

With the captain's permission, Chris relished the chance to stand in for an occasional engineering watch. He was fascinated with the technology and enjoyed the camaraderie that the engineering crew shared. Giving the crew a break was also good for morale, both his and the crew's. In addition, it broke up the boredom he had to put up with between star systems. Being a xenobiologist was exciting only when you had strange new biology to study. On this occasion, Chris had just joined the engineering officer of the watch, Lieutenant Theodore "Ted" Stevens, in the engine room. "Hey, Ted!" Chris had to raise his voice to be heard over the moderate equipment noise.

Ted looked up from his tablet computer to see Chris approaching before he resumed making an entry. "Hi, Chris. What brings you back here? You're not due to stand a watch right now, are you?"

"No, not until tomorrow. The captain only lets me fill in once or twice a week. He says he doesn't want me to miss any opportunities to add to the libraries in my chosen profession. Right now, there's not much to do since I finished entering the data from my last survey, so I thought I'd drop by to chat a bit if you had the time."

"Sure. I just have to finish my hourly log entries," said Ted.

"You know, there's animal life down there, and some of it looks very large. My first impression is that this planet developed very much as ours did after the Cretaceous-Paleogene event on Earth."

"The what event?" Ted asked with a puzzled expression, still looking at his tablet computer as he entered his log reports.

"The Cretaceous-Paleogene event. It happened about sixty-five million years ago, when approximately 70 to 75 percent of all life on Earth died. There are several scientific hypotheses as to why the event happened. According to the Alvarez hypothesis, a huge asteroid struck the Yucatán Peninsula in the Caribbean Basin about sixty-five million years ago. The impact ring, called Cenotes, can still be seen from orbit with ground-penetrating radar. That radar puts the crater and impact ring in rock strata that's sixty-five million years old and ... and by that glazed look I see in your eyes, I've lost you," Chris said with a smile.

"Yeah, you lost me after the asteroid struck and all that life died," Ted admitted while he continued making his hourly status entries on his tablet, which was linked to the ship's main computer.

"I understand. It can be a bit boring if biology or geology isn't your thing. Anyway, the life I've cataloged isn't anywhere near as diverse as on Earth, but then I can only detail so much from up here. What I need to do is to go down there. When do you think the shuttle will be ready to fly again so we can go down and do a close-up study? I heard it got banged up after the last flight."

Ted replied, "Yes, it did. The last time the shuttle was used, the braking and rotational thrusters failed just as the pilot was about to land in the shuttle bay. The pilot told me that he quickly

declared an emergency, and the shuttle recovery crew got the emergency barrier nets up just in time. Apparently, though, the pilot hadn't yet synchronized the shuttle attitude with the ship, and it was still rotating on its long axis when the attitude thrusters quit. It hit at an angle and struck the deck with the starboard wing tip first and then landed hard on the starboard main landing skid before slamming level with the landing deck when it came under the influence of the shipboard artificial gravity field. The damage was quite extensive, and it probably won't be ready unt—"

Ted never got the chance to finish. Both men felt the ship shudder just before utter chaos broke loose in engineering.

"What in—" Chris started to say as a fist-size piece of what looked like a stone meteor struck an overhead beam a half-meter above Ted's head and exploded almost straight down and diagonally into the port-side FTL engine control panel. A fragment of meteor shrapnel the size of a thumb tip struck Ted just under his left ear and behind his jaw, carving into his neck a four-centimeter-deep, two-centimeter-wide gash that extended through his collarbone. The speeding fragment broke the collarbone, leaving a portion of the bone sticking outside his torn one-piece uniform, and continued into his chest cavity. Blood from a ruptured carotid artery on the left side of Ted's neck instantly spurted in a tall, pulsing fountain onto Chris and the nearby equipment. Chris watched the gory scene in shock and horror as Ted, wide-eyed and terrified, dropped to his knees, desperately grasping at the gash in an attempt to stem the flow of blood, before he fell over and died in an expanding pool of the thick red fluid. Then the Copernicus's main lighting failed. Chris could smell the burning electrical circuitry, and smoke was already billowing in the air when the lighting went out. Meteors and meteor shrapnel continued to crash through the engineering compartment, creating intense sparks, like flint striking steel, as the ship's orbit carried it through the meteor storm. Bright lightning-like flashes of light from the wiring and circuit boards shorting out in the FTL engine electrical panels created an eerie scene and caused Chris to shut his eyes in pain. He choked on the smoke and retched when, through the strobing light, he saw Ted's body lying on the deck. He tried to wipe Ted's blood from his shirt and trousers, but succeeded only in smearing it into grotesque shapes. Chris stood there a few moments longer and stared at Ted lying in the enlarging pool of blood that was spreading beside the dead engineer's head and shoulder.

Hearing the roar of escaping air, Chris snapped out of his shocked trance and looked to his left. In the intermittent, strobe-like flashes of light, he watched helplessly as two engineering technicians, who were standing near where one of the larger meteor pieces had just exited the ship, were quickly propelled into empty space because of the differential pressure from inside to outside the ship. The first technician didn't have time to scream. Grotesquely folded in half and seemingly sucked through the newly created thirty-five-centimeter, irregularly shaped hole in the hull, belly first, he slowed the evacuation of air from the compartment for only a moment. Still frozen in place with fear and from the suddenness of the assault on the ship, Chris watched as the second technician tried to hang on to a vertical column while yelling for help. The column proved too slippery for firm grip, and the woman was tugged violently toward the same hull breach once the first technician's body had cleared it. She too was pulled into the near vacuum of space, buttocks first. Chris watched as six engineering technicians were killed outright when shrapnel from destroyed equipment and meteor fragments cut them down. He heard the loud buzzing and snapping of electrical arcing and then screams off to his right and turned to see two

others die from electrocution; the backup power conduit and cabling to the FTL control panel had been severed before the circuit breakers cut the power. The conduit power lines now dangled lifelessly from the overhead and between the bodies of the dead technicians as they lay on the deck.

The warning sirens wailed in the dying ship, although the sound was beginning to attenuate because of lack of air pressure. Air continued to roar loudly, however, as it escaped through the multiple hull penetrations and into space; Chris's ears began to pop as pressure continued dropping in the compartment. Loose papers, clipboards, and tablet computers that had been lying on workstations added to the nightmarish confusion as the debris flew toward the punctures in the hull. Vainly, replacement air pumped loudly and automatically from on-board air tanks into compartments that were depressurizing, but couldn't keep up with the outflow.