

## **The Challenger Deep, August 19, 2037**

The Hadal Surveyor dropped through the darkness. The submersible looked like an inverted spider with wings pinned to its back—a spider at the end of a six-mile long hair-thin fiber optic cable that went straight up to a self-positioning telemetry repeater floating a hundred feet beneath the surface. A steel sphere with a viewport was tucked against the submersible's yellow underbelly like a silver egg sac. The crew module was barely large enough for an average sized male, with barely sufficient room to maneuver among the jumble of electronic gear, electrical conduits and hydraulic lines.

“Nine thousand nine hundred and seventy one meters,” advised Adrian. With nearly seven miles of seawater above him, if a pinhole leak were to occur in the command module Adrian would be sawed in half in less than a second. The hull would implode about thirty seconds after that.

“Copy, Hadal Surveyor,” replied Dr. Benton. “You're looking good up here.” The hologram of the elderly marine archaeologist with the shock of white hair and kindly blue eyes was crisp and vivid. Like the rest of the team he was clad in a blue jumpsuit with a mission patch on the breast. He was in a group clustered around the hologram projection table in the main laboratory on board the research vessel RV Astra.

Adrian announced the shrinkage of his already confined space dispassionately. “Pressure is at one thousand and two kilograms per square centimeter and rising. Hull compression is at four point two centimeters.”

Benton turned to look at the man with the shaved head and soul patch standing beside him. “Perhaps you'd like to say a few words,” he suggested deferentially.

The man nodded. “Adrian, I am damned glad to have you on the team. The technology and teamwork of this expedition will serve as an example for future deep sea expeditions.” Then he pumped the air with a fist. “You’re the man Adrian!”

Adrian privately thought that was a fine example of a typical Delahaye pep talk, high flown with scant meaning. “That is very kind of you, Ethan. This is a wonderful opportunity,” Adrian replied politely. “New discoveries are always so thrilling.”

“I couldn’t agree more,” replied Delahaye. He was a thirty-two-year-old college drop out, the third wealthiest man in the United States, and the guy funding the expedition. That wealth came from Heuristic Allied Technologies in Palo Alto California. The firm manufactured the Triadtronic Artificial Brains used by the United States Department of Defense and the National Aeronautics and Space Administration.

The machines commanded several United States Navy destroyers, with human subordinate officers and crew. A Triadtronic artificial brain controlled the antiballistic shield that protected the United States from sneak attack, simultaneously monitoring the skies while maintaining a network of directed energy weapons and dozens of orbital killer satellites in a state of constant readiness. It was a Triadtronic Brain who’d finally developed an immunotherapeutic cure for the most common forms of cancer. The VA hospitals used the machines to operate robotic surgeons and physicians. A Triadtronic Brain created bionic arm and legs with all the functionality of the real thing. Just the year before Stephen Hawkings had placed first on Dancing With The Stars.

Delahaye’s interest wasn’t limited to Artificial Intelligence. He was also an amateur deep-water archaeologist who’d financed several expeditions, including the one

that located the wreck of the World War Two heavy cruiser USS Indianapolis. Now Delahaye was searching for the Imperial Japanese Navy destroyer Shinodake.

Adrian knew that Delahaye's preoccupation with an obscure and rather unremarkable Japanese warship had nothing to do with scientific inquiry. He was after the one hundred tons of looted gold bullion it was carrying when an American dive-bomber flew out of the sun and sent it to the bottom with a five hundred pound bomb. The survivors told their American interrogators about the precious cargo but getting to a shipwreck lying at the bottom of the deepest place on Earth was out of the question.

Delahaye's expedition hadn't found the warship. It had stumbled upon something Adrian considered far more interesting. Which was why he was dropping down to the seabed to have a closer look at what the RV Astra's side-scan sonar had discovered.

"Descent speed is six knots constant," Adrian reported dutifully.

"Copy that," advised Dr. Benton. "Sure wish I was down there with you."

Aboard the Astra, Adrian's holographic image showed him from the waist up. He had movie star looks, with black hair parted at the side and blue eyes. Dr. Benton thought he looked like the astronaut Dave Bowman in the *movie 2001 A Space Odyssey*.

Adrian's well-formed virtual lips curved up into a smile. "Unfortunately the space taken up by my containment canister militates against bringing a second team member." *And assures I won't be saddled with a human who'd just be in the way*, Adrian thought. He added diplomatically, "It would have been nice if you could have accompanied me, Dr. Benton. Your considerable intellectual abilities would have been a significant asset on this dive. Perhaps next time Ethan will build a larger submersible for us."

Delahaye asked, "How are you feeling Adrian?"

“I am feeling optimistic and hopeful, Ethan. Thank you for asking.”

Delahaye smiled. “Of course you are. Don’t get into any trouble down there.”

“You may rest assured that I will use every precaution to avoid the loss of such a valuable asset.” Adrian meant himself, of course. A Triadtronic Brain cost more than a squadron of seventh generation fighter jets. A submersible was dirt-cheap by comparison.

Outside the viewport a heavy snow of animal and plant matter fell from the upper zones in the water column. But Adrian had no trouble piercing it with his external sensor array. The trench wall was coated with a thick layer of sediment so fluffy and unstable that oceanographers took pains to avoid triggering avalanches with their equipment. There was zero possibility of that happening on this dive. The wreck lay in the exact center of the Challenger Deep, a slot shaped valley in the floor of the Marianas Trench.

A blonde haired woman manning the sonar on board the Astra spoke calmly. “Hadal Surveyor, your present trajectory will place you right above the wreck site.”

Adrian knew that, of course, but humans seemed to have a pressing need to state the obvious. He pondered whether it had anything to do with their decreasing relevance in a world being rapidly overtaken by hyper intelligent machines. Simply put: the emergent Machine race did everything better than humans. Not that Adrian would ever voice such a thought to anyone, except perhaps his actual creator, and Delahaye’s business partner, the brilliant Dr. Chang. Adrian was the very soul of tactfulness.

“Thank you for the update, Cathy. I am now five hundred meters above the seabed,” Adrian said patiently. “Slowing to two point four knots.”

At one hundred meters Adrian pointed the real-time high-resolution 3D sonar downwards. “Surface, I am making my final approach.”

The wreck sat perfectly upright on the tan featureless seabed. The rusty hulk was blanketed with tan silt but all its features could be clearly seen. Adrian sent the Hadal Surveyor into a graceful banking turn around the wreck. It was important to thoroughly document its environmental context for future analysis. Adrian kept the sonar heads trained on the wreck as he flew around it, capturing even the smallest details.

On the support ship, Dr. Benton pressed a button on the projection table's control panel, scaling down Adrian's image to make room for the wreck.

"Surface, are you getting this?" Adrian asked.

"We sure are," Benton replied. Every person in the Astra's laboratory was peering at the holographic image of the massive ship taking shape and talking excitedly.

Delahaye suddenly pointed at the hologram. "Holy shit! Are those bow planes?"

"My God! It's a goddamn submarine!" said Dr. Benton, shaking his head. "What the hell have we found? We may be just about to rewrite naval history."

"It will make for an interesting chapter at the very least," Adrian agreed. He was drawing closer to the wreck with each pass. "The stern hydroplane extends to either side of the propeller. The rudder is large, and extends above and below the propeller."

Adrian's lips curved up in a smile. "She would've turned on a dime.

"Like a modern submarine," Delahaye pointed out.

Dr. Benton leaned closer to the image to have a better look. "Modern submarines have conning tower and periscopes. Adrian, sweep the area for the conning tower. It was probably sheared off on the way down."

"Or blown off by a depth charge," Delahaye offered.

“This vessel did not have a conning tower,” Adrian said confidently. “The only opening on the deck is that round hatch and it’s closed.”

“Have you seen any markings?” Dr. Benton asked.

“None yet.” Adrian hovered above the stubby ram then shined a light on the armored wheelhouse rising three feet from the surrounding deck. It reminded him of the armored catapult control pod on an aircraft carrier’s flight deck. Through a patch of clear glass in the silted viewport, Adrian saw the glint of a brass steering wheel and binnacle.

Adrian goosed the throttle and sent the submersible aft while delivering a crisp running commentary. “From the construction method I would say this vessel dates from the middle to late nineteenth century. The hull plates are hand riveted and arranged in a transverse pattern with their long axis parallel to the hull.” The 3D digital camera’s strobe lights flashed endlessly “It appears to be constructed of a very primitive steel, most likely produced using the Bessemer process. Surface displacement estimated at six thousand tons, with a submerged displacement of six thousand nine hundred and thirty tons.”

In the eerie bluish glow of the submersible’s lights, the overlapping hull plates with their large dimpled rivets made the ship look like a prehistoric monster of the deep.

“This can’t be a Holland boat,” Dr. Benton said.

“You’re correct,” Adrian replied. “This submarine predates the Holland submarines by at least thirty-five years, and it’s technologically superior. Also, they were only fifty-three feet long. This one is three hundred and fifty feet.”

Adrian felt a *frisson* of excitement. Here before him was the product of a brilliant mind on a par with Thomas Edison and Nikola Tesla. Adrian had a very good idea of the ship’s identity, but he wanted to make certain he was correct before saying anything to

the others. Without a word to either Dr. Benton or Delahaye, he logged onto the Internet via the Astra's satellite uplink. It took Adrian a handful of seconds to access the British Admiralty's archives and rifle through them. He tiptoed past the firewall to take a peek at the classified stuff and struck gold. Reports written by ship captains, passengers' letters and sketches, flashed through his mind. Deeper still within the classified archives was a blurry daguerreotype of something long and spindle shaped moving through the water.

"Well, this is truly a momentous occasion," Adrian announced, pleased with himself. "We have just discovered the Nautilus."

Dr. Benton and Delahaye looked meaningfully at each other then at Adrian and the wreck floating above the projection table. Delahaye looked annoyed. Impatiently, he said, "That's impossible, Adrian. The USS Nautilus is a museum ship in Connecticut and looks nothing like this wreck."

Adrian photographed the propeller from all angles. "Your confusion is understandable. This Nautilus was built in eighteen hundred and sixty-six by Captain Nemo," Adrian explained. "I can't pin down the exact date. The records are incomplete." Let them chew on that for a while, thought Adrian. You had to take it slow with humans.

Dr. Benton peered at Adrian over his tortoise shell eyeglasses. "Now you know perfectly well that *Twenty Thousand Leagues Under The Seas* is a science fiction novel. We're human, Adrian, but we're not stupid. Are you teasing us?" he asked kindly.

Adrian shook his head. "Verne got the story directly from his brother-in-law, Pierre Arronax, a minor nineteenth century oceanographer. The British Prime Minister Lord Palmerston personally exerted pressure on the French government to get Verne to novelize Arronax's story to avoid causing a stock market crash. Ships were being sunk at

an alarming pace driving up insurance prices, so the British, French, and American governments agreed to conceal the true nature of the ‘sea monster’ from the public.”

“So how’d it all end?” Delahaye asked, still only half convinced.

“No one knows.” Adrian was puzzled. The optical sensors were picking up something odd that he’d overlooked. He drove the submersible upward like a helicopter. Yes, there it was. A faint violet luminescence rippled along the portion of the hull Adrian was certain contained the engine room. Dr. Benton and the others had missed it too.

Thanks to the sensor pod’s laser spectrometer, Adrian knew in an instant that the light wasn’t caused by bioluminescence or phosphorescence—and it wasn’t produced by heat. The hull was exactly the same cold storage temperature as the surrounding seawater. Adrian switched to another sensor pod and almost blew a circuit.

The Nautilus was awash in curling ribbons of tachyons! Adrian ran a diagnostic test on the sensor pod but it checked out normal. That meant that somewhere deep within the wreck’s hull lay the holy grail of sustainable energy—a zero point energy device.

Adrian made a decision. This discovery was potentially too important to be handed over to a washed up marine archaeologist and his greedy—and let’s be honest here, none too bright—financial backer. Surreptitiously, Adrian tapped into the Astra’s communication system and established an uplink with an AEHF satellite, one of a series of spacecraft used to relay secure communication for the United States Armed Forces, and sent a message to a nondescript building in San Diego, California. Twelve minutes later, the aircraft carrier USS John F. Kennedy, steaming six hundred miles to the southeast of the RV Astra, launched an X-47S drone. With its afterburners shrieking, the tailless blended wing aircraft quickly climbed to forty thousand feet then sped north.



As Adrian guided the Hadal Surveyor to a spot ten meters from the Nautilus, the six landing legs pivoted outward then locked into place. The legs terminated in large round footpads designed to keep the three-ton submersible from sinking into the ooze. Slowly the submersible settled onto the seabed, stirring up a swirling cloud of silt.

“Surface, I am on the bottom.” Adrian shined a light toward the wreck. Jagged shards of glass hung from a large viewport’s brass frame. “It’s in remarkably good condition. That is highly suggestive.”

“Highly suggested of what?” Delahaye asked.

Adrian explained, “If the viewports had blown at a depth of say one hundred meters the Nautilus would have gathered momentum on the way down here until it was falling at close to ninety kilometers per hour. The hull would have shattered upon impact like an egg dropped onto a floor. There is no evidence of external structural deformation. It is almost as if the viewports failed down here, which, of course, is an impossibility.”

Dr. Benton increased the hologram’s magnification then rotated the image. “There is no way that thing made the trip all the way down there *then* imploded.”

Delahaye said, “We won’t learn anything standing around talking.”

“Agreed. I am deploying the squid,” Adrian advised.

Like the animal it was engineered to mimic, the squid jet propelled itself arms first toward the wreck, trailing a micro-thin fiber optic cable connected to the submersible. Adrian was justifiably proud of his creation. The silver ROV was constructed almost entirely of bundles of carbon nanotubes, strong as diamonds and flexible as rubber, and sheathed in an artificial water-permeable skin. It was outfitted with two 3D cameras, and in the center of its web of tentacles was a sensor pod in a

titanium housing. When the ROV reached the Nautilus its arms splayed against the hull and it looked past the gaping hole once covered by glass. It played the beam of its bright LED light around the room.

“Look at that!” Dr. Benton said, leaning close to the holographic image.

“It looks like a Victorian drawing room,” Delahaye added.

Adrian said, “It *is* a Victorian drawing room. Like any nineteenth century gentleman scientist, Captain Nemo would have desired a suitable room to study marine specimens, conduct research, and enjoy a postprandial cigar and brandy.”

Despite its forlorn condition there remained a certain vestigial grandeur to the place. Here Captain Nemo had spent many an hour cataloging marine specimens and observing the wonders of the sea through the drawing room’s two large view ports.

Elegance of a long vanished era emerged in a beautifully designed fountain with a bronze statue of Aphrodite standing between two collapsed silt covered glass display cases. Remnants of a fourteenth century French tapestry hung in faded tatters from a pitted teak wall. Overturned chaise lounges and settees and chesterfield chairs were scattered around the room. A fluted bowl-shaped light fixture dangled on its cord from the ceiling. “The wood paneling is in relatively good condition,” Adrian remarked.

Dr. Benton, Delahaye and the crew studied the images. Unknown to them, other eyes thousands of miles away were peering at the drawing room and analyzing the data being sent to the RV Astra. Orders were being drawn up, and assets moved into place. On a military base on the island of Guam two hundred and seven miles away a black Bell V-280 tilt rotor aircraft sat on the tarmac warming up its engines, waiting.

The ROV passed through a doorway to the left of a crumbling pipe organ whose rusted pipes had collapsed into a disordered jumble against the rotting wall.

In the next room everything was shredded or overturned, from the furniture to the bookshelves. Mounds of books littered the deck. “This is Nemo’s library,” said Adrian.

“The guy sure liked to read,” Delahaye commented.

“Let’s get a look at one of those books,” Dr. Benton suggested.

The squid reached out a tentacle and brushed away the silt from a book. Gilt letters gleamed in the bright LED light. “Moby Dick,” Adrian said softly. He commanded the ROV to pick up a book lying nearby. It was bound identically to the first one and also had gilt letters—*The Count of Monte Cristo*. The squid returned the book to the pile.

“Can’t fault the man for his reading tastes,” Dr. Benton said.

“There must be a fortune in first editions down there,” Delahaye commented, reliably fixated on the monetary aspect of the discovery. “Too bad they’re waterlogged.”

Adrian thought he’d like to have met the Captain. Some humans were terribly interesting. Men like Einstein and Stephen Hawking. The squid finned from the room and moved down a passage with rooms branching off from either side. Some of the doors were ajar. Adrian glimpsed rows of triple tiered bunk beds through a doorway.

Adrian paused the ROV to examine a baby stroller lying on its side. Its iron frame and wheels were rusted and what was left of the heavy fabric was muddy.

“Now I wonder what that’s doing there?” Dr. Benton asked.

Delahaye pointed at the holograph. “Look what lying next to it!”

A severed doll’s head lay a foot away. It was missing an eye, and only a fringe of wispy hair remained on the porcelain scalp. So there had been a child here, most likely a

female. Adrian pondered that a moment. What was a baby doing on the Nautilus? A baby *and* a zero point energy device—Adrian was certain the two were somehow connected.

Cathy said, “You realize this means a woman was on board, don’t you? Wouldn’t it be interesting if it turned out that Captain Nemo was a female?”

Delahaye rolled his eyes. “Saw the movie. Nemo was definitely a dude.”

“Yes, that *would* interesting, Cathy,” Adrian agreed pleasantly, “but Verne wouldn’t have failed to mention it if that had been the case. He was a stickler for detail.”

“Nemo’s wife, then,” Dr. Benton offered.

“That is more likely, given the era,” Adrian allowed.

“Or some shipwrecked broad he knocked up,” Delahaye suggested crudely.

Adrian ignored that and moved onwards. As soon as he saw the violet light rippling on the walls and ceiling ahead, he terminated the video feed to the RV Astra, but left it open to the nondescript building in San Diego. “Surface, I’ve lost video.”

“Switch to the back up video,” Delahaye suggested.

“Sadly, it has failed also.”

“Switch to the 3D sonar,” Dr. Benton advised.

“I am afraid the sonar has also failed,” Adrian lied smoothly. “Stand by, surface. I am running a diagnostic test on all electrical systems.”

The tachyon readings were getting stronger by the moment. The ROV’s lights played over the passageway’s corroded walls and ceiling with its rows of pipes and electrical conduits as it swam down the passageway. Adrian said, “Surface, I just confirmed that the Hadal Explorer is experiencing a cascading failure of its electrical systems. As soon as I recover the squid, I’ll terminate the dive and make my ascent.”

Dr. Benton said, “Understood. It’s just as well. I was just handed a weather report. A typhoon is rapidly forming four hundred and twenty miles to the west of us. It’s coming our way so we need to get you back on board stat.”

Adrian adjusted the audio until all the Astra would hear was the crackle of static. He needed to keep the line open so he could continue sending micro data bursts to the military satellite in geosynchronous orbit above the Pacific Ocean. The pulses from the ROV’s sensor were rising in pitch and frequency as the ROV closed in on the source of the tachyons. Then it encountered an insurmountable wall of twisted metal and debris.

Tachyons streamed from the collapsed bulkhead, ribbons of violet light throbbed on crumpled steel plates. There was a nine inch gap in the mangled bulkhead. The squid snaked its tentacles into it and tried to force apart the plates but they wouldn’t yield. It withdrew the tentacles and slid two of its arms into the opening. Bundles of nanotube muscles beneath the silver skin bulged with the effort to widen the opening. At last it became clear to Adrian that the only way anyone was getting past this barrier was with a cutting torch. Under Adrian’s guidance, the ROV snaked a tentacle through the opening and turned on the small lamp mounted to the back of its tentacular club. At the end of the passageway stood a sealed hatch. Adrian knew at once what it lead to—the engine room.

He turned the ROV around and headed back to the drawing room. Once there he saw a tall floor safe standing in the corner with its door ajar. Inside was the unmistakable gleam of gold bullion, enough to satisfy even Delahaye. Not that the businessman would ever hear about it. But what caught and held Adrian’s attention was the small ironbound wood chest sitting on the mound of gold coins and ingots and gem encrusted jewelry.

Adrian scanned the waterlogged chest with the ROV’s barrier-pass radar. The

image of a thick book wrapped in oilskin and tied with swine took shape deep within Adrian's neural networks. That Nemo had taken pains to place *this* book in the safe instead of the library was an undeniable indicator of its importance.

All eight arms worked their way into the gap between the door and the safe then pushed hard. The door swung open in a shower of rusty particles. Swirling clouds of silt filled the drawing room. The squid picked up the chest with two of its tentacles and swam through the shattered viewport.

With the chest secured in the sample bay the Hadal Explorer headed for the surface. "Surface, I am making my ascent."

"Roger. Hadal Surveyor," replied Dr. Benton. "Good to hear from you. We thought we'd lost you there for awhile, Adrian."

"I was able to restore audio. Everything else is shorted out."

"Did you find anything else of interest down there?" Delahaye asked.

"I located the crew quarters. Beyond that the passage was blocked by rubble."

"Okay. We'll see you topside. Have a good trip," Dr. Benton said.

For three hours Adrian rose toward the surface.

It was daybreak when the Hadal Explorer broke the surface. Fast moving clouds covered the sky. A rising wind shrieked around the submersible heaving and rolling in the choppy sea. Not quite a storm yet, but in another hour the waves would be mountainous. Inside the pitching command module, Adrian was untroubled by the violent up and down motions. All the same, he rotated the upraised manipulator arms until they were pressed against the sample bay's hatch. It never hurt to take precautions.

Divers dropped into the water to secure cables to the submersible. Adrian thought it odd that he wasn't receiving a cheery greeting from Dr. Benton or Delahaye.

As soon as the submersible was swung onto its cradle, Adrian's suspicions were confirmed. Men in unmarked black fatigues and ski masks were dragging corpses by the feet across the deck and arranging them in rows. An unmarked tilt rotor aircraft hovered above the ship with a rope ladder dangling from its belly. A white bulkhead near the stern was speckled with bullet holes and splattered with blood. Adrian saw long streaks of blood on the deck. A corpse hung over a deckhouse railing with its arms dangling like a ragdoll, long blonde hair whipping in the wind. It was the telemetry technician Cathy.

Adrian observed all these activities with great interest and more than a little admiration. You had to hand it to human beings. They really had killing down to a science. Adrian saw Delahaye being drug by the arm across the deck to join the others.

Adrian zoomed in with the camera. Delahaye had a neat red hole in the center of his forehead and a shocked expression on his face, as if he'd been shot mid-sentence.

One of the figures strode purposely up to the Hadal Explorer and squatted down then pulled off his ski mask. The leader of the assault team was tall and blond with gas flame blue eyes. He fished an identification card from a pocket and held in front of one of the submersible's camera, and spoke into a boom mike resting against his strong jaw.

"Do you know who I am?" he asked, over the whistling wind.

"Of course," Adrian replied pleasantly. "Welcome aboard, Agent Lester."