



**CASE WHITE:
THE BREAKING OF
CHEMICAL BONDS**

Steven Mohan, Jr.

Potemkin-class troop cruiser *CSS* Vision of Truth *En Route to Rendezvous Point*

Terra

Word of Blake Protectorate

12 March 3068

The angry clanging of the General Quarters alarm filled the passageway, followed quickly by the pounding of boots against the white tile deck.

Adept Theta IX Johan Karlsson waited for the watchstander in the boots to make his appearance. Johan leaned against the bulkhead, bracing himself against the weight of his own muscular body. He pushed his bright red ballcap back, allowing the AC vent to cool a little more of his old, bald head.

That was the position he was in when the Engineering Roving Watch came around the corner. The kid—he couldn't have been more than nineteen, twenty—stopped and his eyes grew round as he saw the transparent red Mylar stretched over the access to Number Two Engine Room.

Adept Cyndi Smith stepped forward. The gunner's mate was dressed like Johan: steel-toed boots, dark blue coveralls, a red ballcap that said "Damage Control Training Team" in bright yellow letters. She pointed at the access set in the deck. The hatch was a round piece of steel painted haze gray and locked in an upright position. "*Smoke is billowing through the p-way,*" she shouted over the clang of the GQ alarm. "*You hear a roar.*"

The boy snatched a black sound-powered phone off the bulkhead. His hands were shaking, but he managed to turn the selector to DC Central. "DCC, Rover. Mainspace fire, Number Two ER."

Then he made his mistake. Instead of waiting for the Primary Hose Team he ran forward to secure the hatch himself. Cyndi made a pistol out of her right hand and pointed it at him. "Bang. You're dead."

The rover took a deep, shuddery breath and sat on the deck. Johan frowned. The kid had only made the one mistake.

But a mainspace fire would only give you one.

Primary Hose arrived forty-seven seconds later. By then the bridge had gotten off their collective topside asses and cut the alarm.

The team wore fire gear: a black oxygen breathing apparatus strapped to each chest, twin rubber hoses snaking up to a clear plastic mask that kept the smoke out and the O₂ in. They wore fire-resistant gloves that reached up to the elbows of their blue coveralls and matching cream-colored hoods with a cut-out for the mask. And of course they were dragging along a fire hose, even after a thousand years still the best way to put water where it needed to go.

They looked ready for anything. Well, thought Johan grimly, we'll see.

"Smoke is billowing through the p-way," Cyndi shouted again. "You hear a roar. The roving watch is dead."

The hose team leader made the same mistake the rover had. She ran forward to secure the hatch. Halon couldn't be activated until the hatch was secured. The engine room couldn't be vented to space.

Cyndi shot her dead, too.

Which left Adept Theta IV Paul Ridge as the leader of Primary Hose.

Paul Ridge was a thin topsider who didn't weigh half as much as Johan. He wore his brown hair neat and short, which was how Paul liked the world: *orderly*. The mask hid his face, but Johan could see the fear in his eyes.

The *uncertainty*.

Nothing orderly about a mainspace fire.

C'mon, Paul, Johan thought, you can do it. Think it through.

In the event of a mainspace fire and an unsecured hatch the last thing you were supposed to do was secure it. The rubber gasket might melt right off, hell, the hatch itself might warp. Burn a mainspace long enough and there wouldn't be any damn hatch left

And while you're fighting a hatch that's never going to seal the fire below might just catch an oxygen tank or a store of lube oil and just like that the ChEng is writing a letter home to your folks telling them what a brave, stupid sailor you'd been.

No, the right answer was to secure ventilation, expeditiously clear all adjacent spaces, fall back to the nearest spacetight bulkhead, secure *that* hatch, and then blow the engine room to space.

Anyone who knew the business of a fire aboard ship should've known exactly what to do. And Paul knew as much about the subject as anyone.

But instead of ordering his team back, Paul turned and grabbed a fire extinguisher off the starboard bulkhead. It was a ten-kilo CO₂, great for putting out trash fires, worthless against a mainspace and Cyndi was just cocking her pistol for out number three when Paul stumbled.

Maybe it was that his hands were slick with sweat, or maybe it was the extra forty percent of weight from *Vision's* combat burn, or maybe it was

(his terror, my god he's out of his mind with terror)

something else, but—

Paul dropped the extinguisher.

It hit the hatch coaming and the nozzle snapped off, turning the extinguisher into a missile. It shot down the passageway on a plume of frigid, white gas and suddenly Cyndi was shouting, shouting, calling an end to the drill, Paul just standing there pale with shock, everything happening at once, until the terrible *crunch* of a jet-propelled aluminum cylinder smashing into human ribs robbed everything else of its meaning.

CSS Vision of Truth

En Route to Tukayyid from the Zenith Jump Point

Free Rasalhague Republic

19 April 3065

Paul Ridge's heart rattled in his chest like a bird frantically throwing itself against the bars of its cage. Sweat burned his eyes and he dragged an arm across his forehead. Paul was a quartermaster, used to working in the relative comfort of the bridge.

He hated the mainspace.

He hated the smell of oil and steel that he could never seem to wash out of his hair or his coveralls, he hated the oppressive, *pulsing* heat, but most of all, he hated the clatter of the machines surrounding him, any of which seemed ready to explode at any moment.

But he had a duty to perform.

Number Two Engine Room was a cavernous space and at its aft end lived a monster. Paul's eyes were drawn to the dull glint of naked steel. A squat dome six meters in diameter bulged out of the aft bulkhead. It loomed over him, immense, powerful.

Threatening.

The dome was a small section of the Number Two Reactor Compartment protruding through the engine room bulkhead so watchstanders could sample plasma and monitor one of the mighty engines that powered *Vision of Truth*.

Inside the chamber was a mass of ionized hydrogen-1 smoothed into a sphere the size of a softball by a powerful magnetic field and ignited to a temperature high enough to sustain nuclear fusion by the strobe of a powerful laser. Paul felt the beat of the monster's heart in his bones.

And all that separated the miniature sun from the engine room was a sliver of low carbon steel.

A man stood by the dome, studying a panel of gauges and readouts and making entries into a noteputer. He was short but powerfully-built, only one meter seventy-five but easily ninety kilos, every last bit of it muscle. His raven hair was cut marine-short. He looked up and speared Paul with eyes the color of a deep mountain lake.

“What’s the matter, topsider?” The man grinned. “Get lost on your way to your rack?”

“Just bringing down the daily maneuvering plan for the EOOW,” said Paul handing the man a page that described how the Officer of the Deck was planning to use the Chief Engineer’s main engines for the coming day.

The man frowned. (His namepatch said “Karlsson.”) “You’re not the usual messenger.”

“Yeah, well, I just love mainspace,” said Paul dryly. “I’m thinking of giving up interstellar navigation to become a snipe.”

Standing this close to the dome, he could feel the air itself vibrating. Paul wanted to scream.

Karlsson laughed and patted the dome’s steel surface. “Don’t worry about my baby here. We’re perfectly safe.”

Perfectly safe, Paul thought. Looks like it might explode.

And then it *did* explode.

The sharp report knocked him off his feet and saved him from the worst of the shrapnel. He staggered to his feet just as a high keening filled the mainspace. Suddenly a violent wind was tearing at his clothes as air rushed into the vacuum that had filled the reactor compartment.

And then Paul saw the sun. It was a tiny ball of painfully bright light.

And then it came apart, too.

A streamer of liquid fire the color of spun gold shot through the jagged hole. The plasma hit the steel deck plating, instantly cooling it below the temperature required to sustain a nuclear reaction.

Unfortunately, it was still plenty hot enough to burn steel.

Suddenly Paul was standing in hell.

In seconds, acrid black smoke filled the engine room, cutting visibility to zero and poisoning the air. Paul fell to his knees. Couldn’t see, not even the unholy glow of inferno. Couldn’t *breathe*. Which way is... *Which way is out?*

Superheated air scalded his body, burned his lungs.

Then he felt the heavy hand of the snipe clamp down on his shoulder.

"Egress NOW," Karlsson shouted above the rising voice of the fire. The snipe dragged him to the ladder. Somehow Paul found the strength to frantically climb.

He pushed his way through the circular hatch.

Paul collapsed on the deck, sucking in the cold, clean air. The snipe slammed the hatch down and then staggered over to the nearest sound-powered phone. "Mainspace... fire in... Number... Two ER," he gasped, "Halon... activated."

The deep clang of the GQ alarm suddenly filled the p-way.

"Holy Blake," Paul whispered.

"Don't... worry," Karlsson gasped. "We're... perfectly safe."

Neither man noticed that the fire's fierce heat had locked up the hatch's starboard hinge, preventing a perfect seal.

CSS Vision of Truth
Rendezvous Point
Terra
Word of Blake Protectorate
12 March 3068

What finally convinced Johan that Paul was cracking up was the tinkle of shattered glass.

It was a rare sound on a WarShip. Plastic was generally the material of choice on the mess decks: beige plastic mugs, beige plastic trays, beige plastic food. But tonight was special.

Tonight was the night before.

That thought weighed heavily on Johan's mind. Hell, it was on everyone's mind.

Which was the reason for the special dinner. Somehow the SuppO had pulled a rabbit out of a hat. Tonight *Vision's* crew was dining by candlelight on steak and lobster, eating off real china with actual silverware.

And drinking sparkling apple cider out of actual fluted wine glasses.

It was one of these that had been dropped.

Johan had looked up in time to see the whole thing. Paul had been standing in line waiting for his shot at the steak when a mess crank handed him one of the glasses. Paul didn't get a good grip on the glass's slick bowl and 1.4 gees of acceleration yanked it right out of his hand.

He pressed his lips firmly together and bowed his head. When the mess crank tried to give him another glass, he bit his head off.

Johan felt a sudden chill.

"What's the matter, Johan?" asked Cyndi. "You look like you just saw a ghost." Cyndi was a pretty good sort for someone who had opted for the soft life of topside duty.

"Sure. His own." Roger Wekesa let out a harsh laugh. Roger was a comm tech and if he was being a little mean, Johan understood it was just a way to deal with his own fear.

“Did you see Paul drop the glass?” Johan licked his lips. “He’s losing it.”

Roger rolled his eyes. “Nah, he’s just tweaked about tomorrow, like everyone else.”

Cyndi nodded. “Sure. He’s just got a case of the whites.”

“Come on, Cyndi, you saw him during the drill. *A man was hurt.*” Johan shook his head. “We have to watch out for him. I don’t think he can hold it together.”

She shook her head. “He made a mistake, is all. Shit, ChEng had no business ordering a drill during a combat burn anyway.”

“*You’re wrong,*” Johan snapped.

“Take it easy, man,” said Roger.

“You don’t get to *pick* when you have a fire,” said Johan tightly.

“Is this about three years ago?” Roger asked. “Sure we weren’t there, but--”

“That’s right,” said Johan.

“Look,” said Cyndi crisply, “I’m on the DCTT. I *know* how to fight a fire.”

Johan scowled. “But you’ve never fought a mainspace.”

Cyndi’s lips pressed into a thin line

“Fire,” said Johan. “Such a simple thing. The breaking of chemical bonds. You can never understand the power. Not until you see it.”

“Look,” said Roger, “if you really think he’s dangerous go to the ChEng. Have him pulled from the DC watchbill.”

“I can’t do that,” said Johan tightly.

Cyndi shook her head.

“I saved his life,” he snapped. “I promised him he would be safe. *Twice.*”

“He *was* safe,” said Cyndi.

“You don’t understand.” Johan picked up his own wine glass, held it up to the flickering light. “Do you know how glass is tem-

pered? It's heated to just below its melting temperature, then rapidly cooled. Done right, it makes the glass stronger. But cool it *too* fast and the glass cracks."

"You're afraid if you pull him off the bill, it'll break him," said Cyndi.

"Can't you just keep an eye on him?" said Johan.

Cyndi sighed, looked at Roger. "Sure," they both said.

Across the mess decks, Paul knelt to pick up the jagged pieces of his glass and cut himself, staining his hand with blood that looked black in the dim light.

CSS Vision of Truth
En Route to Tukayyid from the Zenith Jump Point
Free Rasalhague Republic
19 April 3065

A fit of coughing shook Paul as his body tried to expel the poison he'd swallowed, great racking coughs that left his head dizzy and his stomach sore. When he finally rolled over he saw a line of DC folks moving through the passageway, dragging a hose along.

The woman on the nozzle looked at him. *"Fire is out,"* she barked. The muffled words sounded alien and strange through her mask. He stared at her blankly.

"Fire is out," she barked again. This time she sounded impatient.

"Fire is out," gasped Karlsson. *"Set...reflash watch."*

Paul blinked. He hadn't known the woman was asking him a question.

She pulled a handle back on the nozzle, coating the hatch with a fine mist of cool water, slowly drawing off the heat from the space below.

A medic knelt down to look at Karlsson.

"Hey," someone said, *"the hatch doesn't look right."*

Someone stepped forward to dog it down. *"Something's wrong with the hinge,"* he said, leaning over the mostly-closed hatch. *"I can't get it sealed."*



Halon was an inert gas that settled to the deck, robbing the fire of the oxygen it needed to breathe, smothering the monster in its crib. But there was no quick way to dissipate the tremendous heat that blanketed the engine room (not without opening the space to vacuum anyway). And so, the residue of inferno set up a natural circulation cell: pushing hot halon-rich air out of the engine room through the imperfect seal of the hatch and pulling cool oxygen-rich air back in.

Carrying oxygen back down to a steel deck that was still well above ignition temperature.



The fire roared back to life with a massive explosion and just like that the hatch and the man standing over it were *gone*. The shock wave threw bodies against bulkheads, slammed them into the deck. Suddenly, Paul heard nothing but the roar of combustion, saw nothing but billowing black smoke, tasted nothing but the fine grit of soot.

Hell had followed Paul Ridge out of Number Two Engine Room.

Karlsson scrambled to his feet, grabbed one of the fallen hose team members under the arms, and dragged her across the tile deck. He threw a glance at Paul. “*You*. What’s your name?”

“Paul Ridge.”

“OK, Paul. I’m Johan Karlsson.

“I’m a quarter—”

“Don’t need your life story, Paul. Help me get these people clear.”

“But—”

“We’re all there is, Paul. Everyone standing was knocked flat. Now *go*.”

Paul pushed himself up too quickly, as it turned out because for a second the world went gray, but somehow he kept his feet. He knelt and grabbed a young adept under the armpits, started dragging him across the deck.

The man was impossibly heavy and Paul could barely breathe, but somehow he kept at it, coughing and hacking the whole time.

Johan Karlsson ran by him to get the next person.

“How far,” Paul shouted.

“The nearest transverse bulkhead,” Johan shouted back.

He finally managed to make it to the open hatch. Johan had locked the big steel door open. Paul looked down at the steel coaming rising three centimeters from the deck’s surface. No way he’d be able to drag the lifeless adept over that.

Paul crouched down, slid his arms beneath the adept, and took a deep, shuddery breath. Then he jerked his body up, using his legs to lift the man *up* and over the coaming.

He dropped the man gently to the deck on the other side of the spacetight hatch. Paul went down on all fours, besides the prone adept, chest heaving, face sheened with sweat.

“Next time...rescue...smaller person,” he gasped.

Somehow Paul managed to push himself up. His mouth tasted like burnt charcoal, his muscles were weak, and his lungs were two balls of fire in his chest.

Black smoke billowed out of the hatch, so thick that he couldn't see Johan, though the man couldn't be more than five or six meters away.

The fire was coming for him.

All he had to do was shut the hatch, dog it down, and it would be over. Paul had never wanted to do something so much in his whole life.

That man saved your life.

Instead, he stepped across the combing.

Paul didn't understand why he was doing what he was doing, but he couldn't seem to stop himself either.

He duck-walked through the smoky space, trying to keep low where he could still breathe. Still see.

A few meters in he saw a body. It was a young woman with close-cropped blond hair, very pretty.

Except for the jagged piece of hatch that had cut right through her long, graceful neck. Her pale skin was stained red with blood.

Paul dropped to his knees, reached out with a trembling hand. Touched her neck.

Pulse. Somehow she was still alive. Maybe the shrapnel had stanchd the bleeding.

Paul reached down and grabbed her under the arms.

And then he heard the cold voice of Johan Karlsson. “Leave her.”

Paul wheeled around and saw the engineer struggling to drag out another member of the hose team, a hulking man.

"She's still alive."

Johan shook his head, a sad frown on his face. "You'll never make it," he shouted over the fire's roar. "If you try to save her the smoke will take you both."

Paul knew he was right. His throat was scratchy and raw. He was already weak from the lack of oxygen.

He looked down at the pretty young woman. "But--"

"Come help me with Adept Kim. He's a big son of a bitch."

But she's still alive.

"When I go through that hatch I'm closing it behind me," shouted Johan, "whether you're out or not."

Paul closed his eyes.

And set the woman down on the deck. He turned toward Johan and together they carried the giant Adept Kim out.

True to his word, when they made it out, Johan slammed the hatch shut and dogged it down.

Paul fell to his hands and knees choking down cool, clean air, trying to soothe the fire burning in his chest. And suddenly he was retching, pouring his insides out onto the deck.

And through it all he heard Johan making his report to DC Central. "Number Two ER Hatch failed. Reflash. Primary Hose Team down. We've fallen back to Bulkhead Zeta." And then: "Recommend blowing engine room."

And the DCA must've agreed because twenty seconds later, Paul heard the high-pitched screech of fleeing air, muffled by the gasketed steel hatch they'd just come through, but there nonetheless.

"We killed her," Paul whispered.

"The fire killed her," said Johan. "We saved these three." He jerked his head toward the two men and one woman lying on the deck.

"I killed her," said Paul.

Johan shook his head. "If you'd tried to drag her out, you'd be dead, too."

Paul looked up and met Johan's gaze. "And if you'd helped me?"

"Then we would've lost the ship," said Johan coldly.

Paul said nothing.

Johan jabbed a finger back at the steel hatch. "That was a main-space conflagration, my friend. Mainspaces kill ships. We did what we had to do to save *Vision*." He paused and Paul heard the note of regret in his voice. "Sometimes fire forces you to make those kind of choices."



CSS Vision of Truth

Engaging the Word of Blake Fleet above Terra

Word of Blake Protectorate

13 March 3068

The Damage Control party waited in silence on the mess decks for the time they would be sent into a burning space to die. They knew nothing about the battle except what they could discern from the changing accelerations of the ship that bore them toward Terra. Space battles were silent affairs. The silent rattle of an enemy's autocannons, the silent streak of a missile's exhaust plume, the invisible path of a laser.

Until vacuum gave way to matter and the world exploded with light and sound.

That would be the time these people would be needed.

They sprawled in the hard plastic swivel chairs bolted to the deck, already in fire dress, OBAs strapped to their chests. Different people handled the stress in different ways: there were the jokers, the preachers, the chatterboxes, even (and this seemed incredible to Roger Wekesa) those who'd made peace with whatever fate intended for them.

Wekesa saw that Paul Ridge was none of these. Paul sat by himself, head down, eyes screwed shut, his face drained of color, sweat glistening on his forehead. Wekesa knew terror when he saw it.

Despite his promise to Johan, the communications adept tried to think of an excuse to push Paul off the DC party. WarShips were manned with enough crew to staff four underway watches. Since not all those people were required to stand watch during GQ, the remainder were sent down to the mess decks to serve as a kind of ready reaction force, prepped to combat any casualty that might arise. Paul wasn't the GQ quartermaster of the watch so he was down here with the DC party.

Whether or not he belonged.

But Wekesa didn't see any way to get him off the team. The navigator wouldn't move Paul topside just because he couldn't take the pressure of the DC party, nor would the nav relieve Paul of duty altogether. In time of war, fear was not a disqualifier.

It was up to Wekesa to deal with the problem.

The comm tech sighed and walked over to Paul. The other man didn't look up. After a second Wekesa sat down. "How's it going?"

"Great," said Paul dryly.

"Look," said Wekesa, "I'm sure when the time comes you'll do fine."

"You're lying," said Paul without looking up.

"I'm not lying," said Wekesa who wondered how Paul figured out he was lying. "I've read your service record. You were decorated for your actions during the '65 fire. You're a hero."

Paul shook his head. "I'm no hero. The hero was Johan Karlsson."

"Johan reported that you went back into the space to rescue another sailor."

Paul finally looked up at him. "You're wrong, Roger. You weren't there. You don't understand."

The same thing Johan said. "OK, I wasn't there. But Johan was. And he believes in you."

Paul shook his head. "He doesn't understand either."

Wekesa raised his eyebrows. "You're saying Johan Karlsson doesn't understand about the fire. I find that *damn* hard to believe."

Paul looked away. "I know," he whispered so quietly Wekesa wasn't really sure he'd heard him.

Wekesa sat like that for a moment, waiting for Paul to work through the chain of logic himself, but apparently the man didn't have anything else to say. He clapped Paul on the back. "We need you, Paul. I need your best."

"All right," said Paul. "I will try my best."

Wekesa let a papery-thin sigh slip out. He supposed that was the most he was going to get out of Paul Ridge. He squeezed Paul's shoulder and stood up. Wekesa made a round of the mess decks talking to the DC crew, checking equipment, making sure all was

ready. And when he looked back over at Paul Ridge he was startled to see the man was gone.



Johan finished tightening a valve with a meter-long spanner wrench and looked up. He was shocked to see Paul Ridge standing there. "Paul? What's going on? We didn't call for a DC team."

"I know. But I have a duty to be here."

Paul looked pale. Drawn. Not well at all.

"Look," said Johan, "I know you feel you left something unresolved during the fire."

Paul nodded. "Yes."

"But you can't be here now. You need to go back to the mess decks. Paul, by being here, you've abandoned your post."

"No." Paul shook his head.

"I know you're afraid of fire," said Johan gently.

"No," said Paul. "Not in the way you think. I--" He stopped, bowed his head. His voice dropped. "I am afraid of not doing my duty."

"Listen—" said Johan.

"No," said Paul. "*You* listen. I want you to understand. Johan you are so brave. I—I've come to admire you, but I must do my duty. Like I failed to do three years ago."

Johan scowled. "How many times do I have to tell you? She would've died anyway."

"I'm not talking about leaving the girl," Paul shouted. "*I'm talking about leaving the engine room.* Helping you. You saved my life and I, I got caught up in that."

Johan slowly shook his head, unable to follow his friend's argument.

"Don't you see, Johan? Fire draws its power from the breaking of chemical bonds. Oxygen is torn asunder and melded into an entirely different molecule. *That* is what makes fire so useful...and so dangerous."

Johan listened to the words, but he had no idea what Paul was saying. “Paul.” He pursed his lips. “I don’t think you’re well.”

He turned and stepped toward a sound-powered phone on the bulkhead.

“What are you doing?” Paul asked.

“Something I should have done before. I’m going to get you some help.”

“I’m sorry,” said Paul. “You were a good man, Johan.”

What? Johan thought. He almost turned to ask Paul what he was talking about, but before he could complete that simple action there was a moment of incandescent pain followed by endless darkness.



Paul Ridge let the spanner drop from his hand and fall with a clang to the deck plating. A bright red smear of blood stained the spanner’s silver surface, matching the newly-minted crack in Johan’s skull.

“You once told me fire forces you to make hard choices,” he whispered. “And so it does, Johan. I respected you. Hell, I admired you. But ComStar broke its sacred bond and that action has a consequence. That action was *inflammatory*.”

As he had done three years before Paul Ridge fingered a device in his left pocket, a device that would ignite a small explosive charge placed on the dome’s surface, a device that would disrupt the reactor’s magnetic bottle.

He’d spot welded the hinges on the engine room hatch and on the hatch beyond that. Any competent snipe could cut through his welds in minutes, but there wouldn’t be minutes. Flame and smoke would pour through the ship like wine from an upended bottle.

He looked at Johan’s prone body. This time there would be no heroes to save the day.

Paul Ridge sat on the deck and gently placed his hand on his friend’s back. “Blake’s will be done,” he whispered.

Then he pressed the button.