tortured path of beach sand siphoned from its existence in the warm sun and deposited in the freezing darkness of the drowned depths.

Cassandra let her mind sink into this strange music flowing through her headset, passing from one ear through the middle of her head to the other ear, and at the same time letting her mind wander around in the sea surrounding them. This went on for more than an hour before she was jolted back to the sonar compartment by the distraction of Captain Percy and Chips having a loud and heated argument behind her. That was unfortunate because just at that moment she believed she could hear a new sound out in the darkness. It was something faint and far off. It was something incongruous and inappropriate, like a soloist from some fast-tempo secular entertainment music had been dropped on top of her spiritual drone.

She opened her eyes and looked at her instruments. She swung the mics around towards the boat's rear starboard side. At about 160 degrees there was a slight, but very real, wavering of the signal strength indicator. It just popped its head up for a second, like some prairie rodent checking for raptors. Cassandra spun the mic direction wheel back across the bearing, and the needle went up and down again. Back and forth she scanned, and each time the needle moved and she was sure now that she could hear a faint mechanical hum in her earpiece when it did so.

She focused the mics on the source of the mechanical sound in the water, and listened to it. It was nothing more than a soft hum that had diffused itself across some unknown amount of the dense medium they worked in, gently tickling the sensitive membranes of the ship's mics, and then running close to the speed of light through the ship's wiring, past the condensers and filters of her equipment, up the fading braided wires of the headset and into her ears. For all that, it was a pulpy mush of a signal, barely discernible as mechanical save for the slow cycle of rising and falling at just a few hertz, but in an evenly repetitive way that was unmistakable.

She struggled to figure out if the source was far off or if it was

closer but moving very quietly. The drone of the engines and the background noise from the surface was interfering with and confusing her sense of distance in the water. It made her feel a little like she was lost and alone on the surface, being lifted and dropped by the force of the storm. The source of the sound might be visible one second, and then she was deaf and blind under the water, and by the time she came to the surface again it had moved away.

Captain Percy and Chip's argument grew louder. Cassandra had the sense they might be on the verge of blows. The verbal storm kept pulling her back to the sonar compartment when she knew she needed her mind out there in the water. But she still felt she did not have the authority to enforce quiet in the compartment.

She rested her elbows on the console, and cupped her hands over the metal and leather pieces of the earphones. She listened to the mechanical hum in the water, and tried to guess by the difference between her right and left ear how far away that sound was. But the white noise of the storm washed it all into one blended continuous sound. She stared at the signal strength indicator and dared it to move.

And then it did. It jumped up, marked a point and floated there for half a second. It was accompanied by a rattling clink in the headphones — metal on metal somewhere out in the liquid expanse. A dropped steel pot or piece of equipment perhaps. The sound was distinctive, carrying Cassandra back to her childhood, to playing on the floor of a kitchen while a meal was being prepared above her. She tried to hold on to the feeling of safeness that brought to her as in her earphones the rattling-pot sound took on an other-worldly echo. An echo that her mind processed for distance — which brought the rising terror of how close she now knew that sound to be.

“Captain Percy! They’re right fucking on us!” She turned and yelled.

Percy immediately broke off with the red-faced Chips and stared at Cassandra, her eyes going wide. It took her a second to process what Cassandra had said. “Oh fuck. A contact?” She asked Cassandra to confirm.

“Yes!” Cassandra put all the conviction she could into this word, worried that she wasn’t conveying the seriousness of the situation quickly enough.

“How close?” Percy asked.

“I don’t know!” Cassandra panicked. “Too close! They’re *here!*” She pointed her finger at the console. “Rear left side of the ship.”

Percy grabbed the gray steel rungs of the ladder up to the control room, feeling the old paint fleck off under her fingers where she gripped the rungs excessively tightly. She flew up the ladder, cupped her hands around her mouth and yelled up to Hemi, “Contact! Close rear port quarter!” She could hear Hemi repeating the information up to Gregory in the lookout ring.

Gregory made a motion to pull out the binoculars from under his slicker, but as he looked in the direction Hemi indicated, he realized he did not need them. There before him rose a shadowy leviathan, breaking out from the dropping curve of the next wave behind them. It was so dark that Gregory would have thought it was literally a leviathan: a whale or a giant squid or something, except as soon as its huge dorsal area split the surface, two holes appeared in it’s back, from which poured out a bright red glow, like the eyes of some corrupted pet of hell. The shadows of people briefly caused those eyes to blink, and Gregory knew they were moving onto the deck of the sub that was so close it looked like the next wave could drop it on top of the *Prospect*.

Gregory cupped one hand to his mouth and stretched his arm out to point in a gesture that dated back to the dawn of humans venturing out onto water. “Hemi!” And with the foreboding sense that they might be the last words he ever spoke, Gregory could not keep the note of mortal terror from his voice. “It has come through the waves and is on us now!”

Hemi turned and looked, and instantly knew the *Prospect’s* only course of action. “Dive!” He shouted downward as he pressed the dive alarm button. He looked up at Gregory in the lookout ring. “We have to dive Gregory! Get below!” The alarm sounded up to him from below in the control room and all through the depths of the boat.

Long thin fingers of flame reached out from the submarine behind them and split the darkness between them. It was followed instantly by the low, fast cracking sound of heavy automatic weapon fire and the sickening thud of lead slamming into the thick steel of the *Prospect’s* sail. It rang with a clanging echo down through the hull of the ship.

Hemi immediately dropped his significant mass to the deck of the bridge, below the protective ridge of the sail’s fairing, and then lowered himself down through the interior of the sail and into the control room. He looked up through the open hatch and called loudly for Gregory.

“Were they fucking firing on us? That same fucking sub?” Percy asked, furious.

“Yes. I saw the ram.” Said Hemi. “We need to dive. Now. Open the main ballast vents.” But he knew his words were redundant. Owen had already shut down the diesels, and Bastian was putting an angle on the dive plane and the main ballast was flooding. The bow tilted towards the depths. But the row of lights that showed the status of the hatches contained one glaring red light among the green — the control room hatch.

The depth gauge had already climbed off its zero pin. The deck of the *Prospect* would be awash in a matter of seconds. The control room would be under shortly after that. Hemi looked up through the open hatch “Gregory! We’re going down!” But all he could see was black rain blowing across the bridge. “He was pretty exposed up in the lookout ring when they started firing. He may have been hit.” Hemi said to Percy.

They suddenly all made a coordinated, involuntarily, and wincing ducking motion as more shrapnel hit the sail.

A rain of blood driven by the wind sprayed down through the open hatch above them.

Through the hatch they could hear a loud, low voice, enlarged by loudspeakers mounted to the sail of the pursuing sub, so that all enunciation blended together into one long echoing drone of command, like the voice of a demon possessing a dog that drives the vulnerable mind to murder. “Do not submerge. Disengage your motors and prepared to be boarded.”

This was followed by a long string of regional control organizations, treaty clauses, and naval ranks by which the following sub conveyed its unshakable and inviolable authority to issue such a command.

“Close the hatch Hemi.” Percy said.

“I... I can not do that Sylvia.” Said Hemi.

“We’re going to be under in seconds! This isn’t a discussion.” She climbed up two rungs on the ladder to the bridge, reached up and pulled the hatch down without looking up, cutting off the echoing voice on the loudspeakers explicating an ever-expanding description of pyramidal powers.

She screwed the squeaking hatch-sealing wheel down tight. The light on the hatch-status board went from red to green.

More bits of lead smacked against the sail and along the hull of the *Prospect* just below the waterline. Percy winced involuntarily again. There was no telling what kind of damage they could be doing. It might be nothing, or it might wound the *Prospect* in just such a particular way that under exactly the right pressure of water, at some unknowable depth, the whole boat would collapse on itself.

Owen looked up at Hemi with fear in his eyes.

Hemi fixed the small frames of his glasses in front of his eyes and looked back at him steadily. "Do not worry. The boat will be safe from bullets underwater. Just get us down."

They could hear the water rushing up the hull and rising around them now as the sail went under the waves.

Then they heard the tapping.

Not the loud thunks of bullets, but the soft rhythmic bump of someone banging on the hull over their head. A few thumps evenly spaced, as if someone was putting all their strength into them. This was followed by a double-bump, which let them know for sure the source was not mechanical.

"Gregory." Said Hemi, his face blank.

"There's nothing we can do now." Said Percy. The thumps went on for another few seconds. After a moment of silence, there were a few weaker ones. And then they stopped.

Chips stood at the foot of the control room ladder looking up at Percy through the hatch. "Fuck you." She said softly. "The fuckin' judges in hell will fuck you for eternity for that, Percy." Chips turned and disappeared towards the stern of the boat.

Nobody else said anything. Percy spat. "Flood the fucking dive tanks."

Hemi reached over to the tank trim panel and opened valves that let more water into the boat. Throughout the whole of the *Prospect* huge volumes of water poured into the ballast tanks as air was displaced up pipes and vented out above them in streams of bubbles. Percy flipped the lights from white to red.

“Set the planes down steep.” Said Hemi. “Full power to the electric motors, drive us down as fast as possible.” Owen pushed the main throttles all the way forward, and the hum of the powerful electric motors rose up around them mixing with the terrifying sound of water rushing in to fill the boat. The rows of smaller dials showing the tank-fill statuses, with their pitted chrome casings — one with a cracked glass face — all rose evenly and quickly.

The *Prospect's* bow tilted towards the depths. Percy and Hemi grabbed the hanging leather straps and counter-angled their ankles against the incline. They were going down fast enough that they could feel their stomachs rise slightly against the descent.

The ship-to-ship radio lit up, and the communication from the pursuing sub continued where it had left off when Percy closed the hatch. “Diving submarine: you are ordered to discontinue your dive. Return to the surface and disengage your engines. If you do not, we *will* launch a torpedo at you. Under the International Water Territorial Authority Control Agreement we are permitted to inspect any—” Percy punched the button cutting power to the ship-to-ship radio.

“If they want to sink us so bad, why didn’t they just fucking torpedo us already?” Owen asked.

“They were too close.” Hemi replied. “They need to be at a minimum safe distance to fire without risking blowing themselves up. They probably also thought there was a chance they could capture our boat if we had been scared enough to just roll over.”



“So we’re not that scared?” Asked Bastian. He put a cigarette to his lips for a long draw, not expecting a reply.

“Fuck.” Said Percy once more as she sized up the situation. “It must have just been total bad fucking luck for us. There’s no way they could have fucking tracked us down in that storm. . . . Don’t ya think Hemi?”

“It is incredibly unlikely. They may have just been riding out the storm themselves, and suddenly found they were on us.”

“And that bad luck cost me a crew member.” Added Percy.

Hemi looked away and found himself analyzing the gauges. They had already achieved 30 meters of depth.

“Cassandra!” Percy yelled down to sonar through the hatch in the deck of the control room. “Stay on them! I need to know what they’re fucking doing.”

“I’m trying to Captain Percy.” Cassandra responded, unable to hide the uncertainty in her voice. “I . . . I think they might be diving. . . .”

Percy caught Hemi’s eye. “What’s their move Hemi? What are they trying to fucking do?”

Hemi considered. “Well, if they are diving, I believe that suggests they want tactical mobility. On the surface, their opportunities to threaten us are extremely limited by the storm.”

“Mmm Hmm. By ‘tactical mobility’ you mean get in range to put a torpedo in the water that’s fucking pointed at us?” Percy asked.

“Our relative positions have barely changed. They are almost certainly still too close. But if we hear them turn away from us, we can assume they are trying to get enough distance to fire a

torpedo. On the other hand, if they do not turn away, they may be lining up to try to ram us.”

“Only a truly fucking suicidal sub driver would try a ramming while submerged. There’s too much risk of damaging their own boat beyond repair.”

“There is nothing to indicate that this commander is not suicidal...” Said Hemi flatly.

“Cassandra!” Percy called down again. “What’s the range to the fucking contact now?”

“Um...” Cassandra struggled, “I can’t really tell Captain Percy. The background noise in the water is still so loud that it’s making ranging very difficult.”

“You had better go down there and get on the fucking sonar with her.” Percy said to Hemi.

Hemi nodded and slipped down through the hatch. He put one big hand gently on Cassandra’s thin shoulder so he wouldn’t surprise her — she had her eyes closed and seemed to be concentrating very hard on listening. When he touched her she turned and opened her eyes and nodded to him. Hemi put the second sonar headset on.

A minute later he reported to Percy. “Sylvia, their diesels are off. They are definitely submerged. Range... maybe 300 meters. Hold on...”

The signal strength indicator rose slowly. Cassandra looked up at Hemi.

“They are increasing speed Sylvia. And turning... through our rear port quarter. They are going for distance. I assume to fire on us.”

In the control room, Bastian overheard this report from Hemi. "Maybe they are turning to run away from us." He said to Owen through the cigarette hanging from his lip.

Percy looked at the depth gauge: 100 meters. "Push her down Bastian." She stood behind him and put her hand on his shoulder.

Bastian turned the dive plane control wheel to give the planes a steeper angle. Percy adjusted valves at the tank ballast control panel to give the bow some more weight.

"Hemi!" Percy said. "Let me know immediately if they start to turn again."

"If they have rear torpedo tubes, they will not have to turn." Hemi replied. "And they are so close a torpedo will be in the water for only a minute before it hits us." He added.

"Fuck." Said Percy. "Then let me know if there's any fucking indication they are about to fire Hemi."

"It is tough Sylvia. Cassandra is right, there is a lot of background noise."

Owen reached up and wiped his sweating fingers on a rag hanging on the forward wall between the gauges. "I could never get used to going down fast like this, controlled or not." He said, as if voicing his fear might let some of it out from his guts and disperse it around the room a little. His eyes rapidly scanned over the stacks of dozens and dozens of dials and readouts on the front wall of the con. What Owen read from those dials was that the sub was being put through the very limits of its endurable capabilities.

The rising and falling needles on the dials, which usually moved with a deliberate and controlled slowness, were all rapidly chasing new positions. The RPM indicators for the electric motors were

near red-line. The battery indicators were showing the batteries being drained so fast that Owen could actually see the needles falling on the dials. The plane angle indicators were pinned at their steepest angle. And the ballast tank status indicators were rapidly pushing towards a completely flooded boat.

The depth indicator was the one that Owen's eyes kept coming back to though. He had never seen it move so fast, showing him quantitatively what he knew from the lightened weight of his stomach: the *Prospect* was a many-thousand-ton steel stone dropping through the water column. It was hard to imagine what would stop the boat from simply winking out of existence in the never-ending blackness of the deepest parts of the ocean, crushed like distant matter pulled into a singularity. Within a few minutes it was passing through the range of 175 and 180 meters.

Everyone silently gripped their stations.

"They are turning Percy." Said Hemi from the sonar station. He tapped a light rhythm on Cassandra's shoulder to draw her attention to a new unique sound in their headsets. "Sounds like they are flooding torpedo tubes!"

A loud ping resonated from every steel piece of the boat. It hit broadside, and passed right through them. It rang off the opposite side of the *Prospect's* hull and echoed back through the air to their ears. At the sonar station, the ranging equipment lit up with the exact distance and direction of the pursuing sub. Hemi read the coordinates off the range display and relayed them to Percy. "That ranging ping of theirs puts them at 612 meters off our rear port side."

"Now they have everything they need to fire on us." Percy said to herself.

Half a minute later Hemi heard the unmistakable sound of a torpedo being pressed out of its tube. "Torpedo in the water!"

Nobody said anything, instinctively listening to the space around them. After a few seconds the ping of the torpedo homing on the *Prospect* started bouncing off the hull with the timed rhythm of a ticking clock.

"Take off your headset Cassandra." Said Hemi, pointing at the range-finding equipment that lit up with the direction and remaining distance between them and the torpedo. It updated immediately following each ping — the torpedo was gaining about 100 meters between each ping.

"Down, we have to get deeper," Percy whispered to herself in the control room. She reached past Bastian, and turned the dive planes wheel to the stop so they had maximum angle. The boat dropped from under them.

Where a moment before Owen was fearing some unknown depth at which the *Prospect* would cease to exist, now he felt himself squeezed in the jaws of a closing vise: between a torpedo that could blow the *Prospect* open, and the pressure of water that could crush the boat flat.

Percy looked up. They were passing 200 meters.

The pinging was fast enough that they all knew the torpedo was almost on them.

And then there was a creeping silence in the moment where they had all expected the next sound to be their eardrums pressed in by the shock wave of an explosion.

There was nothing but a long lingering quiet, no longer being split by the ping of the torpedo. The only sound was the groaning of the *Prospect's* hull being pushed through the continued stress of fast diving.

Owen looked at Percy, "What happened?"

"Most of the torpedoes on these Authority subs are older ones because they manufactured fuckin' huge numbers of them. They generally can't swim below 200 meters or so. The one homing on us probably just stopped functioning when critical components failed under the pressure." Percy paused, thinking to herself. "It's entirely fuckin' possible that they are loading a more modern torpedo into their tubes right now that can reach us at this depth, and all we've done is delayed the fuckin' inevitable."

"What are they doing Hemi now?" Percy asked the sonar station loudly, with a slight tilt of her head.

Hemi and Cassandra had their headsets back on and were listening. "Sounds like they stopped moving Percy. They may have decided to wait us out." Said Hemi.

"OK," she said to Bastian and Owen, "level us out. Hold us at this depth for the moment."

Bastian eased back the wheel on the dive plane while Owen pulled the throttle back to the zero mark, and flipped some switches. The electric hum died away as the deck of the boat came up under their feet to something like level ground. Bastian opened the valves controlling airflow to the ballast tanks, and a soft hissing whispered through the boat. The ballast tank fill needles worked their way slowly back toward the middle marks on their dials. The depth gauge slowed and slowed, and then finally held level at 232 meters down.

The stress Captain Percy was feeling changed in character. A few moments before her mind was working quickly in the desperate survival mode of flight. Now that immediate pressure was off, replaced by an almost overwhelming cloud of slow and helpless dread as they switched to a mode of silent hiding and no further action could be taken.

She looked around her in the crimson gloom. With the motors shut down her boat was completely silent. Their breathing pushed dampness into the air that condensed on the metal fixtures and gathered until it released a soft drip. The randomness of the dripping in the control room was maddening — like it was irregularly marking time towards absolutely nothing.

Bastian knew better than to ask, but Owen did not. “What’s our plan Captain?”

“Fuck Owen! Let me think.” She stared at the depth gauge, unblinking.

Bastian opened a valve on the tank trim control panel slightly further to make a minor adjustment to the level of the boat. Percy noticed his hand shaking as he reached out for the palm-sized control wheel.

Percy lit a cigarillo and put it between her lips. “Do not make any moves.” She said to Owen and Bastian. She slowly climbed down the ladder to the sonar compartment. Half way down another ping from the sub with the ram bounced off the *Prospect’s* hull and rang through the crew’s ears.

“They are 734 meters behind us, rear port quarter. They are at 150 meters deep.” Hemi told Percy, reading off the ranging equipment. “Do you think they will fire another torpedo?”

Percy stepped over to the sonar console. “I think if they had a torpedo that could swim this deep they would have fired it already. No, I think they just want to be sure we have not fucking gone anywhere.”

“They likely learned we are an unarmed boat at the depot as well.” Said Hemi. “They no longer have any fear of pinging us.”

Percy nodded and thought. “Yes... but I wonder if they would be so quick to ping without a storm overhead. Right now they

can reasonably assume there's no other Authority's craft around to hear them. If we can make our way out from under this storm, and into busier shipping channels, they might need to hide nearly as much as we do — and lay off the fucking pings."

Cassandra took a rag hanging from a hook and wiped condensation off the sonar gauges.

Percy pulled Hemi over to the navigation chart. Hemi did not remove the sonar headset, instead stretching out the wire in the space between the sonar and navigation stations.

"We did OK charging the batteries on the surface during the storm. We have about a half charge on them." Percy said, as a starting point for managing all the variables they needed to weigh.

"So we can do a creeping speed for maybe 10 hours." Hemi did not express his opinion aloud that having 10 hours of charge — a somewhat luxurious electrical hoard considering their current situation — meant they could have, and maybe should have, submerged earlier. If they had, they would never have encountered the sub with the ram.

"OK. 3 knots, 10 hours. Let's fuckin' see." Percy measured a compass against a graduated straight edge and then deftly spun the compass against the chart, drawing an arced dashed line with the grease pencil. "That gets us somewhere along this line."

Hemi nodded.

"Not very much in terms of ocean distances. We can probably get out from under the storm, but a long fucking way from any kind of shipping channel."

"Any other features we can use? A relatively shallow place we can hide on the bottom again, like the tablemount?" Hemi asked.



Percy took a long draft off her cigarillo and then leaned closely over the chart. She pulled down the magnifier and guided her vision through it with the tips of her fingers, holding the burning coal of the cigarillo just off the glass. “Ugh. there’s nothing but fuckin’ deep-sea. Bottomless for hundreds of miles in every direction.”

“They are likely looking at the same chart and figuring they can simply wait out our batteries. They know we do not have a full charge since they caught us on the surface, and figure anything less than 20 hours comes out in their favor if they are patient about it.” Said Hemi.

“They might not be wrong.” Percy stood upright and smoked. “Fuck it. Here’s what we’re going to fucking do: we’re going to creep on a direct course towards Stilt City. If we can lose them, even briefly, we’ll surface and try to get in touch with Shakes — we’ll launch the fuckin’ pigeon.” She waved her hand in the air in a way that might indicate a bird fluttering off.

“Herschel. And what if Herschel finds Shakes. Then what?”

“Have him run interference or something. Whatever the fuck it is we hired him for!”

Hemi looked grim.

“We need to get something between us and those fuckers up there, whether it’s Shakes, other Authority craft, or some feature of the seascape. I just need something to hide my fucking boat.” Said Percy, wracking her mind for options. “Owen! Give us 3 knots.”

The soft hum of the electric motors rose up through the silence.

“Hemi, can you stay on sonar?” Percy jerked a thumb towards Cassandra. “Let the kid get in the rack for a few hours.”

Hemi nodded again. Cassandra heard Percy and looked at them with relief in her bloodshot saucer-eyes.

While Hemi took over for Cassandra, Percy climbed back up into the control room and had Owen adjust their rudder so they were on a more direct route.

Ten minutes later another ping echoed through the hull, piercing through the quiet drone of the slowly-moving *Prospect*. Hemi quoted the distance and direction of the ping source to the control room. Percy ground her teeth against the electrical ring that had shook her nerves. She willed the pursuers to get lost in the storm that still raged above.

The ping prompted Owen to speak up. “Captain Percy, don’t you think we should try talking them into *not* shooting at us? Someone over there must be a reasonable person and realize we are an unarmed cargo sub.”

“The best-case scenario if we can convince them not to shoot is we have to let them aboard for an inspection.” Said Percy. “We aren’t going to pass any inspections with our current cargo. And something tells me those guys aren’t going to be open to a bribe either...” She trailed off. “Besides, they are out of ship-to-ship range now — probably trying to keep enough distance to fire a torpedo at us if we come back up above 200 meters.

They settled into an extremely low-speed chase. The *Prospect* quietly hummed along through the deep, beyond the depth in which it was designed to operate, under 230 meters of water. The pursuing sub stayed closer to the surface but maintained the same distance behind them. The night was dragging on. With the glow of the red lights and the pervading and unchanging hum from the electric motors it did not take long for their fears to subside, to be replaced with sleepy routine.

But every 15 minutes, like a grating and persistent alarm, another echoing ping broke through the silence. Each ping was always followed immediately after by Hemi's report from the sonar compartment that the pursuing submarine was maintaining nearly the exact same distance behind them. This he could, and did, tell them with great precision.

Each new ping reset their anxiety. And their eyes would tear up and their hands would start shaking again. The only relief was the passing of time, but that led inevitably towards the next alarm-ringing ping, and the cycle would start all over again.

And the cycle repeated itself without change for hours. The storm continued to spin above them, and their ears rang from the pings and from the silence between them.

Cassandra showed back up in the sonar compartment, unable to sleep for the pings, and offered to sit at the sonar station again. When Hemi climbed into the control room, Percy had him relieve Owen at the throttle controls and sent Owen to make them a very late dinner.

Half an hour later Owen's voice came over the PA saying food was ready. Captain Percy suggested Bastian and Cassandra should eat first, but Cassandra preferred to stay at sonar. Bastian offered to bring a plate of food up to her and sit at the sub controls himself while he ate. He was back from the galley in a matter of minutes with heaping bowls of steaming food for Cassandra and himself.

Percy held Bastian's bowl of food while he climbed the ladder to the control room. She realized how hungry she was as the smell wafted up to her nostrils.

"Bastian, sit at the planes controls and keep her at this depth and going the way we're going. If anything fucking changes, I'll

be in the galley. Hemi, want to join me for food? Maybe we can come up with some kind of fucking plan.”

“I am certainly ready to eat.” Said Hemi.

Owen was not nearly the cook Gregory had been. Dinner was a white mush of crushed up hard biscuit mixed with water and fried with butter. He had stirred in bits of dried salted meat, and was making a pan of scrambled eggs to accompany the mush with at least a little nutrition. He kept making more eggs — in small batches, so at least they would be hot for the crew coming to eat.

Hemi and Percy loaded up bowls — Hemi with twice as much as Percy — of the hot glop, and filled two tin cups of coffee and sat down at the galley table. They ate in silence for a few minutes.

Hemi had let Herschel out of his cage as soon as the bird had come aboard, and Herschel had made his primary home in the *Prospect’s* galley, claiming any crumbs that made it to the deck. He wandered around their feet as they ate.

Another ping rang through the boat.

“Fuck!” Said Percy. “You know Hemi, I just can’t fucking figure what the deal is? Why the fuck are they so fucking persistent in coming after us?”

“It is strange. The Authorities often aggressively patrol their own waters. But the tension between them means they do not cross each other’s lines. Almost always when we see an Authority craft after us over a long distance it is simply because they have claimed new territory from another Authority, and we did not know it. In this case. . . I am fairly certain they have chased us from one Authority territory into another, yet they mysteriously persist.”

“And it looks like they have every fucking intention of pursuing us into a third...”

“You think it is because they want to take this cargo we are hauling? Perhaps it is the strategic move for them: if we deliver, it undermines their position with another Authority somehow.”

“Even for actual weapons — never mind weapons parts — it’s just too fucking risky for one single Authority craft to cross deep into another Authority’s area. And a boatload of magnetic warheads? That could be a real prize for some rebel group maybe, but for an Authority it’s pretty fuckin’ small potatoes. It’s not like we’re carrying fucking nerve gas.” She thought for a minute, stirring her mush. “Have you ever heard of this particular fucking sub commander before? What did Shakes say... he had only one fucking arm or something?”

“And that he was very large.” Hemi paused, unsure how he felt about pigeonholing people by this quality that applied to himself as well.

Owen stopped stirring his egg mixture. “Fuck.” He said slowly, drawing out the middle vowel in a long drag.

Percy and Hemi turned to look at Owen standing at the galley range.

“You have some fucking input Owen?” Percy asked.

“I... may know why they are after us.” Owen hesitated. “About a year ago, before I started working on the *Prospect*, I briefly dated an older woman. She was a submarine commander’s wife...”

“You had sex with this guy’s wife Owen?” Percy jumped to the obvious conclusion and was already beginning to get angry. “And you didn’t fucking tell us earlier?”

“I didn’t know it was the same fucking guy!” Insisted Owen. “There’s lots of submarine commanders in the world! What are the fucking chances? But the guy I’m talking about: I heard he lost a chunk of his arm in the fuckin’ bight of a docking line years ago. . . . And it didn’t seem like he cared that much about his wife at the time.”

“How the fuck is that?” Percy interrogated.

“Well, I used to meet her at their house — a big old marble mansion with fucking columns out front and everything — and Lisa and I would be off in one wing while he was in another. I’m sure he knew what we were up to. She acted like it was totally normal.”

“Odd. So why do you think he’s the one after us?”

“Well, she broke up with me after a few weeks. It was no big deal — a fun little fling, no hard feelings. A month or so later, I’m in a pub, waiting to order a drink. And this huge guy, like as big as Hemi, maybe bigger, wearing a full fucking dress uniform, decorated with medals all along the left side, epaulets and braid, everything — this guy comes roaring into the pub. He’s got a hatchet in one hand and the sleeve of his other arm pinned up, and he calls me out, and he says ‘You slept with my wife. You’re going to die fucking bloody son.’”

“So,” said Percy, “whatever it was that happened, something fucking changed, and now he has the bloodlust for you?”

“You would think,” said Owen, “but the thing is, even in that moment — what should have been a moment of the most violent, heated fucking passion, right? I mean, he’s supposedly there to kill me in rage for seducing his wife, like a some fucking classical play or something — even then his voice was totally flat. It was like he didn’t care, really. He was just going through the motions.” Owen thought for a second. “My take is that he didn’t

care at all about Lisa. Revenge on me was just something to do. A code to guide his life by, maybe because all those years of executing the will of the Authority he worked for had started to seem pointless.”

“So, you think he is pursuing us around the great circle of the globe because of some sort of misplaced nihilistic existential crisis?” Hemi asked.

“Uh, sure. Whatever the fuck that means.” Said Owen, nodding.

Hemi lifted Herschel up to the table, and balled up some leftover glop scrapings from his bowl and tossed it onto the table in front of the pigeon. Herschel pecked at the glob nonchalantly.

“That’s disturbing.” Said Percy. “It’s going to be difficult to predict the actions of a man motivated by nothing but a fucking *vision* of revenge. How did you get away from him in the pub?”

“Oh,” said Owen, “that was easy. The pub was crowded, he was a big guy. I just ran out the back. He followed but couldn’t even come close to keeping up. He just stood there, waving his hatchet in the air yelling — what’s the word? — *clichéd* notions of revenge after me without putting any heart into it.”

Chips appeared in the hatchway to the galley. She caught Hemi’s eye and ignored Percy. “Hemi, the fucking welds along the fucking crack in the cargo hold are weeping pretty fucking aggressively.”

Percy’s eyes followed Herschel.

“I am not surprised.” Hemi replied. “Running this deep is putting a lot more pressure on the hull, so I would expect more water coming in. Those welds were never going to be perfect. How bad is it?”

“Well, it would be no fucking problem,” said Chips, “but one of the forward fucking bilge pumps has broke the fuck down. And the second forward pump isn’t fucking keeping up. We’re fucking flooding again.”

“Can we fix the broken bilge pump?” Hemi asked.

“No fuckin’ way. It’s one of the fuckin’ originals that came with the fucking boat — decades old. The brushes on the pump motor are fucking shot.”

Captain Percy suddenly remembered the pump motor in the depot hardware shop that she had neglected to purchase. She looked down at her bowl and scraped a together a spoonful of what remained.

“Ah. Well. . .” Hemi turned heftily to look at Owen, “Owen, leave your eggs aside and go down to the cargo hold with Chips. Rig up one or two of the portable bilges to pump into the trim tanks. Hopefully that will hold us until we can come shallower.”

“It’s like we’re right fucking back where we started with this fucking mess before we even did any fucking repairs!” Said Chips angrily. She turned towards the cargo hold without waiting for Owen, who was a minute behind her after washing fry grease from his hands.

“Fuck Hemi,” said Percy, “now we have another factor we need to be thinking about in the equation.”

“You mean the leaking hull? Or that Chips cannot even look at you?”

“The fucking hull. I can’t deal with Chips’ fucking problems right now. We have a limited window — that is, how long our batteries will hold out — to find a way to lose these fuckers following us. I’m open to suggestions.”



“We could try shutting down entirely — maybe they will fly right over the top of us?” Suggested Hemi.

At that moment another ping bounced through the hull of the *Prospect*.

Percy rolled her eyes. “That, of course, is why shutting down and hiding quietly won’t work. There’s no fucking way we will get out of range of active sonar at the rate we are moving.”

“We could speed up, get them to match our speed, then shut down and let them shoot past.” Said Hemi. “That way they would be the ones moving out of range, as relieve us of the effort.”

“How fast would we have to get them going so that they are out of sonar range by their next ping?”

“Assuming they keep pinging every 15 minutes...” Hemi did some quick calculations, touching his thumb to his forefinger as he counted. “Fairly fast. Perhaps 15 knots?”

“We’d use up the entire charge left on our battery in something like a quarter of a fucking hour at that speed.”

“It does indeed seem like this commander knows his tactics.” Said Hemi. “A less experienced sub driver would have made more mistakes. I do not see how we have any other option than to continue on our current course, and hope an opportunity presents itself.”

“But it fucking kills me to have no plan Hemi.”

Captain Percy and Hemi refilled their coffee cups and Hemi brought an extra one to Bastian in the control room, who gratefully accepted it into the long fingers of the hand that wasn’t holding a smoldering cigarette. Hemi sat down in the planes control seat, and swiveled to review the tank ballast control panel. He made some small adjustments to the ballast to trim the boat

more level — probably to account for the water they were once again taking through the poorly-welded gash in the pressure hull, he thought to himself as he went through his trim calculations.

Percy stayed below the control room in the sonar compartment with Cassandra still listening to the sonar. She confirmed with Cassandra that their situation had not changed at all, then stepped to the navigation table. She looked at the clock and then used a pair of calipers to measure against the ruler. She put the calipers to the chart, and marked down a single dash with the grease pencil to show the progress they had made in the last hour. The progress was painfully small and slowly achieved.

They sank quickly back into the mired boredom of the chase. In the control room, Bastian lit one cigarette off another as he awkwardly tried to lean back in the control chair and put his feet up on the panel in front of him. Despite the casual repose, he was professional enough with his job that his eyes never left the gauges showing the status of the boat — even though the array of dials and their indicating needles had not moved in any substantial way for hours on end.

The air thickened with smoke, became damp with the condensation of their breathing, and took on a shallow flatness after having been passed through carbon-dioxide scrubbers. The control room and sonar compartment felt hazy and wet. Hemi continually wiped water droplets from the ballast gauges with a grimy red cotton rag.

Hours passed like this. Hemi and Bastian would try to start conversations with each other, instinctively knowing that talking was a way to keep alert. But the thick atmosphere, red lighting, and the grinding drone of the motors continually laid down over their conversations like a fire blanket stifling them. Besides, every 15 minutes there was the piercing ping from their pursuers that reoriented their attention and their fear.

At some point Owen returned to the control room from below and reported that the portable bilge pumps seemed to be overcoming the weeping water from the welded seam and that they did not have to worry about sinking, for the moment. Owen took over the plane control seat from Hemi, while Hemi reminded him to keep an eye on the ballast tank they were pumping bilge water into — it would need to be blown out at some point.

With Owen back in the control room, Percy had them start taking half hour breaks. “You’re each in the rack for two pings from those fuckers up there.” She said to them.

Hemi took over sonar from Cassandra and sent her off first. He was somewhat concerned about how well she could hold up under the strain of these many hours without sleep, though she protested from behind big watering eyes that she was fine.

Putting on the sonar headset, Hemi could tell immediately that the storm had subsided quite a bit. Cassandra had failed to report that the white noise coming down from the storm-stirred surface above had greatly diminished in the last couple of hours. It was understandable, especially for someone new to sonar — the change had been gradual enough that it was easy for someone listening to it in an unbroken stream to not notice it had changed at all. A very experienced sonar operator would have noted the change on the signal strength gauge. But it was also apparent to Hemi simply because he was listening with fresh ears.

Still, a reduced storm did not change their situation much in empty seas. Scanning around carefully, Hemi did not hear any other contacts, or much of anything really. The ocean was getting quieter. At some point the pursuing sub might stop pinging simply because they could possibly pick out the quiet hum of the *Prospect’s* motors in the silent ocean.

Another ping smacked against the *Prospect’s* hull. But this one sounded immediately distinctive to Hemi. He heard the ping as

it rang the boat, but then he heard it again in his headset just a split second later, bouncing back up as if they had been pinged a second time from below. His head immediately swiveled to look at the ranging equipment.

“Sylvia!” He called up to her. “That ping just echoed off the bottom — just a hundred meters or so below us.”

“That’s fucking impossible Hemi, there’s nothing but deep water. . .” In the control room she was looking at the depth-under-keel gauge, which suddenly in the wake of the ping had stood up from the ‘bottomless’ pin and was now showing just 96 meters. She watched the gauge and it was slowly, slowly rising, like a gently slope coming up under them.

Percy lit a cigarillo and stared at the gauges.

“Another tablemount?” Bastian asked.

“No. . .” said Percy, “this came out of nowhere, it’s something fucking weird. . .” She hung her weight from a strap above her, and leaned over Bastian as she smoked, watching the depth-under-keel gauge slowly rise. “Give us a little more speed Bastian; 10 knots.”

Bastian eased the throttle forward and the hum of the motors doubled in volume.

“Sylvia,” Hemi said from the sonar station below as he listened to the increased noise of the *Prospect* in his headset, “at this speed they can definitely follow us on passive sonar without pings.”

“Noted Hemi, thank you.” Her eyes focused on the depth-under-keel gauge, it rolled back ever so slowly and then it crossed the 20 meter mark. Percy slammed her closed fist against the dive alarm. “Owen, full down plane, right now.”

Owen turned the dive plane control wheel, spinning the polished stainless wheel through his fingers quickly until it hit the stop. The bow of the *Prospect* dropped from under them, and the depth-under-keel gauge fell rapidly towards zero. The depth from the surface gauge started climbing quickly in the opposite direction, from 235 to 240, to 245 meters deep.

“Owen, open the main ballast valves.” Percy said.

“We’re dropping awfully fast Captain, if we open main ballast we’re going to hit the bottom and split apart!”

“Fucking hell kid! I’m the fucking Captain.” She reached over Owen to the ballast tank control panel and flipped open the main ballast valves herself. They could hear a rush of air escaping above as water flooded into the main ballast tanks from below.

It was a sound they heard all the time, but at this depth it reminded Owen how unique this sound was to submarines — on any other ship it was the sound of death. He was not convinced that in this particular case it would not also be the sound of the *Prospect’s* death — at the hands of a captain who had snapped under the strain of days without sleep and on a constant edge of terror.

After hours spent staring at the wall of dials in front of him, with little black needles stubbornly refusing to move, suddenly it seemed like all the dials were climbing or falling — all in a directions that communicated nothing but doom for the boat. The depth was rapidly increasing, their speed was increasing, the ballast tanks were filling with water, and the bottom — Owen could see it in his head: black and thick, gooey enough that the boat might sink meters into it, yet hard enough that it might break the *Prospect’s* spine when it hit. The bottom was simply flying up at them. Perspiration ran freely down Owen’s temples.

Bastian quietly wrapped his long thin fingers around the throttle control, ready to yank it back to reverse the motors... perhaps before Percy even asked him to. His other hand reached out in front of him and pressed palm-forward against the steel of the console, in a near-subconscious gesture to brace himself.

Captain Percy stood behind them, one arm slung above her with her wrist twisted into the overhead strap. Her other hand held the cigarillo, aflame, with a long thin string of smoke rising upwards at a slant angle relative to the orientation of the control room in the steeply diving boat. She stared at the depth-under-keel gauge.

Seconds later that gauge tapped the zero pin.

Owen and Bastian winced, waiting for the breaking, popping shudder that would be what the end of the *Prospect* felt like.

Another second after that, the gauge spun wildly and pegged itself against 'bottomless' on the other side of the dial. It flipped over with such force that Owen could hear the hair-tap of the needle against the pin in the quiet of the control room. The depth gauge next to the depth-under-keel gauge continued to rise steadily past 250 meters.

The *Prospect* let out a long low groan that tortured every surface of the boat.

"Level her off!" Said Percy. She had calmly and confidently driven her ship through the false bottom, but now they were up against the very limits of the depths the boat was capable of. A few more seconds of descending, and they would fall unstoppably into the hole, and never see the surface again.

Bastian immediately yanked the throttle into reverse, and Owen spun the dive plane control wheel around in the opposite direction to steer the bow back upwards with one hand while at the same

time he flipped shut the main ballast valve switches on the tank control panel with the other.

The engineers who designed the *Prospect* intended the boat to operate normally down to 215 meters. But Percy had pushed the boat beyond that many times, and despite the age of the boat had full confidence in its ability to withstand 250 meters of depth — though she generally only tested that confidence in an emergency. Beyond that was the mystery of the death zone. The original engineers anticipated full collapse of the boat at 300m. But terrible things could happen in that range between 250 and 300 meters that they were passing into at the moment.

Every 10 meters further down added another atmosphere of pressure to the hull. The equivalent of another entire column of the weight of the air on the surface pressing down from space. And against that had to stand the measly one atmosphere of pressure inside the *Prospect*, reinforced with the strength of the steel pressure hull. On a boat 100 meters long like the *Prospect*, in a steep dive like this, the bow could easily already be under an entire atmosphere more pressure than what the depth gauge (that measured from the sail) was showing Percy. A small adjustment in the wrong direction of the huge planing fins that guided the sub up or down, or one valve accidentally left partially open and flooding a ballast tank could take them down the last critical meters beyond what the boat could stand in a matter of seconds. Percy knew they were within meters of crossing that unknowable line where critical parts of the *Prospect* would fail, and they would never get the boat to rise again.

The *Prospect's* motors were spinning the propeller in reverse now, pulling hard against the fall of the boat.

“Watch the forward speed Bastian!” Percy warned. “If we start moving backwards with the dive planes set like that, you’ll swing

the bow deeper instead of shallower. Don't let her reverse direction."

"On it Cap." Said Bastian, his eyes watching the speed gauge. With full reverse thrust, it was rapidly falling towards zero, but they still had enough forward momentum that the bow was slowly rising. As soon as their speed came below a single knot, Bastian pushed the throttle into neutral. The bow had come up almost level at this point.

The climb of the depth gauge had slowed dramatically, and was now only barely moving — but still moving — higher and deeper.

"The ballast!" Yelled Percy. She stepped to the tank control panel and flipped switches and spun open a selection of the dozen of small valve control wheels in front of her. There was a hiss of air from deep in the boat as the high pressure system blew water out of some of the trim tanks. The boat came back to almost completely level. Percy continued to work the tank ballast panel, putting air back into the main ballast.

The depth gauge came to a slow stop at 263 meters.

Hemi climbed up from sonar. He looked at the depth. "New record?" He asked as his eyes found Percy's.

"Nope. But a close fucking second. I had her down to 267 once." As if to remind Percy of the stress it was currently bearing the *Prospect* let a another slow groan rise from the guts of the boat. "My poor girl." Said Percy. "Sorry baby, we'll take some of the fucking weight off soon."

"What happened back there?" Asked Owen. "I thought we were going to hit the bottom for sure."

"False bottom." Said Percy. "The deep scattering layer — billions and billions of tiny bony fish come up from the depths in the



night to feed — such a fucking mass of them together that they reflect sonar back up, making them look like the bottom. We swam right through them, and came out underneath.”

“Just when you think submarining is fucking boring...” Said Bastian.

Another ping from the pursuing submarine hit the *Prospect*, but this time it had a different quality to it — not just less powerful, but also diffuse and muted, as if it were coming from much further away than the last ping.

“So... they can’t see us now because of the layer of fish between us and them?” Owen asked.

“With any luck their active sonar is nothing more than a damned fish-finder now.” Percy replied. “And we’ll just keep ourselves very fucking quiet for a few minutes here.”

“Maybe I should go back to my bunk then?” Cassandra asked, looking up at Percy from the compartment below, having returned from her short and harrowing break.

Another muted ping rang through the *Prospect*.

“I don’t think they are going to let you sleep Cassandra.” Said Percy. “Can you get back on sonar and see if you can figure out what their next move is?”

“Sure Captain Percy.” Cassandra said tiredly before flopping into the sonar station chair.

A few seconds passed and another ping rang out.

“They have lost us.” Said Hemi. “Now they are searching.”

The gaps between the pings became a few seconds, with no regular intervals.

“Cassandra, can you tell what they’re doing?”

“They’ve got their motors going — pretty fucking loud.” Cassandra listened for another second as a ping passed through them. “They’re moving at a good clip... It sounds like they’re starting to turn in a circle?”

“Starting a search pattern.” Said Hemi.

“And they’re moving quickly and loudly because they are relying on active sonar. I think I might go so far as to describe it as somewhat fucking desperate in character too. They’ve definitely fucking lost us.” Percy added.

“So when do we make our move? Can we sneak away?” Asked Hemi.

“Go down to navigation and start tracking them from their fucking pings. We’ll move when they are furthest from us.”

“OK.” Hemi moved down to the navigation table. For the next 15 minutes every time he heard a ping from the sub with the ram he looked at the ranging equipment on the sonar and marked down the searching sub’s precise location on the chart. Some of his dots were wildly off in random directions because the deep scattering layer was interfering with the ranging equipment. But the sub with the ram sent out so many active pings that Hemi was able to chart a accurate course of their movement. It was a circle that began where the *Prospect* had dropped through the deep scattering layer, and turned in a miles-long arc away from that point.

“Percy.” Hemi called up to the control room as the latest ping showed their pursuers at nearly 5 nautical miles away. “It looks like they are at the apogee of their search arc. Now might be a good time to move.”

“Thanks Hemi. Keep plotting them.” She called down. “Can you also give me a random course in some direction away from them? True fuckin’ random, if you can.”

“One moment.” Hemi replied. He pulled a book off the shelf above the navigation table that contained nothing but a million random numbers, plus instructions for selecting one of the numbers at random. Hemi looked at the chart and estimated about a dozen possible directions they could move that would take them away from the sub with the ram. Then he used the book to select a random number which he transposed into one of his dozen courses. “Here’s a true random bearing Percy: 163 degrees.”

“OK Bastian, make it 3 fucking knots, come about to 163.”

Bastian shifted the throttle slight forward and the speed needle lifted slowly up off its zero pin. He turned the rudder wheel and the boat leaned slightly into the turn.

“Keep her fuckin’ level Owen — we’re too deep to make any mistakes.” Said Percy.

Owen gave a gentle nudge to the bow plane control wheel so the boat would come up just a hair with the new forward momentum on it.

They cruised ever so slowly and silently away from the spot where they had crossed the deep scattering layer. The pings from the sub with the ram quickly got more and more faint, though they could still hear them bouncing softly off the *Prospect* long after Cassandra reported that she could not hear the pursuing sub’s motors any more.

Percy stood directly behind Owen, carefully double checking his every move to make sure they did not accidentally gain any depth and sink below the boat’s crush depth. After an hour, she

personally relieved Owen in the dive plane control seat and sent him to his rack for a break.

At 3 knots the *Prospect's* motor made just enough noise that with the right filters in place on sonar, Hemi could hear the echo of the Prospect off the deep scattering layer above them. He showed Cassandra what to listen for, and pretty soon she could give a rough estimate of their depth below the mass of fish. It stayed above them for more than 2 hours, but then Cassandra told Percy she could hear it coming slowly down on top of them — the fish were beginning their daily vertical migration back down the water column to the safety of the very deep, far below the capabilities of the *Prospect*.

At the depth they were cruising at, near the very limits for the *Prospect*, the boat continually let out long moans as the steel flexed under the weight of the water and stresses of movement. The sounds had a visceral impact on Captain Percy, as if her child were suffering. So it was with a sense of relief that they passed back through the mass of fish as the school descended. Once they were back above the scattering layer, there was no purpose to staying so dangerously deep, so Percy adjusted the bow planes and the *Prospect* rose to a much more comfortable 200 meters of depth.

When Owen came back from his break, Percy stepped down the ladder to the sonar compartment and joined Hemi at the navigation table.

“Our next challenge,” said Hemi as she stepped up to the lighted chart, “is how long the batteries will last.”

“Don’t think for a fucking second that isn’t front of my fucking mind.” Said Percy. “Coupla hours left, at best. Then we have to surface. And it’s fucking daylight now — barring another storm, we’ll be bright targets — both visual *and* radar — for

those fuckers with the ram. They'll be back on us before we can get the fucking ballast tanks fully emptied."

"We could wait it out until nightfall without moving. We have enough power to keep the lights on at least."

"I'm worried we haven't put enough distance between us and that crazy fucking sub commander friend of Owen's for that. If they find us running on the surface, at least we can try to outrun them. If they find us deep with no battery when they come back around on their next search circle, we're done for."

"We would benefit from another piece of covering luck like the deep scattering layer." Said Hemi.

"That move depended far too much on luck and a dangerous fucking gamble Hemi. Luck and gambling is no way to run a submarine. The odds are never in our favor. What I want is a fucking plan that is reliable and executable." She paused, feeling tired. "Fuck me." Said Percy. "I'm going to lay down for a minute. Run the batteries down, and get me when we have only emergency reserves left."

Percy climbed down a deck and disappeared forward into the Captain's cabin. She was out almost immediately as she fell into her rack. The ability to fall asleep instantly was a talent she had gained from long years of experience working with short sleep on subs.

They motored nearly silently though the black depths for another two hours before the battery depletion warning lights lit up on the electrical system panel in the control room. Hemi had them shut the motors down and keep the boat hovering steadily in place while using as little power as possible. He went down to the Captain's cabin and woke Percy. They returned to the sonar compartment together, updated their probably position on the chart — still a long way from anywhere — and decided to take

the only reasonable action available to them: rise to periscope depth and have a look around.

Not wanting to waste battery power driving up to the surface, they opened the high-pressure air system just a bit on the main ballast tanks to gain a little buoyancy and floated upwards. They watched the depth gauge rotate back to the left making its way steadily towards zero. At periscope depth, Hemi flooded enough of the trim tanks to hold them there. Percy put the scope up.

“Holy fuck, Hemi.” She said quietly, with her eyes in the viewport of the periscope. She rotated around the periscope, swinging it around 360 degrees, as every submarine commander is trained to do their first day using a periscope. In every direction she was faced with a gray wall, that occasionally pushed back to reveal an underlayer of a slate-colored ocean — much calmer now — rising and falling with the long frequency of deep ocean swells. “Would you fucking believe our luck is still with us? We have a fucking thick fog bank. In every direction.”

Hemi smiled. “Makes sense — it was likely a big warm wall of air pushing that storm, and now all that hot air is sitting on the surface of the cold ocean, turning into cloud.”

“Alright! So much for needing a fucking plan! Start up the low-pressure compressors, and put us on the surface.”

Hemi flipped some switches on the ballast control panel and the hum of compressors vibrated up from far below deck. The *Prospect* rose in place until the deck of the boat pushed through the tightly-bound tension of the surface and water washed off and over the curved sides.

Hemi opened the hatch of the control room and climbed up to the bridge followed closely behind by Captain Percy. The air on the bridge was warm and wet. It sat on the surface of the water without moving, and left droplets forming rapidly on the piled

woolly fabric of Hemi and Percy's clothes. The fog was the color of purgatory, lit from somewhere far off above them to a flat dim nothingness. At some moments it was so thick they could not see beyond the top of the sail, and at others it pushed back just enough to see down to the bow of the boat.

A blinding fog was not a challenge for a submarine though — which spent most of its time moving sightlessly through the world anyway — but a useful resource, transforming the surface into a similar dense covering medium as the deep ocean.

Percy called down to Bastian to start the engines, push the boat up to its maximum surface speed of 15 knots, and come around to a direct course for Stilt City. A moment later came the loud hiss and roll of the high-pressure air system turning over the diesel engines until they were firing on their own. The exhaust shutters lifted and let out a stream of black froth into the gray fog from the rear end of the sail. A minute later Bastian engaged the motors and Percy felt a jolt as the *Prospect* picked up speed.

"Welp." Percy said to Hemi above the noise of the diesels. "I guess it might be time to launch the pigeon."

"Herschel." Corrected Hemi.

"'Herschel.'" Percy repeated. "Do you think that little fella will be able to find Shakes in this fuckin' fog?"

"He has a better chance in this fog than he would have if we had sent him up into that storm. Though the truth is I am fairly skeptical about Shakes' claims that Herschel can find a boat on the surface of the ocean. My understanding of homing pigeons is that they know instinctively how to fly home — I am not sure that works if 'home' is a moving target."

"Shakes said the pigeon had special training."

"It would have to be exceptionally special."

“So we might just be sending the bird off to die on the fucking ocean?” For the first time Percy’s face showed concern about the small animal.

“If I thought that, I would not send Herschel out. The other thing I have heard about homing pigeons is they are capable of flying extraordinary distances. I am confident Herschel will eventually find some place to land. I am just not convinced we will ever see him again. Of course I am not entirely convinced we will ever see Shakes again either.”

“OK Hemi, if you think the bird will be alright, and there’s a chance it will help us reconnect with Shakes, let’s fuckin’ launch him.”

“What shall the message Herschel carries say?”

“I noted on the chart the dock in Stilt City where we’re supposed to drop the cargo. I guess we’re close enough that at this point, you should should just give him the fucking dock info, and that our expected arrival is 24 hours or so from now. We’ll meet him there, if it’s at all fucking possible.”

“Alright.” Said Hemi. “I will be back in a few minutes with Herschel.”

Percy watched Hemi’s wet, tweed-covered bulk disappear down the ladder and through the hatch into the control room. She lit a cigarillo and took in deep breaths of damp, smokey air. A sudden wave of exhaustion passed through her. She looked at her hands gripping the fairing of the sail — the black grime of her work ground into the seams of her knuckles and the cigarillo smoking between her fingers. The coal of the tobacco glowed robustly now that the *Prospect’s* movement was pushing some wind across it. She’d had only a few hours of sleep and no relent from the tension of being pursued since they left the depot days ago. The warm fog enveloped her and gave her a sense of cover



and safety that she realized now she had missed and desperately needed.

Hemi reappeared on the bridge of the sail, cupping Herschel in one big brown hand as he awkwardly climbed the ladder. The bird looked quite content there. One of Herschel's feet hung out through Hemi's fingers and had a small steel band with an even tinier cylinder attached to it. Percy instantly had a vision of how a few moments ago huge Hemi must have been hunched over the galley table printing extremely small letters with a very sharp pencil on a short roll of thin paper. She regretted missing that.

"OK." Said Hemi. "Herschel is ready to go."

Percy watched him. "So... do you have to give the fuckin' bird any instructions or anything?"

"Assuming Shakes is right about Herschel's training, all we have to do is throw him up in the air."

Percy nodded.

Hemi swung Herschel with both hands and released him at the highest point of the arc his arms made. There was a wild flapping for an instant, then Herschel steadied, circled the sail of the *Prospect* once as he selected a course, and the disappeared straight into the fog.

"I do hope we see Herschel again." Said Hemi.

"I know you say that because you've grown attached to that little fuckin' bird," said Percy, "but it would be pretty miraculous if it works... and we find Shakes at the dock in Stilt City."



## Chapter 6

They ran at full speed on the surface for the rest of the day. The fog held out for them, laying in varying but unbroken thickness on the water they traveled through for all the daylight hours. Percy put them on 6-hour daytime rotations despite the fact that they were moving on the surface, and they all finally managed to get some meaningful sleep. Down a crew member and with limited visibility due to the fog, Percy skipped posting a lookout. It was somewhat risky to charge ahead on the surface at full speed with no lookout. Especially since the fog also played havoc with the radar. But that was also useful, since it would foul up anyone searching for them with radar as well. Percy kept either Cassandra or Hemi on sonar at all times, and counted on them to hear another vessel above the sound of the *Prospect's* diesels soon enough that they would be able to take action if was necessary to avoid a collision.

Even with no official lookout posted in the ring, there was almost always someone on the bridge anyway. Since the crew were free to spend their off hours on deck, most of them chose to spend at least part of it in the open air.

The fog lasted until dark, which was all they needed. The plunged into the settling darkness with the stacks streaking flames above. The fog gave way to the cooler air of night, and the *Prospect* came out under a dome of stars. The boat cut its way across the surface of the planet and left an open gash of white wake behind through the black of the water.

Hemi kept the chart accurate with their position, the dashed line straight and true, and rapidly growing in the direction of the continental coast, marred by the large black dot showing the location of Stilt City. Around nightfall they had crossed out of the waters unquestionably controlled by the Consolidated States of the Archipelago Islands into the area that was contested by a number of different Authorities. With the fog lifted and the higher risk of Authority interference, Percy put them back on 3 hour nighttime shifts and started keeping someone on lookout again.

Chips had spent the entire day in the deepest parts of the engine room, refusing to come up even for meals. Nobody except Owen had seen her since the late meal the night before. But with everyone taking a shift on lookout, she was now required to do her turn in the lookout ring. Hemi called for her on the PA when her shift came up in the middle part of the night, and she duly arrived in the control room on her way to the bridge a few minutes later. She climbed upwards with binoculars in hand and without a word. It was the darkest part of the night, so Hemi appeared on the bridge a few minutes into her watch with his sextant, intending to take sighting of some stars and get a solid fix on their course.

Hemi looked up at Chips from the bridge. "I was not entirely sure you would show for your lookout shift Chips."

"I'm a fuckin' professional Hemi. I may not be fucking happy about working on this fucking demon-infested boat, but I'm going to do the fuckin' job I was fuckin' hired to do until we hit the fuckin' dock."

"And then what?"

"As soon as this fuckin' cursed boat bumps, I'm stepping the fuck off Hemi. And not looking the fuck back at all. If you had any fuckin' sense you'd be fuckin' leaving with me. The whole

fuckin' crew should be leaving with me. How many fuckin' times do I have to be fuckin' pushed right up to the fuckin' edge of the abyss for my job? How many fuckin' times do I have to look fuckin' death in his cold and ugly fuckin' face? How many times do I have to watch people I fuckin' care about fall off that abyss Hemi?"

"What happened with Gregory could not be helped Chips. I was there, Sylvia had to make a tough choice without a clearly correct answer, and she did. I regret what happened to Gregory, I really do, but this job is dangerous."

"Don't you fuckin' defend that fuckin' twat with your fuckin' burden-of-command bullshit Hemi. This isn't a fuckin' war boat, it's a commercial fuckin' cargo sub. She had plenty of fuckin' choices that could have ended with Gregory fuckin' alive. I'm all for moving cargo under the fuckin' attention of Authorities, but not at the fuckin' cost of people's fuckin' lives! She could have turned this fuckin' boat over to them. It's not like they would fuckin' execute us. We'd just be fucked back to land for a while. Eventually go the fuck back out on some other fuckin' boat. There's no fuckin' reason for anyone to fuckin' die!"

"They fired at us first Chips. Gregory was probably hit in the first barrage."

"But he wasn't fuckin' dead, was he Hemi? He was not fuckin' dead. And She fuckin' knew it — we *all* fuckin' knew it Hemi. And as soon as we knew it we should have aborted the fuckin' dive and saved fuckin' Gregory!"

"You know she could never turn over this boat like that."

"*That* is why that's the fuckin' *hard* call Hemi. That's the fucking burden of fuckin' command." Chips was fuming now breathing hard through her nostrils, barely able to keep the binoculars raised, and repeatedly interrupting her scanning arc of the horizon

and starting again. “You’re guilty too Hemi. Don’t fuckin’ think this is all on fuckin’ Percy. You could have easily aborted the dive.”

Hemi looked off at the ocean. “But I did not. I made the decision I did in the moment. Aborting the dive did not even occur to me. I did what I was supposed to do as the Deck Boss.”

“And that right fuckin’ there is why I’m leaving this fuckin’ boat. I respect you Hemi Howell, and I like workin’ with you. But this boat is hers from fuckin’ bridge to fuckin’ keel, and she’s a fuckin’ stubborn piece of fuckin’ dried shit that foulin’ the fuckin’ air of my fucking life. Yours too... Fuck.”

Hemi looked through the sextant and adjusted it slowly and smoothly, watching the bright star in the finder fall from the sky to meet the rising black depths of the horizon line. He noted their position on his clipboard, and climbed silently down off the bridge.

They continued to run at high speed on the surface for the rest of the night without incident. At dawn the *Prospect* dove, and they moved slowly under the remaining contested territory, following the very gradual rise of the continental shelf as it approached the shore. They surfaced about midday well inside the area controlled by the Eastern Coastal Collective. That Authority aggressively defended open commerce in the waters leading into Stilt City. This police protection of free trade had led in the last 20 years to the rapid growth of what had come to be known worldwide as Stilt City. This policing was also the same thing that led to the heavy contesting of the waters further out from the Collective’s control.

The *Prospect* moved into Stilt City under a high gray sky. The seas were calm and the air was warm. Percy had Hemi open the big cargo hatch on the deck and fresh air blew through it and

down into even the deepest and most stagnant bilge wells of the ship.

They passed a number of Collective enforcement ships holding station in an array around the protected waters as cargo vessels made the run into the city. But, as was customary, those ships did not interfere with anyone who was not interfering with another ship. They were there to stop other Authorities from delaying or preventing cargo moving into or out of their port. The policy here was that policing the cargo boats themselves was a matter for the Authority forces on land.

The moniker 'Stilt City' might have been somewhat pejorative, but it was accurate. It was built on a vast river delta which rapidly attenuated the big ocean rollers down to calm, flat, and brown water. The structures built on pylons began to appear relatively far out into the ocean — some in places where the water was dozens of meters deep. The buildings teetered high above the larger waves they needed to clear in these deeper waters. They stood atop artificial underwater forests of rigidly-spaced trees placed by the work of human hands. The ones farthest out from the mainland popped up in clumps in the distance on both sides of the *Prospect*. It was hard not to picture the structures as circus performers striding around on tall stilts.

The *Prospect* floated into the main channel that led into the city. It was nearly a mile wide for much of its passage, forming an artificial equivalent to the large river that bisects so many coastal cities.

The rapid growth of Stilt City had brought wealth in, but the wealth did not flow down to all residents. The channel was thus filled with all manner of sea craft, from enormous steel cargo ships under the flags of various Authorities to tiny canoes from which the marrow of the boat had been scraped by the application of fire and ax blade. The most common craft, of which there must

have been thousands, was an angular home-built wooden boat, driven either by singular canvas sails taught on rough wood masts and booms, or by long thin oars that were used to row the boats in deep waters and pole the boats through shallower waters.

Virtually all the trade of Stilt City was done on the open water or on the docks. In many places boats of all sizes were rafted up and people were trading goods across the networks of hulls.

As the *Prospect* made its way up the main channel, more and more sea craft moved about them. They reduced speed to 3 knots and crawled along through the still murky water with no wake. Though the stillness of the surface belied the powerful slow current that carried massive amounts of freshwater far out to sea down in the depths.

Captain Percy, Cassandra, and Hemi stood on the bridge. Hemi held binoculars and carefully piloted the steel bulk of the *Prospect* among the dense traffic of small wooden craft that swarmed around them. He called maneuvers down through the hatch to Owen and Bastian who sat at the controls.

“So this entire place is built on stilts?” Asked Cassandra.

“That’s why they call it fuckin’ Stilt City.” Said Percy.

“Again, ‘they’ does not include the locals who actually live here.” Hemi corrected. “But yes, almost all of it is on stilts above the delta waters, except for the old part of the city that clings to the dry land. Many cities around the world are built on swamps because that is where the large rivers meet the sea, and that is where major ports come together. In richer places, they drain the swamps to get to dry land under them. Here, they found it more economical to just build above the water line on stilts, at least in recent years.”



"All these structures don't get washed away in storms?" Cassandra asked.

"The river delta makes the water very shallow deep into the ocean. Most of the construction is built far enough up the delta that the waves of the ocean are completely flattened. But... there are many who worry that a really big storm could wipe the entire thing out. The residents here may simply be lucky that it has not happened yet."

"Where does all the material for building come from?"

"Mostly the cut it down on shore and then float it out. That is why everything is made of wood. I do think they sometimes pull sunken waterlogged trees up from the bottom though."

The channel began to narrow, pushing the sea craft using it together. Hemi steered the *Prospect* to take advantage of a path carved through the smaller craft by a huge oiler making its way slowly up the channel in front of them. On either side of the channel the structures raised on pylons above the water grew denser. In places there were masses of small thatched-roof huts, with walls made of thin rotting wood panels and the roofs of cut and dried shore grasses. There were dozens of huts clumped together, as if they gained strength to stand on their wobbling stilts by leaning against each other. Between the clumps ran narrow channels of dark water, in many places only passable by the smallest of the boats that traversed back and forth across Stilt City. Those narrow channels fed into slightly larger winding passages that let residents access homes that were buried deep in the dense clumps of development.

Every so often the masses of huts were broken up by a large access channel running off the main channel. Around these access channels most of the commercial trade had risen up, which had led to the building of long docks and piers, more substantial warehouses, and larger building propped up on stilts. The fancier

buildings had paid the extra cost to ship out and install steel roofs. The big steel cargo and transport ships would make their way into these access channels and dock against the flimsy, leaning piers of crunching wood that barely seemed able to keep the big ships immobile — and perhaps would not have at all if the waters were not so still. The cargo was unloaded onto these docks and from there moved off to its destination by local labor: either into the warehouses, onto another cargo ship, or dispersed around Stilt City — sometimes up onto the mainland and ground-based logistical connections.

As they pushed their way slowly up the main channel and deeper and deeper into Stilt City, Percy became a little concerned. “Hemi, do you know how to find the fuckin’ dock we are supposed to unload at in all this fuckin’ mess?”

“There is a system to the dock numbers.” Said Hemi. “I am fairly certain that we are moving in the right direction. However the system is complex and poorly maintained. We shall have to ask for some guidance at some point.”

Percy asked Cassandra to use the binoculars to scout out the hand-painted signs that indicated the dock numbers accessible from each access channel they passed, and report them to Hemi. The descending order of the dock numbers reassured Captain Percy somewhat, but she would have been much more satisfied with a quality chart of the many passages and byways of Stilt City.

The open lane of the oiler in front of them made navigating much easier. The local boats generally tried to stay out of the way of the bigger ships knowing that the big ships were far less maneuverable and took much longer to stop. But a ship making its way up the channel still had a bit of a job clearing a path, whereas very few local boats would try to cut between two ships moving up the channel. One did though. A small dugout canoe,

that moved very slowly into the lane between the oiler and the *Prospect*, at such a speed that there was no way it would make its way across the lane before the *Prospect* was on top of the tiny craft. The man rowing the dug out kept pausing and raising one arm. At first Hemi thought he was trying to make sure the people guiding the *Prospect* saw him, but then Hemi realized he was actually hailing them. Hemi called down to Bastian to reverse thrust and bring the *Prospect* to a stop. The man in the canoe angled his tiny tree of a craft alongside the huge gray metal cylinder and bumped up against the *Prospect's* hull. He deftly grabbed the handholds on the hull as they swept past and stepped one foot up onto a ring while holding his canoe still with the other. He looped a painter from the canoe around one of the step rings so it could not get away and then shimmied up the handholds to the deck.

“Hoy there! Do you need a pilot?” He shouted up to the bridge of the sail as he continued to move towards them. “I can bring your sub marine in to where-the-fuck-ever. I know all the ways and docks around here. Make sure you don’t ground — the water is very suddenly shallow in many places.”

Hemi waved him up the sail, and he climbed quickly and nimbly up and over the fairing to join them. He was a small, thin man. His pure-white shortly trimmed beard and hair stood out in stark contrast to the leathery skin all the older local residents developed after spending all their adult working years on the unshaded open water. He was wearing an oddly fitted and assuredly ancient three-piece wool suit into which he was sweating profusely after climbing up the sail.

“Name’s Sturmei Lom Ang. Friends and clients call me Sturmei — at least the ones who can pronounce it like that.”

Hemi introduced the crew on the bridge, then presented the issue they were facing to Sturmei. “We were in fact just thinking

that we may need some guidance to our dock. Here is our dock number.” Hemi handed over a small piece of paper with a long number broken up by dashes on it. “Can you get us there?”

The man looked it over. “Sure. That’s no great fucking way from here.”

“Have you ever piloted a submarine before Sturme y?” Percy asked. “It’s not totally like fuckin’ surface ships.”

“Fuckin’ absolutely. I piloted lots of sub marines in and out.” He pronounced ‘sub marine’ like it was two separate words. “I even had my pilot’s license — back when they used to be more strict about issuing them.”

“How much money will it cost to hire you?” Hemi asked.

“Depends on what kind of money you have.”

“Coin.” Said Percy, showing him one from her pocket.

“10 coin. Both in and out. If you go back out fuckin’ today.”

Hemi agreed and paid him right there. Sturme y made a move to go retrieve his canoe, but Hemi asked Cassandra to do it while he showed Sturme y the control room. Even though Bastian and Owen would continue to execute the actual maneuvering operations, Hemi always thought it was good practice for a pilot to know what the control room of a boat looked like.

Sturme y took over command of the *Prospect*. He stood on the bridge, and with borrowed binoculars read the numbers of the channels and water lanes they passed by. After a quarter mile or so he had Bastian bring the bow around and without slowing speed, and with a great deal of confidence, plunged the *Prospect* into a narrow way that was barely wider than the beam of the ship.

They passed along this narrow channel for a long way through a more residential area with densely clustered huts on either side. The gentle wake from the passing submarine washed up under and smacked against the floorboards of the huts. In places children played, jumping from platforms in front of the huts into the thick brown water. Percy was concerned one of the children might get it into their heads that they wanted to jump onto the *Prospect* as it passed, and certainly they were close enough that it could be done. But huge steel ships passing close by their tiny wooden homes was a daily and dull occurrence here, and none of the children showed any exceptional interest in her submarine.

Captain Percy was beginning to find it hard to imagine how there could be a dock that could handle a ship as large as the *Prospect* in a residential part of the city like this, and she expressed her doubts to Sturmei.

"This is a short way." He told her. "We will come out in a larger channel soon, but it is longer around to follow that way all the way from the main channel."

The *Prospect*, which so often felt like a small cramped place, suddenly seemed to take on enormous proportions relative to the huts around them. The bow was the length of dozens of huts put together, and from the sail they towered over the thatched roofs that spread out on either side of them in a huge field of sprouted homes. The passage they were taking that cut through the dense huts reminded Percy of rowing a canoe on clear paths through reed patches on a small lake.

Bastian called up from the control room with a sense of urgency. "Up on the bridge: the depth-under-keel has a warning light and is showing very shallow — 2 meters."

"Umm, Sturmei... are you sure there's enough fuckin' water here?" Percy asked him."

“Plenty of water. I have taken many ships through here.”

“But subs. . . we draft a little fucking deeper you know.”

“Sub marines. Ya ya.”

At that moment the grounding alarm started buzzing loudly in the control room. Percy flew down the ladder, and stood behind Bastian staring at the wall of gauges. The depth-under-keel gauge had a bright red light lit next to it, and the needle was hovering just off the zero pin. Percy punched the button that silenced the annoying buzz of the alarm.

“Sturmey!” She called up to the bridge. “There is very very little water under us. . .”

“It’s OK!” He shouted back just as the *Prospect* came to an abrupt stop. Even at the careful speed they had been moving at, the stop was violent enough to jolt them all forward. Empty tin coffee cups fell and clanked along the deck while clipboards fluttered through the air.

The alarm started sounding again and a second red light lit on the depth-under-keel gauge indicating they were firmly wedged on the bottom.

“Fuck!” Percy yelled, punching the alarm-silence button a second time. “Fucking fuck! Sturmey you fucking amateur, what the fuck did you do? Bastian, power down the fucking motor before we’re driven deeper into the muck.”

Bastian pulled the throttle back to zero. Percy could hear Hemi and Sturmey discussing the situation on the bridge. Sturmey’s voice was aggravated. Hemi was talking in his usual even tone. But Percy could not quite make out what they were saying. She climbed to the bridge.

“Captain Percy, this never happened before.” Sturmey said as she came through the hatch. “The silt underneath sometimes moves around. This channel has always been deep enough.”

“For a fucking *loaded* submarine? Or have you just brought fucking empty transport ships through here before?” Percy was turning red.

“I’ll get you off, do not worry Captain Percy.” He leaned over the hatch and cupped one small hand to the side of his mouth. “Hoy! You at the throttle controls: reverse motor, 2 knots.”

“And then what? Fucking back the whole way out to the main channel? It’s not like there’s room to fucking turn around here.”

“If we have to do that, we can.” Said Hemi, trying to calm the situation. “But Sturmey pointed out we probably have some water in the main ballast and trim tanks we can blow out. If we can get the boat up even half a meter or so, we might be able to clear the silt bar.”

“Fuck.” Said Percy as the *Prospect* slowly reversed, stirring the water behind them and pushing it forward along the hull. It washed outwards and under the nearby huts on either side where people had realized something was amiss and come out to the platforms in front of their homes to watch.

One local saw a stuck ship as an opportunity and rowed his dugout canoe full of fish up to the side of the *Prospect*. Hemi sent Cassandra down with a few coins to buy some.

Moving backwards did get them off the bottom. As soon as Bastian reported they had some water under the keel again, they carefully forwarded the throttle to try to bring the *Prospect* to a dead stop, but it was impossible to have that much control over such a large ship in such a tight space. The *Prospect* very slowly — but with a lot of inertia — bumped into a cluster of huts, and

the whole cluster leaned over against the push from the ship with a sickening crack of the pylons that supported the huts from underneath. A surprising number of people poured out of the huts, cursing and gesturing towards the bridge of the *Prospect* in a variety of languages. The huts were well built and the pylons held, but the residents knew from the sound that deep structural damage had been done. Hemi also knew they had damaged the foundations of the huts, so he sent Cassandra down with more coins that she distributed among the residents until the cursing had mostly died away.

Percy just put her face into her hands, both too embarrassed and angry to look at anyone at that moment.

Sturmey had Owen throw the main ballast blow switches and the high-pressure air system blew out whatever water was left in the main tanks along with a lot of excess bubbles that bubbled up the side of the boat to the delight of the children who were now climbing up the side of the *Prospect* and running around on the deck. Sturmey also had Owen empty every trim tank the boat had, and turn on all the bilges. Long streams of foul water poured out from the side of the hull of the *Prospect*, in one case a cataract that squarely landed against the wall of a hut, and required yet another payment from Cassandra to ease the cursing.

Getting this excess water out of the boat did raise it up though. When Bastian reported an additional meter of water under the keel, Sturmey had them slowly move forward again. Percy went back down to the control room to watch the gauges. The *Prospect* crept over the shallow spot with the depth-under-keel gauge lowering all the way down to the zero pin and the grounding alarm coming back on. Percy could swear she heard the bottom sloshing along the hull as her boat pushed through a soft, sucking muck. But the forward progress was not stopped this time, and



they soon came over the shallow spot and the gauge showed a clear 4 meters of water under them.

They had to squeeze the *Prospect* over two more shallow spots before Sturmeý finally turned them out into a somewhat larger channel — maybe twice the width of the *Prospect's* beam. This channel was consistently deeper and there was more commercial traffic on the water. Sturmeý steamed the *Prospect* up this channel for another mile or so, picking his way through a number of places where the channel branched left or right. The structures along the channel got larger and larger, and the traffic on the water thinned out as they moved into a part of the city that had less day-to-day trading and was more focused on storage and warehouses. The structures here tended to be large flat platforms, open on the side. Some had roofs built over them and some were open to the sky. Some were stacked high with cargo waiting for a ship to be loaded onto, and others were cleared waiting for a loaded ship to come in. The platforms either had one side set with a row of docking pylons, or were otherwise connected to rickety piers of weathered and gray wood that extended out from the platforms into small bays that were left as open water so that bigger ships would have enough room to maneuver in them. Many of these piers had ships of various sizes moored up against them. There only a few people about though, since this area was far more heavily populated with cargo than people.

Finally Sturmeý pointed to a bay off their port side while looking through the binoculars. He turned the *Prospect* into the bay and Hemi could see through his own binoculars that the third dock in from the channel had a small hand-lettered sign with a dock number that matched the one on the paper he had shown to Sturmeý. As Sturmeý and Bastian worked to bring the boat alongside the dock, Hemi got on the PA and asked Chips and Owen to meet him on the deck. The three of them brought thick docking hawsers up from the cargo hold through the big deck

hatch and secured them to cleats on the deck. Owen made a daring leap from the handholds on the side of the *Prospect* to the dock over the sloshing water in the closing gap. Hemi and Chips tossed the lines over to him so he could secure them around the docking pylons.

The dock was exceedingly narrow for handling a ship of the *Prospect's* size, maybe just two meters or so, and when the *Prospect* leaned its weight up against it, the whole dock shifted its center of gravity towards the other side. The *Prospect* took up the entire length of the dock, and then extended another quarter ship-length out beyond it into the turnaround bay. The dock was supported by ancient poles of wood, weathered to a smooth but grainy gray texture. The cross planks had many knot holes and splintered easily under scuffing feet. About halfway out, the dock widened to accommodate the base of a rusty and flimsy looking crane which was left angled at its joints in such a way that it looked like a giant crooked finger of a crone cursing the fates before her. Further out from the crane, the dock narrowed again to just enough space for a single person to walk.

The dock ran into a large and mostly-empty platform. It was one of the platforms that had a roof built over it, supported on the same graying wood pylons as the dock, and roofed with roughly-hewn old boards that had gaps and holes that let light, and presumably rain, pass through in many places. At the far end of the platform was a squat little cube of an office, with a few stacks of crates near it, from which the business of the platform and dock was executed.

As soon as the lines were secured Chips hauled two large and frayed black canvas duffels containing all her gear up from the cargo hold catwalk and onto the deck. From there she threw the heavy bags across to the dock where Owen made sure they landed without falling off into the water on the other side. She left Hemi with an awkward hug on the deck of the *Prospect*, then

made the jump across to the dock where she hefted her bags and patted Owen on the back affectionately before walking up the dock towards the platform. Hemi and Owen watched her until she got to the far side of the platform, where it did not take long for her to hail a passing boat that would take her into the center-city shipping labor yards.

After Chips had disappeared off the far side of the platform, Owen was ready to get to work. "Should we set up the gangway Hemi?"

"Yes. But rather than messing with our own winch, let's ask if we can use the crane." Said Hemi, pointing to the crane leaning above their heads.

Hemi retrieved a clipboard full of papers that he had left on the catwalk, climbed down the side of the *Prospect*, and jumped over to the dock to join Owen. They made their way up the dock and onto the platform. Nobody had yet come out to greet them. Hemi knocked heavily on the door of the little square building.

A few minutes later it was opened by a squat, fat man wearing pince-nez. "Who are you?" He asked Hemi.

"Hemi Howell, Deck Boss on the *Prospect*." Hemi nodded towards the boat. "We have a delivery." Hemi handed the fat man the clipboard.

"Ah. I'm the dock boss here." Said the man as he scanned the top page, lifted it, and ran a bulbous finger down the center of the second page. Unlike most of the residents in Stilt City, the dock boss looked like he had spent most of his working life inside. "Ah, Trinity. We expected you two fucking days ago." He looked disappointed. "Authority trouble?"

"An Authority boat took its toll on our progress." Hemi confirmed.

The man let out a small sound of indignation. “Well, you can start unloading if you want to. I’ll bring my crew in to help. It’ll take them an hour or two to assemble though.”

“Can we use your crane?”

“Sure, if you think you know how to drive it. I’m not fucking responsible if you damage your boat in any way though, got it?”

Hemi nodded.

“There’s also some carts over there at the end of the platform. You can use them to offload cargo and move it onto the platform.”

“OK... thank you.” Said Hemi as he took Owen’s arm and turned him back towards the dock.

“And, uh, be careful,” continued the dock boss, “If you damage the platform, or say, blow it up, *you* are fucking responsible, understood?”

Hemi waved an acknowledgment but did not bother turning to look back at the man.

Out of earshot, Owen asked quietly, “Are we going to start unloading the *Prospect* by ourselves Hemi?” Imagining the total weight of the hundreds of heavy wooden crates in the hold.

“No. That is their responsibility. They want the cargo, they need to move it. You and I are going to set up the gangway.”

Hemi got the engine for the crane started and when it was pouring black diesel smoke at a nice consistent rate out over the water, he lowered the boom, and dropped the hook into the cargo hold of the *Prospect*. Owen, down on the deck in the cargo hold, rigged the gangway to it, and Hemi lifted it up and settled it down on deck. Hemi waited for Owen to appear on deck, and then moved

the gangway out over the gap between the boat and the dock, while Owen guided it into place, and then lashed it down.

With the gangway set, Hemi shut down the crane and made his way back aboard the *Prospect*. He found Percy and advised her they should lay low inside the boat until the dock boss' crew got there. So Captain Percy, Hemi, Bastian, Owen, and Sturmeiy rounded up in the galley around a new pot of coffee. Cassandra had gone off to her rack to catch up on sleep.

They proceeded to drink two and a half pots of coffee as a couple of hours went by, but eventually there was the sound of feet on the *Prospect's* deck above and the grind of the crane's diesel starting up. When Percy got down to the cargo hold, the deck boss' crew of people — men and women, but all of a hefty dockworker build and wearing tough, undyed canvas clothing — were already rigging crates onto the hook of the crane and preparing to unload.

The dock and platform that had been so quiet and empty was now full of noise and people. The crates were hoisted out of the cargo hold one-by-one, carefully stacked four to a cart. Then a team of dockworkers hauled the creaking carts up to the platform where the team would unload the crates and stack them by hand.

The dock crew worked steadily at it for a few hours, with Percy and Hemi observing from the bridge of the sail, where they could keep an eye on things without getting in the way. Generally there was not much to say. Percy was getting sleepy in the warm and still afternoon air.

Then Percy asked, "so Chips is fucking gone Hemi?"

"Yes, gone."

"What are we going to do about that? We need a fucking engineer."

"I think we will feel the loss of Chips poignantly." Hemi said with only the tiniest trace of blame in his voice. "We will have to hire someone qualified eventually. But for the moment, I think Owen will make do. He has spent a lot of time working with Chips since he came on, and has learned very quickly."

"About that... I was thinking maybe we leave him the fuck here. If that sub commander wants Owen, and Owen is not on our boat, then they will leave the *Prospect* fuckin' alone and stop fuckin' following us. That's fucking logical, right?"

Hemi stroked his beard. "That only works if there is a way to communicate to the sub commander that Owen is not on board. I do not see how we can do that. At least not without also just giving Owen up to them. Are you willing to do that?"

"I suppose that is going a bit too fucking far."

"We also need his engineering skills. My advice is we keep him on."

"Alright. But that almost certainly means we are nowhere near the end of being pursued by that fucking sub."

"The next thing we need to do is end that pursuit. We need to resolve that, one way or another, before we can get back to routine cargo-hauling work."

The hold was about three-quarters empty when Hemi and Percy heard the heavy diesels of a large ship moving up the channel. When a horn sounded they turned to find there was no ship coming from the direction of the engine sound. Hemi lifted his binoculars and scanned his way up the channel until he saw the familiar low outline of the *Gnat's* sail with a spiky-haired head sticking out of it, and a stream of diesel exhaust flowing out from behind.

"Sylvia," said Hemi, "it is the *Gnat*."

“Fuckin’ Shakes!” Percy shouted to him and waved her arm in the air.

Shakes waved one arm back at them.

Hemi and Percy made their way down to the dock, as Shakes was bringing the *Gnat* in carefully along the opposite side from the *Prospect*. He put the engine in neutral and hopped out of the sail to catch a line tossed to him from Hemi which he secured to the deck cleats.

“How y’all be fuckin’ doing?” He asked them while still standing on the deck of the *Gnat*.

“Mission fuckin’ accomplished, and unloading; as you can see.” Said Percy. “How’d you fucking find us Shakes?”

“Captain Shakes, if you please. As for finding you: it was fuckin’ Herschel of course! Hang on...” He disappeared into the sail and came back up with a little gray puff of feathers in his hand. Once he got his arms up above the sail, he tossed Herschel into the air. Herschel flapped and then flew circles around the *Gnat* excitedly while Shakes leapt over to the dock to join Hemi and Percy.

“So the bird actually fucking worked?” Percy asked, unable to totally get the skepticism out of her voice as her eyes continued to follow the bird above.

“Herschel was a total fucking champ! Found me cruising out in the middle of fucking endless expanse of green water. He gave me your message with the dock number... But Herschel was the easy part. The hard part was finding the dock on the way into Stilt City here. Had to stop and ask people probably a dozen fuckin’ times — and folks around here speak a strange fuckin’ mix of languages I don’t fuckin’ understand, mostly.”

“It is good to see you Captain Shakes.” Said Hemi. “And Herschel. What happened after you left us?”

“Well, there’s not much to fuckin’ tell of it, really. I drove the *Gnat* hard in a sorta random northerly direction — away from the *Prospect*’s location. Did some weaving back and forth and shit, just in case they fired a torp or something, but kept the fuckin’ throttle up the whole time. With the volume of the *Gnat*’s engines, I couldn’t really be listening to sonar or anything, so I just kept pinging them every 10 minutes or so to see how far behind me they were.”

“Ah,” Hemi interrupted, “So the *Gnat* does have an active sonar system?”

“Say again? I seem to fuckin’ be harder of fuckin’ hearing these days.”

Hemi repeated his question.

“Of course! I don’t cheap out on anything on my fuckin’ boat.” Said Shakes, “So: I kept them a few miles off and ran them northwards for three or four hours. But by that time the sea was starting to chop up from the storm. The *Gnat* was taking frothy green water right up against the sail. I figured we were probably far enough from the *Prospect*, so I went silent and dove the *Gnat* and disappeared under the waves for the duration of the storm. Lost track of the pursuing sub at that point. How’d you all do in that fucking storm?”

“Hemi brought the *Prospect* up to the surface in the ditch of a 10 meter wave, rolled her right the fuck over. She was completely on her side for a bit, but eventually came upright again.” Said Percy.



Shakes whistled. “Shit, I never saw weather that fuckin’ big on this trip. You must have been much more toward the fuckin’ center of the storm.”

Percy went on to fill Shakes in on running into the sub with the ram on the surface during the storm, and the loss of Gregory. Hemi also added that Chips had quit the boat.

“Motherfucker.” Said Shakes. “You’ve all had it rough. I feel like I had the easy part of the job. Yet here I fuckin’ am to collect my due!”

“It looks like the dockworkers have finished unloading.” Hemi noticed that small groups of them had begun to clump up in various places around the platform, idly smoking. “Let’s go find that dock boss and settle up.”

“You two go on,” said Percy, “I’m going to check my fuckin’ cargo hold and make sure they didn’t fuck any shit up when they were swinging that iron hook around down there.”

Hemi and Shakes found the dock boss stomping around the dock on a crude prosthetic foot, counting the crates that had come off the *Prospect* and checking them against a list on a greasy clipboard.

“Hmm. Mr. Howell. The manifest says 215 crates, but I only count 212.” The dock boss gestured towards the stacks of crates.

“I do not know what to tell you. Logistics is not an exact science.” Said Hemi.

“No it clearly is not. I will adjust the payment based on your delivery.” He scribbled some figures with his pencil on the clipboard for a minute and showed it to Hemi. “Does that look right?”

Hemi nodded when he saw that the amount agreed with the calculations he had previously done himself in his head. The

dock boss emptied a heavy leather sack of coins onto a crate in front of them and counted out and arranged stacks. When he finished counting, with Hemi double checking every stack of coins, Hemi swept all the stacks off the crate with one swipe of his big hand into a canvas bag he pulled from the inside pocket of his tweed jacket. Hemi thanked the dock boss gruffly. As he and Shakes walked back to the *Prospect*, Hemi counted out Shakes second deck-hand share he was owed. They agreed to leave the payment for the modifications for the *Gnat* for a later time when Shakes could figure the cost more precisely.

They had just stepped onto the dock when Shakes shaded his eyes and looked far up the channel that led to the dock. "What the fuck is going on up there?"

A black shadow had formed, pushing itself between the brown line of the water and wooden structures and the gray sky. The shadow rapidly grew and spouted a fin, and then it was like some ancient serpent from the deep, come to menace the shores corrupted with human endeavors. A thin stream of exhaust rose from it and climbed up into the still air.

"It is them." Said Hemi.

"Are you fucking kidding me?" Shakes exclaimed.

"We have to get the boats off Shakes."

"Fuckin' right we do."

They two of them started running up the dock. The length of the rickety dock shook with the landing of each of Hemi's heavy steps. Shakes jumped from the dock to the deck of the *Gnat* and had the bow line undone and tossed back to the dock in a few seconds.

Hemi was a few strides behind Shakes and was about to turn up the gangway when Shakes called to him. He turned to look at

the *Gnat* and Shakes was leaning over from the *Gnat* with both hands cupping a bundle of feathers. "Take Herschel."

Hemi nodded as he accepted the bird into his big hands. He held Herschel in one hand as he ran up the gangway shouting to Percy on the bridge. Percy turned to look up the channel and from her height could easily see the approaching black sub. She could even see the strange fiercely-angled shape of the ram mounted on the bow.

Hemi leaned over the open cargo hatch as he came up to it on the deck and saw Owen down in the cargo hold securing pieces of equipment that the dockworkers had moved while unloading the cargo.

"Owen!" Hemi called down to him through the hatch. "We have to leave immediately. Come up here and throw the lines, then get the cargo hatch closed." Hemi turned towards the sail but Owen hailed him.

"Hemi! What about the fucking gangway?"

Hemi looked at the rusted and dented ramp leading from the deck of the *Prospect* to the dock, then back to Owen. "Just undo its securing lines. We are going to leave it here."

Hemi turned back towards the sail, hearing a distant 'fuck' rise up from the depths of the cargo hold. He was up on the bridge of the sail a few seconds later asking Percy to make sure Owen got the deck cleared for leaving dock. A few seconds after that he was on the PA in the control room, calling Sturmeiy and Bastian to meet him immediately. They both arrived from the galley shortly after that.

"Our pursuing sub problem has arrived once again Bastian. Get the diesels started, we are leaving. Sturmeiy: if you can pilot us

back to the main channel in a hurry, there will be a significant bonus for you.”

“Alright Mr. Hemi.” Sturme y climbed the ladder up to the bridge from where his piloting would be carried out.

Bastian did not ask any questions. He turned to the motor panel and flipped the starters. A moment after that came the hiss of the high-pressure air turning the diesels over. The engines came to life, filling the *Prospect* with the reassuring and familiar rumble of its core power.

Sturme y joined Percy on the bridge. Percy and Owen established via some consultation yelled back and forth from the top of the sail to the deck that they would leave the gangway and the hawsers. It only took Owen a few minutes to remove the securing lines from the gangway and undo the hawsers from the *Prospect's* deck cleats. As soon as they were loose Percy shouted down to Bastian and Hemi in the control room to reverse thrust and start backing them away from the dock into the turnaround bay. As the *Prospect* slipped away from the dock the hawsers draped and then fell in long splashing lines into the water. The gangway scraped with a loud steel-on-steel sound along the deck and then it followed the hawsers down the side of the *Prospect's* hull and into the water.

The round dock boss and the dockworkers were standing on the platform watching this procedure, a little stupefied. When the gangway hit the water the dock boss called out to Percy and Sturme y on the sail. “What are you doing? You can’t leave that fucking junk here!”

Percy was annoyed that she had to leave the junk. Those heavy hawsers were not cheap.

On the *Gnat*, Shakes returned to the sail from below decks where he had thrown the levers that switched the power system from

diesel to battery. He stood with his head out of the sail, and backed his small boat at a high throttle from the dock, being careful to clear the stern of the *Prospect* before shifting to forward throttle.

The sub with the ram had moved quickly up the channel towards them. Defying the local convention of moving through the channels with no wake, it was cruising at an open-ocean speed, swamping small boats on both sides and sending heavy waves up over the platforms and through the lintels of the small huts on either side of the channel. It had clearly spotted the *Prospect* at dock and was now moving to the other side of the channel, maneuvering to angle in while maintaining its current speed and aligning to ram the *Prospect* while it was stuck in the turnaround bay.

With his head above the sail of the *Gnat*, Shakes could see what the monstrous black sub was planning. He lowered himself down to sit in the *Gnat's* control seat and pulled the sail hatch closed above his head and sealed it. He opened the valves to flood the *Gnat's* ballast.

He started counting to himself. He lit a cigarette, sucked on it for a second, and then left it propped between his fingers as he used the same hand to give the boat some more throttle. The *Gnat* picked up speed as it dove, the low sail leaving a thin wake like a shark fin just before it sank under the surface of the brown water.

Through the viewport of the sail, Shakes could see nothing but sludgy brown water ahead. He steered the boat on his mental time count and instinct, and a subconscious sense of the mathematics involved in the intercept course he planned.

Far faster than he had anticipated, a black wall arose before him.

With a last-second hope that he was the charging sub with the ram, and not some random dock, he thrust the throttle lever all the way forward to its stop.

He sucked in a deep breath, and from his diaphragm put all he could into his battle cry: "Ramming speed!" He stuck the cigarette back between his lips. Staring intently out the viewport and with his mouth half-closed, he said, "I always wanted to fucking say that."

The electric motor whined with a pitch that pierced right to the center of Shakes' head. With a last burst of speed, the bow of the *Gnat* smashed straight into the looming black underwater wall.

From the sail of the *Prospect* Percy had watched the *Gnat* back behind her boat's stern, and then plow forward and dive. That was the last she saw of the *Gnat* because the water was so brown and silted. The sub with the ram was just starting to come around to an angle where they could maintain the speed they had gained moving up the channel and still drive into the turnaround bay. The ram turned towards the *Prospect*, and just as they had the angle set so the ram would split the rear quarter of the *Prospect*, just as Percy was imagining the crazy one-armed sub commander giving the order to put on a turn of the throttle, the sickening low crunching sound of an underwater collision came up to her ears, and she watched the bow of the ramming sub divert away from the bay, and back into the channel. As the big submarine came around it took on an unnatural list to one side, its sail hanging clean out over the water. Percy knew immediately what Shakes had done to save them. The sub with the ram carved an awkward path, its forward momentum carrying it up the channel until the ram on the bow collided with a cargo platform, which split in two, a splintering crack widening along the sharp line of the ram. The sub ground its way to a stop there.

“Fuck!” Percy called down to the control room. “Hemi, Shakes just drove the *Gnat* into our fuckin’ pursuers! See if you can get him on ship-to-ship.”

But she did not have to wait for Hemi’s report. The *Gnat* floated to the surface out in the channel, its bow heavily dented, but clearly still afloat. A moment later from the top of the sail came Shakes’ familiar spiky-haired form waving to the *Prospect*.

“OK Sturmei.” Percy said. “It’s all on you now my new fuckin’ friend. Can you get us back to the main channel?”

“Yes yes. You think this is the first pursuit I have done through Stilt City? I have a few tricks up my fucking suit sleeves.” Said Sturmei.

Calling commands down to the control room, he backed the *Prospect* into the turnaround bay, and then pushed out into the channel. They got a good view of the sub with the ram as they passed. Black-uniformed crew were running back and forth on the deck with 2 meter pry bars, pushing detritus from the platform off the deck. The channel was too narrow for a ship that size to turn around. If they could get unstuck, they would still have to maneuver into the turnaround bay before they could begin to follow the *Prospect* and the *Gnat*.

Once Sturmei had the *Prospect* out in the channel, he had them put on as much speed as he thought they could without adding to the swamping of the structures along the channel, and without risking accidentally driving into one of those structures. Behind them Percy could see the sub with the ram was already freeing itself from its stuck position and maneuvering backwards towards the turnaround bay.

With the *Prospect* successfully underway, Hemi climbed up to the bridge to consult with Captain Percy.

“How the fuck did they find us in Stilt City Hemi?” Percy asked.  
“The place is a fucking labyrinth!”

“Either they have exceptional intelligence in a foreign Authority’s port — which seems unlikely — or, they followed the dulcet sounds of the *Gnat*’s ridiculously loud engines.”

“Fuck. Yeah. They must have picked Shakes up somewhere on his approach to Stilt City, and then just quietly followed him into fucking port and through the city.”

“With Shakes constantly stopping to ask directions, it may not have been very difficult to do.”

“Well, maybe we can get them to follow him the fuck back out — Sturmei, can we take your shortcut back out to the main channel again?”

“That is maybe not such a good idea. Faster overall, but the boat has to go much slower through there.” Said Sturmei.

“I’m willing to go slower if we can lose our fucking pursuers though.” Said Percy. “Hemi, let’s ask Shakes to start the diesel on the *Gnat*, and we’ll leave him to go back up the bigger channel he came in from. We’ll turn into the shortcut, and with some luck, maybe the sub with the ram will follow his loud ass instead of us.” In one way it felt like a lot to ask of Shakes, who had just risked his boat for them. But one of Percy’s principles of leadership was that if someone shows initiative, give them more responsibility.

“Alright,” Hemi said, “I will raise him on the ship-to-ship and let him know the plan.”

“There’s too much of a risk that those fuckwads will overhear it if you use ship-to-ship. You should probably just flag Shakes down and shout across to him.”



“Alright.” Said Hemi again, and climbed over the fairing of the sail and down to the deck. Percy watched him shout for Shakes’ attention and when Shakes heard him he pulled the *Gnat* alongside the *Prospect* and he and Hemi ironed out the details of the plan by yelling across the gap between the two boats. When he was done Hemi climbed up to the sail and back down into the control room.

“How much further do we have to go to the shortcut?” Percy asked SturmeY.

“Just another quarter mile or so. We have to slow the boat down even before we get there — it is easy to miss a small fucking lane like that, and also no turnaround.”

“OK, when you’re sure you’re close, have Bastian slow us down as much as you think you need to.” Percy looked behind. There was no pursuing sub there, but she could only see about a quarter mile down the channel before the sighting was lost in the winding ways of the channel and the clusters of warehouses and cargo platforms. A quarter mile was nothing. The sub with the ram might be right behind them but she had no way of knowing.

A few minutes later SturmeY called down to Bastian to slow the *Prospect* to 5 knots. SturmeY scanned the signs and structures along the port side of the channel ahead of them. Then he pointed to a rapidly approaching small gap between the huts built along the channel. “There it is Captain Percy.”

She nodded. “None too fucking soon.” She said with another glance behind. Still there was no pursuing sub. She put two fingers in her mouth and let out a loud, short whistle that rose in pitch. Shakes looked up at her from the sail of the *Gnat* following behind the *Prospect*. She waved to him and pointed to the wider channel. He waved back to show he understood, cigarette in hand.

As Sturmeý brought the *Prospect* into the narrow way of the shortcut, they could hear the cough and sputter of the *Gnat's* noisy diesel starting even above the already loud sounds of the *Prospect's* own engines underneath them. As Sturmeý began his careful navigation of the shortcut pass, Percy kept looking back to make sure the pursuing sub had not come into sight. Carbonous black smoke shot up in a long stream from the *Gnat* as if the small boat were aflame. Shakes' head disappeared for a few seconds from the sail as he went below to connect the diesel engine to the prop drive. A moment later he reappeared and put the engine in gear. The *Gnat* cruised quickly and noisily off up the channel.

The *Prospect* moved into the narrow channel between the huts, backtracking the route it had come in by. Sturmeý had them moving faster this time though, kicking up enough wake to slosh up against the bottoms of the huts, but just short of driving water into the huts. That did not prevent residents from coming out and cursing their passing though.

As before, they wound their way through the small homes. Sturmeý faced the bow and scanned the path in front of them with binoculars. Occasionally he cupped a hand around his mouth and yelled forward loudly in various local languages to try to get a local fisherman or kids rowing tiny coracles to make way for the *Prospect* to pass. He kept up a never ending stream of instructions to Hemi and Bastian below, making tiny corrections in their course to keep them in the center of the narrow passage.

Percy rode her boat facing the stern, on the lookout for the thing she feared — the black shadow of the sub rising up somewhere back in their wake among the densely-clustered huts.

It was just as she was beginning to believe the other sub may have gone for the bait and followed Shakes when she heard the loud sound of a thump followed by crunching wood. The strange

sound bounced over the thatched roofs of the huts to her ears. She lifted her binoculars in the direction of the sound. There she saw long boards, clumps of thatch, and huge splinters shooting up into the air. A path of monstrous destruction, moving rapidly towards them.

The sub with the ram was on their path, and coming at them at a high speed, with no regard for any structure or home that stood in their way.

“Sturmey, that sub that was after us? They are, um, kinda coming this fucking way.” Said Percy. “Is there any way we can move faster through here?”

Sturmey looked behind him and saw the rampaging destruction headed towards them.”

“Sorry Captain Percy, I am not destroying my neighbors homes for the sake of your boat.”

“You aren’t going to fucking ground us again, are you? We’re fucking finished if we get stopped.”

“No no. No fucking way! Your boat was loaded before. It is unloaded now — lots of clearance.”

“Unless the tide went out...” Said Percy.

Sturmey did not reply. He resumed shouting directions down to the control room.

Captain Percy did not have nearly as much faith as Sturmey that the *Prospect* would clear the bars of shallow muck so easily, even with her boat unloaded. She asked Hemi to keep a close eye on the depth-under-keel gauge and let her know immediately if a warning light came on.

It was only moments later that she could see ahead the shade of water with a distinctively different ripple pattern on the surface

that indicated a shallow spot running across the lane. Sturme y pointed it out to her, but did not order the *Prospect* to slow down at all. Percy sunk down the ladder to the control room and watched the depth-under-keel gauge intently. The needle lowered itself down til it triggered the warning light, and sunk to under a meter of water, but they cruised over the shallow spot without even touching the muck this time.

She climbed back up to the bridge with a smile on her face and patted Sturme y on the back. She was feeling a sense of relief not just from clearing the bar so easily, but also because her intuition about the size and displacement of the sub pursuing them, suggested to her that the *Prospect* might have an opportunity coming.

She lifted her binoculars and leaned out from the sail to get a clear view around the *Prospect's* exhaust stream. The sub with the ram was still charging recklessly up the narrow passage, plowing through and splintering the little huts on both sides of the waterway. And it drove into the shallow bar with no relent in its speed. The sharp front edge of the ram plowed deep enough into the sludgy ground that the muck erupted up from the bottom in a black moraine that rose until it cleared the surface. A small tsunami of brown water turbid with black muck rose and traveled up the small channel in front of it.

Their pursuers were stopped dead in the passage. Through her binoculars Percy imagined she could almost see the shadows of the men directing the boat from the top of the sail thrust forward against the forward edge of the fairing as the momentum suddenly came off the boat. She could see an arm raised in anger and hear the vitriol spilling off the sub's sail.

As soon as the residents in the surrounding area realized what happened, they attacked the grounded sub, throwing rotting

food, scraps of wood, and rusted pieces of oily metal at the black monster that had been tearing up their neighborhood.

The sub with the ram began shooting jets of bilge water out of its sides, and presumably blowing any remaining water out of their ballast tanks as well. Captain Percy could see they were also driving forward at full throttle, hoping to push through the shallow spot on main power. The screws were kicking up a tremendous frothy wash of white water behind the sub, enough that nearby huts leaned back from the pressure against their stilts. This just angered the residents still more. They began to land on the black sub, beating on the deck with long metal poles and trying to pry up hatches. One local tried to climb the hand holds to the sail. That was when Percy saw the thin shadow of an arm extend and then a flash, followed a moment later by the report of a small-caliber pistol reaching her ears. The body of the climber fell back through the air, hit the curved deck of the sub and slid into the brackish water.

After that, the men on the sail opened up on the locals and there was shot after shot. Figures fell to the deck amid the mass of residents scrambling to get off the deck and back to their small boats and canoes alongside.

The *Prospect* was now gaining crucial ground on their pursuers, quickly finding their path through the winding way. Percy could see the main channel ahead of them. Further behind, amidst the chaos and the violence, it did appear that the sub with the ram was making headway against its bottoming. Percy estimated they might push clear with just a few minutes more.

The *Prospect* turned out into the main channel and Percy took over command. She immediately had Bastian throttle up to the *Prospect's* full surface speed of 15 knots.

“Careful Captain Percy.” Said Sturmey. “I cannot recommend all this speed in the channel full of big heavy ships and small

wobbly boats. If any Authority vessels spots the *Prospect* they will intervene to try to keep order in the channel.”

“I fucking know it. But those fuckers behind us are certainly not going to take it easy up the channel — maybe the Authority will intervene with them instead!”

“That seems true enough. Here I must leave you then. If the Authority catches me piloting a craft at this speed in the channel, I will no longer be a pilot. Besides, there’s 50 meters of water in the channel, you do not need me any more — as long as you manage not to get crushed by a moving freighter.”

“Well fuck. That was as fine a bit of piloting as I have ever fucking seen.” Said Percy. She leaned over and called down to Hemi in the control room. “Hemi! Toss up the pay for Sturmey.”

Hemi underhanded a small cloth pouch clinking with coins up from the control room and Percy snatched it from the zenith of its rise.

She handed it to Sturmey. “You’ll find a generous gratuity in there for your work under tense conditions Sturmey.”

“I am the best pilot in the city Captain Percy! If you come in this way again, be sure to ask for me.”

“We fuckin’ will, for sure. Can you get your canoe off at this fuckin’ speed? I really don’t want to slow down.”

“No problem. I was born and bred on the fucking water!”

Sturmey tucked the bag of coins into his pants, gave Percy a casual salute, and nimbly went over the side of the sail. He pulled his dugout canoe to the side of the deck and sat down in it. He lifted his paddle and pushed off. He slid the tiny craft down the curve of the *Prospect’s* hull and into the rapidly passing water like someone negotiating over a big rock in river rapids. After

a few paddles Sturmei had safely made some distance from the giant steel cylinder flying past him, and he paused to give one final wave to Percy on the sail before paddling in the direction of a large oiler that was crawling upstream to see if he could win a second job for the day.

Captain Percy climbed down to the control room while closing and sealing the hatch above her head.

“Did you guys get the fucking cargo hatch sealed?” She asked.

“Yup.” Replied Owen as he pointed upwards to the hatch control panel lit up all green indicating all the hatches on the boat were sealed.

Percy punched the dive alarm. “OK, take us down to periscope depth.”

“Sylvia,” said Hemi, “may I suggest that we send up Herschel with a rendezvous point for Shakes before we dive.”

“Ah shit, the fuckin’ bird. You’re right.” She pressed the dive alarm button a second time to deactivate it, and then got on the PA that echoed through the whole boat to let anyone listening know that the dive had been postponed. She did this even though the only person on the boat who was not in the control room at that moment was Cassandra — and she was only a few meters below in the sonar compartment. It was good practice to use the PA to announce boat maneuvers regardless of the location of your crew members, as Chips had often pointed out to her.

Hemi climbed down to the navigation station and reviewed the current chart laid out under the glass. He leaned over it, with the magnifier in his hand. He selected a spot of deep water on the chart, just off the continental shelf, about a day’s run out from Stilt City. Holding a tiny scrap of paper down against the glass of the navigation table with his thick fingers splayed, he copied the

coordinates with a very sharp pencil. He also selected a backup location for the rendezvous just in case something went wrong and wrote that on the reverse side of the paper. He scooped Herschel up from the deck where he had been walking around aimlessly and fixed the tiny paper into the bird's leg cylinder.

Captain Percy was anxious to get the boat underwater, so as soon as she saw Hemi starting up the ladder to the control room with Herschel in one hand and nodding to her, she punched the dive alarm again. "Start the dive. Hemi, get the bird off."

Bastian flipped off the diesel engines and their rumble died away beneath their feet to leave only the much quieter hum of the electric motors. Owen opened the main ballast valves. Hemi opened the hatch above the control room and a light on the hatch control panel lit up a brilliant red and an alarm sounded because the main ballast valves were open at the same time as one of the boat hatches.

Hemi quickly climbed to the sail, and tossed a fluttering Herschel up into the wind. Air was shooting out from the top of the deck in front of him carrying long streams of mist from the ballast tanks as high as the *Prospect's* sail which blew back in his face. He took one last look at Herschel who had rapidly gained altitude and was now heading directly back upriver, hopefully towards the *Gnat*.

Hemi dropped below and resealed the hatch above him, silencing the alarm from the hatch control panel.

When the depth gauge showed the sail was under, Percy raised up the scope. As it came to her eye level she leaned into the viewfinder and started slowly scanning all around the *Prospect*. She paid particular attention to the rear quarters, trying to see if she could catch a glimpse of the sub with the ram behind them. The sub would be harder to spot from the lower vantage of periscope depth, particularly with all the traffic in the channel,



but Percy felt running submerged felt far safer than cruising on the surface.

The sub with the ram was not within visual range. It was possible it had gotten stuck again while navigating one of the other shallow spots in Stumey's shortcut. Percy wondered if the *Prospect* might be free and clear to head out to sea. But she was not going to take any chances.

She focused the periscope forward and spoke without pulling back from the viewfinder. "Hemi, there's a big fuckin' outward bound cargo hauler about a quarter mile up the channel. I think I want to put the *Prospect* under it, and hide in its shadow until we're well the fuck out."

"It is a dangerous maneuver in these relatively shallow waters Sylvia." Said Hemi.

"That's why I need you on sonar. And we have the fact that their speed is pretty fuckin' slow working in our favor."

"Alright," said Hemi, "I will get on sonar with Cassandra, it will be good training for her to listen to this." Hemi climbed down to the sonar station. He had Cassandra move into the second sonar seat so he could more easily run the sonar controls and filters himself. They both put on the headsets and started concentrating on the sounds coming in as Hemi rotated the sonar directional control around 360 degrees so they could get a full picture of the traffic around them.

With Hemi settled on sonar, Percy brought the *Prospect* down to 20 meters below the surface. In some ways this made Hemi's job simpler because all the traffic was now above them — there should be no other submerged submarines in the channel. But with only 50 meters of depth to play with, the sounds of the traffic above reflected off the bottom of the channel, back up, and

then off in every direction making the space they were moving through feel very compressed to Hemi.

They had maintained a very fast 15 knots since submerging. One of the first things Hemi asked Percy to do was to slow the boat down — both because it would make the sonar much more clear, and because even at 6 knots he estimated they would be doing twice the speed of the giant prop of the cargo ship above his head.

Hemi began a steady and careful dialog with Percy, much of which she relayed to Bastian and Owen, to bring the *Prospect* up under the cargo ship, and then throttle back to match the slow-moving, building-sized ship that was cruising above.

Percy stood directly next to Owen and worked the tank trim panel herself, feeling the weight of her ship through its movements and finding an absolutely neutral buoyancy. When she was satisfied that her boat was trimmed so it would be perfectly level without any out-of-balance forces causing them to gain or lose depth suddenly, she took one step back from the panel. She tracked Owen's moves on the dive plane carefully.

“Bastian, do what you have to with the rudder, we have space to play with to our sides.” She said to the men sitting at the controls of her boat. “But Owen: only make the most delicate moves to the dive planes — one degree up or down, maximum. We want to have lots of time to correct before we drive the sail into that steel wall above us.”

“Right Captain.” Said Owen, nervously fingering the dive plane wheel. His eyes darted back and forth from the boat level indicators, to the depth indicator, to the depth-under-keel gauge.

After 20 minutes they were feeling more confident with the maneuver and maintaining their position. Captain Percy wondered if they might be able to cruise right out into deep water like this,

and then spend the rest of the day running deep until they were well out and away from Stilt City.

Then a loud active sonar ping pierced through the *Prospect's* hull.

“Hemi!” Percy called down to sonar. “Where the fuck did that come from? Was it them?”

There was a brief silence while Hemi continued listening. Then he called back up to the control room. “The source was roughly a mile back up the river behind us. It must have been them, I do not imagine anyone else has a reason to be sending out pings. They must have guessed we submerged, and decided that if they light up the river with a ping, the only boat underwater would be us.”

“Do you think that will fuckin’ work?” Percy asked Hemi.

“There is enough distance and so much traffic on the water that the ping will be reflecting back massive amounts of information to them. There is a good chance we will be lost in all the noise.”

“OK, we’re sticking with our current fucking plan then.”

Every few minutes another ping rang out. Hemi reported that the pursuing sub was rapidly gaining on them with each ping. But the *Prospect*, still under the giant umbrella of the cargo ship above them, was moving out of the channel and into more open water. Hemi could tell by the dispersing traffic that the main channel was much wider now — miles wide. He also estimated that they would soon be passing the structures built at the furthest extent of Stilt City.

Percy watched the depth-under-keel dial closely for 15 minutes or so as three more pings washed through them. The depth of the water was a fairly consistent 50 meters, varying slightly towards the deeper direction in some places. The cargo ship maintained

a straight course out from the channel, and the *Prospect* held its spot directly under the ship. Moving into more open waters meant they were more exposed. Any moment now the commander of the pursuing sub might figure out that the sonar shadow of the cargo ship above them was much too large. Percy needed to make a move.

She climbed down to the navigation station. “Hemi, how good are our charts for this area?” She asked as she leaned over with the magnifying glass. “Can we run close to the bottom without risking plowing into some fuckin’ uncharted feature?”

Hemi and Cassandra looked over at her without removing their headsets.

“The charts are good. We are also still on the continental shelf, there are not many features to begin with.” Said Hemi.

Percy leaned over the chart. If it was accurate, then Hemi was right. It showed a flat unvarying plane, 50 to 60 meters deep, running out about 200 miles from the port of Stilt City. There were much bigger shelf areas in the world, but 200 miles was longer than most.

“You are thinking we could hide from the pings if we are close enough to the bottom?” Hemi asked.

Percy nodded. “Yeah. With all the fucking pinging they are going to find us under the cargo ship any second now. Putting ourselves just off the fuckin’ bottom is the only other way I can think of that will let us hide from them.”

“I have heard that some of the sonar rigs Authorities are using now are good enough to pick out a boat on the bottom.” Said Hemi somewhat doubtfully.

“Then let’s assume their sonar is of fairly fuckin’ average quality. After all, I’m pretty sure they lost us on the tablemount like that.”

“They may have also just assumed we sunk then.”

“Well, unless you have a better fuckin’ idea...”

“I do not.” Said Hemi, as another ping hit them. He turned back to his work on the sonar unit.

Percy climbed up to the control room. She worked with Owen on the dive planes and the trim tanks to bring the to boat to a scant 2 meters off the bottom. She had them slow to 2 knots to make it less catastrophic if they hit anything — there was no such thing as a perfect chart. Hemi reported that the cargo ship above them was creeping away ahead of the *Prospect*.

After a few minutes Percy noticed that the regular pings had stopped. “Hemi, what the fuck is going on? No more pings?”

“I am hearing high-speed ships heading toward the location of the last ping source.” He called up. “It is possible that all the pinging they were doing has attracted some unfriendly attention.”

“Ah,” said Percy, “the Stilt City Authority ships are on them?”

“Hang on...”

Percy could not see Hemi from where she was standing in the control room, but in her mind she had a perfect vision of him holding one thick finger up in the air towards her.

A minute passed. Then the crew in the control room heard low rumblings that came into the *Prospect’s* hull through the water in a softly percussive succession. Owen looked at her.

“Fuckin’ depth charges.” She said. And when his eyes took on a bit of prey-like fear, she added, “a little fuckin’ ways off though.”

“The Authority surface ships are dropping charges Sylvia.” Hemi confirmed her guess from the sonar compartment.

“Ha,” said Percy, “we should have thought of this before: it’s a known truism that the best way to get out from under the attention of one fuckin’ Authority is to sic another Authority on them. Bastian, let’s take this opportunity to change course. Maybe we will finally be able to lose these fuckers. Come around to something fucking north-ish.”

“Right Cap.” Said Bastian, rolling the rudder control wheel in his hands to port as the compass on the wall of gauges started to swing.

Percy moved down to the sonar station and for the next hour or so Hemi reported charges being dropped in waves with Percy standing behind him watching the dials of the sonar rig rise and fall with the sounds Hemi and Cassandra were hearing. “It seems like they are dropping charges in a random pattern around the area where the last ping came from an hour ago.” Hemi said mapping an image in his head of the rough location of the dozens of explosions he had heard.

“It could be the sub with the ram is now hiding on the fuckin’ bottom themselves.” Percy replied. “The Stilt City Authority ships probably lost them in that fucking brown muck water from the river outflow, and are hoping a random charge will force them to the fuckin’ surface.”

“That does not seem entirely likely to be successful.” Said Hemi.

“... But if it fucking forces them to hole up for any significant length of time then we have a shot at never being found by those fucknuts again. The Stilt City Authority boats incapacitating the sub with the ram would surely be a blessing from fucking hell, but just losing them will be fucking good enough for me.”

As much as Captain Percy wanted to cruise out of the area at high speed, she still did not want to risk giving away the *Prospect's* position. They crawled at a painfully slow, but very discreet, 3 knots on the more or less random northerly course Bastian had chosen for them for the rest of the daylight hours. By dark they had left the noise of the depth charges far behind them, along with any kind of contact or signal that the sub with the ram continued to pursue them.

Percy was feeling more confident. After they gained the full cover of darkness, she brought the boat to the surface, and they turned the diesels over. She pushed the *Prospect* up to its full 15 knots. She wanted to cover as much of the distance across the continental shelf as she could under the cover of darkness.

Hemi took a sighting off a star with his sextant and he and Percy fixed their exact position on the chart. They measured the remaining distance to the edge of the continental shelf and realized they were not going to make it by sunrise, but they would be close. Percy could not let herself truly feel like they had lost their pursuers until they could get back to running in deep water during the day.

They cruised through the blackness. Percy had the red night lighting on in the control room and sonar compartment, and she had them keep the control room hatch closed to minimize any chance of the red light escaping from the top of the sail and giving their position away. She even forbade smoking on the bridge of the sail for fear of the lit coal being spotted, depriving her crew of one of the very visceral pleasures of running a vessel on the surface in a warm climate.

A few times during the night they had to shut down the radar unit because it detected other radar scans washing over them. These waters were fairly heavily trafficked though, and that was to be expected. Percy was not going to let random radar contacts

worry her unless another vessel was detected moving towards their position.

Before the eastern sky even began to lighten they submerged and dove to just off the bottom of the continental shelf again. At about 60 meters down, they resumed their slow underwater crawl towards the end of the shelf at 5 knots. Hemi estimated they still had 4 hours to go before they were out over the deep parts of the central ocean again.

As Percy and Owen were finishing trimming the tanks to hold the *Prospect* steady just off the bottom, Cassandra arrived in the sonar compartment with a metal cup full of coffee that she was gingerly moving between burning fingers. With red-rimmed eyes she relieved Bastian who had been staring vacantly at the swirl of the radar sweep for the last 3 hours while Cassandra was in her rack. He gratefully handed over the station to her as she began her 6 hour daytime shift on sonar, even though up on the surface nobody would describe it as daytime yet.

It was very quiet in the sonar compartment. Cassandra yawned as she put the headset on, and powered up the sonar unit. She slowly scanned around them 360 degrees, and then back and forth behind them while flipping various filters on and off. All the filters did was change the tone of the silence. They had made enough distance into the emptier parts of the ocean during the night that there was nothing out there to be heard now.

She listened to the empty hiss of static in her ears modulated by the swish of the *Prospect's* prop when the sonar was pointed anywhere towards the back of the boat. The static was underpinned by the low hum of the electric motors. She closed her eyes, and an hour passed while her mind was out beyond the boat floating in completely empty acoustic space.

Some more time passed. She may have even fallen asleep in her chair. But when she heard the growl of a long-off diesel engine



coming through the sonar she suddenly became alert. Her mind snapped back from the ethereal world it had been floating in, and her attention came down on the sonar contact the way a beam of light could go from wide to narrow as the focus of a lens changed.

She ran the mics back and forth across the bearing of the contact until she had it dead to center. She flipped filters and the noise from the *Prospect* faded away and she could concentrate exclusively around the sound of the contact behind them.

Hemi was standing at the navigation table holding a cup of coffee and reviewing the charts to figure out the best course to take them to the point where they were to rendezvous with Shakes.

Cassandra turned to him. "Hemi, if I didn't know better, I'd say the sub with the ram is on the surface behind us... again."

Hemi turned and lifted the spare headset the long distance up to his head. He held one earpiece over his ear with one hand and listened while running the fingers of his other hand through his beard. "That is indeed them." He sat down next to Cassandra and somewhat tiredly put both earpieces over his ears. He focused on what he was hearing. "Go get the Captain from her cabin." He said to Cassandra.

A few minutes later Cassandra and Percy's entrance to the sonar compartment was preceded by a string of oaths Percy was sending out ahead of her as she made her way through her boat.

"Fuck me Hemi," Percy said, squinting her sleepy eyes against the bright white daytime lighting of the sonar compartment. "Is it really that same ugly fuckin' sub full of those fuckers who apparently have no fuckin' purpose to their lives — after us again? I just don't fucking believe it."

“I can not quite tell if they are explicitly seeking us at the moment, but unquestionably they are back in our vicinity.” Said Hemi, pointing to the steadily hovering signal strength indicator. “And, from the last few minutes of listening, I would estimate that they are generally making headway in our direction.”

“Fucking fuck!” Percy kicked the panel under the sonar unit. She climbed up to the control room. A second later the *Prospect* listed slightly to starboard. “New fuckin’ course Hemi!” Percy yelled down to him. “I’m making it... 27.5 degrees.”

In the sonar compartment, Hemi stood and moved to the navigation table without removing the sonar headset. He made some marks on the chart with the grease pencil to make sure he would not lose track of their position.

For the next hour Hemi and Cassandra sat at the sonar tracking the contact following them. Despite their course change, the contact steadily gained on them. Captain Percy spent most of the hour standing directly behind Hemi and Cassandra at the sonar station, dreading the updates coming from Hemi. By the end of the hour, Hemi reported to Percy that the contact was virtually on top of them in terms of open sea space: within half a nautical mile. The contact was still running on the surface, though slower, matching the *Prospect’s* 5-knot speed. This last fact was the thing that finally made it absolutely clear to Hemi that the sub with the ram had found them again.

“Fucking fuck Hemi! How could they have fucking found us again? That’s beyond dumb fucking luck. That’s just strategically fucking unfair is what that is.”

Hemi considered for a moment. “It does seem to defy probability.”

“If it is them — and, honestly, who else could it even fucking be — then why aren’t they fucking pinging us again? Hell, why haven’t they fucking shot us down?” Percy asked.

“It is likely they are not pinging because they learned their lesson from the attention it brought them from the Stilt City Authorities last time they were actively pinging. As for shooting...” Hemi tapped his pencil against the rusting metal of the sonar console. “We know the contact we are listening to is the sub with the ram. But they might not know they have us. One can see through the water here clear to the bottom. An airplane flying over could easily have spotted our shadow at this depth, and there are a number of Authorities that might have air patrols through here. This is just a guess, but I suppose if the sub with the ram had received or intercepted a report from one of those aircraft, they would have a strong suspicion that it might be us.” He paused, thinking some more. “Now they are close enough they might be tracking us visually just from their lookout on their sail — but they might not have a way to know for sure what boat they are following. And if they sink a Stilt City boat, the Stilt City Authorities will come down on them with a vengeance.”

“Fuck me again! You think they can literally *see* us?” Percy cursed and spat. “We have to get off the shelf and go deep.”

“The water is *exceptionally* clear in this part of the ocean. It does seem like our only course is to get over the edge of the shelf.” Said Hemi. “And let us hope they do not change their mind and choose to simply fire a torpedo at this range. They could not miss from where they are now. Our only defense may be that they are not sure which boat they are following.”

“Couldn’t they just listen to the sonar and identify us by our sound, like you do when you listen to them Hemi?” Cassandra asked.

“That ram they have makes the sound of their boat extremely unique. There are many submarines that are very similar to the *Prospect*, and they all more or less sound the same.”

“The blessing of being indistinguishably fucking average.” Said Percy. “What if we try to outrun them? The *Prospect* is fast underwater, we might be able to get off the shelf in under an hour.”

Hemi stood up from the sonar station and stepped to the navigation table with Percy. He used the calipers to measure from their current position to the end of the continental shelf. “The batteries still are still mostly charged. If we run at full speed — 17 knots in an hour — we could clear the shelf in a matter of half an hour or so. We will have about a 1/3 charge left at that point. Not much reserve if we need to maneuver for any length of time.”

“If we’re deep enough that they can’t fire a torpedo at us, I’ll feel much fuckin’ safer though. I think it’s worth the trade-off.” Said Percy.

“I would also remind you that running along the bottom at that speed is risky — if we hit anything, it will undoubtedly cripple the *Prospect* permanently.” Hemi warned.

“Oh, I fucking know. Get everyone up here, we’re going to need to be fully staffed up for this.” Percy said as she was climbing up the ladder to the control room.

Hemi stepped over to the ship PA and called Owen up to the control room, since he was the only crew not already there. Then he turned to Cassandra, and she looked up at him from the sonar seat with her big eyes. “You are on sonar Cassandra. It is up to you to tell us what they do.”

“Not a problem, Hemi.” She said, almost smiling through the fear that was creeping over her face.

Hemi followed Percy up to the control room.

Bastian had been sitting in the dive plane control seat while on wheel watch. Hemi had Owen take over the rudder station and he stood directly behind them with one hand on each of their shoulders. Percy stood at the captain’s station in the left rear portion of the small control room. From there she could see almost every gauge, dial, and setting of her boat.

She had Owen throw the throttle all the way forward, and the *Prospect* rapidly accelerated until it reached its maximum underwater speed of 17 knots. At this speed the batteries were drained so fast she could see the needles on the battery charge gauges moving towards their zero pins. At this speed the boat also made much more noise. Even electric motors could not be silent with the effort of pushing a huge piece of steel through dense water at high speed. And the water itself created enough noise as it rushed along the hull to be heard over sonar from any near distance.

“What are they doing now Cassandra?” Percy called down.

“Um...” Cassandra hesitated, sounding scared. “They, uh, shut down their engine... and... I’m not sure. I think I lost them. I can’t hear them anywhere.”

“Fuck. Hemi, go down there and help that stupid fucking kid.”

“Give her a minute Percy. She will find them.”

A few tense minutes with no one speaking. Then Cassandra called up. “Oh! I’ve got them — sounds like they submerged. They are running on electric motors... pretty loudly compared to other boats I’ve heard underwater. I guess that means fast, right Hemi?”

“That is correct Cassandra.” Hemi turned to look at Percy. “They are following submerged, trying to match our speed.”

“OK.” Said Percy. “Two boats going in the same direction are *always* in a race anyway... so let’s fucking race.”

The *Prospect* hummed with life under their feet. Something about the electric motors putting out all they could without the ungainly and all-encompassing sound of the diesels running at the same time made the *Prospect* feel more alive, like a giant sea mammal enjoying the exhilaration and pure rush of being free to move at top speed through the water. The *Prospect* was rarely unleashed like this.

Hemi kept a very close eye on Bastian’s dive plane angle and the depth-under-keel gauge. Constant attention was required at this speed along with tiny adjustments to keep the boat from plowing into the bottom, or shooting up to the surface. Hemi trimmed the tanks so the *Prospect* was just slightly heavier in the bow, that way Bastian could adjust the dive planes to err on the side of the boat moving towards the surface — definitely the lesser of the two evil mistakes Bastian could make.

Captain Percy was also diligently watching the depth-under-keel gauge. She never looked away. It was, for the moment, the only gauge that mattered. With Hemi and Bastian’s careful depth control, it hovered stubbornly at 2 meters. 2 measly meters between them and the bottom — Hemi could not even stand in the space between the bottom and her keel.

“Cassandra!” Percy called down. “How are they doing?”

“Uh...” Cassandra paused. “They might be gaining on us? But very slowly. The signal strength looks like it maybe it has climbed up a bit?”

Hemi had a tip for her. “Cassandra, use the grease pencil to mark the location of the needle on the signal-strength dial. It will help you see the change to the signal.”

“OK Hemi. Good idea.” Cassandra replied.

Ten minutes later she got the control room’s attention again. “Captain Percy, they are definitely gaining on us, but very slowly.”

“Fuck.” Percy said to Hemi. “They must be running at their maximum underwater speed as well, and it sounds like it’s a fuckin’ hair faster than ours — un-fuckin’-believable with that ram on the front. How far to the end of the shelf Hemi?”

Hemi shrugged. “10, 20 minutes maybe?”

Percy took her pack of cigarillos from the wall and put one to her lips and lit it. She smoked it rapidly, repeatedly raising and lowering the hand that held it. She put her other hand up and tightly wrapped it in the hanging leather strap. She never looked away from the depth-under-keel gauge — willing it to climb.

Bastian took one hand off the stainless dive plane control wheel at a time and wiped the moisture of his palms on his pants. Hemi patted his shoulder with a heavy hand.

Suddenly the ship-to-ship radio lit up. “To unidentified submarine running north-north-east at 27.5 degrees. You are hereby notified that you are required to stop your boat and surface for inspection.” This announcement was followed by the string of generalized Authority rights and treaties they were familiar with from previous encounters with the sub with the ram.

“Fuck Hemi. They are within ship-to-ship distance now.”

The ship-to-ship radio continued to blare over Percy’s head, the light of its dial quavering with the power of the voice coming over

it. "This is your only notice. If you do not stop your forward movement immediately, you will be fired on."

"They must *just* be within ship-to-ship range." Percy thought aloud. "We could reasonably claim we haven't fucking heard them. After all, they may have been broadcasting that for the last half hour and we just heard it now."

"A risky gambit with this hair-trigger sub commander." Said Hemi.

Percy lifted a stopwatch that hung on the wall next to her and pressed the button to start it. The soft clicking filled the quiet control room.

5 minutes precisely had passed when the ship-to-ship lit up again, repeating the same message as before. At the same moment, the depth-under-keel gauge rapidly began to climb. By the time the overly long announcement from the sub with the ram had been read, the *Prospect* had passed off the end of the continental shelf and the depth-under-keel gauge had tapped its 'bottomless' pin.

Percy grinned, and took the mic down from the ship-to-ship radio over her head. She squeezed the transmit button. "To pursuing Authority boat, sub running north-north-west acknowledging. Stopping motor and surfacing." As soon as she released the transmit button, Percy punched the dive alarm next to her. As the klaxon wound up she gave Hemi his order. "Dive Hemi! Drive us down!" She flipped the light switch to turn on the red glow of the night lighting.

Bastian did not even wait for Hemi to tap his shoulder. He turned the dive plane to a full descent angle. Hemi stepped to the tank trim board and started trimming the boat's weight forward with one hand. His other hand hung through the strap above his head, and he leaned against the angle of the boat.



“Open the main ballast valves Hemi, til we’re under 200 meters.” The great gaping maw of the deep sea had opened up beneath them, and Percy was going to drive her boat right down its throat.

Hemi nodded, and flipped up the big black switches that opened the main ballast valves with his free hand. Air rushed out of the tanks in long streams of bubbles above them. Percy knew the sub with the ram would be able to hear this and know the *Prospect* was diving. But the *Prospect* was going down so fast, driven by weight, angle, and speed, that it was only a matter of minutes before the depth gauge was approaching the 200 meter mark.

A light lit on the tank trim panel indicating the main ballast had released all the air it had contained a few moments before. Hemi shut the main ballast valves, which closed with an electrically-activated clunk that they could hear resonating through the hull in front of the control room.

Hemi watched the depth gauge carefully. It passed 200 meters.

The *Prospect* let out a long groan, rising slowly in pitch, as the hull adjusted to the weight of water that had been so rapidly dropped upon it.

“Level us off.” Percy said. “Bring us to 5 knots.”

Hemi had Bastian level the dive planes and Owen reverse the prop for a moment to take the speed off. Hemi opened valves that allowed compressed air to start creating a new void in the main ballast to replace the one they had so recently released to the atmosphere above. They were all thrust gently forward by the reverse acceleration, and the angle of the deck came slowly up until it was even under their feet again.

“Level at 210 meters Percy.” Said Hemi, scanning across the gauges. “5 knots of headway. I am working on trimming the buoyancy.”

Dead silence passed through the boat.

“Cassandra.” Percy called down to sonar. “What are they doing?”

“Captain Percy, they are maintaining speed — coming straight for us, fast. They are within 1000 meters.” Said Cassandra nervously.

“No torpedo?” Percy asked.

“No torpedo in the water.” Said Cassandra.

“I guess they learned to not waste their torpedoes.” Percy said to Hemi.

“Sylvia, you should consider the possibility that this sub commander may intend to ram us at depth.” Said Hemi. “He knows he cannot get us this deep with a torpedo, and he knows he lost us last time we dove. He might not be willing to let that happen a second time.”

“That’s a terrifying fucking point Hemi. How will we know if that’s his move?”

“If they match our depth and do not reduce speed, I would say that it is very likely.”

“Can you tell his depth on the sonar?”

“As close as they are now, I should be able to estimate it by the soundscape with their motor noise reflecting back to us off the surface.”

“Well get the fuck down to sonar then, and tell me what you fucking think they are going to do.” Said Percy.

Hemi climbed down and joined Cassandra at the sonar station. A minute later he reported to Captain Percy. "Sylvia, they have definitely tried to match our depth, and are still moving at full speed. They are only about 500 meters off. You have to make a move now."

Percy stared at the depth gauge, and hesitated. But she knew there was only one course of action. She punched the dive alarm again. "Take us down further Bastian."

Without comment, Bastian turned the dive wheel again. The boat was still trimmed heavy toward the bow, so it sank almost immediately. Percy grabbed the leather strap again. The depth gauge began a rapid climb, pushing quickly past 215 meters — the normal operating limit of the *Prospect*.

Percy lit up yet another cigarillo and stared at the depth gauge without blinking. At 225 meters she called out to Hemi. "Are they still coming Hemi?"

"Straight on Sylvia." Said Hemi from below. "They are coming down at us. About 300 meters away from us now. They will be on us in less than 30 seconds."

The needle on the depth gauge had a steady, relentless upward movement, winding its way towards the higher triple digit numbers on the right side of the gauge. It maxed out at 300 meters — the depth at which *Prospect's* original engineers estimated it would collapse.

The depth gauge passed 250 meters.

"They have turned off Sylvia!" Hemi called up. "They went hard port, and are heading away."

"Level us Bastian, now!" Percy commanded.

Bastian spun the dive plane wheel rapidly and the bow came up. The boat leveled out with the depth gauge reading 254 meters. Bastian was breathing quickly. He lifted his shaking hands from the wheel and lit a cigarette.

Owen looked up at Percy with the look of prey having fully consumed his eyes.

“Don’t worry Owen. This isn’t much deeper than where we had her on the tablemount, and she held together then.”

“You’ve had the *Prospect* down this deep before?” Owen asked.

“Honestly,” said Percy, “this is a new record for her. By about 5 meters or so.”

“Though that’s another half atmosphere. . .” Owen said to himself under his breath.

“But look at the depth gauge.” Said Percy. “300 meters is the collapse depth. Still a bit of air between the needle and that point yet.”

“Sylvia!” Hemi yelled up from sonar, “they are coming around for another pass!”

“I thought they turned off in a different direction!” She replied.

“They did. They went out to about 1000 meters, dove to our depth, and are on approach again. . . 500 meters and closing at high speed. I guess that sub commander changed his mind about pushing the limits of his boat.”

“OK boys,” she said quietly before taking a deep breath, “we’re going deeper.” She pressed the dive alarm once again. “Bastian, full dive plane down, again.”

Bastian stuck his cigarette between his lips, wiped his palms on his pants, and grabbed the dive plane control wheel. He spun it all the way to the stop.

The bow of the *Prospect* once again fell away in front of them. The depth gauge rounded into the final quadrant of the dial, where the ink of the graduations changed from thin black numbers to bold warning numbers. Were it not for the red light, those numbers would also be sitting in a red field on the dial.

“Passing 275 meters!” Percy called out so Hemi could hear.

“They are still coming Sylvia. Adjusted their course and diving. They will be on us in seconds.”

Captain Percy had never dreamed of taking her boat this deep. The sounds of her boat under stress rolled back and forth repeatedly throughout the length of the boat, and traveled up to Percy’s empathetically sensitive ears in the control room. A long, weak sigh that went on and on was followed by prickly cracking sounds. A low rumble fell underneath those in registers that echoed the very bones of the ship straining to accept the weight of 10 atmospheres. Her boat was very much alive now, and suffering. And it pained Captain Percy.

The depth gauge needle tapped against the far right pin at 300 meters.

“They leveled out and passed just over us!” Hemi roared his update.

“Level her Bastian.” Said Percy calmly.

Bastian was visibly sweating profusely, breathing in deeply though his cigarette and exhaling through the other side of his mouth, both hands tightly gripping the dive plane wheel. He rapidly spun it back in the other direction from the stop and the bow came up.

From the front of the boat came another long groan — one that sounded to Percy's ears like a sound of relief — as the bow came up to ease into a space of just slightly less pressure.

"Beyond 300 meters Captain." Said Owen quietly. "The gauge can't even tell us."

"Owen, shut down the motors." Said Percy.

The quiet hum of the electric motors faded, and as the *Prospect* settled into the weight of the water, they were left in the uncanny silence of the deep ocean. They listened intently to the silence. It seemed to be made even more silent by the cloud of smoke-filled red light in the control room. It was not even clear what they were listening for, perhaps the sound of the sub with the ram rushing past them over their heads, or at least a report from Hemi on the sonar.

But the silence was broken by another long quaking groan from the depths of the *Prospect's* hull.

Percy put one hand out to the wall, laying her palm flat against the curve. She felt the cold dampness of the steel pressure hull of her boat under her hand. "Hold together baby..." she said softly enough that Bastian and Owen wouldn't be able to hear.

"The sub with the ram... they would have heard that sound from the hull... wouldn't they?" Owen asked, his voice shaking. "It was so loud..."

"It doesn't matter." Said Percy. "Even if they know where we are, they won't follow us down here." Though then she doubted herself. "Hemi, where are they?"

"Trying to figure it out..." Hemi paused. "They are off about 1000 meters again, reduced speed, and are turning back in this direction."

“To submerged submarine.” The ship-to-ship lit up again. “You are in violation of. . .” Percy flipped off the ship-to-ship unit.

More minutes passed with no sound except their breathing and the aggravatingly random drips of condensation.

“Owen,” Percy said quietly, “go down to the cargo hold and check on the repaired seam — see how bad its leaking.”

Owen nodded and quietly climbed down the ladder out of the control room.

Percy stepped up to the trim tank control panel. The boat was slowly settling with the bow dipping down, and that was extra stress on the hull that Percy did not need. She gingerly opened some of the high-pressure valves that would force air into the forward trim tanks. There was a long his that ran up the length of the boat from behind them forward into the deeper darkness.

She kept an eye on the trim. The tank gauges were not showing any water leaving. It was possible they were so deep — so far beyond where her boat was normally designed to operate — that the high-pressure air system did not have enough pressure to push the water out of the tanks. She slowly opened the valve further and further, and when it hit the stop — all the way open — the trim tank gauges slowly turned towards their zero pins as at least some of the water in them was forced out.

Percy made a few further adjustments to the trim tanks, desperately tending the delicate balloon that held them aloft over the black sucking pit that so hungrily wanted to consume them.

She got the boat trimmed perfectly level, and then stood silently in the middle of the control room with a slight gap between her feet. She measured her own center of gravity against her boat’s. In its current configuration it should be absolutely still. But she could feel some kind of movement. Very slow movement.

“Sylvia, they passed us, a few hundred meters off to the west.” Hemi reported, then after a pause continued. “They are swinging around again. . . It would seem that they may have lost us.”

“They are unwilling to come this deep, and unwilling to risk firing off a ping to find us. Good. Keep tracking them Hemi.” Said Percy.

Owen returned from the cargo hold. “Captain Percy, water is just fucking flowing in like a stream all along the length of the repaired seam. I think we should start the bilge pumps.”

Percy felt her boat through her feet and knew it was telling her that the weight was increasing in the bow. That was certainly part of the movement of the boat she was feeling. “We can’t start the pumps now Owen, we’re just about to lose those fuckers up there, and if we start the bilges they’ll definitely hear them. Bastian, keep trimming the forward tanks. They are far less likely to hear the air systems.”

Bastian turned his control chair to face the tank panel squarely. He locked his eyes on the tank fill gauges.

Percy lowered herself down to the sonar compartment and stepped up to the navigation table.

“They just passed by again, further west by a few hundred more meters.” Hemi said to her.

“Further *west*, right? Look at this chart Hemi.”

He removed the headphones and told Cassandra to keep tracking the pursuing sub before he stepped up to the navigation table next to Percy.

Percy pointed. “The chart shows a current here, starting just off the continental shelf. It flows toward the west. But. . . that



current is a *surface* current. And I think we might be drifting east. I think we may be so deep we've picked up a counter-current."

"It is possible. There is often a counter-current under the surface current in the deep ocean. But there is no way for us to tell. We have no outside reference points." Said Hemi.

"Well, our one outside reference point is the fucking sub with the ram. It seems like they are searching for us steadily to the west. But they may in fact be moving back and forth over the same fucking point — the last point where they knew they had us — and *we* might be moving slowly east with the current." Percy postulated.

"I suppose with a little time we will know." Said Hemi.

"If we don't fucking sink first of course." Percy replied. "Keep listening with Cassandra, I don't want to us to drift into that fucking continental shelf wall — at this depth it would be the fuckin' end of us."

"That will be challenging with so little ambient sound to judge what is around us."

"I'm sure that between you and Cassandra you can keep us fucking safe."

Over the course of the next hour the *Prospect* hovered silently just below 300 meters. Hemi tracked the steadily diminishing signal of the sub with the ram as it swept back and forth, and then began circling around the location where the *Prospect* had went under 300 meters. At that point Hemi was convinced the pursuing sub had lost their track on the *Prospect* completely.

Every so often the submarine let out a groan, as if to remind Percy the stress she was under. Every time one of those long wailing groans came up from the guts of her boat it grated Percy's nerves — both because of the visceral way she experience the

*Prospect's* physical stress, and because she worried it was enough sound to give away their position.

At some point, as time passed and it became apparent the *Prospect* was indeed slowly drifting away, Percy's main concern swung from the sub with the ram to the slight but distinct angle to the deck that she could sense under her feet. Her sensitivity to the movements of her boat, especially while standing, made her the first to realize that the bow was sinking under the weight of the water seeping in through the repaired seam.

She worked with Bastian to try to correct it, but they realized the trim tanks had already been emptied to the maximum extent they could be at this depth. There was not enough air pressure in the system to overcome the outside pressure of water and displace the water from the trim tanks. They needed to start the bilge pumps.

She consulted with Hemi at the navigation table. "How much distance have we gained from the fuckers?"

"We have been drifting for a bit more than an hour. The current appears to be 2 knots or so — so we are maybe a bit more than 2 nautical miles from them." Said Hemi.

"That's not very fucking much to play with. Do you think we can start the bilge pumps without them hearing?"

"That would be taking an extreme risk at this close range I think." Said Hemi.

"*Not* starting them is also beginning to look like an extreme risk." Percy said, pointing to the ever more apparent angle of the deck. "And before you even fucking ask — the trim tanks are no longer functional because of the depth."

"But we can keep probably keep pushing air into the main ballast tanks to counter-act the weight of the water leaking in." Said

Hemi. “That will keep us from sinking, but without the trim tanks and without running the bilge pumps there is no way to trim the boat properly — we are likely to hang bow-down before too long.”

“If we can lose a little depth we could also take some of the pressure off the leaking seam and the trim tanks.”

“You have to do that without losing the current though.” Pointed out Hemi. “If we get to shallow we will pick up the surface current and drift right back towards the sub with the ram.”

“It’s going to be tricky, but that’s our fucking move, right there.”

Hemi nodded.

Percy reached up and patted him on his big shoulder and climbed up to the control room. She sent Owen down to the sonar compartment to operate the emergency main ballast blow levers, and she stood next to Bastian reviewing every gauge reading and valve setting on the trim tank control panel. They worked together over the course of the next few hours to blast enough air from the high-pressure system into the main ballast tanks to lift them up 50 meters or so. At that depth, Cassandra could tell them from sonar that they were still drifting away from the sound of the sub with the ram, so they still had the current.

Being slightly shallower did slow the leaking somewhat. And for a short while they were able to overcome the weight of the water in the cargo hold by displacing a little more water from the trim tanks. But as time passed, the bow sank deeper and deeper as water relentlessly seeped in. The deck was soon at a 60 degree down-angle as they drifted like a derelict through the black water 250 meters down. It was getting more and more difficult to move around the boat, and the dramatic effort required by even simple tasks was causing panic to veer its way into the moral of the crew. Cassandra had to constantly press her feet against the

sonar console to keep from sliding off her chair into it, and her leg muscles were burning with the effort.

Finally, when they had gained maybe 5 nautical miles, Percy's patience overcame her fear, and she gave Owen the order to fully blow out the main ballast. With the scraping creak of the rusty valves as Owen opened them, the *Prospect* shot up from the depths. The hull screamed and groaned with relief the whole way, and the boat burst through the surface, settling back down to just under with the deck awash.

Percy put the periscope up and scanned around an empty sea. The western sky was starting to redden with late-day light. She opened the hatch from the control room, and the whole crew followed her up on to the bridge. Even though the *Prospect* still had the semblance of a sinking vessel — with a bow-down tilt, and only the sail above water — she let the crew have a moment in the fresh air. They had been scarily deep. It had felt to Percy like they had stood on the very edge of the black hole under them and hurled insults at it while daring it to swallow them. Yet here they were back to the safety of the planar world. She was going to let her crew appreciate that for a moment before they got back to work.

But it was not long before Percy had the crew back below deck to start the bilge pumps that would finally remove the water from the cargo hold, and run the low-pressure air compressors to get the boat fully surfaced. She also decided it was time to risk a little more noise and they started the electric motors — she would hold off on starting the diesels until after dark, even though they were moving on the surface now. She selected an eastern course to take them away from the sub with the ram and towards their rendezvous point with Shakes.

## Chapter 7

With darkness Hemi was able to take a sighting from a star, and he calculated they had made about 20 nautical miles from the point where they began their dive below 300 meters. Percy felt that was enough of a cushion that they could start the diesels — on the surface at this range they were more likely to be detected on radar than sonar anyway. They soon had the diesels turned over and roaring away below decks. Percy had them throttle up to 15 knots, and Hemi calculated a precise easterly course that would bring them to the rendezvous point with Shakes. Percy kept a lookout in the ring throughout the night and gambled on not running the radar, feeling that it was too likely to give them away.

They ran through the night on too much coffee and not enough sleep. But they saw no other vessels and there was no sign of the sub with the ram.

Even as the sun rose in front of them, Percy kept the boat on the surface wanting to make up some of the time they had lost during the previous day. She was hoping to make the rendezvous with Shakes more or less on time. The sun was well up above the horizon and they had clear visibility for something like 10 miles from the lookout ring before Percy finally called for the submarine to submerge. They had only a few more miles to go to the rendezvous point with Shakes, and Percy had high confidence that Hemi would navigate them very precisely to the correct spot.

A few hours later Hemi announced they had arrived at the rendezvous point. They leveled the boat at 20 meters down, and shut down the motors to wait. Everyone except Cassandra passed the midday and afternoon hours catching up on sleep and lazy recuperation. Cassandra was stuck listening to sonar to detect the approach of Shakes. In the late afternoon she caught the far-off sound of a loud diesel engine, and by the time ten minutes had passed she was sure it was the *Gnat*, approaching the rendezvous a high speed on the surface.

A few miles off the sound of the diesel disappeared, and Cassandra assumed Shakes was diving before approaching the rendezvous point. She called Hemi up to the control room. An hour later Shakes voice came over the ship-to-ship. Hemi arranged with Shakes to mate the *Gnat* to the underside of the *Prospect*. It took another hour to execute the delicate maneuver.

Hemi sent Bastian down to the lowest deck of the *Prospect* and open the hatch to the *Gnat*. Even as he climbed up through the hatch, helped by a strongly gripping hand from Bastian, Shakes was already thinking about food.

“Bastian! Good to fuckin’ see you again. It’s about dinner time on this fuckin’ vessel, ain’t it?”

“Sure it fucking is, Captain Shakes.” Said Bastian, through a cigarette in his mouth. “I think I smelled Owen working on some fucking sticky glop or other in the galley, when I was making my way down here. You’re hungry?”

“Submarining is fucking hungry work Bastian. Let’s go see what that fucking kid is burning.”

They made their way up the decks with the wrenches hanging from Shakes’ belt clanking loudly each time they ascended one of the ladders or steep stairways. In the galley, Hemi and Percy were sitting at the table and Owen had a big curved steel pan

from which smoke was rising upwards. They all sat and ate a heavy meal of boiled oats and cabbage with small bits of slightly charred canned ham sprinkled throughout. The oats had enough texture still left to them that the little grains popped between their teeth. Hemi brought a bowl in to Cassandra who was still on sonar duty.

After Shakes ate his third bowl, Owen poured them all a cup of the requisite coffee that came after every meal, and Percy leaned back into the corner of the galley bench, stretching her arms.

“I see you made it out of that fuckin’ Stilt City,” said Shakes, “when that sub turned off the channel to follow the *Prospect* into that narrow waterway, I thought maybe our partnership was fuckin’ done for.”

“Yet you still fuckin’ managed to make the rendezvous point.” Said Captain Percy.

“Well that last job working for you was so fuckin’ profitable, I wasn’t just going to let that go because I thought y’all were fucking dead.”

Percy laughed.

“So what’s the fuckin’ plan now? Is there a next job?” Asked Shakes.

“For the moment, the plan is to put as much distance between ourselves and the last place we saw that fucking sub as possible. We have to lose those fuckers for good if we’re going to resume business as usual — I see that now. I can cut you loose if you like Shakes — this is mostly our fuckin’ headache, not yours. Did we tell you that we figured out the reason they are after us is because the kid Owen slept with that fuckin’ sub commander’s wife?”

“Your shittin’ me — this whole fuckin’ life-and-fuckin’-death hassle is because of your young fuckin’ cook?” Shakes grinned at Owen.

“Fuckin’ turns out. Ain’t that a fuckin’ bitch?”

“Aww fuckin’ come on.” Said Owen. “Yes that happened, but we’ve already been through this — the fucking dude is way the fuck over-reacting. That, right there, is our fuckin’ problem. Not some coupla fuckin’ nights I spent with his wife.”

Shakes stirred his coffee with a raised eyebrow and a half-skeptical nod.

Percy picked up the conversational thread with Shakes. “Regardless of what fouled spring from which our continuous fuckin’ bad luck flows, I’d be happy to have you along if you’re fuckin’ willing. Having the *Gnat* around could prove useful again.”

“So you’ll keep me on fuckin’ retainer?”

“Sure, if you like.”

“Alright.” Said Shakes. “If your plan includes keeping Owen in the kitchen to feed me, I’ll fucking stick with y’all for now.”

“You know I do take care of a few other things on this boat besides the fuckin’ food.” Said Owen. “Cooking is in fact a relatively recent addition to my duties.”

Percy ignored Owen. “Once it seems like we’ve gotten ourselves some distance, we’ll put into a port somewhere and start looking for work again. And hopefully we’ll be able to include the *Gnat* in whatever new fuckin’ endeavor we take up.”

For the next 3 days and nights the two boats ran next to each other. They fell back into the steady routine of a cargo run, moving fast with the power of diesels at night, and slowly crawling along underwater during the day. They crossed almost a thousand



miles of ocean, and Percy was feeling like they might soon be able to consider heading into a port somewhere and getting back to normal work.

But first, she felt like they all needed a bit of a break. At the breakfast table on the fourth day, while they were hovering without motors underwater with the *Gnat* attached, Percy proposed some recreation.

“Gentlemen. You know what? It’s probably time we got some fucking exercise. How about a bicycle race tonight?”

Hemi nodded, but Shakes was deeply confused. “A bicycle race? Is that some kind of code for some fucked-up submariner thing?”

“Well, the ‘race’ part might be a bit of a stretch, but the bicycle part is literal. Hemi, want to lead our guest down to the hold and show him how we do exercise on this boat?”

“Captain Shakes,” said Hemi, “allow me to formally invite you to the only undersea bicycle race in the world.” Hemi stood and swept his arm forward toward the cargo hold.

In the cargo hold, Hemi unchained the pile of rusty bicycles from the tie-down points on the wall.

“As you may be aware,” said Percy looking at the bit of a gut Shakes was showing after stashing away his giant portion of Owen’s meal, “submarining is maybe not the healthiest of occupations — even when we’re not being fucking shot at. As a captain, it is my duty to look after all aspects of the welfare of my crew. For that reason I encourage time spent on deck for the fresh air — when fuckin’ possible — and require participation in all *Prospect* bicycle races.” She pointed down the empty cargo hold. “Generally, we conduct races when... well, when the fucking hold is empty enough that we can.”

“Fuckin’ Cool.” Said Shakes. “What’s the rules?”

“The single rule is: don’t get fucking hurt. . . badly.” Said Percy.

“That’s fuckin’ it?”

“That’s fuckin’ it.” Percy pointed over to the pile of bicycles that Hemi was untangling and tossing one-by-one towards them. “Select your steed. Choose carefully, most have a surprise or two.”

Shakes looked over the bicycles, which could only be called ‘bicycles’ if the only thing you knew about bicycles was that they had two wheels. Piled on the grating of the deck, they looked more like a giant rusting Mikado set laid out to play. Any individual bicycle appeared to be missing some critical part or another: a seat, or handle bars, or pedals. Or one of the wheels would have a giant dent in it so there was no chance it would roll smoothly. One or two appeared to be missing structural tubes and looked like they would collapse under the weight of an adult. Some were clearly bikes intended for children, with tiny wheels and faded and ripped streamers hanging from their tiny handlebars. On one someone had welded a motorcycle fork with a motorcycle wheel. Shakes guessed that particular ‘bicycle’ must weigh more than 50 kilograms.

Shakes selected a promising looking machine from the pile Hemi was still adding to. An simple small steel frame with upright bars and fenders, and the rusting remains of a steel basket, bent and crushed but still hanging on the front of the bicycle. Shakes stepped over it and looked at Percy. “OK, now what?”

“Now? There and back, and there again!” Said Percy, pointing down to the end of the cargo hold.

“Come on,” said Bastian, picking up one of the kid’s bikes and folding his long skinny legs into position on it. “I’ll fuckin’ race you.”

“I thought the only rule is don’t get hurt?” Shakes asked.

“Don’t get hurt, *badly*. Fucking yeah.” Bastian lit a cigarette, and started pedaling away madly down the grating of the cargo hold. After 10 meters or so he slapped the pedals backwards and skidded for 5 more meters. “Fucking deck is still wet from the flooding! Good skidding.” He said looking towards Percy with the cigarette still between his lips.

Shakes took off after Bastian and, since he was riding a bigger bicycle, easily caught Bastian who was now spinning the tiny bicycle at a high cadence. But as Shakes tried to come around, Bastian swerved hard into him and drove Shakes into one of the old crates pushed up against the hull wall.

Shakes shuffled and regained his perch on the bike. He ripped his way down the deck, getting more speed as he flew past Bastian. He approached the far end, and squeezed the brakes to take some speed off before he had to make the turn to reverse direction. The brake levers clapped easily against the bars.

Brakes apparently were not a feature of the bicycle he was riding.

Shakes slapped his boots flat and slipped along with the grating uselessly rumbling beneath his feet. There was nothing that was going to prevent him from plowing into the puddle of black and oily bilge water that still filled the bow of the boat. A great spray of oozing and stinking water flew up and soaked him through.

Bastian had skidded the children’s bike he was riding to a stop precisely at the edge of the puddle and stood over it, alternately smoking and laughing at Shakes.

Fortunately Shakes was wearing his heavy rubber deck boots. He waded back up out of the bilge puddle pushing the bike between his legs and once he escaped the puddle started pedaling back up the deck. Bastian fell in behind, and stood up to pedal furiously. As Bastian drew even, Shakes unclipped one of the larger adjustable wrenches from his belt, hefted it in his hand for a second and then thrust it into the spokes of Bastian's front wheel.

The weak and loose spokes of the old wheel snapped and curled around the drop-forged steel of the wrench. The wheel gave up on life, and the fork plowed into the grating through a web of small steel wires. Bastian collapsed over the bars and Shakes left him behind. As Shakes approached Percy at the top end of the cargo hold, his feet flattened against the deck in what was now a slightly more practiced maneuver, with plenty of time to skid to a stop where Percy was standing.

"If you kill one of my fuckin' crew members, I'm dropping your boat into the fuckin' deepest part of the ocean Shakes."

"It's not my fault if I'm just naturally fuckin' tougher than y'all."

Hemi easily hefted the bicycle with the motorcycle fork welded to it. He looked at Shakes. "Come on Shakes, let us ride." He started down the cargo hold at a steady pace. Shake caught up with him easily, but despite steering into Hemi multiple times and repeated efforts to twist Hemi's handlebars, had no success at keeping himself from ending up in the oily puddle of bilge again as the two riders arrived at the far end of the cargo hold.

The riding went on like this, with various crew taking turns, swapping out bikes, pointing out what worked and what did not when it came to staying upright, or plowing someone else down. After half an hour or so Hemi dragged a rotting old wooden ramp from among the random refuse lashed to the hull and set it up

just at the end of the cargo hold. Bastian shot down the length of the cargo hold and went up off the ramp and deliberately aimed to come down in the bilge water and splash as high up on to the hull as he could manage.

The bike came to a stop with a precarious tilt. Shakes got off the bike and walked it back up the cargo hold towards Percy and Hemi. When he got a bit closer they could see the front wheel was no longer attached to the bike. “The fucking fork snapped in half!” He shouted up to them.

Percy grinned, “that frame was aluminum and that’s how aluminum fails — snaps in pieces with no warning. That’s why submarine hulls are made of steel, it bends when it fails, but stays in tact.”

Shakes laughed at that. “Maybe, but if you’re at the point where your submarine hull is failing, is it better that it’s slowing fuckin’ crushin’ in around you instead of failing catastrophically? Or is that just a vivid fuckin’ demonstration of a living hell?”

Bastian wheeled the destroyed bicycle up to them. Percy and Hemi prodded the failed fork in turn while Owen took a spin down the cargo hold toward the ramp.

Percy placed the pieces of the fork together so she could visualize how it failed. “Sometimes, I feel like a submarine is just a very very complicated bicycle.”

“That’s fucking ridiculous.” Said Bastian.

“Seriously. In a way at least. They are both mechanical devices that operate within certain constraining physical parameters.”

“You could say that about any fucking machine.” Bastian pointed out.

“Bear the fuck with me! ... Both submarines and bicycles have to move through three dimensional mediums: up, down, left, right, pitch, roll, yaw...”

“Bicycles pitch?” Bastian asked.

“Absolutely they do: up and down hills. Though I guess they only yaw in a skid.”

“I do enjoy a fishtail skid.” Said Bastian.

“Well, I think that’s what I’m really getting the fuck to,” said Percy, “it’s that with both machines I find a kind of pure fuckin’ pleasure from the mechanical handling of them while I move the machine through their element.”

“You mean like a mouse on a wheel?” Asked Bastian, sucking at a freshly-lit cigarette while he watched Owen cruise slowly back up the length of the cargo hold.

Percy smiled, “well, why not? Who ever said the mouse isn’t totally fucking enjoying their time on their fucking wheels? Maybe if you put a wheel out in the woods, mice would come from miles around just to run on it.”

Bastian scoffed. “I guess that’s why you’re the fucking captain. I don’t find I get any fucking pleasure from riding a submarine. It’s just a fucking job.”

Hemi took his leave, pointing out that poor Cassandra had been stuck up on sonar and he would relieve her for a bit. A few minutes later Cassandra appeared and they explained the solitary bike “racing” rule to her. She selected a small sturdy children’s bicycle and carefully pedaled down the cargo hold, without daring to tackle the ramp.

Then they heard a hiss of water through the piping that ran along the side of the cargo hold and the deck tilted slowly downward

beneath their feet. Hemi had let some water into forward trim tanks. The cargo hold deck took on a 10 degree down angle.

Each of them selected a bicycle and used the slope Hemi had given them to get a lot of speed down the length of the cargo hold. With some trepidation and false starts, each of them eventually tried a jump off the ramp, some landing more successfully — and more dryly than others.

Owen displayed an uncanny ability at bicycle handling. With the deck angled, he was able to pull his bike into a wheelie while skidding the rear wheel along the wet grating. He even managed to maintain enough speed doing this to still jump the bike when he hit the ramp.

They circled up and back repeatedly. With the boat otherwise completely shut down it was pleasantly quiet other than the ticking spin of pawls, and the occasional echoing shout followed by a metal-on-metal crash followed by laughing.

Bastian, after breaking his first bicycle, selected a second one that was more upright that he could ride with his thin limbs somewhat less cramped and folded. He slowly pedaled up and down the cargo hold while chain-smoking cigarettes. He rarely touched the handlebars as other shots past him.

Cassandra was very timid on the way down the slope, squeezing the brakes and skidding the whole way. She only tried the ramp once, and found the landing terrifyingly rough. But she could beat them all back up the slope with a high-speed spin and a surprising show of strength in heart and lung.

They raced on for the better part of two hours, until not one of them lacked a spot of blood running freely from somewhere on their body and a number of bruises as badges to prove the amount of fun they had achieved. There were no serious injuries

other than a sprained ankle on Owen's part that would set him limping for the next week.

Eventually, when the whole crew was looking like it had run out their physical capacities, Percy had Hemi level the *Prospect* and then released them all to their bunks or coffee depending on individual preference for the rest of the day.

When the clock indicated that it was fully dark up above the waves, Percy had them drive the *Prospect* up to the surface. Hemi and Shakes got the *Gnat* disconnected and surfaced. Soon both boats were running parallel to each other across a black sea of modest swells. The sky was loaded with heavy clouds which brought with them a steady breeze to drive the swells against the boats. The clouds made the night very dark, so much so that while it was easy to hear the *Gnat's* diesel engine off to the starboard side from the bridge of the *Prospect*, it could not be seen out there in the blackness, except for the occasional spark of fire that escaped from the exhaust pipe.

They kept a steady eastern course, moving deep into the central ocean. With both boats running their diesel engines they could sustain high speeds. They kept up a steady 15 knot average, covering the vast distances of the open ocean relatively quickly.

Percy rode up on the bridge. Given the extreme darkness, she decided to forego putting a lookout in the ring. She had never felt like she had all the crew she needed to run the boat effectively, but having lost Gregory and Chips she was feeling more pinched than ever by too-few hands.

With no visibility on deck, and the sonar nearly useless over the volume of sound the diesel engines dumped into the water, the only real visibility Percy had was on radar. So every 20 minutes she had Cassandra turn on the radar for a few sweeps to make sure the ocean remained clear in front of them — and that nobody was tailing behind.



For the first few hours of the night they settled into the monotonous drudgery of cruising. Owen was in his rack, Cassandra listened to heavy noise in the sonar headset, Percy stared into the darkness from the bridge, and Hemi and Bastian stared at the wall of unmoving dials in the control room.

Toward midnight, Hemi climbed tiredly down to the sonar station, and tapped Cassandra on the shoulder. She did not even look up, knowing that this was Hemi's signal that it was time to turn on the radar unit. She leaned over and flipped the switch and the green light of the radar flashed across the scope and then swept slowly around showing nothing behind or to the sides, except for the lone blip of the *Gnat* to starboard.

But as the radar passed to the front of the *Prospect* it laid down a sprinkling of green glowing dots, like fireflies above an evening field, that slowly faded away until the sweep came around a second time and lit them all up again. A few of the dots were only a mile or two ahead of the *Prospect*. Further away they increased in density to a number that could not be quickly counted.

"Hemi, what's that? It looks like a fucking fleet!" Said Cassandra, her eyes going wide and reflecting the green glow of the radar display.

"Hmm. That is not alright. Bastian!" Hemi called up to the control room. "Throttle back to 5 knots... and shut down the diesels!"

A few seconds after, the sound of the diesels died away, Percy arrived in the sonar compartment having been directed there from above by Bastian. "What the fuck is going on Hemi?"

He pointed to the scope as he adjusted the second sonar headset on his head. "We are going to give that strange pile of radar contacts a listen."

Percy flipped off the radar. "Let's not give away our position more than we already fuckin' have. What do you think, should we dive?"

"I don't hear anything Captain Percy." Cassandra interrupted. "At least, not above Shakes' engine."

"For fuck's sake. Ping him." Percy ordered. "We need Shakes to shut down, and he might respond to a ping."

Hemi reached over Cassandra and pressed the ping button on the active sonar. A second later the unit lit up.

"The active unit is showing dozens of contacts *underwater* as well as on the surface." Cassandra kept one hand against the sonar earpiece. "Shakes did shut down — I still don't hear anything though. It's completely silent now."

"It is extremely unlikely that there is a fleet of dozens of ships and subs just floating without engines running." Said Hemi. "Something else is going on here. . ."

In the sonar compartment they could hear Shakes' voice crackling questions over the ship-to-ship in the control room and Bastian responding to him.

"I suggest we make our friend Shakes a resource." Hemi said.

"Send the reckless risk-taker to check it out? That's my kind of fuckin' plan Hemi." Percy climbed up to the control room and took over the conversation with Shakes from Bastian. She explained the situation to him and they came up with a plan where Shakes would move forward on battery and check out the radar contacts while the *Prospect* submerged to periscope depth and followed behind, staying within ship-to-ship range of the *Gnat*.

15 minutes later, the *Gnat* was coming up on the first of the radar contacts. Percy watched the blackness where the *Gnat* was located ahead of them through the periscope. Soon a beam of light shot out from the water, and in the reflection of it she could see Shakes' spiky head at the top of the sail of the *Gnat*. Shakes ran the light beam forward and back along a black wall that road up and down on the ocean swell ahead of him.

At this range Cassandra could hear the object on the sonar — water slapping against a steel void with the random regularity of ocean chop — Cassandra was convinced it was a ship.

It was only a few minutes later that Shakes confirmed her guess over radio. "Yeah *Prospect*, the object is a big empty cargo vessel. Rusting away and half sunk, it looks like. You think all those contacts are abandoned ships?"

Percy looked away from the periscope viewfinder at Hemi, who was holding the ship-to-ship radio mic. "What do you think Hemi?"

"It is possible. I have heard rumors of such things: abandoned ships and garbage float into some kind of slow gyre in the middle of the ocean, where they sometimes circle for decades before they weaken enough for the ocean to draw them down."

"Like a fucking ship graveyard." Said Bastian.

"A walk among those lost souls might be an fucking opportunity for a pair of boats that don't want to be found." Said Percy. "Hemi, see if you can work out a way with Shakes that we might traverse this graveyard safely."

Hemi and Shakes chatted for a few minutes over the ship-to-ship. They decided that if they kept the speed of the boats low, they should be able to navigate through the sea of derelicts safely.

The *Prospect* surfaced and they pushed forward at 3 knots. The *Gnat* took up a position 100 meters or so behind. Shakes kept the *Gnat's* diesel off as he followed in the *Prospect's* wake so he could keep in constant contact with the *Prospect* over the ship-to-ship.

At first, Cassandra was able to steer them around the big pieces of flotsam using the sonar. Since the ocean was very quiet, she could hear the sound of the *Prospect's* diesel engines bouncing off the bigger floating pieces. But soon they entered an area so densely packed with wrecked ship hulks that they needed to use the active sonar to chart their way precisely through it. They started pinging at regular intervals a few minutes apart, and Cassandra would report obstructions ahead — both above and below the surface. Hemi noted her reports on a clipboard and worked out a safe route forward.

Captain Percy ran a power wire up to the bridge and connected a hand-held spot light. She swept a beam back and forth, scraping away at the heavy blackness in front of her boat. Most of the contacts Cassandra was seeing with the sonar were partially or almost entirely submerged, held aloft over the 1000 meter deep ocean by clinging to the last desperate bubble of buoyancy they yet retained from when the ships were alive. Under Percy's light the vessels were typically a low, black, curved, and oily form, riding threateningly just under the surface, awash with waves that passed over and obscured them. Alternatively, they would take the figure of a low wall in the water, still showing the distinctive outline of the pointed form of a ship hull.

As they made their way further, the debris in the water grew more abundant. The breeze they had been driving into earlier died away and the ocean flattened out, as if held down by the thick greasy blanket of refuse laying on it. In among the larger debris pieces of the derelict vessels were rafts of rotting wood from ship decking and furniture: rusting barrels, bits of foam

covered in bright cloth, frayed lines, pale bleached buoys and bumpers, and pieces of masts and tools. Anything that might fall from a ship or get tossed into the ocean and did not immediately sink seemed to have made its way to this huge gyre of refuse. The larger pieces bumped eerily against the hull of the *Prospect* with deep resonant thumps that could be heard throughout the boat. In many places an iridescent oily sheen sprinkled with clumps of floating grease reflected back in Percy's light.

They spent the entire night slowly pinging their way through the densely polluted surface water. The *Gnat* followed dutifully behind. Percy instinctively was feeling uncomfortable about the racket the two ships were making, especially since every ping told anyone within a 10, maybe even 20, mile radius precisely where they were. And of course even at a near-idle, the *Gnat's* diesel — which Shakes was now running again — growled loudly with sympathetic vibrations reflected back from the abandoned ship hulls surrounding them. Captain Percy reassured herself that they were far off any routine shipping lanes, and most vessels would steer around this patch they had plunged right into. This patch that was more and more appearing to be quite a massive obstacle to make one's way across.

The boats were still on the surface and Percy was still standing on the bridge of the *Prospect* when the morning sun eased itself up over the eastern horizon. Its long red rays ignited the landscape of black hulks around them until it looked like boats were stirring the dead waters of an underworld lake of blood.

As the sun crept upwards and its light filled out the entire spectrum, the lake of blood turned into a turbid and viscous black sea — all the bunker fuels, engine lubricants, solvents and greases; all the specially developed chemical mixes that drove or eased the movements of the giant steel machines through the water — all eventually escaped from the rotting containers that held them and contaminated the clean water of the middle

ocean. The contaminants floated on the surface, coating and binding together the more physical refuse. The stuck-together grime coalesced and joined forces with larger pieces that floated to defy the power of the perpetually sucking bottomless hole underneath.

By the full light of day Percy felt far too exposed. She waved down Shakes until he stopped the *Gnat's* engine and Hemi could contact him via radio to tell him to bring the *Gnat* underneath and mate with the *Prospect*. This was fine with Shakes who had not slept the entire night, and looked forward to taking a rest aboard the much larger and relatively luxurious submarine.

With the *Gnat* attached, Percy had the *Prospect's* diesels shut down, and they submerged to 20 meters. It was much quieter underwater with no noise but the gentle hum of the electric motors. But they continued to send out a ping every 10 minutes or so with the active sonar to avoid the submerged wrecks, which occasionally hung bow- or stern-down hundreds of meters into the water.

Between the active pings, Cassandra could now see a picture in her mind of the complex seascape around her. The sound of the *Prospect's* motors refracted out and away around her, and came bouncing back from the heavy surface and reflected off larger pieces that bobbed around them. She spent the first few hours of the morning scanning around herself in circles with the sonar and flipping filters on and off. She was continually fascinated by the images of the underwater landscape that were drawn in her mind by the sounds the sonar put into her ears.

When she felt like she had found a good combination of filters for giving her the clearest view of the water around them while taking out the source sound of the *Prospect's* motors, she did a slow sweep in every direction, scribbling notes on a pad as she went. Towards the rear port side she thought she could

hear something oddly mechanical, making its way from far off through the dense medium of the contaminated surface water. She adjusted her filters and tried to pin it down, but it eluded her. It may have been the distant thrum of a motor, but it also could just be pieces of garbage grinding against each other. The sea was so full of signals and reflections that it was impossible to be sure what was real and what was just a acoustic mirage.

Throughout the day they slowly proceeded through the refuse gyre. Their active-sonar pings spread out and lit up their surroundings for Cassandra. She continually faced her own doubts: about her ability to detect objects in the water, about the directional guidance she was suggesting to Hemi and Percy, and about that occasional far-off machine noise that suggested the possibility to her that they might not be alone in the garbage patch. But every time her doubts came up, Hemi asked her to set off another active-sonar ping, and each of those pings would come back with such a concrete depiction of the water around them that her doubts would melt away along with the fading sound of the ping.

By the end of the day, Cassandra's confidence was rapidly growing. Sonar was becoming second-nature to her. She would close her eyes, and her mind would travel out into the water. It would be all blackness at first, but she would relax and open her mouth slightly to minimize the sound of her own breathing. Her heart rate would slow. Her mind would go out searching in the water. Without opening her eyes she could turn the directional wheel, and she found her mind could follow the direction as if she were seeing out through the microphones. She no longer need to look at the directional indicator to know whether the mics were oriented to the front, sides or rear of the boat, she just *knew*. The black pitch of the deep sea fell away, and in her mind it would all light up around her with a midday brightness that was entirely contained within her small skull.

With confidence came a love of her job, and the long shift that Percy was currently asking her to do without breaks seemed like less of a burden than it had at first. She found time passed rapidly when her mind was out there in the sea of sound.

By the clock, it was just after dark when Captain Percy suggested they might want to move up to periscope depth and have a look around at the garbage patch. The *Prospect's* batteries were about half discharged and if it was safe to run on the surface, they could run the diesels and recharge the batteries as usual. She asked Cassandra to have one last listen before she started raising the boat. Percy shut down the motors entirely so Cassandra could hear as far as possible.

In this complete silence Cassandra swung the sonar mics slowly around 360 degrees, listening to the sounds of the ocean in every direction. Into this complete silence that soft far-off motorized sound came again as the mics came around the rear of the boat.

Suddenly all her doubts came flooding back, and Cassandra felt her ears go warm inside the headphones. She instinctively *knew* that motor off in the water was the sub with the ram, still behind them, still pursuing; perhaps never having left. She also knew instantly that she should have known it was the sub with the ram when she heard the first faint wavering contact hours ago in the early part of the day. She realized she had made a mistake, potentially a large one, and that made her afraid to say anything.

She listened to the sound for a few minutes, only just barely easing the directional wheel back and forth across the signal, trying to lock in on the strongest bearing for the signal. It was only when Hemi put his heavy hand on her shoulder that she realized that he had been standing behind her watching. Even without hearing he was capable of reading the gauges and knowing she



was on something. Cassandra looked up at him. She wrestled down her fear about the mistake she had made.

She slipped a headphone off one ear. “Something’s there Hemi.”

“It does look like it, does it not?” He said. “Let me listen.” He picked up the second headset and adjusted the volume. He paused for a second, the flipped a couple of filters on and listened again.

“That’s them, isn’t it Hemi?” Cassandra asked. “I . . . I think I heard them earlier.”

Hemi nodded as he patted Cassandra’s shoulder again. “Sylvia!” He bellowed upwards as he stepped backwards, stretching out the wire of the headset. He looked up through the hatch to the control room.

Percy was squatting on her haunches, her face a meter above Hemi’s. “What the fuck is it this time?”

“The sub with the ram. . . it is back again.”

“Sweet motherfucking fuck! How fucking far away are they?”

“The contact is faint and far off. That is why Cassandra did not hear them before.” His eye caught Cassandra’s grateful face. “They are far enough away that the active ping is not returning a distance to them — or at least the active unit can not sort it out from all the other refuse in the water.”

“But the pinging we’ve been doing has probably been leading them along through this garbage patch I fuckin’ mistakenly believed would provide us cover — like fucking breadcrumbs through some fucking black forest. I know I’ve said it before, but I can’t fucking *believe* that fucking *ugly* fucking boat is *still* after us!”

“*Round Good Hope, and round the Horn, and round perdition’s flames. . .*” Hemi said quietly to himself.

But Percy heard him quite clearly. “Oh, so the *Prospect* is the fucking white whale now?”

He looked up at her. “You must admit, there is almost a kind of classic literary insanity to his actions.”

“You stifle that fucking tendency of yours toward layered meanings expressed through overwritten symbolism right now Hemi. The Ocean is plenty fucking dramatic enough without having to spread some kind of pretentious icing of bullshit modern literary sludge on top of it. . . . Alright, are they gaining on us? How long before we have to start worrying about them putting a torpedo in the water?”

“No way to tell just yet. They likely have the same difficulty as us — moving fast through the surface garbage puts them at risk of hitting something.”

“On the other hand, they have a giant fucking ram mounted to the front of their fucking ugly-ass sub. Perhaps they have no fucking fear at all of plowing through all this heavy shit. With that in mind — we run like the fearful fucking bitch-offspring we are. We remain submerged! Bastian, 7 knots. Fuck! No, wait. Owen — first go find fucking Shakes and get that leaching boat of his detached from my *Prospect*.”

20 minutes later there was a clunk from the depths of the *Prospect* as the *Gnat* detached. Bastian eased the throttle forward slightly and the *Prospect* responded with an increased hum. The difference in speed was not significant, and most of the crew did not detect their increased velocity through the water.

But Percy could. To her it felt like her boat was now tearing through the deep, and the terror of what may be hanging down from the surface directly in the path of her boat made her break out in a cold sweat that did not evaporate in the damp cool air of the control room.

For the first half of the night, they kept up the active pings. Percy traded the assurance of a clear path for the fear that each ping almost certainly allowed the sub with the ram to continue to track them.

As the night wore on though, Hemi and Cassandra's careful measurements of the strength of the sub with the ram's sonar signal suggested the *Prospect* was not going to sneak away while the pinging was going on. In fact, it seemed they might be losing ground.

The hours droned by with unvarying regularity. Hemi and Cassandra felt their minds softening with the persistence of the white noise in their headsets. While Percy desperately needed her crew, she also could not have them making bad decisions from lack of sleep. So after midnight she insisted that Hemi and Bastian hit the rack, with Cassandra and Owen scheduled for a few hours rack time later in the night. She had no intention of sleeping herself.

When Percy inspected the page on the clipboard next to Cassandra's sonar unit she found it was rapidly filling up with notations describing the objects the active sonar was reflecting back, and the signal strength of the sub with the ram. Percy willed the *Prospect* on, trying desperately to get the numbers to add up to some more distance between herself and that dogged signal out there in the water. But the numbers eased ever closer together, and she knew it was only a matter of time before the sub with the ram would be in torpedo range. That sub's commander must have known it too, because he did not increase speed, preferring to slowly reel his target in with minimal risk to his own boat. Given how quickly he had jumped to taking risks to gain an upper hand on the *Prospect* in the past, the patience the sub with the ram's commander was currently showing telegraphed to Percy an unnerving amount of confidence he had in the coming demise of her boat.

When Captain Percy came down to the sonar compartment in the middle of the night to check on the contacts, Cassandra showed her that the list of signal strengths had steadily increased with the closing of their pursuers. Percy broke out in another cold sweat — this time from the fear of the torpedo that she now realized could be released at any second. The sub with the ram was now rendering clearly on the active sonar readouts — it had crept within 10 nautical miles.

Almost regretting it as she said it, Percy asked Cassandra to lay off the active pings and use only passive sonar to track objects in the water. It would be challenging given the density of objects in the fouled water they were moving through, but at 7 knots the *Prospect* was putting out just enough noise that a good sonar operator should be able to see clearly the surrounding seascape for miles in every direction. Hemi's faith in Cassandra's natural skills was rubbing off on Percy.

With the active sonar off, Cassandra soon reported that the sub with the ram had slowed and was losing some distance. Captain Percy knew exactly what the cause of that was — they had to run slowly and more silently to hear the *Prospect's* engine noise now. Discontinuing the active sonar pings felt like the right move to Percy.

For the next two hours Cassandra bleakly focused on listening to the sonar contacts and shouting potential hazards she heard in the water up to the control room. Owen and Percy were required to constantly make adjustments to their course to avoid one large object or another that rang out in Cassandra's earpieces. But she could not hear the smaller objects, and every so often one would bump threateningly against the hull, loud enough for them all to hear it regardless of which part of the ship had been struck. Every time this happened Percy shouted a string of curses down to Cassandra, and every time it happened the oaths were fiercer and lasted longer.

By the time Hemi arrived back in the sonar compartment from his rack, Cassandra was clearly frayed. He consulted with her briefly to get caught up. He realized he would need to relieve Cassandra and let her get some rest. But first he wanted to check in with Percy, so he climbed up to the control room.

While he was on the ladder, the crunching sound of an impact — a recapitulation of the sound they all heard the first time the sub had rammed them — shook the *Prospect* bow to stern.

“Owen! Reduce speed to 2 knots!” Percy shouted almost instinctively. As the boat slowed, Percy’s next thought was that they had in fact been rammed again — that Cassandra had not heard the sub with the ram charging at them. “Cassandra you little shit! You let them hit us!”

“No Captain Percy!” Cassandra wailed with the deep-grained panic of someone who knows they had made a mistake, “it definitely wasn’t them! They’re still miles and miles off.”

Percy looked down at Hemi, who still clung to the ladder, his huge stone form held by tense-hard muscles. “Hemi, you get that little fucking whore off my sonar immediately and tell me what the fuck is going on with my boat!”

Hemi slowly lowered himself to the deck of the sonar compartment, and nodded to Cassandra. She stood, wobbly on her feet, and handed him the sonar headset. Hemi looked towards the hatch that led to the crew quarters and Cassandra followed his eyes, first with her own eyes and then her whole body. She disappeared silently below decks.

Hemi put the sonar headset on and listened closely for a minute. “It was just a derelict... Cassandra was right, the pursuing sub is still close to 10 miles behind us.”

“She still fucked us Hemi. A competent operator would have fucking heard that derelict coming on.”

“She was just tired Sylvia. She had been at the sonar station for nearly 20 hours. You or I could have made the same mistake in that condition.”

“I can’t use her in critical fucking situations, Hemi. It’s too fucking risky.”

Hemi did not reply.

Bastian was climbing up through the hatch into the sonar compartment when Owen reported to Percy that the *Prospect* was losing buoyancy in the bow again. Percy had already known it through the feeling of the angle of the deck against her feet, but the thought had yet to register itself in the conscious part of her mind.

Percy looked down and saw Bastian standing at the foot of the ladder up to the control room. “Bastian, get up here. Owen, before you hit the rack, go down to the fucking cargo hold and check on our welded split in the pressure hull — fucking money is that it has opened up again with that last little tussle.”

A few minutes later Owen’s voice came crackling over the PA radio in the control room. “Fuck Captain Percy, you’re right. Those welds are failing. There’s already about a fucking foot of water in the bilge.”

“Fuck me!” Said Percy. She leaned over the trim control panel and flipped on the forward bilge pumps and slid the power controllers up to maximum. As the bilges ramped up, the higher-pitched hum of their small but powerful electric motors passed through the hull and lay down on top of the bass hum of the main drive motors. Bastian looked up at Percy with a doubtful look, but didn’t express his doubt verbally.

“Sylvia,” Hemi’s voice floated up from below, “whatever hope we have of the sub with the ram not tracking us is gone if you are going to run the bilge pumps.”

“Well, we’re not going to fuck around with sinking again Hemi. I’ve had too many fucking close calls with getting sucked down the hole recently. We’ll just have to figure out some other fucking tactic.”

For the next few hours Hemi carefully tracked the pursuing sub on sonar. He grew ever more sure that they were back on the *Prospect*’s track and were gaining ground once again. Percy nervously watched the battery gauges as the needles dipped slowly down into the areas marked with red cross-hatching. The relatively fast speed they had kept up now combined with the added draw of the bilge pumps to leave them with terrifyingly little battery power.

Captain Percy had run out of ideas though. She just let the *Prospect* run, leaning her weight from an overhead strap while she smoked. Hemi continued directing Bastian to make occasional adjustments to steer clear of dangerous objects in the water.

It was just starting to seem to Percy that perhaps there were fewer calls up from Hemi for course adjustments when the needles on the battery gauges suddenly dipped down into the solid red zone and then fell onto their zero needles, flat and lifeless. The sound of the electric drive motors died away with them. And just a second after that the higher pitched whine of the forward bilge pumps died away too.

The *Prospect* sat dead in the water.

Bastian nervously reached up and tapped the battery gauge, a smoking cigarette propped between two long fingers on a shaking hand.

“Hemi!” Percy called down. “We’ve completely run the fucking batteries down!”

Hemi removed the sonar headset and stood at the foot of the ladder to the control room. “What do you want to do now?”

“I’m fucking asking you: what the fuck can we do? All we’ve got is hotel power! . . . And We’re going to fucking sink if we don’t have power to run those forward bilges. Give me options!”

“You could flip over the main power to draw from the emergency hotel batteries — but with the bilge motors running, they’ll deplete those batteries in a matter of an hour or so.”

“No.” Said Percy. “That leaves us with no maneuvering. Give me another option.”

“We could surface of course. Though we will never lose them running diesels, and it is almost daylight now.” Said Hemi.

“Of this I am fucking aware. But I think that’s what we’re fucking doing because at least we’ll be fucking moving. How much garbage is on the surface?”

“There is still a fair amount of coverage, though I do believe we have passed through the densest mass of the garbage patch now.”

“And how far behind are our fucking malformed pursuers?”

“Fewer than 10 nautical miles.”

“Shit. Ah fucking well. Up we go boys! Hemi, want to let some air into the main ballast?”

A few minutes later a loud hiss pushed through the boat as Hemi opened up the compressed air into the main ballast tanks. The *Prospect* rose slowly up until it bobbed with its deck awash at the surface.



Percy popped the hatch and climbed up to the bridge under a still-dark sky that was just beginning to lighten in the east. The oily water was still black around them and bits of floating refuse and wood lay across the deck and in the water, but there were distinctly fewer of the large shadowed ship hulls in the dimly visible sea around about.

In the pre-dawn light Percy scanned around with a pair of binoculars, and not seeing anything of note on the first pass, she circled around the horizon a second time. There was nothing out there to see except the gray gradient field of the sky meeting the black field of the water.

She called below and a minute later came the familiar whine of the compressed air turning over the diesels. The engines fired and a chugging black smoke rose from the top of the sail behind her. She could almost feel the power flooding back into all the systems of her boat that depended on it as the big diesels spun their turbines.

The *Prospect* picked up speed and the low-pressure air system soon had pumped enough gas into the ballast tanks to fully surface the boat, stranding big chunks of refuse on the now-dry deck.

Percy put Bastian in the lookout ring and had Hemi take over at the controls of the boat. She piloted herself, constantly scanning ahead of them, and sometimes yelling a small course correction down to Hemi.

In half an hour the eastern sky they moved towards had lightened but the western sky behind them still pursued them with a dense blackness. With no crew to listen to sonar, they had no chance of hearing the torpedo that slipped into the water behind them. They did not know it was there until the percussive sound of an explosion caught Percy and Bastian in the back of their heads. They spun around to find the source and a glowing ball of orange

was lifting slowly up from the surface a few miles behind them, a central point of sparkling and glowing orange light that reflected the oily sheen and the shadowed chunks of refuse back at them.

“Fuck.” Said Bastian quietly.

“What was that?” Hemi called up from the control room.

“They put a fucking torpedo in the water after us!” Percy shouted in response. “Looks like it hit one of the derelicts.”

“This is not going to work Sylvia. They are just going to get closer and try again.” Said Hemi.

“I fucking know!” She lit a cigarillo and sucked at it for a long time, the lingering petroleum smell in the air blending with the harsh tobacco smoke as it made its way into her lungs. “OK. Fuck. Bastian, keep watching.”

Percy climbed down to the control room, and flipped off the diesels, had Hemi throttle the boat back to zero, and powered down the bilge pumps.

“To take a chance on firing from that distance, they were counting on the fact that we were making so much noise. We just got fucking lucky that there was a big steel target between us and them for the torpedo to find.”

She pulled on her cigarillo and stared blankly for a minute.

“Without the bilges we will not remain long on the surface.” Hemi broke her reverie to remind her of the other impending danger they faced.

“Go wake up Owen and sic him on welding the fuckin’ seam back together again. We’ll risk taking on water until he gets the leaking slowed. Are we still in touch with Shakes?”

“He checked in over the ship-to-ship maybe ten minutes ago. He should still be in range.” Hemi said as he was climbing down the ladder.

Percy pulled down the ship-to-ship mic. “Captain Shakes, are you still out there?”

“Captain Percy.” Shakes voice came crackling back. “Nice to hear from you. I heard that fuckin’ explosion and I thought for a second you were on your way down the fucking hole.”

“They put a fuckin’ torpedo in the water, but all they got was one of the derelicts. Listen, we’re going to make like a derelict ourselves and shut everything down over here. I need you to try to confuse the situation, or they’ll just fucking come right to the point where they last heard us. Make some noise, would ya?”

“That’s what I fucking do best these days.” Said Shakes. “I’ll totally throw some fucking chaos and confusion into the situation. Right?”

“Fuck right. Out.”

A minute later the *Gnat’s* engine started and Percy could hear it without aid through the hull of the *Prospect* though it was a quarter mile in the distance.

Hemi returned and reported that he successfully got a stumbling and groggy Owen headed down to the cargo hold to seek out the welding gear. Percy put Hemi on sonar with a mandate to give detailed reports on the sub with the ram’s location — as soon as the *Gnat* had moved far enough off to be able to hear anything.

Percy spent the next few hours in the control room sitting in the dive planes control chair and smoking one cigarillo lit off another as the cargo hold once again took in sea water and the bow of her boat slipped slowly further down into the water.

Hemi would call up a report from sonar every ten minutes or so. The first hour passed quickly with Hemi's reports describing their pursuer's continued movement towards them. But Shakes' slow, noisy run off to the southeast seemed to have worked, and the sub with the ram adjusted its course to follow him. They were moving steadily away from the *Prospect's* location.

At least at first. But in another hour, Hemi's reports made it clear that their pursuers were now familiar with the tactic of using the *Gnat* to draw them off. The sub with the ram gave up the chase to the southeast and started to move in large slowly-searching circles. They returned to using active sonar. The pings once again loudly echoing through the hull of the *Prospect* every ten minutes or so, penetrating through the consciousness of every crew member.

By the third hour, the fear of being found started to convert into a somewhat safer feeling that came with the monotony. It was clear that the active sonar pinging was not helping the pursuing sub sort through the mass of contacts that echoed back to find the *Prospect*. The sub with the ram gave no signal that it would leave off its diligent search, but Percy began to feel more and more confident that unless they were spotted visually, the *Prospect* could continue to play the part of the proverbial needle while the sub with the ram dug through the haystack.

After hours alone in the empty cargo hold standing in reeking bilge water, Owen finally put his dripping and stinking head into the control room to report to Percy that he had successfully stanchied the substantial part of the leaking. She reached over and patted his head, and then wiped her palm on her pants. By now the bow of the *Prospect* leaned down about 5 degrees. She opened a couple of valves on the trim tank control panel and let water flow into the rear trim tanks. The stern sank slowly down until the boat was level. This left the *Prospect* at a depth where the deck was under water, but most of the sail was still

dry. Percy figured floating the boat slightly deeper could only enhance the perception that it was another derelict.

Long hours of this stagnant situation turned into even longer hours. While Captain Percy believed that the most important quality in a submariner was the ability to put patience above all else, she also knew that not taking action was a kind of action. In many cases the right move for a submarine was to simply hide and wait. It was the thing a submarine was best at — and in this world of discreet shipping this was the reason so much cargo now crawled across the face of the globe underwater. But the success of using hiding as a technique obviously depended entirely on having a reasonable chance of not being found. Percy's intuition told her that while they were safe for the moment, it was only a matter of time before their chances of not being found decreased to virtually nothing. She was confident the commander of the sub with the ram would intuit the same conclusion.



## Chapter 8

Around mid-afternoon Hemi joined Percy on the bridge of the sail. Bastian had been sent off for much-needed rest, and Owen was temporarily covering sonar for Hemi, who needed a break to clear his mind after the endless streams of noise. Hemi would have asked Cassandra to cover for him, but there was no way to know how Percy would react if she found Cassandra back at the sonar station.

Percy was squinting into binoculars as she scanned around the horizon. She was unused to the brightness of the ocean under high daylight.

She heard Hemi's heavy step up off the ladder onto the bridge, but she did not look away from the horizon while she spoke to him. "We have to make a move. The surface is an unnatural place for a submarine to hide. They are going to fucking find us eventually."

"Having charted their search pattern, I agree. They are following an extremely systematic course, and that suggests to me that sub commander has high confidence that he will find us eventually. And is willing to take the time to do it."

"We need to end this. We can't fucking run and hide forever. That fucker might be under the delusion he's fighting a fucking entrenched battle, and will go on fighting with all the deep-pocketed resources of an Authority. But we have got to get back to work. We have no fucking margin that covers operating in

these conditions where were constantly some kind of fucked-up prey.”

“I have had the same thought. And I have an idea we could try — though I warn you it is extremely unlikely to work.”

At this, Percy lowered the lenses and looked at him. “You have another option and you have been fuckin’ holding out on me?”

“*Extremely* unlikely to work — and likely to get us killed.” He took a breath. “The magnetic warheads... I let a couple of crates slip off the palettes when they were being unloaded in Stilt City. So I have a few dozen warheads still stashed down in our cargo hold.”

“You want to try to hit them with one of those fuckin’ explosives?”

“They are the only weapon we have.”

“Indeed. But how do you deliver a fucking warhead to the sub? They are just *part* of a weapon, as Trinity mentioned a number of times. We can’t just underhand one over the water at them.”

“That is the part of my idea that might get us killed — I propose we use the *Gnat*.”

“I don’t think Shakes is going to appreciate you turning his boat into a fuckin’ torpedo. As small and shittily made as it is.”

Hemi proceeded to lay out a plan for her that, though likely to end with the destruction of the *Gnat*, did at least not intentionally involve blowing the *Gnat* up. It did, however, use the *Prospect* as bait. It took some convincing on Hemi’s part for Percy to fully come around to supporting the idea.

“OK. We’re going to fucking try your insane plan to take out a military submarine with nothing but leftover parts hanging



around my darling *Prospect*. Go ahead and get Shakes on the pigeon.”

“You mean Herschel.”

“I don’t care what the fuckin’ bird’s name is. Just make sure Shakes heads back here as silently as fuckin’ possible.”

Hemi got Herschel off with a note to Shakes attached to the bird’s leg containing instructions to return to the *Prospect* submerged and running slowly on battery power. It was going to take a while for Herschel to find Shakes, and then a while longer for Shakes to motor quietly back. Hemi figured he had a couple of hours at least to gather the things he needed.

The magnetic warheads were in the crates he had left in the cargo hold. He selected a half dozen of the ones that were least coated with rust and hauled them to a work table in the engine room. Each weighed about 25 kilograms and consisted of a cylinder containing high explosives that was about 300 millimeters in diameter. Attached to one end of the cylinder was a small-diameter device with the switching mechanism in it, and on top of that was a big plate with a magnet that was strong enough to activate the switching mechanism, but weak enough that it was not likely to actually adhere itself to the target. The magnet was intended to be a trigger, not an attaching component.

The devices were designed to be as simple as possible, with the idea that while a complex device could have more safety features, a simpler device would enable any idiotic naval deckhand to understand how it worked, and thus handle it safely. Details were printed right on the side of the explosives cylinder.

It was from this block of text that Hemi learned the particular mix of high explosives the cylinder contained was held very stable by a cake of exoskeletons from extinct microscopic sea creatures. It could not be exploded without providing power to the detonation

switch and closing the arming circuit. At the same time, the explosive did not seem so finicky that it would not go off in the close presence of another high explosive. A fortunate thing, because Hemi estimated he needed to chain at least two of these devices for detonation if he wanted to blow a hole through the pressure hull of a military submarine.

He used large steel straps to join two of the cylinders together, orienting them so the magnetic trigger plates faced outwards on both ends. He tracked down some batteries and wired them in as the power supplies for the triggers. From a forgotten storage compartment for parts in the engine room he found a pile of old mechanical timed switches that could be wound up and the timer set for when they would close the circuit. He wired these into the arming circuit on each warhead.

He made three more units like this. With two magnetic warhead strapped together, each weighed more than 50 kilograms. Then he plundered the many storage compartments throughout the boat looking for the rest of the parts he needed: some old boat bumpers, heavy line, air hoses and chucks, and his slide rule and clipboard. He wished he had some small clamps, but those were not to be found anywhere. He would have to make do with screw-tightened steel clips. So a screwdriver went on his list of things to find too.

He had most of the parts he needed gathered together when he heard the bump of the *Gnat* attaching to the bottom of the *Prospect*. By the time Percy's voice came over the PA a few minutes later to let him know Shakes was aboard, Hemi had recruited Owen to help him move all the parts he had gathered down to the *Prospect's* battery compartment near the hatch that opened down to the *Gnat*.

As Owen opened the hatch to see Shakes' greasy-haired visage grinning up at them, Percy's voice came back on the *Prospect's*

PA. "Hemi, Bastian is telling me that he is tracking the sub with the ram closing on us. He thinks they picked up the *Gnat* and followed Shakes in."

Still down in the *Gnat's* control seat, Shakes could hear the PA message. "Tell Percy there's no fuckin' way man — I was ultra fucking slow and quiet on my approach. I could have passed through a sleeping baby's bedroom without fuckin' waking it."

"They were pinging constantly." Hemi replied, leaning over the hatch down to the *Gnat* to accept the small package of feathers, feet, and beak that Shakes was holding up to him. "They may have simply caught you in motion and followed the only moving object in the water. It cannot be helped now. Here Owen, stow Herschel somewhere safe, and then help me get these parts down to the *Gnat*."

"What's the fuckin' plan?" Shakes asked as he accepted some filthy old boat bumpers down through the hatch and tossed them backward into the cargo space behind him.

"I am coming with you. If the sub with the ram is coming in, we need to get the *Gnat* off as quickly as possible. I will explain the plan on the way." Said Hemi.

Hemi had Shakes swap places with him, and standing down in the *Gnat* received the heavy explosive units that a straining Owen and Shakes lowered down to him. After that it was only a matter of minutes to pass down all the odds and ends into the smaller boat.

When it looked like everything was aboard, Shakes climbed down and joined Hemi in the *Gnat*.

"I hope you didn't fuckin' forget anything." Shakes said, looking at the pile of what appeared to be just garbage in the middle of his boat's cargo space.

"If we need anything else, I am sure the copious bounty of the *Gnat's* hold will provide." Hemi replied.

Shakes grinned.

"If y'all have everything, I'm going to seal these fuckin' hatches." Owen called down from the *Prospect*.

Hemi shuffled his big body forward in the cramped space and looked up at Owen. Owen reached out his still-boyish hand and Hemi lifted one meaty mitt to meet it. Shakes watched them shake.

"Don't fuckin' die down there Captain Shakes." Owen said, angling his head so his voice reached back to where Shakes was standing.

"If I do, take care of fuckin' Herschel!" Shakes called back as Owen seated and sealed the *Gnat's* hatch.

Shakes shimmied forward and slithered into the *Gnat's* control seat. He unclipped one of the bigger wrenches from his hip and gave the hatch above his head a ringing double-tap to let Owen know they were about to disconnect. As his hand with the wrench came down, he put out a finger and snapped open the switch that made the circuit to the docking clamps. It was immediately followed by a low thump from the outside of the *Gnat's* hull.

Hemi was still wedged into the small space next to the control chair. "If you're going to take up that space there big guy, would you mind workin' the fuckin' trim?" Shakes asked. "Give us a little flood."

Shakes had left the *Gnat* a little over-buoyant while it was attached to the *Prospect*, so even with the docking clamps disengaged the boat's mating collar was still pressed firmly against the *Prospect's*. Hemi twisted open a valve and they could hear water pouring into the *Gnat*. It was only seconds later that the boat

dropped a meter or two. Shakes gave the electric motor some throttle and most of the dials in front of the two men suddenly came to life with their little fingers of fate wagging at them.

"*Gnat, Gnat*. You boys fuckin' listening?" Captain Percy's voice lit up the ship-to-ship radio.

Hemi closed the trim tank valves and picked up the ship-to-ship mic from where it hung in front of Shakes. "We have you Sylvia."

"I couldn't let you two shitheads just go off and try this dumb-ass fuckin' idea of yours without a proper send-off Hemi."

"Uh, Hemi," Shakes put in, "when are you going to fill me in on the fuckin' details of your little plan here? I'm not so sure I'm likin' the fuckin' vibe I'm gettin' from the rest of yer fuckin' crew."

Percy's voice came back over the ship-to-ship. "How does your inhumanly calculating mind put the odds that this plan will fuckin' actually work?"

Hemi held up a finger to Shakes. "Frankly, I give it about 1 chance in 5." Hemi said into the mic.

"And what are the chances that you will blow up either the *Gnat* or the *Prospect* or both?" Asked Captain Percy.

"At least one of the two boats? I would say 1 chance in 4."

"One in fuckin' four?!" Shouted Shakes.

"But I also think it is very likely that one way or another the plan will bring this pursuit to an end." Hemi continued, still talking to the *Prospect*.

"Counting blowing us up as one way the pursuit could end?" Asked Percy.

“That is right.” Hemi paused for a second before continuing. “I would like to also point out that this plan has a better chance of succeeding if you put Cassandra on sonar again.”

“No fucking way Hemi. I’ll grant you that she has learned fast enough to be perfectly capable of doing the sittin’ sonar watch job I hired her for — I first to see her fuckin’ potential you know — but in this situation where we live or die depending on what the sonar operator hears... nope. That little fucking shit stays in her rack.”

“Have you not noticed that with me on the *Gnat* you are down yet another crew member? You are running a full-sized 100 meter cargo sub with a crew of four — and that is including Cassandra. During the wars a boat the size of the *Prospect* would have had a crew of 70.”

“I’ll put Bastian on sonar. It will be fucking fine.”

“You need Bastian to run the trim tanks and Owen to steer the boat. You need to keep yourself free to think about tactics — tactics are what will make this plan successful, or not.” Hemi paused. “Besides, Cassandra can do this.”

There was silence from the radio for a minute. Then: “alright Hemi. It’s your fuckin’ plan, I fuckin’ defer to you. I’ll put her back on sonar. If she kills us all, just know my last thought will be that you were fucking wrong.”

“I can die with that.”

“Seriously. Do your fuckin’ best *not* to die if you fuckin’ please. Out.”

Hemi hung the mic back on the hook.

“Bring us up to the surface.” Said Hemi when Shakes looked at him doubtfully. “The first thing we have to do is try to confuse

that sub with the ram into following the *Gnat*, even if for just a short while. We are not ready to use the *Prospect* for bait... yet."

"The *Prospect* is going to be the fuckin' bait for the sub with the ram? What kind of fuckin' plan is that?"

"Bear with me. We need to get the *Gnat* into position, and I need to prepare some things. Then we will go over the plan."

"OK. To the surface and running on diesel it is." Shakes gave the *Gnat* a little more throttle while peering through the small viewport in front of him. He turned the steering yoke and drove the *Gnat* silently out from under the *Prospect* for a few hundred meters, then pulled back and the little submarine rose until the bow poked softly through the oily ocean surface.

"We're on the fuckin' surface." Shakes turned around in the pilot's seat to talk to Hemi who had moved rearward to sort gear in the hold. "Can you switch the drive from the electric motor to the fuckin' diesel? The levers are just fuckin' back there behind the engine."

Hemi squeezed past the diesel engine that took up most of the interior deck-space in the rear third of the submarine. There he found a series of levers that stuck up from the deck. He had to take a minute to read the hand-written labels, but it rapidly made sense to his mechanically-inclined mind. The system had a clutch so switching between the power sources to the propeller could be made without stopping the boat. Hemi threw out the clutch lever, moved the selection lever over to the diesel, and let the clutch back in.

"OK, looks like it should be on diesel drive now." Hemi called forward.

“Fuckin’ sweet. There’s a starter button for the diesel just above the levers, can you press and hold that until the diesel fires?”

Hemi pressed the large slick rubber-coated button down with the fat part of his thumb, and the diesel engine in front of him made a few reluctant whines as it turned and the glow plugs warmed up.

But before the engine fired, Shakes interrupted him. “Wait! Hemi, fuckin’ wait!” Shakes yelled back from the pilot’s seat.

Hemi let his thumb off the starter button and the whine died slowly away.

Shakes joined him a second later. “I almost fuckin’ forgot! After the diesel starts I won’t be able to hear a fucking thing up there. Here. . .” Shakes unclipped the largest of the crescent wrenches from his belt and handed it to Hemi. “If you need to get my attention with the engine running, whack that against some metal part of the boat.”

Hemi nodded as Shakes grinned at him and slammed his thumb down on the starter.

Hemi knew it would be loud. But he was not prepared for the sheer penetrating amplitude of the voluminous engine that had no muffler to speak of. It rolled and roared its way to life and the pressure of the sound swamped the entire interior of the small craft from bow to stern.

Being direct drive, unlike the *Prospect*, the *Gnat*’s engine also shook the boat a lot more. Also unlike the *Prospect*, the *Gnat*’s diesel changed pitch and volume as the boat gained speed and the engine had to work harder. Shakes pushed the throttle forward and the already all-consuming sound grew, clawing its way into the deepest folds of Hemi’s tweed clothing until the bass notes vibrated his clothes against his skin, resonated in the huge void



of his chest, and shook every last tiny screw holding the *Gnat* together.

Hemi squeezed himself into the small space next to the pilot's seat where Shakes was guiding the boat. In that space he could reach the sonar controls, which Shakes had set up close enough to the pilot's seat that normally he would work the sonar himself while driving the boat. With Hemi aboard he was happy to let Hemi keep an eye on the sonar.

Hemi did not even bother with the headset. There was no way they would hear anything on passive sonar above the raucous engine noise of the *Gnat's* diesel. But he punched the active sonar ping button and it was loud enough to get a response. The sonar sweep laid out a speckled ground plan of contacts in the 10 nautical miles or so around the *Gnat*. Hemi waited 5 minutes and then fired off another ping. Only one dot had changed position, and that was the sub with the ram. It had moved from its intercept course with the *Prospect* and swung around to follow the engine noise of the *Gnat*.

A few minutes later Hemi let go one more ping just to be sure the sub with the ram was still following the *Gnat*, which it was. Then he powered down the sonar unit. Any further pings would run the risk of giving away the position of the *Prospect* to the sub with the ram after Captain Percy started maneuvering her boat. For the time being, with the *Gnat's* engine overwhelming everything else in the water, Hemi would have to just guess what the status of the other boats was.

Hemi caught Shake's eye and pointed up to the hatch. Shakes nodded, and squeezed off the other side of the pilot's seat. Hemi passed through the space of the vacated pilot's chair to climb up and open the hatch above. He stepped out into the shallow stream that washed over the deck of the *Gnat*.

The surface was mostly calm with little breeze under a bright gray sky. With the hatch now open, Shakes piloted the boat standing, with his head up out of the sail, keep a fierce eye ahead for large pieces of debris or sunken hulks. Hemi shaded his eyes and scanned the horizon behind them. They had only made a few miles from the *Prospect*, and Hemi could still see its gray sail rolling slowly from side to side, outlined dimly against the gray sky. But it was just one of a half dozen other large inert masses bobbing on the ocean surface within eyesight, not to mention the hundreds of smaller bits slowly churning through the scummy black water and occasionally clacking against each other.

Hemi sat on the *Gnat's* low sail, just astern the open hatch and in front of the diesel exhaust that blew away abaft in a long stream of airborne crud. Shakes reached down into the sail and withdrew a pair of binoculars which he handed to Hemi.

Hemi could see nothing moving under power on the surface besides themselves, which meant the sub with the ram was probably operating submerged. As with everything to do with submarining, this plan of Hemi's would be a series of very long, slow moves interspersed with terrifyingly quick determining actions.

Hemi scanned back and forth across the horizon for 20 minutes or so, and then a small aspect change of the *Prospect's* sail caught his practiced attention. It had stopped swaying, and was now holding itself bolt upright. Hemi focused his binoculars on it, and a few minutes later it sank silently downwards. The viscous black surface closed over it with a sucking sound that Hemi almost imagined he could hear.

At this, Hemi signaled to Shakes to make way so he could climb back down into the bowels of the *Gnat*. He returned to assembling the devices he had been working on. He made careful calculations with his slide ruler, and noted them on his clipboard. Then he connected an air hose to a valve of the *Gnat's* compressed air

system, and blew air into the old boat bumpers he had brought from the *Prospect*. After each bumper was filled, he put a gauge on it and checked the precise pressure inside the bumper. When he was satisfied with the level of inflation, he sealed the bumper shut with a screw-tightened clip, and then lashed it to one of his paired explosive cylinders.

The resulting device was crude, but Hemi trusted the numbers on his clipboard and the fundamental simplicity of the weapons he had created.

Another hour had passed as he worked, and Hemi intuited that it might be time to check on the sub with the ram. He lifted the big crescent wrench and smacked it against the hull of the *Gnat* with all his might. Shakes lowered his head and looked around at the clanging sound that managed to creep across to him just above the racket of the diesel engine, and saw Hemi giving him a “kill it” gesture. Shakes gave Hemi a thumbs up and then throttled back.

The sound of the engine died down enough to give Hemi a tremendous sense of relief. Shakes pointed to the engine kill button on the wall and Hemi thumbed the button. True silence — silence like Hemi had never quite experienced before in all his years on submarines — overtook the small boat.

The silence only lasted a second before Shakes’ suddenly nasally-sounding voice broke in. “What the fuck’re we doin’ now?”

“Take us down. As deep as the *Gnat* can go.”

“OK... then switch us back to the fucking electric motor, man. And now maybe with the quiet back on us, you can fuckin’ fill me in on your apparently suicidal fuckin’ plan.”

“Shortly, Captain Shakes. We must check the sonar first, and I am sure you can appreciate the pragmatism of that order to things.”

Hemi pulled the levers in reverse order to before to disengage the drive from the diesel and re-engage the electric motor. Unlike the diesel the electric motor did not have to be started. Shakes just pushed the throttle forward and the much softer hum of the electric drive motor increased in pitch along with the slight sense of acceleration.

Hemi stepped forward and powered up the passive sonar unit. He lifted the headset from the welded steel peg from which they hung and put it on. He listened to the quiet ocean around them. He could not hear the *Prospect* at all — Percy must be running very slowly. But swinging the mics around he found the sub with the ram easily — a few nautical miles off to the west of the *Gnat*. Even though the pursuing sub had to be much further away than the *Prospect*, and even though they were running submerged on electric motors, the sub with the ram was running fast enough to be easily tracked. They did not care who knew where they were.

It took Hemi about 15 minutes of listening to get a grasp on the situation. The sub with the ram had given up the pursuit of the *Gnat*, probably not long after Shakes and Hemi had started the engines. Hemi assumed they had quickly realized the *Gnat* was once again playing a decoy. But the *Gnat's* run had apparently thrown just enough confusion into the water for the sub with the ram to have lost their bead on the *Prospect*. They had taken up a search pattern again, and Hemi tracked them turning through a multi-mile diameter circle searching for the *Prospect*. They were pinging regularly, so if *Percy* was moving, there was a good chance they would find the *Prospect* soon.

Hemi pulled back one earpiece and turned to Shakes. “There is

not much time. Give us all the speed the *Gnat* has got underwater. We have to get between the sub with the ram and the *Prospect*.”

“Ya, OK Hemi. But... now you absolutely fuckin’ have to tell me what the fuckin’ plan is.”

“Well...” Hemi lowered the headset so it sat around his thick neck and made a wide gesture towards his devices piled up in the *Gnat*’s rear cargo space. “The plan is pretty simple, really. I intend to suspend some of the magnetic warheads I saved from the last shipment in the water column. With some careful calculations, I hope to set them in such a way that the sub with the ram will move into one and set it off, hopefully disabling the submarine.”

“Ah.” Said Shakes. “So it’s just a little fuckin’ matter of flushing one of those bad boys out the escape trunk at precisely the right depth and in the path of that big ugly fucking sub, eh?”

“I can control the depth with the amount of air in these old boat bumpers. I have calculated the pressure needed in the bumpers with enough precision, I believe, so that they should float at precisely 25 meters deep. That should take care of the Z axis, but I need you to navigate us across the path of the sub with the ram.”

“That may not be so fucking easy.”

“I am aware. I will be listening on sonar though. I am confident the *Gnat* is capable of doing the job.”

“Well of course this boat can fuckin’ do it! ... I just never thought I’d be using the *Gnat* to play fuckin’ chicken with a full-sized full-speed foul-looking ram-headed fuckin’ military sub.”

Hemi put the headset earpieces back over his ears and listened closely as he slowly spun the sonar in an arc across the direction

of the bow of the *Gnat*. He slowed when the microphones were pointed a little off the starboard side, and then stopped.

“Sylvia is on the move.” Hemi said quietly.

“Really? Seems fucking stupid with that sub looking for her.”

“That’s the ‘bait’ part of the plan: she will let the sub with the ram find her, and chase her. As soon as she heard us shut down the diesel she ramped the *Prospect* up to something like 10 knots — to make it look like she is trying to make a run for it.”

“They are submerged?”

“Yes. We planned for the *Prospect* to run at about 30 meters down — that way they can move fast with less risk of hitting a derelict. But her batteries are very low. I estimate she can only maintain 10 knots for perhaps 20 minutes, so we have to move quickly to put this plan into action.”

Shakes leaned his hand on the throttle, but it was already pushed all the way to the forward stop. The electric motor whined steadily from behind them, driving the small boat forward with all the force it could muster.

“Come port to 227 degrees.” Said Hemi, with his hand cupped over the earpieces of the headphone, trying to eek out just that marginal amount more sound dampening that might be what he needed to hear some crucial thing out in the water. Shakes leaned the yoke slightly to the left and the boat heeled over in response.

“Down. 30 meters. The sub with the ram has clearly heard the *Prospect’s* run and matched its depth. They are lined up in pursuit a little less than 5 miles behind. We need to intercept their course in the next ten minutes or so, if we possibly can.” Hemi lifted a stopwatch that hung from the same peg the sonar headset was stowed on and clicked it once to reset it to zero. He

counted for a few seconds while listening, and then clicked it a second time to start the stopwatch. He made a note on the clipboard.

"If your plan doesn't fuckin' work, the *Prospect* is fuckin' done for. Honestly, I'm not even sure why those fuckers haven't already fired a fuckin' torpedo."

"There are still a number of derelicts around. A torpedo is a precious thing. At the moment it is still too likely they would hit one of those garbage hulls rather than their target." Hemi looked down at the stopwatch, ticking away loudly and quickly. "I have to get ready. Do not change speed or course."

"Fucking right."

Hemi left the headset behind on its peg, now relying entirely on the stopwatch and the unvarying speed and course of the *Gnat* to know where he was in the water. He gingerly moved toward the stern, stepping over and around the detritus Shakes felt was perfectly reasonable to cast about in his only living space.

He picked up one of the devices, and it was heavy enough that even Hemi struggled a little to lift it. In addition to the sheer weight of the two warheads strapped together, he had to manage the awkward bumpers and lines that managed to tangle themselves repeatedly around the myriad protrusions that all submarines have into their interior spaces.

The escape trunk was located behind the engine and motor, so it took some effort on Hemi's part to pass one of the heavy devices through the narrow space and push it back until it was underneath the thick cylinder of the escape trunk that hung down from above. The escape trunk had a heavy hand-screw sealed hatch on the bottom of the cylinder. Hemi opened the hatch and hefted the device up into the narrow interior space of the escape trunk. He struggled to get it to sit on the narrow ledge

that circled the hatch inside. The ledge was intended to be a foothold for the person who wanted to escape while sealing the hatch from the inside.

It was difficult to get the heavy warhead package to balance on it, but he did manage eventually to arrange it so it no longer tried to tilt back into the empty space over the hatch. Then he piled the excess line on top of the warhead package and stuff the bumpers in. The bumpers were even more of a challenge to position so they would stay up in the escape trunk, but at least they hardly weighed anything and had no chance of exploding if dropped. He finally got the bumpers to stay in the trunk by propping them on the ledge and leaning the two bumpers against each other.

Finally, Hemi reached back up into the escape trunk and wound the mechanical timers that would close the circuit to arm the warheads when the timer reached zero. He set them to a frighteningly-short 5 minutes — hardly enough time for the *Gnat* to drive clear of the amount of explosive the combined warheads packed. But he could not risk the devices being unarmed when the sub with the ram came within range of them.

Time was compressing down on Hemi. The little mechanical timers buzzed away with their sound reverberating around inside the circular steel walls of the escape trunk. The rickety little devices strove desperately to count out their 5 minutes with some precision. Hemi gingerly lowered the escape trunk hatch down and spun the sealing wheel closed, which cut off the quick ticking of the timers and left him in silence.

Hemi looked around the outside of the escape trunk for a control that would flood it. The only promising component was a massive unlabeled lever set into the top of the pressure hull above his head.

“Shakes, how do you flood the escape trunk?”



“Flood? Hemi this ain’t no fucking commercial sub with some kind of specs-mandated flood-and-pump escape trunk for getting a crew of 50 off a boat. The *Gnat* has a normal crew complement of just one, so the escape trunk is a one-time use only. That big ugly lever above your head releases the escape trunk topside hatch which is rigged a giant fucking spring to open it. There’s another lever inside the escape trunk just like it that does the same thing. The hatch opens and the ocean pours in. That’s fucking it.”

“So it cannot be reset underwater then?”

“Hells the fuck no. Fuck, the only reason I even put in an escape trunk was so I could flush out any problematic cargo if I got into a sticky situation with a fuckin’ Authority vessel. That... and I was fuckin’ terrified of being stuck on the bottom of the ocean and unable to open the fuckin’ sail hatch.”

“Alright. It will have to do. Be ready, I will open the escape trunk in another minute or so.”

Hemi held the stopwatch up in front of his eyes and the second hand rapidly screwed itself across the face of the watch. In his head Hemi could see their position in the water, see where the *Prospect* should be off to their port side, and see the sub with the ram — all black and fiercely toothy in the front in a way that was entirely unnatural for a submarine — charging towards Shakes’ rickety little craft from starboard. The boats all moved relative to each other in his head, driven into position by the second hand on the stopwatch. He put his hand up to the heavy iron lever covered with flecks of rust above his head.

The second hand curled around and came up level. In Hemi’s head the boats were all in the exact position. His thick fingers tightened on the lever and then the muscles all the way down his arm to his shoulder tightened — the lever had been resting and rusting peacefully for years.

But it budged, then gave, then swung back. From above his head came a loud clang as the escape trunk hatch snapped open and back against the deck of the *Gnat*. Hemi could almost feel the intense weight of the water under the pressure of 3 atmospheres dropping into the escape trunk almost instantaneously. He put his ear against the trunk. Through the cold damp steel he could hear the gentle bumping as his device lifted up and clear of the trunk.

“The device is away Shakes!” Hemi called forward.

“...Are you sure about that? I’d hate to find out it’s stuck in there and fuckin’ arming itself.”

“I am as sure as I can be. Blow the tanks — the surface is going to be the safest place for us in the next few minutes.”

“Fuckin’ aye Boss.” Shakes reached down and pulled up on the heavy red lever at his feet. The *Gnat*’s compressed air reserves blew past him in the boat’s narrow pipes with a whistling hiss. Water burbled heavily out from the boat’s ballast tanks into the surrounding ocean. The *Gnat* started upwards — slowly for a second — and then a moment later gaining speed. “Hang the fuck on to something Hemi!”

Hemi could feel his stomach dropping and grabbed one of the freezing pipes that ran along the hull next to him. He gripped the pipe with his hard fists, his knuckles whitening through his cracked skin. The pipe was so cold the moisture of his palms froze and his skin stuck to the metal.

Hemi had ridden submarine ballast blows up hundreds of times, but the tiny *Gnat* was a different experience from a big cargo sub like the *Prospect*. In the *Prospect* it was a dramatic but graceful maneuver, with the power and dynamism of a calving glacier. The *Gnat* was another matter entirely. More like a bird of prey diving on a small sparrow. The whole boat shook with the strain

of it, the hull made sounds like it was cracking apart — and it was by no means clear to Hemi that it was not. When the bow popped through the surface a second later, the boat came down hard and Hemi was forced to rip one hand from the pipe and throw it up to keep his head from being driven up into the escape trunk lever.

On the surface, the bow of the boat, which had taken on a dramatic upward angle from the ballast blow, settled slowly ahead of the two men. The *Gnat* leveled out and a sense of calm flowed through the craft. As soon as he was sure the maneuver was complete, Hemi moved rapidly past the engine and pushed in next to the sonar unit. He had the headset on and was tracking the sub with the ram in a few seconds.

Shakes cut the throttle to the motor and caught Hemi's eye. He pointed to the hatch at the top of the sail with a questioning look, and Hemi nodded. Shakes lifted himself up, unscrewed the hatch and sat up on the sail scanning the flat gray water behind the *Gnat*. With little wind there was almost no noise. There was only a stifling silence, broken by nothing except the soft slap of water against the drifting hull. The sea was mottled in places with black oil that reflected back the gray of the sky, making Shakes feel like they were floating in bath of concrete slurry.

Nothing moved as one minute passed under that silent dome of sky, then another. Shakes shaded his eyes against the brightness of the sky and scanned the water between him and the horizon line, looking for any surface manifestation of the movements going on below.

Another minute passed. And then, much closer than Shakes had anticipated, the heavy thud of an underwater explosion broke through the surface, and a plume of water, driven up and forward by explosive momentum shot upwards and dropped a gray oily rain onto the deck of the *Gnat*. The rain passed up in a rapid

squall line from stern to bow, soaking Shakes where he sat on the sail.

“Ha ha! Fuck Hemi! It fuckin’ worked!”

“Hold on.” Hemi’s voice came up darkly from below. “I am tracking the sub on sonar.”

Shakes initial feeling of excitement that such a claptrap device actually worked subsided to be replaced by the more rational thought that detonating the device was one thing, actually damaging the sub with the ram was another. He stared into the water next to the *Gnat* for a moment, and saw a long black shadow — endlessly long and thin, it seemed to him — pass under his boat down there in the depths below.

“The device worked, but I am not hearing any sign that they were damaged.” From where he was standing below, Hemi’s voice did not reveal any sense of disappointment. “They just passed under us, still tracking the *Prospect*.”

“So that’s fucking it? Impenetrable fuckin’ hull?”

“They hit my explosive with their ram, which is probably a very well-reinforced part of the ship.” Hemi hesitated. “We need to figure out how to deliver a charge to a weaker part of the ship.”

“Yeah, and while you are pondering that tiny fuckin’ challenge, they are closing in for a shot on the *Prospect*.”

“Hopefully Captain Percy can manage one close pass by the sub with the ram and give us time to get another device into position. We need to get the *Gnat* back under water.”

“Hang on, don’t forget we need to reset the fuckin’ escape trunk first.”

“How do you pump the water out of the flooded trunk?”

“Pump! Ha. Just open the fuckin’ bottom hatch down there, and let it run into the bilge. Then we’ll turn on the bilge pumps to toss the water off the boat.”

“Elegant.” Hemi slid his big body back past the engine again, and a minute later Shakes saw the water in the escape trunk drop away into the bottom of the *Gnat*.

Shakes stepped out of the sail and leaned over the now empty escape trunk where Hemi’s round, black-bearded face was looking up at him. “Maybe I should rig some kind of pump for the escape trunk.” Shakes said to him. “I actually have to do that emptying maneuver more often than I like. The fucking hatch opens sometimes while diving, just from the fucking stresses on the hull I guess. Fucking pain in my ass.”

“You could just fix the latch to make sure it only opens when it is supposed to.” Hemi said. “When we are done with this project, I can help you with that.”

“You mean if we *live* through this fuckin’ scare-quotes *project*.”

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In the control room of the *Prospect*, Captain Percy heard the detonation of Hemi’s device, stripped of all but the lowest frequencies as the sound passed through miles of water and refracted through her boat’s hull.

“Cassandra!” Percy shouted down to the sonar compartment. “Tell me what they fuck just happened!”

Cassandra nervously fumbled with the directional control wheel for the sonar mics and flipped switches controlling filters on and off. “There was an explosion. . .”

Percy sighed. “I fucking know that Cassandra. Did the explosion hit the sub with the ram by any chance? Are those fuckers sinking right now?”

“I . . . I can’t tell. There’s nothing but silence out there at the moment.”

“Fucking figure it out Cassandra! I’m fuckin’ depending on you here.”

“The explosion definitely came from the pursuing sub — I’d say they hit Hemi’s device. But . . .”

A full minute passed.

“But what Cassandra? I need to know what is fucking happening!”

Cassandra sighed. “I can hear them now. The pursuing sub is still after us. It is definitely not sinking. As far as I can tell, it isn’t even fucking damaged.”

“Fuck me!” Percy spat and lit a cigarillo. “It sounded so fuckin’ good. I thought we’d at least have taken a bit of wind out of their fuckin’ sails.” This she said mostly to herself.

“Captain Percy!” Cassandra was shouting now. “There’s a torpedo in the water! They’ve fired at us!”

“Stay calm Cassandra.” Percy’s kept her voice very even. “This is very important: has the torpedo acquired us? Is it pinging us? If so, we have to dive *now*. And if we dive, this plan is over.”

“I don’t know Captain Percy!”

“Figure it out Cassandra. You know what a pinging torpedo sounds like. Listen until you can see what’s happening in your head. Then tell me what I need to do.”

Cassandra slowly closed the lids over her large eyes. The ear-phones of the sonar pumped sound into her head and her mind passed out of the *Prospect* and into the water. She searched around with it, looking to port, then to starboard behind the *Prospect*, passing over the dead zone where the prop wash made her deaf. She honed in on the torpedo — a high whining electric motor just off their rear port side. She wrapped her head around it, and in her mind she could see the machine — a long, slick steel tube slipping through the water at a speed that was far faster than anything else she'd ever heard. It was coming directly toward her.

It started ping-pong. The round ringing echo of it almost hurt her ears.

“OK Captain Percy.” She said loudly enough for Percy to hear, but kept her voice calm. “It’s ping-pong.”

“That means it’s probably armed. Now tell me if it seems like it is tracking the *Prospect*. Bastian, come port 20 degrees.”

Bastian spun the rudder control wheel and the boat listed slightly over to the left side as it made its turn.

Cassandra did not hear any corresponding change to the torpedo’s direction. “It doesn’t seem to be tracking us Percy — no change to direction.”

“OK, it hasn’t acquired us... yet. What’s the range?”

Cassandra looked at the active sonar rig readout. “1.3 miles.”

“That’s not very much room to play with Cap.” Said Bastian, nervously fingering the throttle control.

“No shit Bastian.”

Bastian lit a cigarette and blew smoke out from one side of his mouth.

Cassandra let her mind slip out into the water again. The frequency of the torpedo's pings had increased. It seemed to Cassandra like the device was gaining confidence, more sure of its target. But what was the target?

Cassandra scanned back and forth in wider arcs around the *Prospect* with the sonar. Then, farther off to their port side, she could hear a hole in the water. A mass that bounced back the torpedo's pings at her, and at the same time a void that sucked in her consciousness until her mind passed around and under it, and she could see the shape clearly in her head.

"Captain Percy! The torpedo is tracking a derelict!" She announced confidently.

"Are you sure?"

"Absolutely. It will hit at any..." In her earpieces the explosion suddenly pierced through her mind, and she yanked the headset off, but she was too slow to save her ears from being swamped with a painful and enduring ringing sound.

A second later the detonation rumbled through the hull of the *Prospect*.

Percy smiled. "Nice fucking work Cassandra! I don't think they will risk another torpedo on us in these waters. They wasted two already, and those fucking things are expensive."

"Great," Owen smirked, "So they'll just go back to trying to fucking ram us."

Percy ignored Owen. "Cassandra, the next task is to find the fucking *Gnat* and figure out what Hemi is doing.

"Right, Captain Percy."

"And don't forget to track those fuckers pursuing us at the same time. What's the range?"



“2.3 nautical miles. And they are increasing speed now.”

“They’re trying to close on us. You might be right Owen.” Percy glanced at the battery gauges. They were moving fast enough at 10 knots that she could almost see the batteries draining. Those gauges had passed into the hatched red zone. They only had a matter of 20 minutes or so of battery remaining. Then they would be forced to remain stationary or surface — either way they would be an easy target for a final ramming.

“Find the *Gnat* Cassandra! Quickly!”

It was not an easy task. While the *Gnat* created an earth-shaking amount of noise while running diesel on the surface, its small size and tiny electric motor made it nearly invisible under water. And even though it was relatively quiet, the noise from the *Prospect*’s electric motors at this speed also drowned out much chance of hearing a target as small as the *Gnat*. The only way it could be done was by carefully filtering the *Prospect*’s motor noise out, and then somehow landing the sonar mics precisely on the bearing of the *Gnat*. Cassandra flipped filters on and off, and adjusted the fine-control dials carefully. Eventually she managed to limit the noise wash from the *Prospect* to a degree that gave her some sense she might be able to hear her way around it.

She scanned and scanned, back and forth. All the way around the bow too, but mostly focusing on the direction behind where she had last heard the little boat moving. Her mind was out there, deep in the water behind her, but there was nothing but darkness there. She felt like she was blind to everything except for her sense of the *Prospect*’s position, and the sub with the ram steadily gaining on them.

Then she heard the faintest rhythmic pumping noise, off to the starboard side. It had to be mechanical, and the *Gnat* was the only other machine in the area. She locked in on it, and tracked it carefully for a minute. “I’ve got them Captain Percy! 30 meters

down, almost directly off our starboard side. About a quarter mile off.”

“Excellent. They might hear us on ship-to-ship.” Percy pulled down the radio mic and called out into the water for Shakes.

“*Prospect!* Captain Shakes here. I fucking read you. Nice to hear you didn’t go down with that last fucking torp.”

“Indeed. Unfortunately Owen here has a theory that now those fuckers are after us for another ramming. Based on the speed they’ve put on, I’m inclined to agree with him. So... what’s the plan now?”

“Aye, fuck. Well Hemi says he still thinks he can take them down. He just needs to deliver one of his devices to a weaker part of their sub than the ram — which is what they detonated the last one with.”

“And how is he going to do that?”

“Fuck if I know. I’m just steering the boat the way the Boss says. Hang on...” A few seconds of static came across the radio, and then Shakes picked up again. “Hemi says you should just keep running — make evasive moves if you can. He’s going to maneuver us into position to deliver a second device.”

“OK Shakes. But keep in mind we’re down to maybe 15 minutes on the battery here. As soon as we’re out, we’re a dead-still target for a boat with an intention to ram.”

Another second passed. “Hemi says — fuckin’ get this — ‘he will take your remaining battery into his calculations.’”

“If anyone beside Hemi had said that to me, I would not be able to take it as any kind of fucking reassurance. Don’t fucking sink Shakes — I need Hemi back.”

“Don’t you fuckers sink either — I’ve gotten used to the fuckin’ hot meals on your boat! Out.” Shakes clicked off.

As Percy hung the mic back up above her head, Bastian reached one long finger out and fruitlessly tapped the battery gauge.

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“We have to go deeper Shakes. 50 meters.”

“Can’t fuckin’ do that Hemi. The fuckin’ *Gnat* was built at altitude man! Below 30 and the seams start splitting. 50 is out of the fuckin’ question.”

“If we lay the mines shallow, the sub with the ram hits them head on. As you could see from the first device, the ram essentially acts as heavy plated armor. We are not going to do any damage if their boat hits the mine with the ram. If we can get the device *under* their boat though — if we can get it to detonate right in the middle of their sub — the upward force of the explosion will blow through the middle and break the sub’s back. Snap it in half. And all the watertight compartments in the world will not help them at that point. At least in theory.”

“That sounds to me like the *Gnat* would have to be directly under them, release the mine, and have it go off almost immediately. How are we fucking surviving that Hemi?”

“Not quite. I will set the arming timer. We can leave the mine under their path, and if I get the timer right, the weapon will arm just as the middle of the sub passes over it — and detonate immediately. We would have a few minutes at least to move the *Gnat* to safety, probably the surface again.”

“You can calculate the timing that precisely?”

“I believe so. It is just a refined use of dead reckoning.”

“Never was very fuckin’ good at dead reckoning myself.”

“All you have to do is drive the boat Captain Shakes.”

“...Down beyond a depth I never intended to take it.”

Hemi pounded on one of the roughly-welded thwarts. “It is a good boat. I think it is capable of more than you give it credit for.”

“I’d have more fucking faith in that statement if it came at a time when you were not trying to convince me to do something incredibly fucking suicidally stupid with the *Gnat*.”

Hemi grinned and patted Shakes on the shoulder. He picked up the sonar headset and put one earpiece over his ear. After a second of listening, he gave Shakes a new course. “Come left to 330. That will put us on an intercept with the sub with the ram again.” Hemi started his stopwatch.

It was natural that any person piloting the *Gnat* could not help but look out the small viewport set into the sail at eye level. After aligning the bow of the boat to 330, and pushing the throttle control all the way up, Shakes’ eyes moved upward and peered out into the murky water. There was nothing to see, but Shakes could never resist the temptation to try.

“10 minutes Shakes.” Said Hemi, speaking softly since he was less than a meter from Shakes’ head. “We need to start descending now.”

“Just curious Hemi, how fuckin’ deep do you think it is here?”

“More than 1000 meters. All we are asking the *Gnat* to do is swim a bit deeper in the very top layer of all that water. No big deal.”

Shakes patted the rusting cold steel of the hull closest to his head. “Boat, You’re the only thing that can keep us from being sucked

into that hole under us. It wants us, I can feel it — but you're a good little boat, even Hemi says so. You're just the tool to keep us out of that fucking hole." With this clandestine blessing, he pushed the yoke forward and the *Gnat's* little dive planes responded by angling downward.

They gained depth quickly, and almost immediately the hull of the *Gnat* began to groan with the stress of it.

"40 meters."

"The boat is doing great Shakes."

Crackling sounds snapped and echoed from somewhere deep in the forward compartment.

"*Captain* Shakes. And tell the boat, not me man." Said Shakes. His hands were sweating. He put a cigarette to his lips, but forgot to light it.

Hemi stared at his ticking watch.

"45 meters."

"OK, start leveling out," said Hemi, "I think you can stay above 50. I have to go prep and load the mine." Hemi listened for one second more to the sonar, checked his stopwatch, and sidled back to load the second device into the escape trunk.

The *Gnat* clearly did not like being this deep, it groaned and cracked and gave every impression of being on the verge of imploding. Hemi reassured himself that he had been in lots of boats that were just 'noisy' when they went deep — though apparently perfectly sound. Some boats just liked to vocally let their operators know about the stress they were suffering, like whiny children. On the other hand, those were professionally-built boats designed by engineers. Those boats just happened to

have a few idiosyncrasies. Hemi could not shake off the knowledge that this boat was built by... Shakes. It was *all* Idiosyncrasy.

It was only a minute later before both Hemi and Shakes knew it was not just the *Gnat* being vocal. There was water in the bilge and it was rising. They could hear water sloshing around. Somewhere in the *Gnat* the seams were leaking.

"Better hurry Hemi. I'm not sure how much longer we can stay this deep."

Hemi looked at the stopwatch. "3 minutes. Just hold the boat right at the level and speed you have — do not let anything change."

Hemi had stuffed the explosive cylinders, bumpers, and lines of the second device up into the still-wet escape trunk. He quickly scribbled calculations on his pad, made adjustments to his slide-rule, looked at the stopwatch, and came to a solution. He reached up and set the timers on the explosive cylinders. "I hope that is correct." He said to himself, and sealed the device into the escape trunk.

"30 seconds!" Hemi called forward. He put his hand on the lever. The hand of the stopwatch ticked around, climbing upwards. It hit the zero mark. Hemi hefted the lever that released the escape trunk hatch. It slid easily back this time.

It took a second for Hemi to realize that was because the hatch above him did not open.

"That hatch is not open!" Hemi yelled forward, real panic slipping into the baritone of his voice.

"Fuck! The pressure Hemi! The whole hull is compressed, the hatch must be wedged in its fucking seat!"

Hemi smacked a heavy fist against the hull above him.

Shakes could hear the pounding in the pilot's seat. "Hemi. You have to get that open. If the weapon arms in the trunk, we're fucking done."

"I am aware of that!" Hemi pressed his lips together, concentrating on revising his estimates of where the boats were in relation to each other, and at the same time trying to figure out a way to release the hatch. "Come shallow by a few meters," Hemi shouted forward, "...that might be all we need." A second went by and Hemi knew they were getting out of position. "You also need to come left to 222 degrees, Hard! Now!"

The boat leaned over dramatically as Shakes turned the yoke left all the way to its stop. At the same time the bow rose slowly in response to his gentle backwards pull on the yoke.

Hemi pounded and pounded against the hull. He slid the release lever in and out uselessly. "No throttle! We will be too close!"

Shakes pulled the throttle back and the boat drifted. Hemi picked up the crescent wrench and smacked the hull repeatedly until he left dents. Sweat beaded at his temples and his face went red with a deep anger rarely seen on his calm features. He let out a yell that scared Shakes to his core.

Hemi gave one final smack against the release lever with the wrench.

He heard a pop, and water fall into the escape trunk. Hemi quickly leaned over and slapped his ear against the wet steel of the escape trunk. He could hear the mine lifting away out of it. "It opened! Full throttle! Any direction! Get us away from here!"

The electric motor wound up behind Hemi and the sudden acceleration almost rolled Hemi off his feet.

Shakes lowered his head and tried to see up through the tiny viewport. Above the *Gnat* the water was lighter. He saw a dark shadow pass through the light.

“Blow the tanks!” Hemi yelled from the rear of the sub.

Shakes pulled the lever, and the air blew through the boat. But the depth gauge did not move. Shakes tapped the gauge. He pushed the lever down, and pulled it up again, hard. Shakes believed deeply that with mechanical things you sometimes just had to get physical.

Nothing happened.

No fucking go Hemi.” Shakes said with some kind of resolve reflecting in his voice. “We must have cracked the ballast tanks. The blow isn’t fuckin’ doin’ anything.”

At that moment the mine detonated, far too close to the *Gnat* for safety. The little boat shook to its timbers, and rolled over on its side as the shock wave grabbed the *Gnat’s* small sail. The sound was so loud that it rang Shakes’ and Hemi’s ears. Whatever small cracks that had opened in the seams before now split wide and freezing black water poured in.

The power blinked and then went out. Hemi felt his way forward in the blackness, climbing over the engine. He found Shakes by feel. Shakes was laying against the sonar equipment on the side wall that was now the floor, in half a meter of water that was rising quickly.

“Emergency power. Does the boat have emergency power?” Hemi asked loudly.

“No. Kinda like I said before. We’re fucking done.”

The *Gnat* was sinking.



But not so fast that it did not right itself first. The sucking hole under them pulled harder on the lead weights at the bottom of the boat than the rest of it. Slowly the keel was drawn and the sail rolled back up to where it was supposed to be.

Shakes was almost ecstatic. He started laughing. “Hemi! This is fucking it. But at least the *Gnat* is going down upright! With some fucking dignity!” He found his lighter and tried to light the cigarette that was somehow still hanging unlit from his lips. The cigarette was soaked and refused to light, but the glow of the flame from the lighter showed them how dire their situation was.

“Give me that.” Hemi took the lighter from Shakes and snapped it aflame. He used it to look over the *Gnat’s* controls, waving the flame slowly in front of each terrifying dial and gauge. For good measure he pulled the emergency blow lever again. He opened all the tank trim valves. None of those things required electricity to function — they were purely mechanical devices on all submarines as a safety precaution for a situation just like this. If there was no power, the sub should still be able to make it to the surface.

But not if the ballast tanks had split and let the reserve air out. The bubble they need to ride up had made its own way to the surface, leaving uselessly without them.

The water Shakes sat in was rising quickly. Water was pissing in through cracks in the viewport. Hemi looked at the depth gauge — 100 meters. He let the lighter go out. His whole life he had been able to make these machines — all machines — do what he wanted them to. But this particular one was failing him now. Shakes’ resignation seemed to be all that was left.

In the darkness he listened the water streaming into the submarine. It sounded like babbling brooks he had known long ago in his youth, on land. With no visual sensory input in the darkness,

his mind instead saw the bright sunny brooks that brought fresh water down to the sea on the island he had grown up on. All his years on rusting and leaking submarines, and running water — a sound of death on submarines — still remained firstly the sound of life and his youth.

A thick clang rang out in the darkness. Hemi had expected something like this. The pressure hull would be collapsing in on itself. The steel snapping together like the jaws of some beast. He braced himself for the rush of water that should follow it.

Instead the *Gnat* settled flat, and the descending sensation suddenly jolted to a stop. Hemi lit the lighter and Shakes was staring at him with a puzzled look on his face. Hemi looked at the depth gauge: it was rising.

“What the fuck?” Shakes asked.

“...The *Prospect*. They must have got under us.”

“And now they’re fuckin’ raising us to the surface? Like some fucking new born whale? Fuck me! Fucking fuck me!”

“I certainly find myself overcome with awe.” Hemi replied.

Shakes stood up and took the lighter back from Hemi. He lit it and with a renewed hope for life, he crawled forward. He pushed Herschel’s empty and guano-covered roost aside and pulled open a fuse box panel that lay behind it. He rummaged through a pile of old and corroded fuses that lay at the bottom of the fuse box to find one that looked like it was still at least partially conductive. He ran his finger down the rows of blown fuses til he found the one he wanted and yanked it out. The hopefully-working replacement went into the fuse box in its place.

He knew it did work because the radio panel lit up and the rapidly dwindling space of air in the sub was filled with the sound of radio static. “Try the ship-to-ship!”

Hemi picked up the mic from the front of the glowing box, and squeezed the transmitter. The transmit power needle snapped to the right, just as it should. “*Prospect*, this is Hemi, aboard the *Gnat*, do you copy?”

“Fuckin’-A Hemi!” Percy’s voice came back through the box. “We were worried that you were already fucking flattened, and we’d just be bringing up your corpses in a squashed metal coffin! Fuck it’s good to hear you. Shakes there?”

“Captain Shakes is here, though wet. How did you find us?”

“Fuckin’ Cassandra of course! She managed to pick Shake’s shitty little sinking craft out from all the noise of the sub with the ram going down, and then she navigated us down with fucking dead-on precision until we were under you. Just in the fucking nick too! Our batteries flat-lined just after we picked you up. We’re rising on a gentle ballast blow right now.”

“The pursuing sub?”

“Those fuckers are on their way down the hole Hemi, dragged by their black fuck ram first, I hope. Cassandra said she heard the boat split, and the bulkheads failing, and then the two biggest pieces went down.”

There was now light coming through the viewport around the streams of water coming from the cracks. Shakes stuck his head between the lines of water and could just see the shadow of the *Prospect*’s sail out there in the gloom.



# Epilogue

The next morning they managed to motor out of the garbage gyre to find a patch of clear sea stretching around them in an enormous circle out to the horizon. By the time the sun achieved a mid-morning altitude that sent the shadow of the *Prospect's* sail charging out over the water at an angle from the boat, the sea had turned a bright shade of slate-blue. A long slow deep-ocean swell rose and fell all around, giving the impression of passing through a landscape of low hills, though in a queasy way that the traveler feels like they might be standing still and the landscape is moving around them, rather than the other way around.

Even though it was bright daylight, they could not submerge for the *Gnat* lay on the deck of the *Prospect*, angled to one side by the rounded bottom and the weight of the water still in the bilge. Owen and Bastian had secured it to the deck with heavy rusted chains and thick grimy straps of webbed cotton, winched tight as piano wires. And indeed, when the wind blew through the straps and chains they hummed with droning tones cut up by the quick staccato of the straps twisting. On top of the drone from the straps came a number of high whistles as the wind found its way through the numerous holes in the split hull of the *Gnat*.

All those whistling splits in the *Gnat's* hull were the reason they could not submerge. The *Gnat* was far too damaged from its brief dip below its crush depth for them to repair it at sea. And so it rode on top of the *Prospect* until they could put in somewhere where repairs could be attempted.

Shakes spent quite a while on the *Prospect's* deck that morning, going over the damage to his boat. It was beginning to look like the *Gnat* might end up being more weld than plate — if it even could be repaired. Even now, as the *Prospect* rolled on a larger swell, water from the bilge would come streaming out of the *Gnat* in long greasy lines where the hull was split. It was enough to bring tears to Shake's eyes.

Hemi was far less upset about the damage to the *Gnat*, and instead found himself unusually jubilant. He had been through close calls before, but never before had he given up and been ready to die. He was glad to be out of the *Gnat*. And he was glad to be outside on the deck of the *Prospect*. Since they couldn't submerge without doing further damage to the *Gnat*, and they were going to be running on the surface through all the lovely warm daylight hours, he decided some grilling was in order. He opened up the hatch to the cargo hold, and winched up the soot-covered black grill that had been made by cutting a steel drum in half and then welding legs on and installing hinges to make the top a lid.

From the cargo hold he also hauled up an rusting platform made of welded deck grating and cut tubes. Owen bolted this platform to the deck next to the sail. It allowed crew to get out past the curve of the *Prospect's* hull and stand out over the water. From it hung a swim ladder that dipped down into the water below.

Hemi lashed the grill to the deck of the *Prospect* and spent the first hours of the morning burning down some very old and damp wood he found stashed in the cargo hold. Fortunately the breeze kept the fire hot enough that the dampness was quickly driven from the wood, and in a not-unreasonable amount of time Hemi had the grill bottom glowing with coals.

While Hemi was getting the grill hot, Captain Percy stopped the *Prospect*. As they drifted, Owen, Cassandra, and Bastian stood

on the platform and ran out some long poles to drop lines into the sea. They baited the lines with sardines from a can they split open. It was not long before they had a violent mahi-mahi tearing at one of the lines, which Owen and Cassandra together managed to haul in close enough for Hemi to heft the huge fish onto the deck from below and club it senseless with a borrowed wrench from Shakes.

Hemi cleaned the fish, leaving a sparkling trail of sticky scales across the deck of the *Prospect*, and threw the head and tail and various viscera back over the side. Big steaks of the meat went onto the grill and Hemi spread a rub of salt, lime juice, and red pepper flakes across it. The flesh browned and burned a little at the edges, and Hemi took the steaks off smoking and dropped them into bowls of rice that Owen brought up from the galley.

The crew sat on the deck poking at their late breakfast with old bent forks and watched the water rise and fall around them. Herschel waddled around among them, pecking dropped bits of rice from the steel grating. Drifting with the diesel engine shut down left the surface of the ocean nearly silent, and no crew member felt like they needed to intrude upon that silence. For once neither the malevolent violence of nature, nor the chaotic violence of man was trying to do them in, and that made the food taste so much better, and the silence so much quieter.

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