

MAN OF THE RENAISSANCE

McCollum, Michael

If you think nuclear weapons are difficult to build, ask yourself the following question: How successful would the Manhattan Project have been at inventing the VCR?

Darol Beckwith guided his steed over rocky ground, carefully threading his way among scrubby Palo Verde trees and yellow stands of cholla cactus until he gained the summit of the small hill that had been his goal for the previous quarter hour. Once on top, he reined in his horse. Behind him, two heavily laden pack mules stopped in their tracks, each taking quick advantage of the opportunity to crop at the few patches of wiry, yellow grass that poked through the carpet of fist sized stones.

Beckwith removed his salt-stained hat and wiped perspiration from his forehead onto the sleeve of his threadbare, cotton shirt. Around him, the yellows, greens, and browns of the Great Sonoran Desert stretched as far as the eye could see. Replacing his hat, he rummaged in his saddlebags for his pipe, lighter, and tobacco pouch. He soon had the pipe alight and the other implements repacked. Only then did he lean forward to retrieve a pair of 'tronic binoculars from their case. He pointed them at the brown pillar of dust that rose lazily into the cloudless blue sky halfway to the horizon. The dust cloud leaped forward at the press of a control, resolving itself into a column of mounted men. He studied the image for several minutes before restoring the glasses to their protective sheath.

"They're Sonoran cavalry, all right," he muttered as he leaned forward to stroke his horse's neck. "Vargas's report was right about that. Wonder what they're doing this far north?"

The horse's answer was a short whinny as Beckwith urged it forward with his spurs and began picking his way toward the level ground of the plain below. He made no effort to avoid the patrol, but rather rode straight for it, reining in when the file of horsemen was less than a kilometer distant.

It did not take long for them to spot him. He puffed on his pipe and watched the Sonoran envelopment unfold with professional efficiency. He counted thirteen in all -- an officer and a dozen enlisted men -- as he became the center of a cloud of roiling dust, milling horses, and men with rifles drawn and ready.

He bit down on his pipe and lifted his hands well away from his body. The officer, a captain of cavalry by his collar insignia, stopped directly before him and aimed a needle gun at his midsection. Beckwith could see by the thumbwheel that the weapon was selected to full automatic. He tried not to let that knowledge bother him as he carefully broke into a practiced smile.

"*Buenos Dias, Capitan,*" he said, bowing his head slightly in respect to what was obviously a nobleman, and probably a younger son or bastard willed into the duke's service by a father determined to keep him out of trouble. "To what do I owe this singular honor?"

"Who are you, *Senōr*? Where from and where bound?"

"Beckwith's the name. Darol Beckwith. I am the circuit doctor for these parts. Most recently out of California Free Republic, bound for the village of Nuevo Tubac on my yearly rounds ... and damned if I expected to see Sonorans this far north."

"When were you last in the Republic, *Senōr Medico* ?"

Beckwith reached up to pull the pipe from his mouth and then lazily scratched at his week old growth of beard. "Let's see now. I stopped for a week in New Refuge before crossing the river at Blythe, six ... no, seven ... yeah, seven days ago."

"Did you see any soldiers there?"

Beckwith let his smile degenerate into a sheepish grin. "Now, Captain, you know that my service doesn't take sides in local politics. It would be a violation of my oath to answer such a question."

"Perhaps you would prefer walking to Nuevo Tubac without your boots?"

Beckwith raised one eyebrow. "Has His Imperial Majesty, Moctezuma VII, decided to abrogate his sworn oath given in the Second Treaty of Hermosillo? Or is this the Duke of Sonora's idea? Is it now the policy of the Empire to harass doctors of the service wherever found?"

"His Majesty does what he wishes, *Senōr* , and My Lord, the Duke, is his strong right arm."

"Then I guess I'd better give you my boots and start walking, for I will not answer. I assure you, by the way, that my response will be the same when the California border guards ask me about you when I cross back over next fall. I am but a harmless medic trying to get on with his job."

At this last, the captain's eyes dropped to the polished-by-use wooden stock of the automatic rifle in its scabbard beneath Beckwith's right knee. Beckwith followed his gaze, and shrugged.

"Even a doctor must oftentimes defend himself in the wilds. All my instruments are on my pack animals, and would bring a goodly price on the black market in Mexico City."

At the mention of the pack animals, the captain holstered his needle gun and gave orders to a burly noncom. The *sargento* leaned forward and took Beckwith's lead rope from him. A few more quick orders in the local patois -- a corrupt version of Spanglish -- and the doctor found himself disarmed. The patrol formed around him and the whole party clattered off in a southeasterly direction.

Beckwith took the opportunity to study the men around him as he rode among them. Everything about them -- their lean, watchful look; their dusty, sweat stained uniforms and dirty sombreros; the straight-backed way they sat their horses -- told him that they were regulars. That, too, confirmed Vargas's initial report. The insignia they wore identified them as the Second Hermosillo Dragoons, one of the Duke of Sonora's best regiments.

The men themselves were a varied lot. As Beckwith had already noted, the captain was a mustachioed young dandy of nearly pure Hidalgo stock. His troops, however, ran the gamut of humanity. Several pairs of blue eyes stared from out of reddened, sunburned faces above blond beards; indicating that their owners were descended from the vast wave of refugees that had swept down from the north eighty years before. Other members of the patrol sported Indio and Negroid features, and one was Caucasian-Oriental mix. All looked as though they knew their business.

It was late afternoon when they entered the pueblo of Nuevo Tubac in the Gila River valley. The town sat on one bank of the stream whose position was marked by a darker-green swath cut through the yellow-green of the desert vegetation. He took in the signs of the Sonoran occupation with experienced eyes, while appearing to have no interest beyond finishing the long dirty joke that he had been spinning for his companions. He did not like what he saw. If the main street of this little hamlet contained a representative sampling of the Imperials' strength, they must number at least four troops of cavalry and an

unknown number of support personnel. That was a big chunk of manpower for Juan Pablo Andros, the Duke of Sonora, to send this far north -- especially considering the other claimants-of-the-moment for his throne.

Obviously, the fact that he *had* sent them north was convincing evidence that he had some overwhelming reason for doing so. Beckwith cursed the fates that had prevented Vargas from finishing his report. Whatever had happened, it had been no mechanical failure. A clear carrier wave had ridden the satellite channels for almost three minutes after Vargas's voice link had been silenced.

The patrol did not stop at the village square as Beckwith had expected, but rode through the inner defense wall and into the courtyard of the hacienda belonging to Don Ynicente Galway, *Patron de la Pueblo*. Beckwith had spent many an enjoyable evening in that great rambling structure, playing chess and arguing philosophy with his host. He hoped the old pepperpot had not objected too strenuously to Juan Pablo's henchmen taking over his home. Beckwith had too few true friends in this world as it was. He would hate to lose two in the same month.

The captain led him through the fortified outer door and into the gloomy interior of the hacienda, stopping only when he arrived at the door of Galway's study. He knocked briskly and waited for a muffled order to enter. Inside, sitting behind Galway's desk -- a prized pre-war antique -- was a General of the Imperial Mexican Army in full regalia. His chest was covered with more medals than Beckwith had ever seen before in one spot. More important was the fact that the general was Moctezuma's man (not Juan Pablo's), and that he was commanding Sonoran troops.

After the Captain had finished his report, the general, a rotund, mustachioed man with hard eyes, waved dismissal and the Sonoran officer spun briskly on his heel and marched out.

The general leaned back in the squeaky swivel chair and regarded Beckwith for a moment in silence. The doctor stood his ground, coolly returning the stare.

"I am General Miguel Stefan Trujillo of the *Militar de Mexico* ," he said, finally, leaning forward to rest his elbows on the polished surface of the desk. "You are the traveling doctor for this village?"

" *Si, Senor General.*"

"I would have expected an older man."

Beckwith shrugged. "Riding circuit requires the stamina of youth, General. Do not fear. I began my training at age twelve. That was twenty-five years ago. I assure you that I am highly skilled in my craft."

"Why is it that none of your patients informed us that you were due at this time?"

Beckwith shrugged. "Probably because none of them knew it themselves. I am late this year. Got hung up fighting an outbreak of blue plague up in the Navajo Nation last fall and I've been rushing to catch up ever since."

" *La peste!*" The general crossed himself with his right hand and made the sign of the Mushroom Cloud with his left. Beckwith wondered what the Archbishop of Mexico City would think of such an overt appeal to paganism in one of His Majesty's highest-ranking officers, a comment he carefully refrained from making aloud.

"There is no danger, General. I've been vaccinated and if it hadn't taken, I would have been dead six months ago."

Trujillo's expression quickly turned to anger, obviously fueled by the thought that he had made a fool of

himself before this stranger.

"Be that as it may, *Senōr Medico*, I find myself wondering at the timing of your current visit."

"If you will pardon me for saying so, General Trujillo, it is I who should be wondering at your presence, not vice versa."

"My presence here does not concern you."

"It concerns me if it interferes with my work. I got the impression from Captain Rodriguez that I am to consider myself your prisoner."

"His Imperial Majesty would never imprison a representative of the Public Health Service, Doctor. You are our honored guest."

"Will I be allowed to practice my craft freely?"

"Certainly. I will even assign an officer to assist you."

"Will I be allowed to leave when I am finished in this village?"

"I'm afraid not," Trujillo said. "You will to remain as our guest until we complete our work here."

"How long will that take?"

"As long as it takes."

"I was forced to lecture your junior officer concerning Mexico's obligations under the treaty. Must I do the same for you, General?"

"His Majesty has authorized me to take special measures on my current mission, Doctor. If you are inconvenienced, your service may petition His Majesty for compensation. Now, then, if you will excuse me, I have much to do."

Beckwith turned to leave.

Trujillo glanced up from his paperwork. "One thing more, Doctor. I would be honored to have you for my guest at dinner this evening. Senora Galway sets an excellent table and I am always interested in tales of far-off places."

Beckwith blinked, seemed about to refuse, and then relented. "I would be delighted."

He turned to leave once more, his expression dour. He was well out in the hall, following a uniformed flunky toward the stairs that led to the hacienda living quarters, before he allowed himself the barest hint of a smile.

Phase One had gone as planned!

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Beckwith followed the aide to the upper part of the house and found himself in the same bedroom he had occupied on his last visit. He busied himself unpacking the leather satchel he found in the room. He noted signs of a hurried search of his belongings as he did so. A few quick glances inside the case assured him that the seals on the false bottom that hid his "special equipment" were unbroken. He placed his clothes on the pegs set into the adobe walls for the purpose. He had just finished laying out his

shaving kit when there came a quiet knock on his door.

He opened it to find Esperanza Galway standing in the hall with a load of linen. She curtsied politely and brushed past him, all the while keeping her eyes averted as was considered prim and proper for a young lady hereabouts. She placed the linen on the feather bed and turned to face him as he closed the door.

"It is good to see you again, Doctor Darol."

"And you, too, Espe. By the Great Gods of Fission, you are sprouting up like a weed! It won't be long before the young grandes will be beating the doors down."

Espe blushed as Beckwith nodded approvingly. Gone was the gangly little girl whose arm he had set five years ago. In her place was a blossoming young woman of nearly fifteen summers. Espe was one of those lucky people who seemed to have extracted just the right characteristics from her mixed bag of ancestors. She was fast becoming a beautiful young woman.

"How is your father?" Beckwith asked.

"Safe, as far as I know," Espe said. "He left for Taos to buy breeding stock last month and has not returned."

"And your mother?"

"Very angry at the *Mexicanos* for tracking mud all through her house."

"Did that potion I left help her tuberculosis?"

"She is much improved."

"What of my other patients?"

"Carmen had her baby, a strong, young boy with healthy lungs that can be heard all over the pueblo. And Aldo Finessa's arm has regenerated as good as new. Other than that, not much has happened except for the Sonorans."

"What of old Manuel Vargas? Does he still suffer from shortness of breath?"

"You haven't heard?"

"Heard what?" Beckwith asked. "I just got here, remember?"

"The Sonorans killed Manuel Vargas. They say he was a spy. They found him with a machine. Some say that it was a radio."

"Radio? Where would old Manuel get a radio? And for whom would he spy? And what would he spy on out here in the middle of all this desolation?"

"I do not know. All I do know is that the fat Generalissimo was most unhappy. It is said in the village that he had two of his own men shot when he learned that they had killed Vargas."

"Nice people," Beckwith muttered. "Why'd they come to the Gila Valley, Espe? This is poor land, barely able to support the people who live on it. Surely old Moctezuma can't want to add this place to his Empire."

"I do not know, Doctor Darol. They have four horse troops and *los ingenieros* with them."

"Engineers? Any power machinery?"

Espe nodded. Two large steam wagons with drilling attachments. Also, things like a prospector's metal detector."

"Metal detectors, huh? Did you see any radiation counters?"

Espe nodded. "Yes, a few. In the twenty days since they arrived, they have set off many explosions near the old charcoal ovens east of town. What does it mean?"

Beckwith shrugged. "That they're on a treasure hunt, I suppose. I wonder what they are looking for. Maybe I'll ask the General at dinner tonight."

#

"The ancients were a pack of god damned fools!"

General Trujillo wiped at his plate with a crust of coarse bread, soaking up the last of the pinto beans while daring his double handful of assembled subordinates and unwilling guests to disagree with his comment. He was not disappointed when a priest across from Beckwith crossed himself and muttered a silent prayer.

"Ah, our padre thinks otherwise," the General growled, his speech slurred by too much wine.

"Our Lord looks not well on those who blaspheme the dead, Miguel Trujillo."

The general turned to Beckwith. "What say you, Medico? Our ancestors blew up the world in a fit of pique. Should we regard them as near demigods on that account?"

Beckwith wiped his mouth on his sleeve and belched politely before answering. Esperanza Galway peered at him with alert eyes from the chair next to the priest's. Her mother, La Donna Alicia Galway, maintained a stony silence from the foot of the table.

"The ancients were neither fools nor demigods, General. They were men like us, with all the weaknesses and strengths to which mere mortal flesh is heir. If they had a fatal flaw, it was that they weren't wise enough to extricate themselves when they fell into one of the universe's traps."

"Trap?" the General muttered. "What are you talking about, Medico?"

"Why, the trap of nuclear weapons, General. What else would I be talking about?"

The priest folded his hands in a prayerful gesture, "It is refreshing to meet a medical man who is also an adherent of the teachings of the church, Doctor Beckwith."

"You misunderstand, Padre. Whether nuclear weapons are the spawn of the devil is a point that I happily leave to you clerics. No, the trap to which I refer is the obvious fact that they are too damned easy to build."

"You're crazy!" the captain of ordnance who was Trujillo's second in command said from Beckwith's right. "The Manhattan Project was one of the most complex ever undertaken. How can you call what they did easy?"

"I do so, Capitan Villela, because the men who invented the bomb accomplished their feat with the aid of mechanical calculators and vacuum tube technology. They knew nothing of semiconductors, lasers, magnetic containment devices, or dozens of other machines available to pre-Catastrophe civilization. In

outlook, they were closer to the engineers of Queen Victoria's time than they were to the hi-tech warriors of The Catastrophe. That they were able to succeed with their relatively primitive technology is an indication of the ease of the their task."

"Your point, Medico?"

"Why, that nuclear weapons were invented too early. Humanity was not ready for them. Had the task been significantly more difficult, it would have taken longer. That would have given us more time to mature as a species and to develop countervailing technologies. As it was, the weapons of mass destruction were introduced into a world woefully unprepared to deal with their consequences."

"They were more prepared than are we," the priest argued.

"Not necessarily, Padre."

Captain Villela blinked. "Surely, Senõr Doctor, you are not suggesting that we are more advanced than the ancients?"

Beckwith shrugged. "Not in all ways, certainly. Not even in most. But in some."

"What ways, Doctor Darol?" Espe asked.

"Many ways, Espe. If Aldo Finessa had been mauled by that javelina boar a hundred years ago, the most advanced hospital the ancients possessed could have done little more than amputate his arm. Yet, it was not a difficult matter for me to achieve full regeneration. Or cancer, the most dread disease of the ancient world. I can cure it as easily as the common cold. We have come a long way since the days of The Catastrophe, and not only in the field of medicine. Of course, we have an advantage that previous generations did not."

"Advantage?"

"A very great advantage if you think about it. Post-Catastrophe civilization is the first ever blessed with the sure knowledge of what was once possible. Sometimes, while searching for the old secrets, we uncover new ones.

"Our ancestors built a civilization of factories and assembly lines, of massive industries and even larger bureaucracies to control them. We, on the other hand, are a world of cottage industries and master craftsmen, where each machine is the work of a single individual or a few dozen people at most. We are a society that specializes in prototypes rather than mass production.

"We are also more efficient than they were ... of necessity. They left us too poor to do things their way. In the long run, who is to say which is the better road to travel?"

"Then you are not one who believes the race is in its twilight, Medico?" the General asked.

"Not at all. As I see it, our situation is somewhat akin to that of Europe after the fall of the Roman Empire."

"Roman Empire?"

"You might say an earlier *Estados Unidos*, General. A culture that in its time ruled much of the world."

"The city of Romulus and Remus, Julius Caesar, and Benito Mussolini," Espe said, nodding.

Beckwith beamed like a proud parent. "You've seen the collection of ancient books in your office,

General? Ynicente Galway was a scholar of some renown in his youth. I am predicting that his daughter will surpass even his accomplishments someday."

"Most unusual," the General said, his tone betraying his opinion of the usefulness of teaching women to read. "You were saying..."

"Oh, yes, the First Dark Ages! They were a time in history with parallels to our own situation. Then, as now, the world was a collection of warring fiefdoms, with no nation strong enough to enforce its will on its neighbors. The result -- as now -- was a growth of feudalism and a certain lack of stability. Yet, the human race continued its technological advance right through the Middle Ages. Those years saw the invention of the horse collar, the stirrup, the lateen sail, and the first truly efficient plow -- all significant advances over Roman technology."

The dinner conversation continued for more than an hour. Beckwith had hoped that the wide-ranging discussion he had started would cause one of the Sonorans to slip and make a remark that would be a clue to their purpose here. No such luck. The conversation had never risen above the level of a polite debate comparing the present with the "good old days."

Eventually, Beckwith concluded that most of his dinner mates really didn't know what was going on -- not surprising if the powers-that-be back home were right in their suspicions. So, just when the conversation was beginning to lag, he reached into his repertoire of anecdotes and told a funny story. One advantage of the current state of world communications was that jokes did not age as quickly as they once had. He had his listeners chuckling in a matter of moments.

The great crackling log in the fireplace had burned low when he finally asked to be excused and started toward the rear of the hacienda. His demeanor showed no sign of the adrenaline storm that raged in his bloodstream. For if his probing had stirred the General to suspect that he was more than the traveling medic/storyteller/troubadour he pretended to be, this was the moment of greatest danger.

No lurking guards stepped out to bar his way, no shots rang out of the darkness, not even the hacienda dogs bothered him as he crunched along the graveled pathway at the rear of the house. He quickly finished taking care of necessities in the hacienda outhouse, and stepped back into the cold night air of the desert.

He paused to light his pipe. The lighter was a flare of blue against the yellow lights emanating from the hacienda windows. He puffed quickly, and was rewarded with the bitter taste of tobacco smoke on his tongue. He drew in a lung full of the smoke, and then exhaled slowly. As he did so, a bright light just above the northern horizon caught his attention. He stepped out of the shade of the trees to get a clear view as the familiar star began to climb the sky.

#

Beckwith's internal alarm clock woke him two hours before dawn to a pitch-black world lit only by star shine. In spite of the heat of the previous day, the night air was brisk against his bare skin, causing him to shiver at the thought of throwing back the covers and leaving the warmth of his soft bed. He stalled the inevitable for a few moments by remembering the bright star he had watched cross the heavens the previous evening.

By rights, the Catastrophe should have ended all life on Earth. That it had not was a tribute to the overlapping layers of orbital fortresses and satellites the two pre-Catastrophe superpowers had built with such laborious care over a thirty-year period. When finally the world had gone insane and the missiles began to fly, fewer than one in fifty warheads survived to explode against their intended targets. The other forty-nine had either been destroyed with their carrier missiles, in transit through the vacuum of

space, or in the final seconds of their terminal maneuvers.

Coordinating the defenses had been the great manned battle stations. The greatest of these was *High Citadel*, the prime command-and-control facility for the western alliance. First constructed in the early years of the twenty-first century, *High Citadel* had been constantly enlarged, strengthened, and improved. In addition to being the nerve center for all western orbital defenses, *High Citadel*'s computers had been used to archive all manner of scientific and technological data.

During the six weeks the war lasted, *High Citadel* had defeated everything the eastern bloc could throw against it. It had destroyed the east's own system of orbital fortresses in a duel that had turned night into day across the entire face of the planet. Finally, it had directed the strikes that destroyed the eastern bloc's surviving missile fields, and thereby brought about a cessation of hostilities.

The end came too late to save technological civilization. For, although the orbiting satellites and defense stations had saved the human race from extinction, sufficient megatonnage had gotten through to smash the industrial base on which civilization was built. In less than a year, Earth was swept by successive waves of famine and plague. Those men and women still in orbit watched as their world disintegrated into ever-smaller warring groups. These orbiting warriors were finally forced to abandon their posts as food, water, and air ran low. One by one, their emergency craft departed *High Citadel* to slip below the roiling clouds of Earth, never to return. For eighty years, the deserted battle station's anti-laser armor had reflected the rays of the sun with mirror brightness, making *High Citadel* one of the brightest stars in the terrestrial sky.

The sound of a distant catfight brought Beckwith back to the problem at hand. Unable to postpone it any longer, he slipped out of bed and groped in darkness for his leather case. His fingers quickly found the hidden catches that freed the false bottom from the valise. He withdrew a garment from the secret compartment. What little radiance fell through his open window was sufficient to show the darksuit to be a pool of deeper black against the near stygian dark around him.

Beckwith carefully climbed inside, zipping the light amplifier hood over his face as a last step. He was now encased in shadow, able to see, but not be seen.

He turned back to the case, working more quickly now that the world was lit in a bright, greenish glow. The hidden compartment yielded up a holster and needle gun that he belted around his middle. Two small rectangles the size of dominoes went into his breast pocket. He visually inventoried the half dozen tiny vials in the bottom of the case, checking them for any telltale signs of breakage before carefully resealing the hidden compartment. The floorboards creaked slightly as he moved to the open window.

There were two guards roaming more or less at random through the courtyard below. Both were fairly distant from the hacienda and Beckwith took advantage of this good fortune to lever himself up onto the tiled roof of the hacienda. Once there, he catfooted his way to the far side of the building, the side closest to the Sonoran bivouac. After a moment's hesitation at the edge of the roof, he concluded that his best avenue of approach was atop the village wall. Better to be silhouetted against the black sky than the whitewashed walls of the town -- assuming that he did not break his neck in the process.

He thanked the Gods of Fission that this village was too poor to top their wall with metal spikes or barbed wire as he moved in a balancing act *cum* hundred-meter dash along the narrow, impromptu footpath. In a matter of seconds, he found himself overlooking a small sea of tents.

The Sonoran encampment was a sturdy little fortress with an air of permanence about it. On one side, the conquerors had used the village wall -- the same wall where Beckwith now squatted. Everywhere else, they were building new walls from native rock cemented together with adobe. By the progress they

had already made, Beckwith judged their annexation of Nuevo Tubac would be complete within another month.

The thought left a sour taste in his mouth. He liked Ynicente Galway and the people of this village. It would be a tragedy to see them fall under Juan Pablo's iron heel. The real tragedy, of course, would be losing Esperanza Galway. He had watched that precocious little girl for nearly ten years now with an interest far from avuncular. The Public Health Service's greatest need was for good people and Darol Beckwith had planned to recruit Espe Galway for the training academy on his next visit. Now there was a good chance that would never happen. Keeping this one pueblo out of Sonoran hands was not his concern at the moment. Nor was securing Espe for the service. His current mission went far beyond the mere delivery of a few hundred likable people from the bonds of slavery.

Beckwith slid down from the wall, chiding himself for the nasty tendency towards morose thoughts he had developed lately. Then he hadn't time for such thoughts as he padded quietly between rows of tents, slowly making his way toward two large machines parked at the center of the encampment. A tall antenna mast rose between them.

He hid among the tents, acutely conscious of the snores around him, and gauged the moment when the two guards pacing in front of the silent machines would be at the farthest reaches of their circuits. Then it was a swift, crouching run through a dark gap between watch fires, and a rolling dive into the shadows beyond.

The steam wagons were nothing like the pictures of the ancients' sleek machines he had seen. They were both large flatbeds, with their alcohol-powered engines mounted toward the back near the drilling fixtures. The whole of the wagon bodies in front of the main tiller was covered with canvas. Beckwith pulled himself aboard one, being careful not to dislodge the loose equipment scattered haphazardly around the floorboards. Once inside, even his light amplifiers were of limited use as he found himself groping in murky surroundings.

His first stop was at the ancient radio set that was perched on a built-in shelf on one side of the steamer. As expected, the radio was a pre-Catastrophe model, its black plastic case cracked and its battery pack trailing an unsightly cluster of wires. Beckwith removed a screwdriver from his pocket and quickly opened the back of the transmitter to reveal the integrated circuitry inside. He removed one of the dominoes from his pocket and wedged it into the radio's power supply. He then hurriedly replaced the back of the case.

Sometime tomorrow, after the radio had worked for several hours, there would be a quick crackling noise and a puff of smoke from inside the circuit enclosure. When the Sonoran operators opened the case, they would find fused and twisted circuitry, the apparent victim of a massive short circuit. With any luck, they would mark the failure as one of old age. Whether they did so or not, however, it was vital to the success of Beckwith's mission that contact between the Mexican expeditionary force and their emperor be severed.

After replacing the radio on its shelf, Beckwith quickly searched the steamer for spare transmitter parts. He poked into various boxes with the beam of a tiny flashlamp, cataloging items by sight and feel as he went. He quickly found the metal detectors and radiation counters of which Espe had spoken. He also found what appeared to be a jury-rigged seismograph from pre-Catastrophe days in one corner. Next to it lay a pile of recordings. Apparently, someone was very interested in the geological formations in this area. Maybe the Sonorans were prospecting for oil!

He considered the possibility. True, the ancients had pretty well drained the planet of the legendary stuff, but who knew? There might still be a pool or two around for the taking.

He photographed everything and slipped outside, intending to give the other steam wagon a thorough going over. He changed his plans as he caught sight of the burgeoning glow on the eastern horizon. It would be light enough for naked eye seeing in another half-hour, and by that time, he planned to be safely back in his room.

#

"All right, Espe, what is *tinea* ?"

"Tinea refers to a group of common fungus infections, Dr. Darol; also known as ringworm. The fungi involved are *Microspora* , *Trichophyton* , and ... uh, ... *Epidermophyton* . *Tinea capitis* is ringworm of the scalp; *tinea cruris* , of the crotch; *tinea pedis* , of the feet."

"And how does one treat these very itchy problems, Espe?"

"By direct application of any one of several anti-fungal agents, including..."

Beckwith smiled. "Never mind. I should have known that you would keep up with your studies. You'll make a fine doctor someday."

"Do you really think so, Dr. Darol?"

"I would not have said it if I didn't," he replied gruffly. "Now go get me a bucket of hot water so we can get this place cleaned up."

Beckwith and Espe Galway had spent the morning preparing one room of Nuevo Tubac's small church for the traveling doctor's use. One of Ynicente Galway's large mahogany tables had been moved there from the hacienda, and draped in cloth that had been boiled in disinfectant. A similar cloth covered another table on top of which several of Beckwith's instruments were neatly arranged. Battered instrument cases marked with a caduceus were piled in a corner. On their covers were stenciled the words:

PUBLIC HEALTH SERVICE

In Service to Humanity.

Beckwith and Espe had worked through the morning and were ready to begin the sterilization process as time for the noon meal approached. It was the third year that Espe had acted as Beckwith's nurse, and she went about the preliminaries with the practiced touch of a veteran. As Espe left the church to retrieve an iron kettle filled with steaming water, Captain Villela entered the examination room and gazed around in interest.

"Good morning, Doctor Beckwith," the Captain of Ordnance said. "The general sent me over to see how you are getting along. I trust you have all that you need."

"Thank you, yes," Beckwith replied. "We're about to disinfect the examination room."

"So I see. I am surprised that you go to the trouble of individual diagnoses. I always thought that you public health people were interested in water supplies and hygiene, and left the actual laying on of hands to others."

Beckwith shrugged. "We circuit doctors tend to be jacks of all trade, Capitan. And while our primary duty is to insure the health of a community through public hygiene, we also dabble in individual cures."

At that moment, Espe returned with a kettle full of boiling water from the fire where Beckwith had sterilized his instruments.

"Will that be all, Captain Villela?" Beckwith asked as he prepared the water by measuring out a few drops of disinfectant into the kettle.

"Yes, Doctor. Let me know if you need anything."

"Thank you, I will."

Beckwith watched the officer stride out into the bright sunshine before turning to Espe. "Shall we begin scrubbing?"

After twenty minutes of hard labor, Beckwith called a halt. The two of them sprawled on the floor and examined their handiwork.

Espe looked at Beckwith, her black eyes regarding him seriously, and said, "Doctor Darol."

"Yes, Espe?"

"I've been meaning to talk to you about Manuel Vargas."

"What about him?"

She leaned close and lowered her voice to a whisper. "Sometimes when he would get drunk, Old Manuel would say things."

"What sort of things?"

"He would hint that you and he were the only two who knew a great secret."

"Oh?" Beckwith asked, his eyebrows rising in inquiry.

"He would never tell anyone anything, you understand. He would just keep muttering that you were the only one who appreciated him. I didn't think anything of it until they caught him with that radio."

"You said yesterday that it might have been a radio. Now you're sure?"

She nodded. "The fat Generalissimo had it on my father's desk, looking at it, when I took him his lunch one day. It was a radio all right, although unlike any I have ever seen. There was a black box with LED's on its face and a keypad. It was attached by a coiled cord to something that looked like an umbrella frame with a pistol grip."

"Sounds like some sort of communications gear," Beckwith said, nodding, "but why do you think I know anything about it?"

"My room is across the hall from yours."

"So?"

"This morning I heard you moving about before dawn. I figured to tell you about Manuel Vargas then, so I tiptoed across the hall to your room. I knocked twice before opening the door. You weren't there."

"Maybe I went down to the outhouse."

Espe shook her head. "I would have heard you on the stairs."

"So, if I wasn't in my room, where was I?"

"I think you were spying on the Sonorans."

"And if I was?"

"Then I want to help you."

Beckwith did not answer for a full minute. Finally, he said, "Perhaps you *can* help. I would like to look over the Sonoran excavation. I need a way to slip out of the village without being seen. Have any ideas?"

She grinned and was again a little girl. "I will come to your room after dinner and show you the way."

#

"Watch your head."

Espe's warning echoed hollowly from the walls of the small tunnel through which they crawled on their hands and knees. Beckwith glanced up at the sound, wondering how much further they would have to travel in this cramped style. Espe was a black silhouette framed in the dim light of the flash she carried.

The two of them had spent the day treating the people of the village. Night had begun to fall when they finished with their last patient and returned to the hacienda. At dinner, General Trujillo had seemed distracted, as though his mind were on something more important than making conversation with his guests. Beckwith told another of his stories and swapped lies with some of the Sonoran officers before going upstairs to bed. An hour later, Espe had knocked softly on his door and the two of them had slipped down into Ynicente Galway's wine cellar. There Espe had shown him the entrance to an escape tunnel concealed behind one of the wine casks.

They had crawled some two hundred meters, and Beckwith was about to ask Espe how much farther it would be, when a round metal hatch appeared at the end of his restricted field of view. In another few seconds, he found himself half crawling/half dragged out into the frigid night air. It was still an hour or so before midnight and a quarter moon hovered in the sky overhead, casting a soft silver glow across the landscape.

Beckwith glanced back at the tunnel entrance. The escape hole was well camouflaged. If it had not been standing agape, it would have been invisible. He doubted that he could have spotted it in broad daylight, even had he known where to look. Espe did something to a section of the rock wall through which they had emerged and the camouflaged opening swung shut on well-oiled hinges.

"Which way?" he asked.

She pointed a direction and they started off, keeping to the cover of the arroyo into which they had emerged. Both were dressed head to toe in black, although not in darksuits. Since Espe had none such, the protection offered by Beckwith's darksuit would have been useless.

Espe led him across the desert and up a rise that Beckwith knew from previous visits was actually the rim of a broad depression in the midst of rolling hills. They carefully worked their way to the crest of the rise, moving the last hundred meters on their bellies. When they reached the top and were able to look into

the bowl-shaped valley beyond, they found a large detachment of men working around a wooden derrick. The derrick covered a vertical shaft that had been sunk into the dry desert soil. The scene was lit by numerous lanterns strung between rough-hewn poles. A steam engine puffed away beside a ramshackle building, emitting a column of black smoke into the moonlit sky. As they watched, a lift platform surfaced in the midst of the sturdy looking derrick and was immediately manhandled to solid ground.

"Recognize anyone?" Beckwith asked Espe, relying on her younger eyes to substitute for the binoculars the Sonorans had confiscated.

Espe rose up on her elbows and squinted at the activity for a few moments. "There is Capitan Rodriguez talking to a soldier. And over there..." she gestured to the shaft. "... is a *Coronel of Ingenieros* who has been absent from dinner for the last three nights. The man he is talking to, the one with his back to us, is General Trujillo, I think."

"I want to get closer," Beckwith said. "You stay here."

He picked a tentative route that would take him close to the excavation. The floor of the small valley was covered with mesquite bushes and a few scrubby Palo Verde trees. Even without his amplifier hood, he could see well enough by moonlight to spot the sentries posted around the rim. There seemed to be quite a few of them. They would make any approach difficult, but the ground cover was such that if he were careful, he should be able to get into position without being spotted.

"There is an old drainage ditch of the ancients a hundred meters from here, Doctor Darol. I will show you." Espe did not wait for an answer, but moved forward with a catlike speed that Beckwith knew he would be hard put to match silently.

The drainage ditch was a concrete lined culvert that had been stained and broken by age until it was open to the sky. Beckwith studied the workmanship. There was no mistaking the product of the pre-Catastrophe machine culture.

"Why didn't anyone ever tell me about this, Espe?"

She looked at the jutting, broken concrete and shrugged. "You never asked, Doctor Darol. Father says that this ditch paralleled an old railroad spur before someone ripped up the tracks."

"A railroad? Here? The maps don't show any railroad."

"Maybe father was mistaken."

"Where does this lead?" Beckwith asked, gesturing along the length of the ditch.

"Almost to the Sonoran diggings. We should be able to see everything from the other end. Just be sure to stay down."

This time Beckwith took the lead after debating whether he should send Espe back to the pueblo. He decided against it, primarily because he knew he could not find the tunnel exit again in the dark. A cautious half-hour later, they were less than two hundred meters from the Sonoran shaft.

"Stay here," Beckwith said. "I'm going to get closer to see if I can hear anything."

"I'll come, too," Espe replied as she prepared to follow him.

"No, you won't!" he hissed as he grabbed her wrist. He swallowed, regained control, and continued in a

softer voice. "Look, the chance of getting caught goes up with the square of the number of people blundering around out there. You stay here. If I am spotted, you try to make your way back on your own. I have told you how to find my radio in the church. Get it and report what happened."

"I will, Doctor Darol," she whispered.

He slid out of the ditch on his belly and began the long crawl toward where a clump of Sonorans, including General Trujillo, were discussing something in voices too low to understand. He took his time, relying on years of experience to find every possible concealing shadow. When he had closed the range to less than a hundred meters, he rose on his hands and knees and scurried across an open gap in the mesquite. The toe of his boot caught on a half buried, dry branch. The crack of its breaking was like the blast from a rifle. He froze as he hoped the excavation and steam engine noises would cover the sound. Then he saw a man's silhouette against the light of a distant lantern as a sentry moved cautiously through the brush to investigate. A flash beam moved in his direction. He got to his feet and set off in a broken country, stooped over run.

There were sudden shouts behind him and a bullet zipped past his ear with an angry wasp sound. Up on the depression rim, other flashlamps were coming alive. Two such were directly in front of him. He changed direction quickly, heading away from Espe's hiding place. He hazarded a backwards glance over his shoulder to see how close his pursuer was. As a result, he did not see the dark shape rise from the brush and lunge for him. Two bodies collided with a bone-jarring *thud*, and Darol Beckwith slipped unwillingly into unconsciousness.

#

Beckwith opened his eyes and tried to focus them, but the small red crested woodpecker inside his skull seemed determined to prevent it. He attempted to lift his head and gave it up as a bad job. His body was one giant ache. Even his teeth hurt.

At the thought of his teeth, he quickly tongued the false molar he'd so carefully fitted into place back in his room at the hacienda. His questing tongue found the tiny container intact, for which he said a silent prayer. He reopened his eyes. A flesh colored blur quickly filled his field of view and someone's smelly breath was hot on his face. After a few seconds' concentration, he managed to make out the features of General Trujillo.

"Welcome back to the living, Medico. Are you well?"

Beckwith heard his own voice respond in a croak. "My head is killing me. Where am I?"

"In our storehouse. Why were you spying on us?"

Beckwith took a deep breath and hoped the racking pain in his chest did not signify a broken rib. "I wasn't spying. I was curious about whatever it is you are doing out here."

"You were spying."

"What's to spy on in this godforsaken wilderness?"

"Who sent you? The Californians?"

"I don't know what you're talking about," Beckwith said as he struggled to a sitting position.

"And I suppose you know nothing of the failure of our transmitter this afternoon."

"Nothing."

The general opened his mouth to reply, but closed it again when one of his troopers entered the storehouse and began conferring with him in hurried whispers.

Trujillo turned to leave. He spoke to Beckwith's guards as he swept out of the hut. "Bring in the girl and leave the lantern. We will give Doctor Beckwith a few hours to consider his fate. Perhaps he will be more forthcoming."

Moments later, a small figure sailed through the air and sprawled face down on the packed earthen floor. The Imperials left, and there was the rattle of a heavy beam being braced against the door. Beckwith crawled to where Espe lay, not heeding his own contusions. He gently turned her over as pangs of guilt stabbed at the conscience he had long thought armor plated against such feelings. Some Sonoran soldier's fists had left one eye nearly swollen shut and a dried trickle of blood emanating from a bruised and split lip.

Espe moaned and opened her eyes. "I'm sorry, Doctor Darol. They got me."

"So I see," he said, his voice gentle. "Anything feel broken?"

She shook her head, and then sat up with considerably more ease than he had managed. The nascent tears that had welled briefly in her eyes were gone as quickly as they had come, and only concern showed on her face as she reached out to touch his cheek. "They beat you, too!"

He managed a lopsided grin. "Just clumsy. I tripped over my own feet."

She shivered. "I was almost away. One of them caught me in his light just as I left the drainage ditch. I tried to fight. I got in a good kick. I may have broken one man's kneecap."

"Good for you! That's one for our side."

"What are we going to do now?" Espe asked.

"I guess we wait," Beckwith said as he climbed unsteadily to his feet and wobbled to the door. He placed one eye to a crack and gazed past the broad back of the guard outside. From somewhere nearby came the *chuff, chuff, chuff* of the steam engine and the acrid smell of mesquite smoke.

The scene outside was lighted by the same lanterns he had observed previously. Rather than being spread out across the work site as they had been, however, the Sonoran soldiers were gathered in a small clump around the head of the shaft they had sunk into the floor of the desert. They grew excited as the lift car was hoisted out of the shaft via the rough-hewn derrick. Beckwith watched as General Trujillo and another man stepped onto the platform of timbers and then disappeared below ground.

"What do you see, Doctor Darol?" the girl asked.

He turned from the wall and hobbled back to where Espe sat cross-legged on the floor. He slid down beside her and quickly described the scene outside.

"What are they looking for?" Espe asked.

Beckwith hesitated, wrestled briefly with his conscience, and then came to a decision. "Do you really want to know?"

Espe nodded, her expression grave.

"I think they've found an old nuclear fuel depository."

She frowned. "I don't understand."

"It's simple, really," Beckwith said with a humorless smile. "Our ancestors needed a place to dump the spent fuel from their nuclear reactors. They built a series of underground depositories for the purpose. For reasons of security, and also to keep the public outcry to a minimum, they kept the location of those depositories secret."

"And one of them was near Nuevo Tubac?"

Beckwith shrugged. "We don't know. Too many records were lost during The Catastrophe. There *was* a depository somewhere in the southwestern desert. This may well be it."

"Why would General Trujillo go to all of this trouble? Surely Moctezuma isn't attempting to refurbish one of the old Mexican reactors."

"I only wish he were, Espe. No, the Imperials are after spent reactor fuel because of the plutonium it contains. My bosses in San Francisco think Moctezuma is trying to build his own nuclear weapons."

Espe crossed herself and grimaced at the pain the gesture caused. "By the blessed Virgin, it can't true!"

"That's the reason I came here, Espe, to see for myself whether it's true or not." Beckwith slipped a thumb and forefinger inside his belt and came up with a small cylindrical object. "Here, let me take care of your pain."

"What's that?"

"Field syringe," he replied as he stripped the cover from the short, sharp needle. "It contains a mild pain killer."

"I don't need it."

"You'll take it anyhow. I feel guilty about bringing you along, and it hurts me to watch you move. Give me your arm."

Perplexed, she offered him her bare arm. Beckwith searched for a spot that looked cleaner than the rest, then slipped the needle beneath the skin. Espe started at the sudden prick, but was otherwise stoic about the process. When the golden fluid had disappeared into the girl's bloodstream, Beckwith removed the syringe, snapped it in two, and then tossed it into one corner of the shed. "Now, if they'll only leave us alone for a few hours..."

"What did you say?" Espe asked as she rubbed at the needle mark on her arm.

"Nothing," Beckwith replied. "Let's try to get some sleep."

#

It was nearly dawn before anyone bothered them. Beckwith sat with his back to the rough lumber of one wall, dozing fitfully with Espe cradled in his arms. He was awakened by the sound of heavy wooden beams being lifted from in front of the door. Espe stirred and the two of them climbed to their feet as Captain Villela ducked through the low doorway.

"The General wants to see you two!"

Two guards pushed their way past Villela, grabbed Beckwith and roughly thrust his wrists together behind him. Sharp pains shot up his arms as they tied his wrists together with rawhide cord. They did not bother restraining Espe. One of the guards merely grabbed her hair and dragged her yelling out into the cold night air. Another sent Beckwith reeling after her with a blow from his rifle butt.

When they reached the derrick, Captain Villela gestured to the rickety structure suspended over the mouth of the shaft. "Onto the car, Doctor!"

"No need for the girl to come along."

"Sorry, I have my orders. The General wants both of you below. Get onto the car."

The platform shifted under Beckwith's weight as the doctor climbed aboard. The movement nearly caused him to lose his balance. He was followed by Espe Galway and the two guards. Villela remained on solid ground. A quick order from the captain sent the lift car on a jerky descent into the shaft.

The car dropped for nearly a minute while Beckwith and Espe studied the varied strata through which they were descending by lantern light. The rock walls finally fell away on all four sides, marking their entry into an underground chamber. The lift platform dropped another ten meters before it grounded.

Beckwith blinked as he took in the details of his surroundings.

The chamber was long, hemispherical, and sloping. A single set of railroad tracks ran along its center. Uphill, lantern light reflected off a jumbled barrier of rocks that marked the location of an ancient cave-in; while downhill, the tunnel disappeared around a curve. One of the guards nudged Beckwith with his rifle butt. As he stepped down, the doctor fell to one knee amid the rubble that littered the tunnel floor from the spot overhead where the Sonorans had pierced the concrete lining of the tunnel. Espe hurried to his side to help him to his feet.

The small party moved along the length of the railroad track. As they did so, they passed smaller side tunnels. Flickering lanterns betrayed the presence of Imperial work crews in several of these. They passed men in the main tunnel that appeared to be tracing cable runs. Finally, they came to a huge vault-like door with a man-size portal set in its face. The guards ushered them through the smaller opening and into the chamber beyond.

Beckwith found himself in an artificial cave roughly spherical in shape and some fifty meters in diameter. The cave's equator was girdled by a catwalk of steel meshwork on which they stood. The cavern was filled with massive machinery the likes of which Beckwith had never seen before. At its center was an object he recognized after a moment's glance. In that moment, Beckwith knew that his superiors were wrong in thinking the Mexicans were after the old fuel depository. Whatever else this underground installation had been, it had never been used to store spent reactor fuel. However, that revelation brought no comfort. For directly in front of Darol Beckwith, suspended from the roof by an intricate system of cables, was a small winged spacecraft!

#

"Ah, Medico, glad you could join us!" General Trujillo's voice echoed through the underground chamber as he hailed them from within the delta-winged craft's airlock. Trujillo stepped onto the meshwork bridge that connected ship to catwalk and clumped to where the prisoners were standing. He grinned toothily.

"What do you think of my little toy?"

"Impressive," Beckwith replied. "What is it?"

"A single-stage-to-orbit, scramjet powered command craft," Trujillo replied. "Or so my experts tell me. But then, you already knew that, didn't you?"

"How could I have known?" Beckwith asked.

"Because your bosses, the Californians, told you what it was that we were after."

"I work for the Public Health Service, General. Our allegiance is to humanity, not to any sovereign state."

"Now why don't I believe you?" Trujillo asked. He turned to the guards who were gawking in awe at the ship. "Leave the girl. Go outside and close the entry. I have something confidential to discuss with the doctor."

"*Si, Mi General!*"

The two guards returned to the tunnel beyond and closed the man-size door behind them. "What I have to say is not for the ears of common troopers, Medico," Trujillo said.

"Nor for those of a fifteen year old girl," Beckwith replied.

Trujillo moved to where Espe stood, took her chin in one hand, and tilted her face upwards to catch the light of the overhead lanterns. "If you refuse to name your employers, Doctor Beckwith, I will give Esperanza to my troopers for their pleasure. These are hard men. I doubt she will survive even a few hours of their ... shall we say, attentions?" He released Espe, who shrank back in horror, stopping only when she encountered the safety railing at the edge of the catwalk. "Will you speak, or shall I call the guards back?"

"No one sent me."

Trujillo stared for a long moment at Beckwith, then threw his head back and laughed aloud. The sound of his laughter echoed eerily in the dimly lit cavern. "You almost convinced me that time, Medico. You had just the right mix of indignation and earnest fervor in your voice. But then, anyone the Californians would send would have to be a consummate actor."

Beckwith did not answer.

Trujillo frowned. "Come now, Medico. I am truly interested in your opinion of our find. Is it worth your death and that of the girl to protect the traitors in Mexico City who told you of my mission?"

Beckwith made a show of studying the winged spacecraft. Finally, he said, "Why the hell would anyone want this museum piece? After eighty years in storage, it cannot possibly be flown. And even if it could, you'll never get it out of this hole."

Trujillo gestured at the series of large rams that surrounded the ship and the heavy steel cylinder suspended in the gloom overhead. "Penetration equipment, Doctor Beckwith. Getting it to the surface is the easiest part of the task ahead of us. As soon as we trace down the emergency generators, we will let the ancients' own equipment do the job.

"As for the airworthiness of the craft, you are wrong when you say it cannot be flown. I have just finished a tour of the interior; which, by the way, was filled with an inert gas until just a few hours ago. These command ships were designed for indefinite periods of storage. His majesty's archivists believe the reconditioning task to be well within the current capabilities of the empire. And if they are wrong..." Trujillo gave an expansive shrug, "I won't be the man flying it."

"Even if you're right, what use is it? Where can you fly it to?"

The general smiled. The shadows on his face turned the expression ugly. "To *High Citadel*, of course. The orbital fortress is rumored to possess large stocks of nuclear weapons. If Mexico can obtain those stocks, we will put an end to the Californians' arrogance! But enough of this. Are you going to tell me your mission, or do I have my guards escort Esperanza down a side passage to begin the festivities?"

"You are as big a bastard as your emperor," Beckwith cursed.

Trujillo took one long stride forward, whipped back his arm, and slapped Beckwith full across the face. "You will keep a civil tongue in your head, Medico. Now quit wasting my time. The name of your employer!"

Beckwith clenched his teeth together. The gritting sound was loud inside his skull as Trujillo moved in for a second blow. The second slap was more painful than the first. Half of Beckwith's face was aflame as he concentrated on his tormentor through blurry eyes. Trujillo grinned evilly and moved in for another attack. Beckwith waited until the general was less than thirty centimeters distant, then spat full in his face. Trujillo staggered backwards, his features frozen in a look of shocked amazement. He slowly and carefully wiped the dripping saliva from his chin. As he did so, his expression turned to one of animal rage.

This time when he advanced on Beckwith, Trujillo's hands were balled into white knuckled fists. The general's first blow landed on the doctor's right temple, sending him backwards against the safety railing. The second smashed into his nose. The third doubled him over and drove the breath from his lungs. The pummeling continued for nearly a minute before Darol Beckwith slipped thankfully into the black comfort of unconsciousness.

#

Again, Beckwith struggled back from oblivion to a myriad of aches and pains. A fire seemed centered in his nose, and his breathing was accompanied by a recurring pain in his chest. Of more immediate concern was the arm that he could not feel at all, and the low placed ache that signaled at least one sharp-toed kick to the groin. A single cough welled up unbidden. He waited for the pain to subside before opening his single uninjured eye to survey his surroundings.

To his surprise, he found himself in his own room in the hacienda. Judging by the light streaming through the window, the time was early afternoon. Precisely *which* early afternoon was impossible to determine since the sky was the same pale blue it had been for the past several days. As he scanned his field of view, he noted a number of changes. Someone had gone to the expense of equipping the window with an iron grille. The pegs on which he had hung his clothes were bare and his valise was not in the corner where he had left it.

Beckwith carefully turned over in bed. The sudden torrent of pain that accompanied the movement left him with tears in his eyes. He let a sudden dizzy spell pass and gazed in the direction of the door leading out into the hall. He noted with interest that a ten-centimeter square hole had been messily chopped in the oak door to form a peephole of the sort guards use to periodically check their prisoners.

At the thought that a guard might be nearby, Beckwith croaked out the single word, "*Agua!*" He waited a few seconds and then repeated it in a voice that sounded like a nail being scraped across concrete. After a dozen seconds, a blond bearded face appeared at the peephole.

"Get me water," Beckwith cried out. The face disappeared and he lay back, panting from his exertions. Another minute passed before a rattling on the other side of the door signaled the unlocking of a

padlock. The door opened and Espe Galway entered the room. Her face still showed the marks of her beating, but she had washed and changed into clean clothes. She smiled when she saw him awake.

"Get me a drink!" he gasped.

"Right away, Doctor Darol," Espe replied. She moved to the rough table beside his bed and poured from the pitcher sitting there. She then cradled his head aloft and let him sip the cool liquid from a ceramic cup. After two painful swallows, he signaled that he was through. She lowered him gently to the pillow.

"Thank you. How long have I been out of it?"

"Two days. I was very worried. I thought the fat general had killed you!"

"To judge from the way I feel, he came close. What are my injuries?"

He listened quietly as she cataloged the damage that Trujillo had inflicted on him. He had already deduced that he had suffered broken ribs from the fact that his chest was wrapped tightly in bandages, and every breath felt like a lung full of fire. The swollen eye was accompanied by facial lacerations; and the dizziness, coupled with the length of time he had been unconscious, confirmed Espe's tentative diagnosis of a mild concussion.

He waited until she finished her list of his ills, and then smiled painfully. "You have remembered your lessons well. What is your prognosis, Doctor Esperanza?"

"That you will live to face a Sonoran firing squad, Doctor Darol, as will I."

"Is that what they have decided to do with us?" he asked.

She nodded. "Those were the orders General Trujillo gave his men when he finally stopped kicking you. He told them to bring you here, and ordered me to care for you so that you would be awake and aware when the bullets tore into you."

"What about the ship? Have they raised it yet?"

Espe shook her head. "All work has stopped. General Trujillo gave orders that he must be present during the attempt. He was directing the salvage yesterday when he collapsed in the ship cavern. They have him in my parents' room."

"What is his condition?" Beckwith asked.

"His fever is very high. Forty-one degrees the last time I checked. He has developed convulsions and is raving. He has had numerous diarrhea attacks. I have tried to care for him, but he does not respond. *Capitan* Villela is very worried."

Beckwith grunted his understanding, and then struggled to sit up. He tried to ignore the pain as he swung his feet over the side of the bed.

"What are you doing?" Espe asked.

"I'm going to see the patient," he replied through clenched teeth. "Now bring me my pants."

"But he tried to kill you, Doctor Darol, and will have both of us shot as soon as he regains consciousness."

"No one ever said the practice of medicine was easy. Now do as I say, girl!"

Beckwith dressed with Espe's help, and then rose unsteadily to his feet. He hobbled out into the hallway with Espe supporting him under one arm. The dozen meters of hallway was the longest Beckwith had ever walked in his life. They were met at the door to the master bedroom by Captain Villela. From the bags under his eyes and the deep worry lines in his face, Beckwith knew that the Mexican officer hadn't slept in several days.

"Doctor Beckwith, you are awake!"

"No thanks to your chief. I understand that he is ill."

"*Si*," Villela said, his head bobbing rapidly. "It is most mysterious. He was whole yesterday morning, but by afternoon had lapsed into a deep coma."

"What are the symptoms?"

"Before he lost consciousness he complained of a severe headache and pain in his chest. Do you have any thought as to what the problem could be?"

Beckwith started to shrug, remembered his ribs, and thought better of it. "From your description, Captain, it could be a number of things. I will have to examine him."

Villela snapped out a series of orders and Beckwith quickly found himself ushered into the sickroom. The expedition's priest stood at the edge of the bed and watched as the guards helped Beckwith into a chair at General Trujillo's bedside. He found a position that was less uncomfortable than any other, and quickly examined the ill man while letting Villela handle the manual labor involved. When he was finished, he asked, "Where is my luggage?"

"Your equipment cases are down in the church where you left them. Your personal bag is in the study downstairs. General Trujillo was inspecting it before he fell ill."

"Fetch the bag. I need to consult my library."

Beckwith's leather case was brought to him. He noted that the false bottom was still sealed, and concluded that Trujillo's inspection had been a cursory one. He had probably planned to return to it after organizing the salvage operation. Beckwith fished a small pre-Catastrophe computer from its carrying case. He opened it up to reveal a small, calculator size keyboard and an LCD screen. He carefully typed in an inquiry, and then let his eyes scan the scrolling words. He did this a number of times before he looked up and nodded.

"What is it?" Villela asked.

"I can't be completely sure, Captain, without tests I'm not equipped to make. However, I think your commander is suffering from septicemic plague. If that is the case, I'm afraid there is nothing I can do for him."

"*Madre de Dios!*" the priest said from the foot of the bed as he crossed himself.

"But how can this be?"

"Who besides General Trujillo entered the spacecraft?" Beckwith asked.

"No one, Medico," Villela replied. "The General's orders were quite strict on that point. He alone was

to enter the ship. He didn't wish to risk one of the common soldiers damaging the equipment."

"Then from the fact that he was the only one struck down, I can only conclude that he ran into an old war germ inside the ship. Both sides are known to have used mutated *Pasteurella pestis*, the plague bacteria, in their germ warfare laboratories. The war germs were bred for quick action and deadly effect."

"Surely there must be something we can do," Villela replied.

"For the General, no," Beckwith said. "Not if it's truly modified septicemic plague. We have ourselves to think about."

"What do you mean?"

"I mean the damned stuff is contagious, you idiot! Why else would they call it The Plague?"

The priest crossed himself once more, while Villela merely gulped as his complexion lightened several shades. Finally, he said, "What must we do, Medico?"

"The first thing is to seal up that devil's spawn in the cave where you found it. If the original source ever gets loose, it could decimate every town and village between San Francisco and Mexico City. The next thing is to call for help."

"But we have no radio!" the priest exclaimed. "It failed several days ago and the technicians have been unable to fix it."

"In that case, we must get you and your men to a Public Health Service station, Padre. The nearest is in Blythe, but you can't very well use that one, can you?"

"There is such a station in Hermosillo, Doctor," Villela said.

"So there is. You will have to go there, Captain."

"But there isn't time. General Trujillo was struck down within twelve hours of first entering the ship. If we too are infected, we will be dead before we reach the imperial border."

"I admit that I don't know how it hit him so quickly," Beckwith replied. "Perhaps he cut his finger while he was in the ship and the bacteria went directly into his bloodstream. You will have to pray that it does not attack you that quickly. However, if any of your men have been infected, they have no more than a week to reach adequate medical care. Perhaps you can send a small party ahead with remounts and alert the doctors at Hermosillo Station. The Duke can loan them one of his aircraft to fly out to meet you on your line of march."

"What of the village, Doctor Darol?" Espe asked, terror in her voice.

"We'll have to do the same. We will send riders as quickly as possible to Blythe. Perhaps they too can get an aircraft to bring serum here. In any event, as soon as General Trujillo dies, we will burn his body and all of the bedding in this room. I am sorry, Espe, but it is all we can do."

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Darol Beckwith stood on the balcony of *Hacienda Galway* and gazed toward the south where a cloud of brown dust hung low on the horizon. It had been long minutes since even his electronic binoculars had been able to pick out the retreating Sonoran column. Even so, he continued to watch until the cloud of

dust kicked up by their passage had begun to dissipate on a gentle easterly wind.

Despite their obvious fear of the plague, the Sonorans had retreated in good order. Captain Villela had waited for the moon to rise the previous evening before dispatching a group of his best riders toward Hermosillo. The main column had followed at dawn. Judging by the swiftness with which the men and horses disappeared from sight, Beckwith estimated that they would make at least sixty kilometers their first day.

He lowered his gaze to the remains of the Sonoran encampment just beyond the village wall. The two steam wagons were parked where he had first seen them. Like the rest of the heavy equipment, they had been judged too cumbersome to take along on the forced march and had been abandoned. The cavalrymen had been gone only a few minutes when the first villagers ventured forth to salvage what they could. Since then, practically the entire population of Nuevo Tubac had joined in the excitement. The abandoned equipment would go a long way toward repaying the people of the village for the occupation.

On a small rise beyond the abandoned encampment lay a mound of blackened wood and gray ash from which a thin wisp of oily smoke rose lazily into the air. The smoke marked all that remained of General Miguel Stefan Trujillo's funeral pyre. The Sonoran commander had stopped breathing at 04:16 that morning, and had been cremated shortly thereafter. The expedition priest had prayed for the soul of the departed even as soldiers doused the body and bedding with alcohol. Immediately following the funeral, Nuevo Tubac had been rocked by a series of distant thunderclaps from the excavation site. It had taken all of the expedition's remaining stocks of explosives to reseal the entrance to the underground base, but reseal it they had.

Beckwith was jolted from his reverie by the sound of footsteps. He turned in time to see Espe Galway join him on the balcony. "Did you get through?"

She nodded. "They said to tell you that they were sending a team via aircraft, and that it will be here this afternoon."

"And the troops?"

"The first party of California dragoons will arrive in three days. The rest will follow a week later."

"Very good," he said, smiling. Espe had been in contact with Public Health Service Headquarters in San Francisco via Beckwith's hidden radio.

"Are they gone?" she asked, gesturing after the departed column.

Beckwith nodded.

"Good riddance! Now maybe you will explain all of this to me."

"Nothing to explain," he said. "General Trujillo ran into an old war germ, got sick, and died."

"I don't think so," Espe replied.

"Oh?" Beckwith responded, his single arched eyebrow asking far more than that simple monosyllable ever could.

"General Trujillo told us that the ship had been filled with inert gas until just a few hours before we arrived. Remember?"

Beckwith nodded.

"As you taught me, " *Pasteurella pestis* is carried by the fleas on rats. I hardly think the rats, the fleas, or the bacteria could have survived eighty years in a ship without oxygen."

Beckwith shrugged. "How else could he have been infected?"

"I think your saliva was filled with *Pasteurella pestis* when you spat on him."

"Then I should be dead, too."

She shook her head. "Not if you've been vaccinated against the plague. That was what that injection you gave me in the equipment shed was for, wasn't it?"

"Are you saying that I, a medical man, would intentionally infect another human being with a deadly bacteria?"

Espe slowly nodded her head.

"Do you have any proof to back up such an allegation?"

She nodded again. "I checked your teeth while looking over your injuries. I thought the fat Generalissimo might have loosened one with his blows. I found an artificial molar broken off at the root. That is where you kept the bacteria culture until you were ready to release it."

Beckwith sighed and put his arm around Espe's shoulder. "My ribs are beginning to ache. Why don't we go inside and we'll talk about this."

Espe assisted Beckwith to one of Ynicente Galway's softer chairs. Beckwith gestured for her to sit on the floor in front of him. She did so in a manner that made him envy the recuperative powers of the young. He reached into the pocket of his robe, fished out his pipe, and made a production of lighting it. Only when he was surrounded by a blue haze of tobacco smoke did he continue: "You seem to have some very definite ideas, Esperanza. Why don't you tell me what you think you know."

"I know your superiors sent you here to stop the Mexican Empire from establishing a plutonium mine. I imagine you were quite relieved when you realized that what they had found was not a nuclear fuel depository after all. Then you discovered General Trujillo planned to salvage the command ship in order to raid *High Citadel*'s nuclear arsenal, and you killed him. Did I get that right?"

"Sorry, no," Beckwith replied. He watched his star pupil as her smile of triumph turned to a look of confusion. For a brief instant during the transformation, he caught sight of the beautiful young woman she would soon become. "The truth, Espe, is that there aren't any nuclear weapons aboard the battle station. *High Citadel* was a command-and-control facility, and as such, was prohibited from stocking nuclear devices. True, it commanded such weapons during The Catastrophe, but those were ground and space based systems long since expended.

"And while I'm clearing things up," he continued, "I'm afraid that I owe you an apology. That story about my coming here to stop the Sonorans from looting a nuclear depository was not the truth. Actually, the last of the fuel depositories was discovered and neutralized thirty years ago."

"But if there wasn't any fuel depository, and *High Citadel* doesn't stock nuclear weapons, *why* did you kill General Trujillo?"

Beckwith sighed. "That is difficult to explain. To begin, what caused The Catastrophe?"

Espe blinked at Beckwith's sudden change of subject. "The Sevastopol Incident, of course."

"Sorry, but you're wrong."

"That's what all the history books say!"

"Then they confuse the incident that touched off the conflagration with its root cause. It is true that the nuclear exchange was triggered by the sinking of two American destroyers off Sevastopol. The *reasons* the bombs began to fly were far more complex and spring ultimately from a single source. The underlying *cause* of The Catastrophe was due to our ancestors tarrying too long in an era."

"What era?"

"That of unbridled offense, the period that began with the mating of nuclear warheads to intercontinental ballistic missiles and ended with the lofting of the first orbital defense systems. Nuclear tipped ICBMs were weapons of irresistible power. They so overwhelmed all other military technology that for decades no defense was possible. That unpalatable truth drove our ancestors slightly insane.

"You see, Espe, once the option for self protection is taken away, all that's left is for one side to threaten the other with extermination should they launch an attack. The analogy that was often used was that of two men standing in waist deep gasoline, each holding an unlit match, and each ready to strike a spark at the first sign of his opponent's doing likewise. The only recourse to having one's own citizens incinerated was to incinerate the other side's citizens. Is it any wonder that they were a bit paranoid?"

"But what else could they do?" Espe asked.

"Nothing," Beckwith replied. "And that's the point. So long as there was no defense against nuclear tipped ICBM's, the strange logic of mutual destruction made sense. However, that logic carried with it a terrible price. Throughout history, the race has become more unified as its level of technology has risen. Nothing mysterious about that, of course. The effect is mostly a function of the ease of travel and long distance communications.

"The invention of nuclear weapons halted that process. In a world of such destructive power and half-hour flight times, a nation's first mistake could well have been its last. No one dared take the risk that always accompanies trusting one's enemies. So, the world divided into two hostile camps and hunkered down to glare at each other across their respective battlements.

"To give credit where it's due, they *did* manage to control the stalemate for an admirably long time. Still, the situation was unstable. It could not endure forever. Sooner or later, one of the men in the pool of gasoline had to strike a spark with his match. So long as warfare was all offense and no defense, disaster was inevitable."

"But warfare wasn't all offense, Doctor Darol! They had *High Citadel* and all of the other battle stations to defend them."

"True," Beckwith said, nodding. "But there is always a time lag of about a generation between the time a new technology is introduced and when societies come fully to grips with that technology's consequences. At the time of The Catastrophe, the orbiting battle stations were still too new to have put to rest a century of paranoia. Had the nuclear exchange been delayed another thirty years, things would have been different. By that time the defenses would surely have been good enough to hold the damage to a level civilization could have tolerated. Who knows? Had the consequences of making a mistake not been so grave, the various leaders might have risked trusting one another enough that they could have avoided The Catastrophe altogether."

"What has all of this to do with you killing General Trujillo?" Espe asked.

"It has everything to do with it. As you surmised, I killed the General to stop that ship from being raised. My service keeps its ears open. One of our operatives in Mexico City picked up rumors about a discovery in the royal archives, and of an archeological expedition that was being dispatched to check it out. I was sent here as soon as we received Manuel Vargas's report. My orders were to evaluate whatever it was that they had discovered, and to act as I thought appropriate. That is precisely what I did."

"But why take any action at all? What could it have harmed if the Mexicans had raised that ship?"

"Do you remember what we spoke about at dinner that first night I came to Nuevo Tubac?"

"You said that nuclear weapons were too easy to build."

"And after that?"

"You explained how we've managed to surpass the ancients in some fields."

"That we have! Not many, I will admit. Nevertheless, we have had our moments. The truth is that we are recovering much faster than anyone predicted. In many ways, our current state of development is reminiscent of that of the Late Middle Ages in Europe. We too live in a world of postage stamp fiefdoms where rulers spend their time plotting the overthrow of their neighbors, or else scheming to prevent their own overthrow. As in the Middle Ages, this state of anarchy is a necessary precursor to the formation of continent spanning nation-states. Also, like the Middle Ages, we see definite signs of a renaissance emerging from the chaos of our present age. Out of this rebirth will come many things. There will be advances in the arts, in science, in mathematics. As our duchies and despotisms are consolidated, trade will increase and the grinding poverty in which we have lived these past eighty years will begin to lift. Roads will be rebuilt, oceans spanned; there will be a rebirth of intellectual vigor unmatched since before The Catastrophe.

"Unfortunately, that vigor will bring with it a much less welcome development. If there is one thing we can predict with full confidence, it is that humanity will soon attain the level of development necessary to produce nuclear weapons. Knowing human nature, we have no doubt that such weapons will be produced as soon as we regain the capacity. Once we reach that particular plateau, we will face the dilemma that nearly destroyed our ancestors."

"Whether we survive the Second Age of Nuclear Weapons will depend on two factors: How long can we delay the inevitable conflict, and how quickly can we rebuild our orbital defenses? When the time comes, we are going to need every bit of technology that *High Citadel* represents, as well as the information stored in the battle station's computers. If we allow that technology and information to be vandalized or squandered, we will delay by decades the time when the human race will be safely past the crisis. If, on the other hand, we conserve those assets for future generations, we may well shorten the epoch of overwhelming offense to a manageable period. Once through it, the race will reach an era of stability that could well ensure its immortality.

"Helping humanity survive the coming crisis is the true goal of the Public Health Service. We advance that goal any way we can. In this particular case, we advanced it by safeguarding *High Citadel*. In another place and time, we may choose to make certain that a king never produces a legitimate heir. In another, we may give an aged philosopher a new heart in order that he can live a few more years to complete his work. By so doing, we perform more good for humanity than with all the potions and nostrums ever peddled. That is the organization that I am giving you a chance to join, Espe. I await your decision."

There was a long silence while Espe digested all that Beckwith had told her. Finally, she asked, "Do you

truly think that I would make a good doctor of the service?"

He laughed, unmindful of the pain it caused him. "If I didn't, I wouldn't have spent so much time training you. I must warn you, though. The work is hard and dangerous, the food is poor, and you spend entirely too much time sleeping on the hard, cold ground. It will mean years of separation from your friends and family, and you could end up in a ravine somewhere with your throat slit or a bullet through your head. Still interested?"

"I have never wanted anything other than to be just like you, Doctor Darol."

He nodded. "In that case, we'll see about arranging passage to San Francisco for you when the plane comes this afternoon. I think you will find it an interesting life. I know I have!"

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