

*The New Tom Swift Adventures*

# Tom Swift and His Luna-Tronics Excavator

By Victor Appleton II  
and Leo L. Levesque

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## Dedication:

To all the hard core Tom Swift Jr. aficionados.

This story is not for you. But, if you like fun...?

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# Tom Swift and His Luna-Tronics Excavator

Or

*How Tom Swift Finally  
Met His Space Friends*

By Victor Appleton II  
and Leo L. Levesque

The start of a brand new world of Tom Swift stories featuring many of your favorite characters, plus a few new ones, in all-new situations and adventures highlighting the many skills and inventions of the world's number one teenage inventor, Tom Swift!



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# Rambling Foreword

I'm sure this is a safe statement to make: The final Tom Swift Jr. book is a dud! Somehow, juvenile-book specialists at Stratemeyer Syndicate took a wrong turn at the end of the series. At this point they must have believed that the jig was up and Tom Swift Jr. was being laid out in his coffin and his grave was being dug. And so, *Tom Swift and the Galaxy Ghosts* was a sad and unsatisfactory way to end the Tom Jr. stories.

But, it was not the end of Tom Swift!

As with all good story ideas, our named hero was to be resurrected three more times but never with the popularity of the father and son books.

For me, being left hanging regarding the Space Friends is the most upsetting and incomplete story line in the books. The Tom Jr. books start with the Space Friends trying to make contact with the famous father and son team, but the series concludes with some fiendish alien invasion of Earth by ghosts from another galaxy. What happened to the Space Friends? Did the radiation from the fiends get to them?

A small group of authors who are also fans of the series have continued to add to the stories, especially to the Tom Jr. canons. In recent years several of these fan/authors have addressed this point by creating stories that get Tom (finally!) face-to-face with the Space Friends. Some have added new stories to the beginning or the end of the Tom Jr. tales. Most have just skipped over the last book and then continued on. One author recently completely rewrote that ghastly ghost tale in an attempt to resurrect the title, but not the story. We shall see.

No matter what way you go about it, the new material coming out today is better than what we got from the Syndicate in the final few Tom Jr. books. And, many may even argue the new stories are better than the final three complete series.

Now it's my turn to see how Tom meets the Space Friends, and I took the easy way out. I'm purposely ignoring what others have written. After all, there are worlds of probabilities are out there just waiting to be grabbed. The five Tom Swift's we know are not the only ones. I already explored an alternate universe where the hero is a heroine, Thomasina Swift. As I said, there are many "Tom" worlds out there. Some must be so close to the real one that the difference won't start till just before that last book while others diverged in the early days... somewhere around the time Tom starts to build the *Sky Queen*.

There are a million Tom Swift stories in the Naked Multi-Universe; this is one of them.

*Leo L. Levesque*



# Prologue

“Now listen to me, kid, I may be old but I’m not senile yet and I tell ya, that Tom Swift over at Swift Enterprises and me were like that.” The old man held up his hand with two fingers touching each other. “And it wasn’t that long ago that I was always there looking around and listening to all the gossip and what not. Who do you think wrote all those darn books about his early exploits when he was a kid no older than you?” He pointed a shaky finger at the orderly and smiled his toothless grin.

The night orderly pulled up the one extra chair that was in the room and sat down near the old man. The young man loved this time of night, (three in the morning) when he had an hour or two in which he could hide and spend the time with his favorite resident. Everyone was asleep or snoozing in some corner so he wasn’t missed.

“Now, Mr. A,” began the young Hispanic orderly as he reached over and added another pillow to the pile that was holding up the old man in a sitting position, “I want to hear a new story, one not known to the public at large, one that was kept secret because it would shake up the world in general. One that even the famous Tom Swift is still afraid that he may have screwed us royally with and is holding his breath and hoping it won’t kick him in the a...”

The old man chuckled, closed his eyes and slowly started to talk to himself. “Now let’s see. There’s the time he put a crack right through the Earth. Nah! The time he

made the gravity on little old Nestria to triple up and caused it to head toward the Moon and almost smashed into it. Nope, everyone swallowed the cover up on that one. Let me see... I know... the Moon anomaly, that's it!" He half opened one eye and looked to see if his audience was paying attention. It was.

"Okay, kid, I got it. The Moon anomaly and all the other stuff that happened up there that he caused and the aftermath that no one knows of except for a few select people, like me!" The old man smiled at that and struck his chest several times with his finger.

The young man laughed and knew that it was going to be a good tale. He made himself as comfortable as possible in the old straight-backed chair.

Mr. A's eyes glazed over and he was off and running...

## Chapter One: Sand Twister

“Hey, genius boy,” Bud Barclay called out as he came into the ‘Barn,’ a gigantic open ended work area at the Swift’s experimental science complex called Swift Enterprises. “I hear you’re about to go on a fishing trip without me!” The tall, athletically built boy of eighteen rarely missed a chance to go adventuring with his best friend, Tom Swift. Tom was also eighteen, tall, lean and always sporting a blond crew cut and a striped tee-shirt. He was an inventor and creator of so many world-shattering innovations that the public really had no way of keep track of his many achievements.

Bud came to a halt as he saw what was in the Barn before him. “Jetz!” he called out as Tom came out of the mid-section hatch of the newest model of his Subocean Geotron. It was a quarter of the original size and could only hold two people in its central position control cabin. It was mounted on one set of collapsible caterpillar treads. The major difference in design was that it no longer had a boat shaped nose but was more elliptical with a flatter top and bottom—like his seacoasters—and narrower in width.

The Mini-Geotron was still covered with close to a hundred one-foot-wide satellite-looking dishes that were embedded into the surface of the vehicle. The repelatron antenna was just a stub of a few inches in the center of each of the dishes. This gave the Geotron a streamline hull and it had no windows of any kind to have to be kept from being marred. Each dish was multi-purpose; aside from the repelatron functions, it contained ground penetrating radar/sonar, infrared/ultra-violet and micro-video lenses of different frequencies and sensors for both pressure and temperature.

“Tom, you’re a liar!” he told his old chum as he admired the new sleek machine with a whistle. Tom gave him a quizzical look. “I remember you telling me you couldn’t make a smaller Geotron than the one you have because of the power requirement of two atomic engines and the structural stresses from the repelatrons pushing away the dirt to make the pathway. So, what gives?” Bud was running

his hand over the smooth, slick, tremendously strong, heat-resistant titanium-steel alloy of the outer hull. The inside of the plating was insulated with layers of asbestalon and the amazing plastic, Tomasite.

“Well, flyboy, you got me there! But at the time it was no lie. And I thought you only came by to nap on that corner stool in my lab. The truth is, Bud, this Geotron is not a true ground-digging mole like my other one. This one I designed for ocean bays, tributaries, and rivers. It can’t do any real heavy tunneling. It’s to be used more for inspection of bridge pylons and footings and to dig into the sand and muck that you find in a lot of waterways. It can’t penetrate hard rock and subsoil.”

Bud looked mildly unconvinced.

“Do you realize how much work is done underwater that is more or less guess work? They take soundings and test probing and drill cores of the layers of sand and muck until they hit bedrock, but there is lots of untouched ground. With this machine they can actually do a total grid search and know every nook and cranny there is down there.”

“Sounds great, pal, but you still can’t see a thing down in that muck and you have no windows. We’ve gone that route before!” Bud was thinking of past sea adventures, especially in the Fat Man’s suit.

“Then I take it you’re not interested in coming with me for a little test run in the lake to check out the new visual systems I’ve installed. Maybe we can find old Carlie, the lake monster, hiding in that deep chasm at the far end of Lake Carlopa!”

“You promise me no ‘three blind mice’ routine and you’ve got yourself a partner, partner!” And Bud threw his arm around Tom’s shoulder and led him back into the Geotron.

Inside, it was cramped but well laid out. The hatch was right behind twin seats and a U-shaped control console topped with a wrap around view screen that covered a total of one hundred and fourth-five degrees. In back of the small entry way was a small circular hatch... and that was it. The walls were smooth and shiny except for a twin line of holes

along the top of the wall and another set along the bottom of the walls near the floor. They were the environment control vents.

“Claustrophobia City,” Bud murmured out loud as he tried to get into his seat. With a smile, Tom had to show him the slide/button on the side of the seat to move it back and forth for easier access. Bud took the left seat and settled in, adding, “but what else could you expect from a Minitron.” He had already nicknamed the machine. Most of the controls were familiar to him as it was the same layout that Tom used in his original Geotron. It was only at the monitor control sections, which were located between the left and right pilot controls, where the instruments were new to him.

“Bud, I did not design this machine for long term occupancy. Six to eight hours tops for a submerged run time and it has a two hour emergency air and power supply after that.”

“Is there another way out of the Minitron if it does get stuck in the mud?” Bud held his nose and waving his hand above his head going, “blub, blub, blub!” as if he was sinking.

“For you, no! For me, there is a Hydrolung suit located under each seat.”

Satisfied, Bud said, “Just a day worker, I can go for that!” He liked to keep his nighttime free so he could take out his one and only girlfriend, Sandra Swift, Tom’s seventeen-year-old sister. She was a little shorter than Tom’s six-foot height, but with silky blonde hair all the way down past her shoulders and sparkling blue eyes. While Tom was mild and introspective, she was outrageously beautiful and outgoing.

“Once we get going, Bud, I’ll check you out on the viewing screen and its different applications. Strap in, flyboy, safety first, and I’ll fire her up.” Tom’s hands were moving over various controls, closing the hatch, turning on the air supply (a hiss of air could be heard from the top vents) and adjusting the cabin’s AC controls. With the control board showing only green lights on all its power and other systems, Tom turned on the viewing screen.

It was a remarkable, life-like image, almost 3-D in appearance. They had a full colored panoramic view from their right shoulders all the way to their left and they could see from just above the ground to the sky. The view could be rotated a full 360 degrees in all directions by using the viewing trackball. They were seeing the whole front section of the barn, right out the open entrance and beyond.

“Now, Bud, this is set for direct viewing, and at night we can switch to a combination of infrared and radar. A ‘*Little Idiot*’ computer interprets the two signals and adjusts it to our vision range. We can also split the screen and view two or three directions or modes at once.”

With a smile Tom pointed to the combination ear fitting communication ear bud and mic sitting in its holder. “Call the air traffic control tower for me and get us clearance to use the main runway to get to the back gate of the complex and out to the lake.” Tom put his own earpiece in and placed his hand on the armrest joystick and tapped one of three control buttons on top of the stick for forward drive. He eased the stick forward, the caterpillar treads engaged, and he slowly drove the Minitron out of the Barn and onto the tarmac.

Hearing Bud’s conversation with the tower over his own ear bud he turned onto the edge of the runway and poured on the speed. With a slight clacking sound from the treads on the asphalt they achieved a top speed of thirty miles per hour. Bud let out a laugh. “Go, rabbit, go!” and he leaned forward as if he was cutting through a hard wind that was blowing on his face.

Tom glanced at his friend and his antics and just kept on driving. At the back gate he made Bud get out and keypad the gate open and close it after the Minitron rumbled on through. The back gate was just a half-mile from Lake Carlopa and as they drove down the dirt road that cut through old forest land, Tom remembered that he needed to look at the old abandoned sand pit on the inland side of the bluff that overlooked the lake.

The Swifts were about to build a new nature preserve there. The sand pit had been closed for years because it was now so near the water’s edge, and was causing sediment

problems, that it was a public health concern.

While this land was still part of the properties owned by the Swifts, it was not part of Swift Enterprises proper. The Swifts throughout the years had bought up as much adjoining land as possible, and let it go back to nature, as a bumper zone from both intruders and residential building that in the future might cause trouble with both zoning laws and their needs as a scientific research establishment and experimental jet testing grounds and airport.

Tom finally found the overgrown road and did a quick ninety-degree turn into it. “Ya-hoo!” screamed out Bud in pleasure as the Minitron bulldozed through the underbrush. “Now, that’s the way to go, Tom! Let her rip!” They were bouncing around so hard that Tom had to slow down to a crawl. Bud’s face went from a look of joy to disappointment in a split second.

The Minitron came out of the brush and Tom had to slam on the brakes. He didn’t realize just how close the shrubberies and new growth pine trees had matured to the rusty old chain link fence. Bud let out a sigh and started to unbuckle his seatbelt when Tom stopped him. “Bud, let our fingers do the walking,” referring to an old advertising campaign about using the telephone books.

“Oh!” was his reply as he buckled back in looking at Tom.

“Now is the time for your lesson on how the monitors work and their special features, Bud. Look under the viewing trackball at the digital readout block and push in one of the two arrows that point right or left. This will let you scroll through the dozen or so options that are available, and if you tap the button between the arrows it will direct what you’re selecting to one of four screens. One tap, full screen, two quick taps left third of the screen, three taps middle, and four taps right side.”

Tom looked at Bud. He was nodding his head, *yes*, in understanding. “Go through the options and see if you can find something that will help us get inside the fence.” Tom knew from past experience that Bud learned best by doing. He never made the same mistake twice. It was all part of the natural feel he had for flying that made him one of the best

“fly by the seat of your pants” pilots that the Swifts employed.

In less than a minute he had a couple of options up on the screen. One was ground radar and the second was electromagnetic wave distortion. He left the middle screen as normal view. “Tom, earlier you said you can combine signals. How do you do it?” He was enjoying himself and he knew that he was almost there.

“Okay, Bud, all you have to do when you select your option is just hold down the select button until the readout starts to blink and then let it go. When you’re totally done, hold down both left and right arrows at the same time and all two or three blinking options will merge.” He nodded to Bud to do it.

The radar image merged with the normal view and the foliage of bushes and smaller branches of trees disappeared off the screen. But objects farther away just looked solid and you couldn’t tell what they were.

The magnetic image overlaid the other two and now the metal fence could be seen. Bud used the trackball and moved the center of the screen both left and right. He could now make out the rust covered gate from the rest of the enclosure far off to their left.

“Good going, flyboy. Now take us to it.” Tom folded his arms over his chest to show he was not going to drive any further. Bud eagerly grabbed his set of controls and had them there in no time at all.

“The gate, Tom. Do you have a key or something?” Bud asked while he stopped the machine in front of it and gazed at the rusty old lock and chain that held it closed.

“Bud, old man, it’s your kind of day. Go for it, *‘Have tank, will travel!’* Tom sang out, miss quoting an old TV show. With a grin on his face Bud rolled the Minitron forward and snapped the hinges on the far side of the gate post and pushed it aside. It seemed the old lock and chain still had some life left in them.

“Who do we send the money to so he can repair that gate, Tom?” Bud asked knowing full well that the property belonged to the Swifts.



“I think the driver of the vehicle that did the damage is responsible, so...” He pointed a finger at Bud and laughed.

Bud just shook his head no and nudged the nose of the Minitron toward the far end of the sand pit. This whole area had been excavated, leaving only a long downward slope of sand to the bedrock and into the back of the slopping bluff that overlooked the lake on its far side.

Being the middle of summer the pit only had a few feet of scummy rain and possibly ground water in it. Black and green crud floated along the top of the water, and this was part of the reason that the pit caused a health hazard to the community and why it had to be fenced off years ago.

“You want to go into that?” sarcastically asked Bud as he looked at the stagnated water.

“That is what this baby was made for. We have two ways of doing this. We can go right in and get as dirty as heck or we can do the intelligent thing and turn on the repelatron systems and see what happens.”

“Tom, you know I’m all for mudslinging if I have the chance, but let’s try out the systems first and then play. Safety first as you always say or I would have been a dead test pilot a long time ago. She’s all yours, skipper!”

Rubbing his hands together and with a grin on his face the young inventor took over and, with a deliberate slow motion, he set the controls. “Repeltrons on, individual automatic select for each dish element combinations on, tunneling distance set at two centimeters from the Geotron plating.” Tom ran an ongoing tutorial for Bud as a reminder for running the machine. Finally grabbing the joystick, he eased them into the muck.

Water and mud went flying everywhere and covered everything. But the monitor screen was showing none of it. The setting that Bud had earlier uploaded was cutting through all of the mess. But best of all, the repeltrons were keeping it all from touching the machine itself.

Tom repeatedly edged his way closer to the bluff and took a deeper cut into the sandy wall of the cliff with each pass. The *‘Little Idiot’* computer handled the power adjustments without a hitch. He headed the Minitron deep

into the sand bank on his last pass. At first it slipped in easily but it came to a grinding halt after penetrating some twenty-five feet. Tom had to change the monitors to a different combination of viewing and it showed only sand, but it was under a lot of downward pressure. Tom readjusted the view angle up and groaned out loud.

Bud knew they were in trouble, too. Without knowing it they had driven the Minitron under a rock overhang and the shifted sand from the Minitron had nowhere to go. They were trapped!

“Back up, Tom, fast before it all settles on top of us!” Bud’s gut wanted him to take over the controls, but his head knew that Tom was the best man for the job.

Tom rotated the scanner around and found they had only two choices to make. Back up or go down deeper into the sand. The rock above them extended down to bedrock in front of them too. He threw the machine into reverse and eased it back. It started to move but then stopped. He next tried to rock it back and forth. It made a little space but the sand still had them in a firm grip. The mass of the sand was greater than that of the Minitron.

Downward was no better, so he sat there drumming his fingers on the armrest thinking. “Brute force is not the answer,” he thought to himself, “I don’t have the power to move the trapped sand. I’ll have to loosen it some other way. If only I had some water available it would help by making the sand more fluid. Is there another way to accomplish the same thing? Yes, there is!”

Bud knew instantly that Tom had a solution by the look on his face. He wiped the beads of sweat off his forehead. “Bud,” Tom spoke up, “this will take a little time, so just hang loose while I take the computer off line and do some reprogramming.” Tom called up the touch screen on the control board before him and reached into his eidetic memory and went to work. As his fingers flew over the keyboard, words and symbols filled the screen. Bud watched in amazement as his friend recalled hundreds or even thousands of code lines, changed them and added new code that ran the operations of the repelatrons.

“There, done!” Tom called out as he initiated the

modified repelatron program. He ran a quick test on the systems to see if they responded to command. And with a smile he took the controls in hand again.

“Give, genius boy,” Bud nodded toward the computer, “what did you do?”

“Nothing much, Bud. I just rearranged the firing order of the repelatrons. Instead of pushing out with all the beams at one time to open a passage way I now have them firing in a sequential circular order around the center beam that extends longer than the rest. I can control the speed of the firing and...”

“I get it. You turned the repelatron beams into a screw type motion, pulling the sand away in smaller loads instead of doing it all at once. That lightens the pressure on the rest of the sand and we can pull forward through it.”

Tom smiled at his friend and Bud in turn could now see and follow the beam pattern on the control console. He pulled the joystick slowly backward and the Minitron moved, slowly at first, but it moved. Tom kept it going backwards until at last it bulldozed its way out of the sand and into the open air of the pit. Bud was never so happy to see sunlight again and he hit his friend in the arm as Tom stopped the Minitron.

“Good work, pal!” Bud exclaimed. “Maybe you should leave that little fix in the programming for future emergencies.”

“No way, Bud,” Tom answered back, “That little trick is going to be our only way to tunnel from now on.” He pointed to one readout. “We pushed through that sand using only half the power consumption we used to get into that mess in the first place. If nothing else happens to us with these tests we’ll come away with a winner.”

Bud grinned. He knew that Tom was mentally cataloging the improvement and probably even thinking of added refinements.

“Still want to go for a swim in the lake or are you ready to call it quits?”

“What! I’m having the time of my life, so let’s go fishing!” Bud grabbed the controls and took them out of the

pit and back to the lake road where he gunned it up the hill and over the top at full speed.

\* \* \*

On top of a bluff that over looked Lake Carlopa two teenage girls were standing up on their oversize ATVs. The tall, statuesque blonde was using binoculars and following a sparsely marked perimeter line that ran some two hundred feet above the lake. The bluff itself was cut in two by a seldom-used road that went partway up the re-graded bluff, cutting down the steepness on both sides of it.

Sandra Swift, Tom's sister, was calling out instructions to the other girl who was equally as tall but had a more willowy build with long brunette hair. Phyllis was Sandy's lifelong friend. She was the daughter of Helen and Ned Newton. Mr. Newton managed the Swift Construction Company that turned the Swift's invention and devices into products that the world wanted to buy.

She held an oversized clipboard that had page after page of topography maps covered with boundary lines and markers. They were doing the yearly survey of all the Swifts properties and listing whatever maintenance had to be done, like tree and brush removal, reposting of 'private properties' signs, and fixing road barriers.

Phyllis was checking off what was needed when she glanced up the dirt road that lead back to Enterprises and could see a moving trail of dust heading their way.

"Sandy," she called out as she put down the clipboard and picked up her spyglass, "we got company come down the road!" Sandy's head snapped around and the binoculars focused on the dust trail. Phyllis meanwhile murmured, "Darn, it's the Geotron. I thought Tom had leased it out to some oil company down in the gulf?"

"He did, Phyl. That's the new one he created for river work and such. I'm surprised you didn't know that!"

"Look, I might be dating Tom, but that does not make him more talkative, and you know how he is at times. Now, if he was Bud, you would be down there testing that thing instead of the two boys." They both laughed at the truth of that statement.

They followed the progress of the vehicle down the road and its sudden turn toward the sand pit. Trees partially hid it, but they witnessed its equally fast stop at the fence. “Bud!” called out Sandy trying to guess who was driving.

“No way,” retorted Phyllis, “if it’s the first time out, Tom is driving.” Then the Geotron made its way to the gate and crashed through it.

“Bud!” they both called out together with a laugh. They continued to watch until it disappeared into the sandy cliff wall.

“Back to work, girlfriend,” said Phyllis as she put away her binoculars and picked up the clipboard.

“Did you see that?” Sandy excitedly shouted. “That flash of light. There it is again!” And Sandy scanned the area of the flash. “By the outcrop of rocks, Phyl, a man with a telescope... no, with a camera with a real long lens. Do you see him? Rats, he’s gone!”

“Sorry, Sandy, no I didn’t. Should we call Harlan?” Harlan Ames was head of security at Swift Enterprises. “For all we know he’s just a bird watcher or a hiker that likes to take pictures. Not everyone on Swift’s land is a spy!” Phyllis, as usual, just could not see extraordinary circumstances over the mundane.

“Well, Phyl, I’m going to find out.” And Sandy dropped her binoculars into the holding basket behind her seat, started her ATV, and went off down the lakeside of the bluff. Sighing to herself, Phyllis followed her at a more conservative speed.

Phyllis stopped her ATV a little distance away and once more she knew that she was about to witness another Sandy fiasco. She had found her on the other side of the beach road up near where the bluff sloped down and where several footpaths merged together going down to the lake. One of the paths was the best way down from the other side of the bluff and was just beyond the fenced in area that blocked off the sand pit.

She could tell by the way the man was waving his arms around and the yelling sound of his voice that Sandy was up to her ears in trouble. Rolling forward she stopped near

Sandy and shut down her machine and listened to the goings on.

“How... dare... you, young lady,” the man stammered back in a grave accented voice, “accuse me of spying on your brother? You are the one that is a menace! You and... and that machine you’re on.” He took a quick look at Phyllis, pointed a finger at her, and shouted, “You too!” Sandy was standing up on her ATV with her hands on her hips getting redder and redder in the face.

“It was *your* mother, young lady, and... and I use that term loosely, that got me permission from *your* father to go over this land and... and to see if it is suitable for your project. Don’t you ever talk to each other? And I thought that the Swifts were good, upstanding people. Ha! What a joke...”

“Hold it right there, mister.” Sandy exclaimed, “Yell all you want at me, but keep my family out of it. I’m the one that’s here, not them!”

“And God, I wish it was them and... and not you!” He reached down under Sandy’s ATV and picked up what was left of his camera and telephoto lens. The body of the camera was crushed and the lens barrel was broken in half a few inches up from the lens mount. The outer lens had a fracture down the middle of it. As he looked at it he got madder and madder.

He slowly closed his eyes and you could see that he was counting to ten. He opened them and looked once more at the camera and slapped it into his knapsack that he took off his shoulders. He looked at both girls again and shook his head in disbelief.

He started to walk off down the beach but stopped when he realized that one of his shoes was missing and went back to where he had been standing before the ATV. Looking around, he found it under the ATV’s front wheel. “Would you mind getting off my shoe?” he angrily spat out at Sandy as he reached down with both hands and started to tug at it.

Trying hard not to laugh, Sandy started her vehicle and backed it up a bit. The man still pulling on the shoe, at the time, went stumbling back and landed on his rump with an

*oomph!* With all dignity now lost, he got back on his feet and headed off toward the community parking lot. When he abruptly turned back to them. “You!” he screamed as he pointed at Sandy with the shoe still in his hand, “have not heard the last of me!” And he turned around again and he limped and huffed his way down the beach.

Sandy looked at Phyllis, Phyllis looked back at Sandy, and they both burst out laughing.

## Chapter Two: River Eel

The road went down the back side of the bluff and both boys noticed that the road barrier that had consisted of a few sawhorses with ‘keep out’ signs were gone. Gleeefully Bud watched as the water edge came up fast! He was not slowing down and with a tremendous splash the Minitron hit the water with a bounce and sank down several feet before it bobbed back up and settled down almost to a dead stop.

The caterpillar treads were spinning away but they had no grip in the water. They were throwing up twin rooster tails from the back of the stalled machine that arched back to dry land. Tom reached over to Bud’s control stick and fingered the middle button. The machine started to gather speed and before long they were cruising at ten knots.

“Thanks, skipper,” Bud sheepishly told Tom as he cursed his forgetfulness, “I forgot to extend the water paddles in the treads.” The Minitron had a positive buoyancy to help it from getting trapped underwater when the repelatrons were not being used, and as a safety precaution. They were motoring out to the center of the lake. Tom also had turned on both the radar, on the left, sonar, on the right, and normal viewing on the middle screen.

It was a beautiful day out on the lake. There was a steady breeze coming in and the waves were long and low in the water. Plenty of sailboats were out, as well as motorboats of all types. “Where to, skipper?” Bud asked as he looked over both the radar and sonar screen for potential hazards.

“Down, first mate, eight fathoms deep!” Tom called out.

“Aye, aye, sir! Bud answered back as he blew what little ballast tank they had between the lower walls and under the deck to start them sinking. They had to get some water over the Minitron’s top deck before they could turn on the repelatrons. With no diving planes to help force the Minitron down into the water they needed the water over them so the repelatrons had something to start pushing



against. The further down they went, the easier it was to stay down. With the help of the computer the vehicle handled under the water like an airplane. The computer adjusted the numerous repelatron's giving the needed power to each to achieve the maneuvers the pilot wanted without him thinking about it. It was the perfect balance of human and machine without the use of artificial intelligence, just the complex amalgamation of data from various instruments.

At forty-eight feet of depth, Bud leveled the craft off and headed it towards the far end of the lake that was miles away. They could only go about eight knots using the treads, so Bud, being the mischief type, turned on Tom's new repelatron program. It was amazing. The Minitron surged forward to over thirty knots and for the first few seconds forced them back into their seats.

"Jetz!" Bud shouted with delight as he flung the craft into wild maneuvers. He did sharp flat turns that threw them about, then he added a banking movement to it and the Minitron then practically flowed into the turn.

Tom, for his part, intensely watched the performance readouts and all the engine gauges. He let Bud take the vehicle to its limits and beyond anything he would have considered possible for the craft. That was why Bud was one of the best test pilots at Enterprise.

But when he took them into double spirals that left them feeling disorientated and light headed Tom had to call it quits. Bud's adrenalin was running down anyway and so he slowed the craft to a stop and suspended it over one of the deepest parts of the lake.

"Bud," Tom remarked, "remind me not to go test flying with you for a while. This is supposed to be a submarine, not a jet plane!" He could not help laughing at his friend. Bud just sat there, glassy eyed and panting for air, like he had just run a seven-minute mile. He gulped once and then again to catch his breath.

"Tom that was the best ever!" he wheezed out, "I can't wait to take Sandy for a ride. Boy oh boy, won't she be surprised! But what caused the speed, Tom? It couldn't have been just the Screw Drive." He looked at Tom in wonder

and waited for the inevitable comeback.

“Well, it was more than that, Bud. Besides the Screw Drive... do you have to name it that?” Tom pleaded with a negative shake of his head. “You left the hull repelatron on, so the water was pushed off the sides and it caused an empty space between the hull and the water. While it was not a vacuum, it was close. The craft literally did fly through the water inside that tiny air space, and the repelatron just kept you going at whatever level and direction you wanted to go. There was no water friction to slow you down.”

“And the way it handled, it was like sliding on ice, smooth and slick, like an eel.” Bud slapped his knee with his hand, “Jetz, that’s it. River Eel. I christen thee, the *River Eel!*”

Tom sighed, “I knew it was only a matter of time before you came up with something, mate!”

Returning the conversation back to the Screw Drive, Tom added, “Do you realize what this could mean to shipping if we can take away the water pressure from the forward part of the hull of super tankers or aircraft carriers? The speed, even the fuel they would save would be incredible! I’ll have to run the numbers on the energy used by the repelatron versus the fuel saved... hum... this could be big, real big. Thanks Bud! This one is on you. The Budworth Drive!” And Tom once again laughed at his friend.

“Two new functions for the repelatron and we’re not done testing this Minitron, yet! If you don’t mind Bud, I’ll take over the controls for now and you can have a rest.” With that said Tom took control and headed them down into the deepest part of the lake, and maybe into the lair of Carlie, the lake monster!

The deeper they got, the darker the visual screen became, and before long they only had sonar to tell them what was around them. Tom then turned on two other detection systems and merged all three together on one screen. The first was a laser in the higher X-Ray range, and the other was the Mad Magnetic flux detection system... a brother to the one Bud used earlier. Between all three

systems they had a very good idea of what was going on around them.

“How deep is this chasm anyway?” Bud asked as he turned on the depth finder scope to his side monitor. They were down about one hundred and twenty feet.

“Well Bud, some say it’s bottomless. But we all know that it can’t be. The average depth is eight-fifty feet, fourteen fathoms, give or take a few feet. The chasm goes down to about one hundred and seventy feet. That’s about forty feet above maximum for scuba diving, and believe it or not, forty feet deeper than recommended by certified training agencies.”

“Yeah, I remember it now. But with your Hydrolung we’ve gone much deeper than that! And what’s the matter with the depth finder? It keeps changing the bottom depth!” Bud pointed it out to Tom.

“Well, I’ll be! A thermal shear. There must be a wide, slow moving, and extremely cold water current just above the chasm. The interface between the two water temperatures is reflecting our sonar signal and it’s showing up as a false bottom. That must be why so many people think it’s bottomless. They can’t get an accurate reading.” Tom loved this kind of thing happening around him. Pure science, plain and simple. It was like being a kid again.

“But, skipper, where’s the cold water coming from?”

Tom gave Bud a look of approval. “Now, first mate, that is a good question! Where is it coming from?” Tom drummed his left fingers on his arm rest while he continued to pilot the craft downward through the water and deeper into the chasm.

When the Minitron reached the bottom they found themselves between two steep, winding walls some thirty to forty feet apart and in water was not that much colder than it was on the surface. The ground was covered with all sizes of rocks and boulders.

Tom went north following the chasm; it was now gradually rising and by their position in the lake they were about to enter the lake proper again. As they came out of the rift the water didn’t change temperature.

“It must have petered out, Bud,” Tom said as he shrugged his shoulders and turned the craft around and proceeded to go back to where they descended into the chasm.

A hundred feet past that spot the rift did a zigzag and the floor dropped down some forty feet more. Tom took the Minitron to the new bottom where they found the water colder than ever.

“Skipper, did you see that reading?” Bud excitedly asked Tom.

“Yes, this must be another cold water stream. It’s coming from behind and a little above us. So we’ll go back to where this new bottom started, slow and easy, and watch the back wall.” Tom was busy adjusting their monitors. He split it to cover both forward and back directions of the craft.

And there it was, under an overhang at the end of where the rift zigzagged, some twenty feet above the bottom of the rift. It was a cave or tunnel. Tom stopped the Minitron before it. This was the start of the fast moving stream that rushed along the steep walled rift and somehow over the top of the chasm.

“Lets follow the stream first, and then we’ll see about this tunnel,” Tom suggested as he sent the Minitron moving forward. The floor below them was covered with long slabs of rock and debris.

The cold water stayed trapped in the rift until the far end of the chasm. The end wall was a bowl-shape depression and the cold water just flowed along the concave wall and as it passed out over the top of the wall it was level with the normal lake bottom and flowing in the opposite direction. It was going with the lake’s surface current and that help it from thinning out to fast. Two cold water streams from the same source—no wonder the real bottom was never revealed by sonar!

Tom was now slowly approaching the cave, flooding it with powerful lights. The swift current buffeted the craft.

“What do you think, skipper? Want to go in and find out if Carlie is at home? It sure looks like her type of place.”

Bud could not stop laughing. Tom looked at him and then at the sonar that was not showing anything but a hole in the wall.

“Just a few feet. I want to know why that water is coming out so fast. It’s like it’s coming out of a hose nozzle.” Slowly they ventured into the tunnel, the Minitron fitting with a few feet to spare on all sides. With the tunnel partially block by the Minitron the water pressure was now more severe and harder to get through so Tom had to speed up the rotational speed of the Budworth Drive. Twenty feet in, the tunnel wall and bottom widened and started to go downward at a ten-degree angle.

Tom shifted his gaze to Bud, who nodded his head ‘yes.’ They continued to descend until they emerged into a huge cave right under the lake. If the cavern weren’t full of water it would have collapse under the enormous weight of the lake and caused a sinkhole mini-tsunami that could have devastated the area around the lake. Towns like Shopton and Harrison, on the opposite side of the lake, would disappear forever. Their sonar showed it to be hundreds of feet deep and a half-mile wide.

They were both astounded. “Tom, how?” Bud was finally able to ask.

Tom was following the wall around the cavern looking for where the water was coming in. He kept an eye constantly on the water pressure readout. The Minitron was not design for this type of work!

He located the water inlet midway down the back wall; it was coming in from the north-east, from the White Mountain area of New England.

“Bud, I’m no geologist, but I say this was once a volcanic dome and the tunnels must have been part of its vent system. It appears to have turned into an artesian water aquifer. I don’t think something like this exist anywhere else in the world. One earthquake and we could all be in serious trouble. I bet part of the reason for the chasm is that it was part of the vent system that had collapsed in the past and that’s why we have Lake Carlopa.” Tom finished by saying. “Let’s get out of here. We’re not equipped to explore this cavern.”

“Skipper, do we tell anyone? What if someone drills down here, what will happen?” Bud was getting nervous about this whole thing.

“Not to worry, flyboy. People have been drilling for years all around the lake. We’re over two hundred and fifty feet down and we’re mostly under the lake. It’s reasonable to assume that this carven doesn’t go past the lake edge by much and it’s even deeper underground along the perimeter. People who drilled for water find it way before they get deep enough to pierce the cavern.”

“Yeah, I guess since it’s already full of water a small hole or two wouldn’t do much,” Bud said.

“Right. As for keeping it a secret? That I’m surprised at! With all the geological surveys being done these days, I don’t know how they missed this.” Tom was shaking his head in wonder.

He was piloting the Minitron along the dome roof and back down the wall to the tunnel exit while they were talking.

“Tom, look out!” Bud shouted, but it was too late.

A large rock outcrop was hanging out from the cavern wall. The Minitron hit the edge of it as it was sinking downward to the exit. The outcrop dislodged and preceded them down as it tumbled slowly end over end. The tunnel had a lip that extended into the dome and the slab of rock hit it while it was pointing slightly to the wall, it settled across the exit, blocking off a large portion of it.

Tom and Bud’s mouths fell open as they watched the slab cover the tunnel. Bud looked at Tom and burst out in nervous laughter. “Skipper, do you know how many caves and tunnels we have been in and I think this one beats the cake! Now what?” He sat there looking at the blocked tunnel in dismay.

Tom was slowly surveying the whole blockage from one side to the other. The rock had firmly planted itself. There was no more than a five-foot gap at any one spot. He positioned the Minitron’s nose into one of the biggest cracks and, using full power for forward thrust, tried to push the slab aside. He even added the remaining front side

repelatron, tuned for granite, at the same time, but it did nothing but waste power. He was stumped for the moment.

“Skipper, do we abandon ship and use the hydrolung to get out.” He hated to do this, but he couldn’t think of another way out.

“Sorry, Bud, but take a look at the depth and pressure readings. We’re too far down. We have the hydrolung, but not a pressure suit. The pressure is too great!”

“Okay, let’s look at this in a scientific way. How...”

“Whoa there, Buddy boy! Where is the Bud that I know and love and who is this creature now sitting before me?” Tom wanted to know.

“Ha! Ha! Just for that *you* name the many ways to bust a rock!” He was looking at Tom with a smile.

“Force, cold and heat—there, smarty-pants!” Tom threw back kiddingly.

“You tried force, but it was a no go there. We have no way to make anything cold enough to shatter, so that leaves heat. So, pour it on, skipper!”

Tom pointed a finger at Bud and opened his mouth to say something witty back, but shut it instead. Then with a smile he lightly punched Bud in the arm. “You’re a genius, my friend. A first class genius! Let’s get ready to go home.”

Tom maneuvered the Minitron’s nose to the middle of the slab. “Bud, hold us right here, and don’t let us drift off center. I’m going to force the water away from the front of the rock with the front repelatron beams. Then I’m going to use the sonar’s highest frequencies to start the slab vibrating and the infrared laser to heat it up. We’ll keep the slab dry, so when...”

“Bang!” interjected Bud, “You let in the water and crack it wide open!”

“And, Bud, you’d better be ready to keep us from getting sucked into the tunnel, if you haven’t notice the water pressure is still climbing, wherever the source of this water is, it’s still building up.”

Tom applied the front repelatron beams to the water around the rock and they could see it move away, but not

completely to the edges. “Back us up, Bud, we’re too close. The beam is not wide enough to encase the slab.”

Bud did as he was told and the rock was quickly free of water.

“Hold us right there, and don’t forget to save our sixes. I’ll let you know when to run for it!”

Bud barely nodded his head in reply. Trying to balance the Minitron against the force of the forward repelatron holding the water back was not as easy as it sounded. With the water not getting out of the tunnel at all now, the pressure was building up rapidly inside the dome, and it was swirling around the cavern, buffeting the Minitron.

“Tom, I feel a vibration in the controls and it’s getting worse.”

“I was afraid of that. The sonar waves are bouncing back from the rock and affecting us too. Just hang on for a few more minutes and we’ll be out of here.”

Tom had the infrared monitor turned on and both of them watched the color image change from black-purple, to red, then orange and to yellow. Tom wanted a hint of white but the vibrations were getting too strong. Their teeth were starting to rattle. “Bud, get ready to pull us back into the dome and keep us from getting sucked in—full power... now!”

Bud did as he was ordered. It was like being in an explosion and a tornado at once. The Minitron was pelted with rocks and then pulled into the maw of the hole. There was no way that Bud could stop them, it all happened too fast. Instead, he let the vehicle go into the passageway and turned the repelatron on full, adjusting them to repel the granite rock walls all around them.

They shot out of the tunnel as if they were a canon shell, and if it wasn’t for the repelatron beams they would have slammed into the abyss wall. As it was, because they were in the chasm with granite on three sides of them, they shot out and to the surface so fast that they flew into the air and came down with a tremendous splash. Luckily the nearest boat was hundreds of feet away. The resulting wave was felt and seen by everyone on the vast lake.



People with oars were banging on the hull of the craft when the two boys slowly regained consciousness. The lake patrol was just arriving after they had received several panicky calls of an explosion and a capsized boat. Still fuzzy brained, Bud opened the top half of the hatch and almost stumbled out into the water. Hands reached out and pulled him back in just in time. They both fell onto the deck laughing.

As one of the officers from the lake patrol looked in he was bemused to have found them, still on the floor, laughing and glad to be alive.

## Chapter Three: A Spy in Their Midst

“Where are they, Phyl? I told them to be here at seven-thirty sharp!” Sandy and Phyllis were standing on the top steps of the Shopton Yacht Club at Lake Carlopa. It was seven thirty-one and Sandy was impatiently tapping her high heels, her whole body bouncing with each tap. Attired in a flashy, off the shoulder blouse that emphasized her physique and even tan, tight black pants, and heels, she was stunning.

*She* could be a half hour to an hour late, but don’t you dare be late. The boys had never called her back on her impromptu invitation for dinner and dancing afterward. The one thing she detested most was being ignored. A woman scorned and all that had nothing on Sandy.

A white convertible pulled up to the portico and the boys jumped out. They were dressed to impress. Bud threw the car keys to the valet. Taking the steps two at a time, with big smiles on their faces and roses in their hands, Tom and Bud rushed to meet their dates for the evening.

With a flourish Tom presented Phyllis with her red roses that went beautifully against her white silk top and powder blue calf-length Gucci slacks. Bud, not wanting to be outdone by Tom, swept Sandy off her feet, swirled her around, and promptly stumbled. With Sandy still in his arms, he did a balancing act that finally ended with both of them being held up by a very alert, but stunned, doorman.

Bud, who was so flustered by what had just happened to him, handed the yellow flowers to the doorman and started to apologize to him instead of to Sandy.

Sandy stood there with a perplexed look on her face. She tried to speak, but nothing came out. And when she glanced at Phyllis and Tom for help they were both roaring with laughter. By this time Bud was so red in the face at what he had just done that he tried to sneak away.

“Oh, no you don’t, buster!” Sandy called out as she quickly grabbed his arm and pulled him back into the group. “This is your one freebie for the night, chum. As we hear it from the grapevine, you two came this close,” she held up

two fingers together, “to ending up in a watery grave this afternoon. We want details, and if they’re good enough we’ll let this whole thing pass!” Sandy had been really shaken up by what she had heard happened to them.

“Hey, sis, I didn’t pick you up and almost drop you, I’m innocent!” Tom pleaded with a grin.

“No you’re not, oh big brother of mine. If you don’t do something stupid, then he does and you follow and vice versa.” Sandy took Bud by the arm, turned him toward the door and marched him into the club.

Sandy, earlier that day, had made reservation for the four of them at the yacht club, because if she didn’t take the bull by the horns, then Phyllis and she would never go out on a date. She had also left both Bud and Tom stern messages that they had better show up or else. Of course this was before Sandy or Phyllis had heard of the lake incident.

Giving their names to the hostess, they were lead to a table and given menus. Sandy, always wanting to be noticed by her friends, especially with the roses in hand, looked around to see if anyone she knew was there. Instead she spotted a folded evening newspaper left on the table next to them. The large printed headlines on the half page that she could see proclaimed, ‘**Swifts Responsible... Hazard at The... Sand Pit!**’ and under it was a half a picture of Tom’s new Geotron sticking halfway into the sand bank.

“Tom, look at that paper!” Sandy’s voice was louder then she wanted it to be as she pointed to the table next to them. Bud being the closest, half stood, reached over, and plucked it up and unfolded it so they all could see it.

The Shopton Evening Bulletin boldly stated, ‘**Are the Swifts responsible for the health hazard at the old Iggy’s Sand Pit?**’ Then came the photo of Tom’s latest invention, and under that in smaller letters, ‘**Is their constant testing of new machinery causing the plight that could endanger both Lake Carlopa and the whole community?**’

And before they could read more, Sandy stood up, snatched the newspaper from Bud’s hands, and headed into the private section of the club where they held banquets and

meetings.

Phyllis, Bud, and Tom all knew that Sandy was at it again. With ‘excuse mes’ and ‘pardons’, the group went after her. And there she was, in front of the banquet room, standing inches away from a man, waving the newspaper in his face, the best she could, being that close.

“Oh, no!” moaned Phyllis as she saw who it was. Sandy must have caught a glimpse of him as he walked by on the other side of the room. The boys took a quick look at Phyllis and saw she had her mouth opened and one of her fist shoved into it. Her eyes were popping out of her face in what could only be called a state of panic. Looking back at Sandy, they noticed for the first time that Mr. and Mrs. Swift were standing alongside the stranger. Sandy was so engrossed in what she was doing that she failed to notice them, too.

He was the man from the beach! “You’re nothing more than a liar! And how dare you accuse the Swifts of causing that health hazard at the sand pit! And how will you deny it now that you took no pictures of Tom’s Geotron. It’s right here in the paper.” She was still waving it in his face. “We should sue you for slander and for...”

“Sandra Helen Swift!” sternly whispered her mother with a hiss and that caught Sandy’s attention. Her mouth closed, she looked around, and saw her parents for the first time. Then closed her eyes and shook her head, nothing rattled, so she was not seeing or hearing things. She saw that they were with the man from the beach and instantly realized that, somehow, she had done it again—opened mouth and inserted foot.

“But... but,” she stammered. “He was there! It has to be him!” and she stomped her foot as hard as she could.

“Ouch!” the man screamed in pain while dancing on one foot and trying hold his other one. Sandy had nailed him with her six-inch heel. Mr. Swift was valiantly trying to hold the man up.

Mrs. Swift, upset and ready to ground her daughter for life, grabbed her by the arm, and dragged her out of the building by a side door that lead to a balcony overlooking

the lake. The crowd of people that gathered to watch this escapade play out were laughing and hooting as the two women left. Mr. Swift helped the man to a chair by the restroom in the hallway.

Tom and Bud both tried to grab Phyllis and turn her to their direction. “Guys, I’m only one person! Don’t tear me into two, ‘cause it won’t be pretty.” She pulled her arms away from the boys. “You two,” Phyllis advised, “better check on Mr. Swift and company while I go outside and see if there is anything left of poor Sandy.” And off she stomped.

“Ah, excuse me, gentlemen.” It was the waiter from their table with the two bouquets of roses in his hands. “If you’re not coming back immediately I have to sit another group of people at your table. Sorry, I hope you understand.” He held out the roses for them to take. Bud just about had them in his hands when the waiter turned and left on the run!

“Well, I’ll be,” was all Bud said.

Mr. Swift was coming back toward them, by this time, holding the arm of the hobbling man, now grimacing with each step. “Dad, can we help?” Tom was reaching out for the man’s other arm.

“No thanks, son, I think Sandy did enough for one day.” He had a twinkle in his eye and was having a hard time not laughing.

“Tom, Bud, this is Mister Pichincha, from the American Nature Conservancy. He is the gentleman that will be in charge of overseeing both the land reclamation at the Iggy’s sand pit and he’s the director of a bald eagle relocation program. That’s enough of an introduction for now. I think it’s about time to find your mother and my now estranged daughter.”

Looking at the man he was holding up, he said, “Mr. Pichincha, if you don’t mind, I think they went that way.” Mr. Swift pointed out the side door. “Bud, I like your roses, but they do clash with the suit. So why don’t you find our lady friends and give those back to them and see if the dust has settled. Let us know if it’s safe to come out.”

Bud nodded and turned toward the door. Mr. Swift quickly added. "Please have Sandy sitting down, preferably in a corner somewhere, so we can contain her. Tom, you take one side and Bud, the other. I'm truly holding both of you responsible for keeping her on her a... ah, back side." He chuckled.

Bud rushed away leaving a trail of rose petals and leaves. At a much slower paced, Tom and Mr. Swift lead their visitor to the side door. Tom stepped out first and saw no one. He was about to go back in when Bud stepped from around the far end of the balcony and wave for him to come over.

Ten minutes later the somewhat sedated group of three adults and four teenagers were seated at a secluded table on the deck, overlooking the water, with cold drinks in their hands and a less memorable meal of assorted hors d'oeuvres coming their way.

Sandy, sitting at the back of the round table against the railing with her two appointed guards, one on each side of her, and Phyllis next to Tom, was staring at the table with her hands folded on her lap. Like always, the lecture *not* received hurt more than one given from her mother.

They ate in relative silence, no one wanted to bring up the subject that was on their minds until all the food was gone and Sandy was left with fewer potential weapons on the table. After several minutes and the food only being picked at, Mr. Swift ordered it wrapped up to be taken home and a new round of cold drinks for the table.

Clearing his throat, Mr. Swift looked at everyone and said. "I must admit that this has been a very strange and troublesome day. First off, Mr. Pichincha, this is a special occasion for us. Mary," nodding toward his wife, "and I do wish to thank you for come from Haines, Alaska and the world famous Chilkat Bald Eagle Preserve, to help us with our plans for turning that potentially hazardous tract of land into our crown jewel of our nature conservancy project. With all the other lands donated by both the state and town of Shopton, we have acquired over seven hundred acres, some of it waterfront and the rest bordering it. It's not heavily forested but it does have some good groves of pines

and oaks.

“You have started your preliminary survey today, as I regretfully understand it, and I am truly sorry for the way it ended. All my children are over protective and somewhat exuberant in their action when it comes to anything Swift related. So please give all of us a chance to show our good side.” Mr. Swift then stood up and offered his hand to Mr. Pichincha.

Taken totally by surprise, and with some mumblings on his part that no one could understand, he too stood up, and with a half smile on his lips shook Mr. Swift hand. And in his accented voice proclaimed. “I can forgive all, but only under two conditions.” He waited a moment to see if anyone objected, no one did.

“Mr. Swift, I want your daughter and her friend,” he pointed to Phyllis, “to buy me a new camera and telephoto lens...” Sandy was jumping to her feet when she found herself being pulled back down hard by both Tom and Bud. A small smile formed on Mr. Pichincha’s face.

“Second, for the rest of the summer, until these girls go back to school, they will be my personal attendees. They will go and... and do all that I tell them.” He folded his arms and stared pointedly at Sandy with a grin.

Both girls were flummoxed. Sandy tried several times to form a word and she just couldn’t. Phyllis just shook her head and mumbled to no one in particular. “Why me! Why am *I* her best friend? You’re supposed to like your best friend. Not take them to hell in a hand basket!” and a tear formed in the corner of her eyes.

Tom, seeing this, took out a Kleenex and dabbed it away, taking time to whisper to her, “Don’t worry, I’ll fix it!” He squeezed her hand and gave her a smile. Hoping that he could, but doubting it, she nodded, but felt no better.

“Mr. Pichincha,” spoke up Mrs. Swift, “are you sure?” and her gaze went from him to both of the girls and back.

“Yes... no, ah... yes! I may live to regret this, but yes. They must learn not to jump to conclusions and... and get all the facts!” His accent was less now that he was not as agitated. And they were getting used to his weird speech

impediment.

“Sandra?” Mrs. Swift spoke up while looking at her, “What do you say?”

“Mother, please...” and Sandy looked at her and could see that it was a lost cause. She swallowed several times and finally stood up.

“Mr. Pichincha, please accept my apologies and I will buy you a new camera and lens. But, please exclude Phyl. She had nothing to do with my behavior.” She hung her head down and her lips quivered while she held back tears.

“My dear young lady, thank you, and please calls me Mr. P from now on. Because of your willingness to take all the blame and... and save your friend from my clutches, I shall release both of you from my authority.”

Everyone’s jaws dropped open in surprise.

“I only ask in return that both of you ladies be willing to act as my assistants and... and help me with this project. Undoubtedly you both know the area well. I promise you no whips, and... and you might just enjoy yourself and... and learn something about nature at the same time.” His voice had a wholly different tone in it now.

“Mr. P,” Sandy and Phyllis said out at the same time. “Thank you!” Sandy then added, “I’m still going to buy you a new camera, it’s the least I can do!” and everyone had to smile at that.

“Now, Sandy, let me see that paper you’re so worked up about.” Mr. Swift held out his hand to her and she took it out from under her flowers that were beneath her chair and she handed it to him. He read it, passed it to Mr. P, who in turn gave it to Mrs. Swift.

“I was wondering why Mr. Perkins, our insidious newspaper editor ducked into the bar so fast when we came in and he noticed us. Mr. Pichincha...”

“Boris, please.” he interjected.

“Then, Mary,” pointing to his wife, “and Tom, will do. Now if you can remember, did you see anyone else on your walk along the lake?”

“No, Tom, I did not. I only went along the bluff path on



the beach side and only took pictures along that way. I was planning to walk back on the other side of it but... I never got that far.” He smiled at Sandy.

She sank down a little in her sit and mouthed, “Sorry!”

“Well then, were does this leave us?” asked Mr. Swift. “Kids, did any of you see anything out of the ordinary other than the man and the camera that was not Mr. P?” They all shook their heads ‘no’.

“Then I take it we now have a new person or persons of interest and they are out to make us look bad to the public. This is not the first time we have had an enemy in our midst, so from now on be doubly cautious and go nowhere without your watch amulet. I want all of you to go to security and have then checked over and replace the battery. That is an order, understand.” He looked at all of them. They all agreed to go and have it done.

“Now, if you all excuse me for a moment or two, I have an editor to confront and ream out!” Mr. Swift threw his napkin onto the table as he stood up.

Mrs. Swift reached out and touched his arm. “Tom, do you have to do it now?” she looked nervously up at him.

He bent down and kissed her on her forehead, “Not to worry, Mary, but if I don’t confront him now he will think he can do this again and get away with it. So, please excuse me.” He hurriedly left the deck with a bounce in his step.

Once more inside the club he made his way to the bar. Looking around he spotted his prey at a corner table with several other men. Nodding to himself, he made his way to the bar, and once he got the bartenders attention he ordered a round of drinks for that table and a soda for himself.

He watched the waiter deliver the drinks and when the people at the table looked in his direction to see who bought the round he lifted his glass to them and smiled, they raised their glasses in acknowledgement. Mr. Swift took that as an invitation to join them, which he did.

Standing in front of them at the table, Mr. Swift threw the folded paper onto the table in front of the editor. “Nice job, Dan, but next time get all your facts straight. I’m afraid you will be hearing from the company’s lawyers in the

morning.” He paused for a second and continued with a grin, “Unless you’re willing to tell me who gave you that story and picture. And, make a full retraction!”

“Tom, you know darn well that I can’t do that, newspaper’s confidentiality and all that.”

“If that the way you want to play it, that’s fine by me. It won’t cost me a cent, but it will you!” Mr. Swift started to turn away. “Oh, and good luck ever getting invited to a press conference again.”

“Tom, no, you misunderstand me. I can’t tell you! I received it all in an anonymous e-mail this afternoon right after I heard of your son’s accident on the lake.”

Mr. Swift stared at the newspaperman and shook his head.

“I put two and two together and felt that I had ample proof that the e-mail was true. Why else would you Swifts suddenly be so concerned about that sand pit? You have owned it for countless years and never done anything about it before.”

“You could have asked.”

“There were several pictures of your son’s device in the pit and one of it roaring into the lake with total disregard for everyone’s safety on the beach or in the lake. So if you ask me you have lost control of your son!” Mr. Perkins sat back in his chair to smiles from his friends.

“For a newspaperman, Dan, you don’t have a lot on the ball at times. Have you already forgotten about the nature preserve we want to make on that property. You did make such a big deal over it at the time, making it seem like we were trying to rip off the town and the state for free property to expand into. You had to eat your words then and you’re about to do it again.” The men at the table stopped smiling.

“How do you expect us to do anything constructive unless we survey the whole area, both in and out of the pit? We must first get rid of the water that’s there and that might mean we have to stop it from getting in from the lake, if it is, and then we can do something with the sand pit and not turn it into swamp lands and make it worse!”

Perkins was now looking a little uncomfortable.

“Dan, if I were you, I’d make sure that everything you received in today’s e-mail is sent to our security chief, Harlan Ames, at Swift Enterprises. And I do mean everything. If you receive anything else in the future, we’d better get a copy of it too.”

Mr. Swift took a few steps away and turned back and added, “Before you print anything. Understand? A retraction would be nice, on the front page, not on the last. Upper half of the page, too.” And he was gone leaving them all stunned.

“Tom, I was starting to get worried.” And Mrs. Swift held out her hands to him.

“Not to fret, Mary. All is right in the world once more.” He smiled down at her.

“Boris, Mary, if you two are ready, I think it’s time to go. We must pick up Boris’s things from his motel and drop off that rental car if he’s going to stay in our guest room at home.” A look of bewilderment passed over the four teens’ faces. “And Tom, you and Bud have a lot of explaining to do when you two get up in the morning. You are staying the night, right Bud?”

“Yes, sir, I was going to, but if you already have a guest...”

“No, no, it’s all right, you can either bunk in with Tom on the rollaway or you can use the extra bedroom in the finished basement. Either way you two better be in my study by nine.”

“And Mary, if you don’t mind, please take Boris to get one of his own watch amulet while I’m having my chat with the boys and while he is there have him sign out a vehicle of his choice from the motor pool.”

He turned back to the teens. “Enjoy the dance, kids, and stay out of trouble, at least for the rest of the night.”

And with a round of ‘good nights’ and pecks on the cheeks and handshakes, the teens were left to their own devices.

## Chapter Four: Lunar Mystery

“Professor Martin,” the Outpost intercom sang out after the three attention beeps were heard, “please report to the Megascope Space Probe Observatory.” The call went unheeded as had the last two calls. The young man making the call was now seriously worried. Where can a man disappear to in the confines of the Outpost?

Then the answer dawned on the young man and he frowned and he sighed sadly. He called the docking bay and asked if the professor had gone out. ‘Yes, he did’ was the reply and Aaron, the professor’s intern for the next three months, knew that he had done it again. He turned off his spacesuit radio, against all regulations, to contemplate the wonders of the silent universe, not that he was ever silent. This was the third time he had done it, and Ken Horton, the Outpost administrator, was going to blow a fuse for sure this time.

There were only two things he could do. Either suit up or let the professor show up on his own and in his own good time. The latest orbiting moon satellite with its gravity flex generator and sensors was passing over the anomaly site in five minutes and that was not enough time to go out and get the foolhardy professor. He had to stay to receive the telemetry signals and to see that the Megascope stayed at close focus on the correct coordinates on the moon surface, and to be the backup if anything went wrong with the equipment. Even the *Little Idiot* computers could make mistakes.

The Megascope’s probe’s ‘anti-inverse-square-wave’ had never affected anything in the area before, but in combination with the gravity flex emitter wave, who could tell—stranger things had happened. At least with this pass of the satellite the total series of images of the area would be complete. They now had a progressive time-lapse reading and a positive growth reading on the anomaly.

Why the professor chose this time to go sightseeing outside of the Outpost was beyond him, but he was determined to hold the fort and complete the job. This alone

should raise his standing with his peers at the prestigious Grandyke University of New York State.

He had the entire array of equipment running and all possible recorders on. He even had set up the Megascop viewing screen to track and show the lunar satellite in its orbit. The *Little Idiot* computer would automatically switch to the lunar ground sweep program at the predetermined time.

Aaron, a small and somewhat chubby youth with a prematurely receding hairline, sighed again as he once more checked over everything. It was then that he noticed the red blinking light over the emergency airlock chamber that was built into all the ends of the Outpost spokes.

Shaking his head in disbelief he went over to the emergency airlock and cycled Professor Martin in. The lock could only be used from the inside and two back-up spacesuits were stored inside at all times.

“Thanks, Aaron,” the gray haired, but ruggedly built, professor bellowed out in a loud voice stepping inside. He had lost some of his hearing because of all the long hours and intense cold out on mountain tops using old obsolete telescopes, in the dead of winter, which allowed him hours and hours of viewing time versus the long wait and only minimal usage time of the newer scopes. “For a time there, my boy, I thought you were not going to notice me.”

He placed his helmet on the floor next to the air lock. Looking at the clock, he decided he didn’t have enough time to get out of his spacesuit, so he only took off the gloves and tossed them by the helmet and went over to the operations board. He pulled up a chair and beckoned his assistant to join him.

“You know, Aaron, this is so wonderful not having to float all over the place. That Tom Jr. is a whiz kid if there ever was one.”

He pointed to a fluorescent strip that ran the entire length of the ceiling. “Just that gizmo there has revolutionized the whole space industry. Repelatron gravity and light, RepelaGrav they call it. Everything is coated with a special paint or dye made out of a totally inert compound

that the repelatron beams push to the floor and voilà, instant artificial gravity. And the glass that's covering it is coated with a fluorescent substance that makes light from part of the repelatron beam spectrum. They're even mixing a small portion of it in our food so we can be affected by the ray. It's just wonderful, yes indeed, it is!"

Aaron was now used to the professor's rattling on about things everyone already knew, seemingly just to fill the air with his voice. It was another bad habit he had gotten into. Talking to himself to while away the hours of loneliness in the bitter cold. Aaron hoped he never got like that.

The clock hit the hour and the Megascope switched locations and started to scan the moon surface. Three seconds later telemetry readouts began to come in from the satellite. An image started to form on an oversized computer screen. It was being rendered in 3-D with digital lines for height and width. The computer was slowly spinning and rotating it for a full 3-D view.

Both men were ecstatic at what they were seeing. After hours and hours of painstaking research and using overlapping data from all over the world, and with statistics that were years old, the lunar surface and this area in particular, was about to finally give up its secrets. They were now seeing the end results, and it was unbelievable. It was too perfect a shape to be natural and it was definitely growing micron by micron every two weeks, but it *was* growing!

Both men thumped each other's back and hooted and hollered like kids. In fact they caused such a ruckus that other parts of the station could hear them and many crewmen came over to see what the matter was.

On the station, being such a closed community, everyone knew what the two astronomers were looking for. Gravity anomalies were nothing unfamiliar, the Earth even had them, but one that changed size was definitely something new!

Before long a little home brew was being passed around and even Ken Horton gave a toast along with a warning to the crew about such behavior—but a good commander knew when not to look too hard and when to draw the line.

One cup each and that was it. He got as big a cheer as the scientist's discovery did!

A couple of hours later both men had their feet up on the edge of the control board and were watching the graphic rotating on all its axes. Both were slouched in their chairs with a second glass of congratulatory hooch in their hands. The smiles were still on their faces.

"Professor, do you realize what we discovered?" Aaron pointed to the screen with his drink.

"Aaron, my boy, I was wondering when you'd bring that up. Yep, I sure do. It has to be one of three things, my son." Aaron looked at him with scientific curiosity, but very wild conjectures were running through his mind.

"One, crystal growth of some unknown type. And I mean unknown in big letters! Two, some type of life, in which I truly doubt! Three, some type of artificial mass that needs to get bigger all the time. Like some type of computer recording complex with self expanding memory. As time goes on it needs to increase its files and size."

The implication of this last possibility made Aaron gasp.

"And, in that case," he asked Aaron "as we study it, is it watching us or the whole solar system?"

"Come on professor, the Swift do have their so called, *space friends*, but you're talking about true UFO type things! Flying saucers and space monsters." Aaron had to laugh at that.

"Let's hope we don't have to eat those words." The professor took his last sip of liquor and stood up and belched. He tapped his chest with his fist and murmured, "That hit the spot, and now to talk to the bosses downstairs. Come on kid, it's eleven a.m. Shopton time, and the big boss must be in his office by now, even if the little one isn't. Off to Horton's office we go. I'm sure he needs to be in on this call, if there ever was a need!"

It only took a minute to complete the communication hook-up. Horton was expecting them and he had a direct access line already set up to Enterprises. He was so glad that they were including him in on the call. He had postponed his own daily reports so that the professor could be the one

to disclose his discovery to the Swifts.

“Commander Horton, this is Miss Trent, Mr. Swift’s personal secretary. He is on another phone line right now, but Tom Jr. is available. He can take the call, if you want?”

“Yes please, Miss Trent, that will be fine.” Horton had the speakerphone on and all three men were sitting around his desk in his cramped office. There was a couple of ‘clicks’ as the phone lines changed.

“Ken!” Tom Jr. briskly answered the phone. “It’s been awhile, and I’m sure there must be an important reason for you to be calling us personally. Dad will be off the other line in a minute, so while we’re waiting, how are the RepelaGrav strips working? No unforeseen major problems?” Tom hoped he knew the answer to that one already.

“Well, Tom, there might be one. People are getting so use to it that they are forgetting that quite a lot of things we use in the station are not coated and they start to drift off into the air currents. We had a few accidents in the science labs and one did almost did turn into a serious situation.”

“Oh?”

“We had to send a VIP chemist back home just the other day. He may have gotten a little space happy. The psych department is looking into it. He kept adding the inertia compound to everything so it wouldn’t drift around. Guess what? He didn’t like your inert version of it, so he made his own concoction and it reacted, well, violently with the RepelaGrav beam when it dried. Didn’t find out until after he started to spray it on everything!”

“Oh, my God,” was all that Tom could say.

“You can say that again. Luckily he started in his own living quarters. He lost all his stuff in the flash fire but that was the extent of the damage. I had to give legal a heads up on that one. The chemist is threatening to sue us for keeping an unsafe working environment.”

“Why was I not informed about this, Ken?”

“Skipper, that’s the reason I’m the commander up here. This is all part of my job. It’s all day-to-day stuff to me. If I bother you with all the little stuff you might as well move



up here. With over sixty people in the station, and all the science that is going on, he was small potatoes!”

“Anything I can do other than just go, ‘uh-huh’?”

“What you can do for me is to think of a way to stop this from happening again. My thoughts are to use the RepelaGrav only in the living and telecommunications area and that may enforce the need for caution everywhere else. Most of the science going on up here is because of the micro-gravity conditions and don’t need gravity. They actively don’t want it. What’s your take on that solution, Tom?”

“It sounds good to me. You know you can control individual strips, so you’ve got more control than you may realize. Give it a try, and put up door size warning signs of ‘No Gravity in Use Zone.’

“Hello, Ken,” broke in Mr. Swift. “Sorry it took so long. But I’m glad you had a chance to talk to Tom about the artificial gravity problem. It sounds like you may already have a handle on it. So, what can we do for you?”

“Mr. Swift, Tom, let me put on the person that this call is for. Professor, it’s all yours!”

“Thanks, Ken,” The professor replied. “Tom, Tom Jr., this is Professor Martin and I have my assistant, Aaron MacNickleson with me and to be blunt, I think we’re all going back to the moon! We did it. I was right!”

“Well, congratulations, Chuck!” Mr. Swift wholeheartedly replied.

“Same for me, professor.” Tom added. “When can you send down your final results? What do you think it is?”

“That, I can’t tell you! That is why I need to go there myself. The only thing I can tell you right now is that the top of it is buried some two hundred feet underground, and if our remote measurements are correct it’s grossing approximately five hundred tons in weight, and is three hundred and seventy feet wide and five hundred twenty-four feet high. The clincher is that it’s perfectly egg shaped”

“The crater,” Mr. Swift,” added Aaron excitedly, “is close to fourteens miles in diameter and the density of the lunar surface in it is only about a quarter of the normal

around the anomaly. It's all concentrated in the egg object. But that is not all. Mare Crisium, where the crater is located, is showing some weird soil properties. The moon dust is not right there either. It is off the norm. It has an extremely high silicon ratio in it. The reason it was never seen before is that there is a very thin, even coating of regolith on it. Far too even and thin to be natural." He stopped there and let that information sink in and then he also realized that he had cut the professor off. The professor just nodding his head in agreement with what Aaron had said.

"Chuck, this is way more than what we've expected." You could hear the enthusiasm in Mr. Swift's voice. "Do you have to stay up at the wheel anymore? Can you come down with your findings? We can explore our next move together, but it does sound like a definite moon trip to me."

"Tom," he looked at his son, "Can we count on you and the *Challenger* for the trip?"

"Dad, a team of wild horses couldn't stop me," Tom laughed.

"Thanks, gentleman. Aaron and I will be on the next scheduled ship down to Fearing. I'll leave the moon satellite running and transmitting in microburst once every twenty-four hours, so that the station's technicians can record and save it for us. Is that acceptable to you, commander?"

"Of course, and Tom, I'll call up the next group that wants to use the Megascop. I've got to earn some cash out of it sometimes. It can't all be freebees. I do have a ledger that needs balancing!"

\* \* \*

Bud found Tom inside the Minitron, the back hatch to the motor room in the control section was open and the monitor screen was swung down over the control board so Tom could crawl over it and have access to the forward electronics. On the barn floor, next to the Minitron, parts of several devices were waiting to be installed in the machine.

"Tom, do you know what 'deep doo-doo' is?" Bud asked his friend with a smirk. "If you don't, well you will now, because you're up to your knees in it."

"What are you talking about, Bud?" Tom was at a total

loss.

“Phyllis, Sandy and that Mr. P guy are off into the wild blue yonder in the *Seeker/SNE-4*, for a fact finding flight over the preserve, and you were not there to see Phyl off liked you promised when you picked her up this morning and dropped her off at the cafeteria for the strategy breakfast meeting. You were ‘just going to pick up a few things to work on later and return’, remember?” Bud laughed.

“But I didn’t hear the helicopter warning up or even taking off!”

“Jetzt! What part of SNE don’t you remember, Tom? Sonic Noise *Eliminator!*”

Tom playfully slapped his forehead, “Roses won’t do it this time, will they?”

“Afraid not, Tom. What is all this stuff, anyhow? I recognize the gravitex generator over there, if you’re planning to put all of this stuff in that machine, you’d better rethink it!”

“Actually,” Tom laughed, “I’ll be using only part of most of these things. But the gravitex is going in whole. And I wish I’d thought of it before our first test run. But then, we may never have come up with the Budworth Drive. So, I guess it’s a wash.” Tom sighed.

“How would a gravity concentrator have helped us in the lake, Tom?”

“No, no, not in the lake, but in the sand pit. We couldn’t move forward in the sand because we didn’t have enough force to move the sand. The mass of the Minitron was not equal to the job, the repelatron beam could not push the sand away, so we got sort of pushed back but not enough to make a difference. If I had the gravitex generator I could have pinned us down so hard that the sand would have to have moved. We would have been the proverbial immovable object.”

“Sounds good, but where are you going to put it?”

“That is the easy part, I’m going to take out the buoyancy tanks under the floor and lower wall, and most of it will fit there. Only a small portion of it will protrude into

the cabin, right between the seats by ten inches. We'll put a cover over it with cup holders and turn it into a useful item."

"Not to be a spoil sport, Tom, but how will we start to get underwater without the tanks?"

"Gravitex!" was all Tom answered back.

"Well, color me stupid. Want a hand with all this, Tom? I've got a few hours free before I have to fly out to Fearing Island and pick up the professor and his sidekick."

"Sure, two heads are better than one! And when you come back, do it in the *Sea Hound*, will ya? I'm going to need the Aquatomic Tracker as well as the Minitron to track down that water source in the sand pit."

\* \* \*

"Okay, Mr. P we're over the spot where we met the other day." Sandy was hovering the 'copter at about five hundred feet in altitude, over the water's edge, and before the bluff that held the sand pit in its other side. They all had on sunglasses, and a radio phone in one ear. Phyllis had the geographical charts, as before, and was the official note taker.

From their height they could see the beach parking lot to their right with its concession stands. The beach was pockmarked with umbrellas and sunshade tents. Children and adults, alike, were in the water enjoying the hot summer day. Most of the people never noticed the stealth helicopter, which was why they were using it today!

To the left for about a mile, the Swift's owned the land backing the Enterprise's complex as a runway buffer zone. Further on was a small parcel of state land that a long time ago was part of a junk yard that was now waiting for a '*Super Fund*' grant to help clean it up. As part of the bargain the Swifts had made with the town, they would clean it up in exchange for the land being added to the preserve.

"Now Mr. P," Phyllis asked as they over looked the area, "why would bald eagles stay if we relocated them here?"

Mr. P thought about it for a second and answered, "The bald eagle prefers habitats near seacoasts, rivers, large lakes,

oceans, and other large bodies of open water with an abundance of fish. We have that here. They will also go after ground animals like mice, voles, rabbits and such.

“They also require old-growth and mature stands of coniferous or hardwood trees for perching, roosting, and nesting. They select trees with good visibility, an open structure, and proximity to prey, but the height or species of tree is not as important as an abundance of comparatively large trees. We have that here though it does need some work and more trees added in some of the areas.

“The bald eagle is extremely sensitive to human activity, and is found in areas free of human disturbance. Occasionally bald eagles will venture into large estuaries or secluded groves within major cities. A family of bald eagles moved to the Harlem neighborhood in New York City some time back.”

“Incredible,” Phyllis murmured.

“As long as you can keep the public away until they establish themselves they should adopt to the area just fine. Sandy, take us to the end point on the far left and inward by five hundred feet. When we sweep back that should put us over the sand pit. From what I can see, that is going to be the most challenging part of this whole thing.”

Mr. P picked up his new camera, equipped with a telephoto lens, and got ready to take pictures of all the things that was of interest to him and Phyllis marked the areas on the chart. Later they were going to put together a photo composite bulletin board out of an enlarged satellite picture.

Mr. P took several shots of the junkyard and had Phyllis make a note that a full survey had to be done by hand, at ground level, to ascertain the potential health hazards.

Next they moved on to the sand pit. Some dump trucks, a flatbed and a crane/bulldozer were there taking out the old wire fence in preparation of the clean up and refilling of the pit to match surrounding ground level. “Your brother, Tom, is to oversee this part of the project, right, Sandy?” Mr. P asked.

“Yes, he is. As a matter of fact he is putting the finishing

touches on the device that will take care of that problem.”

“Ha!” Phyllis snapped back, “If he doesn’t get distracted by something else, like a wire laying on the ground or something just as stupid!” Both Mr. P and Sandy had to hold back smiles so as not to hurt Phyllis’ feelings any more. Boy, were they glad not to be Tom right now!

“When will Tom be ready to do his part in all this?” Mr. P asked in between snap shots.

“With Tom, that’s hard to tell, He could show up in five minutes or in two weeks. It all depends on what else he has in the fire at the moment.”

“Fire! I’ll give him fire!” retorted Phyllis, breaking her pencil on the chart board.

“Who owns the land alongside the road that goes to the beachfront?” he asked quickly, afraid to look at Phyllis.

“I’ll fly us over it next, Mr. P. That land is under dispute right now.” Sandy started to fly them over that strip of land. “As you can see, the property on the far side of the road is natural wetlands and falls under the preserve protection. The road was put in way before people had concerns over that type of thing and it will have to remain, as well as the beach areas. On our side of the road you have the rain runoff ditch and a strip of town-owned land that is about two hundred feet wide and now dry because the road stops the water from coming through. That’s why we have a fence along it to mark the town land from ours and to help keep people out.”

“Why is it in dispute?”

“Let me show you something so you can get the big picture.” Sandy flew only for a minute and hovered them over a four-way intersection on the beach road. “If we go straight ahead we’ll be in Shopton, to our right is Heritage Park, and that is where we live. It is all divided up into five acre parcels and four of the acres must stay wild, and on the left is Rufus Cioe’s Land Development.” It was all rolling hills and valleys for about a two-mile square area.

“Old man Cioe died about a year ago, amidst some entangled bribery charges. Cioe was to develop that land like ours was. But he got greedy, and over the years tried to

get the zoning changed to one-acre lots and then to half acres. For many years he could never get it passed. But last year he did. According to a reporter from the Daily Gazette in Albany, our state capital, He literally bought and paid for the two votes he needed to change the building codes with two handpicked candidates that he financed to win council seats that were vacant in the last election.

Mr. P was shaking his head. "Let me guess the rest, Sandy. The land went to a relative..."

"His son," interrupted Phyllis.

"And his contention is that he had nothing to do with the bribery, if it happened, and the council's last ruling should stand. I can see the mess in this." Mr. P was shaking his head.

"We decided that the preserve doesn't need the road land and we're going ahead with the project, or it could be years before this is all hashed out!"

"What is so importing about that strip of land by the road? I don't see a connection."

"Oh, this is the best part! Cioe wants to build beach type cottages along it and put in high priced multi-level condos' along the front side of the bluff." Sandy was flying then back to the sand pit area as they talked.

"Whoa there, I thought you Swifts owned that property?" Mr. P was starting to look confused.

"Well for years we have been paying rent to the town for the land with the speculation that we could buy it sometime in the future. The same night that the town passed Cioe's land zoning change it also passed that we could buy the land and set a price for it. We gave them a check right on the spot, with the provision that it's turned into the preserve. But that was earlier in the night in a separate vote."

"I don't see the problem," he told them.

"Cioe Jr. demands that the land transaction should be thrown out, if his own claim has to be. The state court then told Cioe that if he allowed the charges of bribery to go through then they would have to stop the Swift's land transfer but otherwise it stands. So we now own the land as

long as we keep it as a preserve.”

“Sandy, Phyl, let this be a lesson for you to stay out of politics as much as possible. With politician as friends you’ll never know who you will wake up with in the morning.” He laughed, trying to make a joke out of it and hoping he had not gone too far. He’d gotten into trouble before because of his views.

“Can I see the land that surrounds your complex?” He could see it in the distance and it looked kind of sparse. They were back at the pit and hovering, looking out at the water and the sailboats.

“Sure, just let me call the tower and get clearance for a low level pass around the complex. We might as well see the whole four miles square of it plus you can see where we’re planning to get most of the fill for the pit.” In less than a minute they were cleared and Sandy only had to follow the old beach road and then go around Enterprise.

She swung the *Seeker* around once more to face inland and the control board went from all green to red in an instant, at the same time the helicopter violently shuddered and began to spiral down into the pit. Thick, black smoke filled the pilot’s cabin. The racket issuing from the engine compartment was absolutely deafening.

“We’re totally out of control!” shouted Sandy, “We’re going in hard! Phyl...” and there was no more.



## Chapter Five: From Mud to the Moon

“Quit it, I tell you, quit it! Sandy pushed Bud’s hand away from her face. “Can’t you see that I’m breathing all right?” Bud was trying to keep the oxygen mask over her mouth. He stood in three feet of scummy green water that the other day he didn’t want to go near.

Tom was at the other side of the ‘copter holding a compress on Phyllis’ forehead. She was still unconscious, but her pulse was good and strong.

Mr. P looked shocked but seemed all right. One of the fence removal crewmen was with him. The canopy was gone. Blown off when the engine exploded or shattered by the crash.

The high pitch whine of rescue vehicles’ sirens were winding down as several emergency medics, lead by young Doc Simpson, came rushing in to help. “Here Doc, Phyl is bleeding from a head wound, but be careful, there’s canopy pieces and sharp metal fragments everywhere! We have not moved them or taken off their seat restraints!”

“Good work guys! Now, get out of the way, and let us work. If you can, get that flat bed truck down in here; load it with three stretchers, pronto!”

Both boys were gone like a shot. Bud made for the truck and Tom went to the ambulances and got three gurneys ready. A squeal of brakes and the sound of the horn told of Bud’s arrival. Several men helped Tom load the stretchers and a couple of the men climbed onboard to help hold them down.

“Go, Bud, go!” Tom shouted as he rapped the roof with his fist. Bud just let the truck roll into the muck and made their way slowly to the crashed helicopter, so as not to cause big waves or splashes.

The doctor signaled Bud to Phyllis’s side of the wreck. “Get ready to back up to the ‘copter, Bud. Tom, lower the tailgate and get that gurney on it. Bud, when I tell you, back her up.

“Tom! Stop staring; the collar is a protective measure

only. Lower the tailgate some more. I want it as level as we can relative to Phyllis. That's it... stop! Bud, back her up... more... more... stop!"

The truck stopped within inches of the downed aircraft.

"Stay up there, Tom, and hold the gurney... Nuts! Lower it into the water, Tom. It's still too high. As long as we keep the bed itself dry we're okay! That's it... that's it... stop! Joe, Harry, Sam, get ready, get set, lift! Tom, get that gurney right to the edge, that's it, set her down, boys! Pull her in, Tom. And don't let go."

As a team they worked to follow his orders.

"Sam, take hold of the man and get him onto the tailgate and into a stretcher. Then get Phyllis off the gate. Joe, Harry, you two go around and carry Sandy back here. Sam, is she off?"

"Clear, boss!" Sam shouted.

"Bud, pull forward a few feet, and Tom, lower the tailgate all the way down... good... careful guys... careful... step up, that's it. Tom, raise her up. Now, onto the stretcher with her... Great! Bud, get us to dry land, please!"

\* \* \*

Two hours later at the Shopton General Hospital, Mr. and Mrs. Newton were nervously awaiting the final test. They were both walking around in circles, holding each other's hand. Phyllis was in the CAT Scan machine. Doc Simpson was not taking any chances with his young patient. Mr. Swift and Tom were in the waiting room also, sitting on a couch.

Mrs. Swift and Bud had taken Sandy and Mr. P home and helped them to bed. When Bud was finished taking care of Mr. P, he checked in on Sandy. Her mother was sitting with her, holding her hand, and Sandy was lightly snoring. The sedative and pain pills were working wonders. And for the next few days she was going to need them. With the bumps she took, they were going to be painful ones.

"Mrs. Swift, if she wakes up tell her I... heck, you know what to tell her. I'll be back tomorrow. I've got to go to Fearing Island and pick up that Professor and his assistant

and bring them back in the *Sea Hound*. I'm hours late as it is and will probably have to stay the night on the island. Your sure she's all right?" and he longingly looked at her.

"Bud, get over here and give her a kiss," laughed Mrs. Swift, "and if it will make you feel better, I won't look!"

\* \* \*

"Helen, Ned, please sit. Let us get you some coffee." Tom Sr. was anxious for his two lifetime friends. "Phyllis is going to be fine. Doc Simpson is just being cautious. I'm sure she'll be going home with you."

"Tom, how do you do it?" Mrs. Norton asked. "Time after time you let your son go out into danger and possibly face death and you don't even flinch! How? I don't think I can let her out of my sight right now."

Tom Sr. got up off the couch and hugged Helen. He met her almost the same day he met his young wife to be. Was it so long ago? He shook his head in wonder. And Ned, there was never a day without Ned in his life.

"Helen, it's hard, let me tell you, it's hard! But if I tried to stop him, I might as well dig a hole and put him in it. And I think before I had it half filled he be standing next to me helping me fill it in. Some people you can't stop, you only have to equip them with the tools they will need for life and stand back and be ready to help them when you can!"

"But—"

"The girls did nothing wrong. It's like crossing a street. You never know when some nut will turn up. Thank God they were only a hundred feet up or so. And Tom and Bud showing up there to check up on the fence removal was pure luck." Tom Jr. was trying to sink into the cushions of the couch. He never heard his father talk so openly before.

"But, Tom," Ned remarked with equal candor, "Phyllis is not 'rough and tumble' like us. She's a church mouse, meek and mild. I don't know where we got her, but I thank the Lord every day, she is our saving grace..."

The door, at the far end of the room hissed opened and young Doc Simpson came in with a smile on his face. He didn't have to say a word.

Helen swooned to the floor and Ned just swept her into his arms and placed her on the couch. Doc Simpson, with a chuckle, came to her side and knelt down. As he touched her wrist to take her pulse, her eyes flicked open and with a shy smile, pushed his hands away. He helped her to sit up.

“Sorry!” was all she could say.

“I guess I need a better bedside manner; I’m the one who should be sorry! If it helps, she’s good to go. Give her time to get dressed, have her see me tomorrow to take the dressing off her forehead. Make her keep ice on that bruise on her jaw. In a few weeks you won’t even see the scar.”

\* \* \*

Tom had just pulled up to the sand pit in the Minitron. Mr. P was with him and somewhat sore from the other day. It was late morning. He watched as Bud landed the *Sea Hound* next to him, pelting the Minitron with small rocks and several hundred pounds of loose sand thrown up into the air by the high-speed rotors.

The nuclear powered vehicle was saucer shaped and could fly through the air similar to a helicopter, or submerge like a submarine. It has a central rotor section with variable pitch blades that provided lift or, by reversing them, downward force for submerging. Professor Martin and Aaron climbed out of the seacopter with Bud. The sand was just settling down. You could see nothing but smiles and eyes lit up by an adrenalin rush.

“Sorry, Tom,” Bud called out, “forgot about the backwash on loose soil.”

Tom said nothing, entered the Minitron and seconds later the repelatrions shoved all the debris away from the vessel. He shut it back down and came out to find Bud now partially covered with loose sand and twigs.

Laughing, they all walked the little distance to the flatbed truck that had the remains of the *Seeker* on it. Harlan Ames, the head of Swift’s Security department, had spent the morning getting the craft out of the pit and trying to find all the wreckage. His crew was filthy from head to foot. And as he got off the flatbed he didn’t look any cleaner than his men. He didn’t look too happy, either! Ames had a twisted

piece of metal in his hand.

He handed it to Tom to look at. “It’s part of an RPG, Tom. U.S. military made, you can tell by the design fault that has never been fixed. That’s part of the tailfin assembly of the rocket, a dead giveaway!”

“Are you trying to tell us that someone or a splinter group in our own government is trying to kill us,” Bud asked, even though it shocked him to think that it may be true.

“No, Bud, it just may indicate that it’s a home grown group that is after you and not some foreign espionage team. Someone who is familiar with our weapons. A rogue CIA agent or ex-military. Or, just a crackpot. We’ll know more when we analyzed the explosive residue and get its chemical fingerprint. Then we’ll know where it came from and can start a trace on it. Give me a day or two. See ya!” and he was gone fifteen seconds later, and so was the flatbed.

Tom knew Harlan was not going to let that piece of evidence lay idle. He was going to tear it apart like a mad dog with a bone! And God help the bone.

“Professor Martin, it’s nice to finely meet you face to face.” Tom shook his hand and then offered it to Aaron saying, “I’m glad you’re willing to join our happy little band. We’re always looking for new members—we lose them so fast!” Aaron’s face went pale, and Tom slapped him on the shoulder and chuckled, “Just kidding. Now, for a rapid overview and off to work we go. Professor and Aaron, you must be wondering why you two are here. Well that’s because when we go to the Moon to check out your findings, we’re going to be taking this Minitron with us.” Both men nearly dropped their teeth into the sand, one almost doing it literally.

“So I want you both to get use to the machine, and the best way to do that is to take you with us on this little fact finding expedition. Mr. P and Bud will take the *Sea Hound* and find out if we have a leak in the pit going into or coming from the lake. If there is, then the three of us will go and seal it with the Minitron.”

“Afterwards Mr. P can supervise the evaporation of this slime filled water, and the refilling of the pit from the Enterprise expansion project. The rest of us are off to the Moon. Any questions?” Tom looked at their astounded faces and added. “Gentlemen, start your engines, and Bud, please let us know when you’re about to start your rotors? We’ll want to be out of harm’s way.”

“Aye, aye, skipper!” Bud sang out as he shook the last of the sand from his hair and gave Tom a snappy salute.

“Guys, just a warning,” Tom was leading them into the Minitron, “it’s a little cramped and we only have two seats. But I thought of everything!” and with the professor inside and Aaron peeping in Tom touched the keypad on the back wall that opened the rear access hatch. The seamless looking space between the side wall and the hatch folded out, then partway down. The inside of the panel held formed seat cushions, and armrests slid out of the wall.

“One on each side of the hatch.” Tom informed them. “Professor, please take the left control seat, and Aaron, sorry, but the back seat is yours. Or if you’d like to give it a try, you can stand just in back of the control seats and hang on. The going is usually not rough, it’s up to you?” and Tom slid into his seat.

The seacopter, meanwhile, had rolled forward on its two sets of tank like treads, splashing water all over the place. “I can see why you wanted to be in the Minitron, Tom,” Aaron was watching from between the control seats.

“That, Aaron, is not the actual reason... watch and learn.”

The typical Swift seacopters were made with the idea of a three or a six-man crew—three persons in each identical half of the craft. That was true of this vessel. Compartment ‘A’ was the same as Compartment ‘B’. But the *Sea Hound* was even more special.

It was equipped with Tom’s aquatomic tracker, based on the same principle that the repelatrions used to detect what elements to repel against. It collected water into nine separate tubes that analyzed the entire chemical makeup of it and displayed them on a monitor. You then selected the

trace chemicals you wanted and the devices would follow it in the water.

Once its treads eased the front end of the seacopter into the water, the snooper tubes located around a central circle on the front end of compartment 'B' still weren't in the water. Bud moved over to the second set of controls in that compartment. He turned on the aquatomic tracker systems and took hold of a seldom-used joystick. Pushing it forward caused the top of the snooper rods attachment base to tilt forward. Bud was running a play by play accounting of what he was doing to Mr. P, who just nodded his head and kept quiet. Nature he loved and could understand, but machines and computers were another thing entirely.

By the time the tracker was horizontal to the water all nine nozzles were submerged. Bud turned on the analyzing circuit and waited for the results. On the monitor, all the different chemical compounds were slowly being listed by their percentage in the water. Biological matter was also listed and cataloged. When done, Bud, had the *'Little Idiot'* computer save the information.

He switched seats again and picked up the communication headpiece. "Here's your heads up, Tom. It's my time to fly. And you were right about bad contaminates in the water that weren't put in by nature."

"Thanks, pal. Let me back up some and then let her rip!"

Tom backed up the Minitron a couple hundred feet. "Sea Hound, you're good to go. Please follow outlined procedure until told otherwise." The atomic powered rotors of the *Sea Hound* went into high-speed rotation. Seconds later, the Minitron was hit by a deluge of green, slimy water.

"What the heck...!" The professor let out in his roaring voice.

Laughing, Tom, explained, "Professor, try lifting an eight ton craft straight up off the ground covered with water using only high pressure air from rotor blades and see what you get. Usually we land on very hard surfaces, like concrete slabs or tarmac at an airport. Water landings are always a little messy."

“Then why do you use that machine? It doesn’t seem all that practical,” Aaron asked.

“Oh, it does have its drawbacks, but its overall usefulness outweighs all of it. That vehicle can take you around the world in the matter of days and do it in every environment—land, sea, or air. But mountain climbing is not its forte. We just fly over the top.” He laughed. The seacopter was one of Tom’s favorite inventions.

The seacopter was now heading out over the lake before making its dive into the water to start its back and forth sweeps to try to locate any faults that were allowing water to or from the sand pit.

Tom brought the Minitron into the middle of the pit, which now held half the amount of water as before the Sea Hound’s takeoff. He set up the monitors to detect ground vibration, as in low frequency sound waves, and thermal differential. He sat back and explained. “If water is seeping in from the lake we will be able to hear it coming in and pinpoint the source, and the thermals will show it up as a temperature change in the surrounding soil.”

“Houston, we have a problem!” Bud radioed Tom a half hour later. “The sniffers are detecting an over abundance of a C-4 like compound in grid L-3. We do not see anything on the surface of the ground, so it must be buried. I think I need your help.”

“Bud, don’t move the *Hound*. If that is an actual explosive, it may have a proximity fuse. Be right there!” Tom gunned the Minitron out of the pit, onto the beach road and into the lake. The two passengers hung on for dear life.

The area of L-3 was fairly shallow, only about ten feet deep and twenty-five feet out from the beach. Tom reconfigured the monitor screens and found the device in seconds.

Harlan was on the side screen and he was reviewing the sensor readings from the Minitron’s devices.

“Bud, you can back off,” he informed him on an open radio channel. “It has an old fashioned pressure release detonator and it’s so far down in the soil that it could not explode. It’s even upside down, and it’s been there for a



long time. Your tracker is also detecting a lot of rust. It's old and probably came from the military base across the lake that was active during the WW Two era. Same place as that old sunken bomber in the middle of the lake. Mark it with a transponder. I'll get the military experts to dig it out later."

"Thanks, Harlan," both boys said at the same time and breathed a sigh of relief.

"Bud," Tom repeated, "mark it and then finish up the grid work. Then go back to the pit and take a water reading and check it against the lake's. We don't want it flowing into the pit either. This delay has finished our day and it doesn't look like we have a leak to worry about."

"Wilco," the flier radioed back.

"Sorry about this, guys," Tom informed his crewmates. "I guess there won't be an underground trip for you after all. And I don't want to cut a tunnel into the sand pit and undermined all that sand for nothing when we're trying to prevent a leak." Tom thought about it for a second and smiled.

"But, come to think about it, I'll tell you what. The town has an old pier just past the beach area that's used for fishing and they need to have the supports inspected. Why don't we do it for them? This is actually what the Minitron was designed to do. Up to it?" He asked.

The grins on the two men's faces told it all.

\* \* \*

It was later after a great supper prepared by Mrs. Swift out on the patio. They were all sitting and enjoying the cool evening air. Bud was sitting next to Sandy, treating her like glass. Mr. and Mrs. Newton and Phyllis were there, with Tom making a fuss over her.

The three other guests were having a good time watching the boys making a nuisance of themselves. Even Aaron thought—being older than the teenagers and without a date—that he was going to be bored, but he was not. The conversation throughout the meal was smart and lively.

It finally turned to the moon mission that was scheduled for the day after tomorrow. "I'm having Zimby Cox and a

couple of techs fly the *Challenger* over from Fearing in the morning,” Tom informed everyone. “It’s being pre-flighted as we speak. When it gets here we’re going to outfit it with a pair of cranes that will be able to lift the Minitron onto the back deck, leaving the cargo entryway clear for other uses.”

“What cranes are you taking, Son?” his father asked.

“The Mechanical Engineering department is retrofitting a couple of small construction cranes. They’re tearing out the diesel motors and installing electric ones. They will also take off the wheels and weld on steel plates in their place that can then be bolted down to the *Challenger*’s deck. Finally, they will be totally cleaned of all lubrication. We don’t want that freezing in the vacuum of space. I’m hoping that Professor Martin and Aaron will join us as we do this?” He looked their way.

“Absolutely,” the professor roared out, while saluting Tom with his drink.

“If it’s any help, Tom,” Aaron added, “I can run one of the cranes for you. My family is into high-rise construction and I’m licensed to run all types of construction vehicles. Have been doing it since I was sixteen, summer jobs and all that. No free college for me. ‘If you want it, pay for it,’ is my family’s motto.”

“Fantastic, Aaron! I’ll make sure to hand you over to the crane crew. That solves one of my problems, one less person on the moon crew, and the smaller the better.”

“See that, Aaron, I told you that you’d come in handy.” Professor Martin slapped him on the shoulders. “That is one thing I know about the Swifts. They’ll use you to the fullest and when they’re done with you, you’re better off than when you started.”

\* \* \*

If Tom thought that he would beat everyone to Enterprises in the morning, but boy was he wrong. The Barn and the area behind it was lit up brighter than the noonday sun. The *Challenger* spacecraft sat behind the building in an out of the way spot. It towered over it. It was huge. From a distance it appeared to be crawling with ant size workers.

It looked like a super sized gyroscope. A three story

rectangular box was suspended in a spherical framework of track rails that ran both horizontally and vertically around the center of the box. The loading deck completely encircled the box at the level of the cargo bay doors at the first floor level. It was round on the outside and fitted into the two main track rails for the super repelatron drive system. This help anchored the ship to the tracks. The box was also attached to the top and bottom of the railing.

Two massive cranes were lifting the smaller modified cranes into place on the back side of the circular deck. They were to be secured some thirty feet apart. Their arms were also designed to fold down and help hold the Minitron in place in its fitted cradle. No other bonds were needed.

Under the back deck a new repelatron dish was being added. It could not be moved along the rails like the others, but it was gimbaled so it could be rotated down at an angle, if needed, to help offset the extra weight of the Minitron that now threw the ship's balance way off for landings and takeoffs.

Tom was amazed at all the activity going around him, wandering throughout the worksite looking at everything. In the control cab of one of the massive loading cranes sat Aaron, operating it like it was his everyday job. He took a second to wave. Professor Martin was on the deck, helping to bolt the smaller cranes down. Bud was with him and both looked like they were having the time of their lives.

At last Tom found who he was looking for. He instinctively knew that both of these men were the cause of all this controlled mayhem. Hank Sterling and Arvid Hanson, partners in crime.

Sterling, the head of the Patterns department, which created most of the physical pieces of the Swifts inventions and Hanson, the model maker, who built both scale mockups and working test models and miniatures. They were both the driving force of the engineering department.

“Arv, look who showed up!” Hank called over to his partner. “Mr. Sleepy Time himself.” Tom opened his mouth to say something but a hot breakfast sandwich was shoved into it.

“Howdy, son,” laughed Chow Winkler, head chef of the cafeteria, and personal cook to Tom and his father. If there was a special project going on, Chow was there to feed the crew!

Taking the sandwich out of his mouth with one hand and covering his eyes with the other he yelled! “Fire! Man on fire.”

Tom then pretended to pull a pin out of an imaginary fire extinguisher and spayed Chow with a hissing sound. Chow’s shirt was one of his loudest, yet. It was black and neon green with several rows of full, orange moons around it with a coyote silhouetted in a pool of yellow moon. All of Chow’s shirts had to be western in style or design. And very, very colorful.

Tom, with nothing left to do but eat his sandwich, smiled his thanks to everyone that passed by him. There was nothing he could say or do that expressed his pride in the people that worked for him and his father.

## Chapter Six: Moon Anomaly Site

Everyone was there. Swift Enterprises might as well have closed for the day. Tom wanted to take off in the middle of the night, but his mother had put her foot down.

“Too many times, Thomas, you’ve run off without a proper goodbye. Not this time!” If nothing else, the ‘Thomas’ was the stopper.

“Mom, name the time, as long as it’s tomorrow.” Tom was helping her with the supper dishes. This quiet time was theirs to share. Putting down his dishtowel, he walked over and hugged her gently. “Mom, you’ll always be my best friend, you believed in me before I ever did. You’re my guiding light when I have to make a decision that affects the lives of others. You taught me never to cause harm to others and I try to live by that.”

“Tom, you make me so proud, I love you and Sandy with my whole heart. Will seven o’clock, tomorrow morning do?” She pulled herself away and patted him on the chest with the palm of her hand. She returned to the dishes so he wouldn’t see the tears in her eyes.

Several calls later it was done, and lift-off would come at seven. While Tom preferred to keep it low-key, the word spread like wildfire. It was not often that the *Challenger* lift-off from Enterprises to go to the Moon.

Chow did not help matters by turning the event into a circus. He had two large white tents set up where he and several cooks, both from the cafeteria and friends outside of work, were serving a hot breakfast that was over the top for most restaurants, in the first tent.

The second tent had row upon row of tables and chairs. They were filling up fast. The third shift workers were now getting off duty and the first shift were coming in. At a raised section of tables and chairs the Swifts, the Newtons and the crew of the Moon ship were being served by a group of waiters, dressed in full regalia.

“Mother, what is the meaning of this?” Tom asked her out of the corner of his mouth as they were escorted to their

table.

“Tom, I’m just as surprised as you are. I called Charles last night to ask him to have a few donuts, with coffee and fruit juice handy in case anyone missed breakfast.” She looked around and sighed. “What am I going to do with that man? He may be Texan, but he doesn’t have to do everything like it’s the size of Texas!”

Bud made his way to Tom and his family, “Boy, Tom, this is the umpteenth time we’re off to the Moon... so what gives this time?”

“I don’t know, Bud, but I’m getting an idea that Chow thinks he’s not welcome to come with us. So this is his way of showing us what we’re going to be missing.” Tom looked around and spotted Professor Martin and called him over and went into a huddle with him and Bud.

It was now an hour after the scheduled lift-off time and everyone was still on the ground. The cooks had finished and they were eating at a side table with Chow waiting on them! The man would not stop as long as someone was hungry.

Tom picked up a wireless mic and turned it on. “Friends,” he called out, “First I wish to thank Chow Winker and his crew of cooks for an excellent breakfast!” Cheers and hoorays sounded throughout the tent.

“Second, with so much food in all of us, we may not get off the ground, never mind making it to the Moon.” Laughs filled the air.

“Third, Bud and Professor Martin, please escort our Mr. Winkler to the stage.” Everyone hollered and cheered Chow as he was pushed forward by his escorts.

In his high heel boots, blue jeans, star spangled shirt and a white ten-gallon hat, he looked enormous. He was almost as wide as he was tall. And if he were any more bowlegged he would look like he was walking in a hoop.

“Partner, put it there,” and Tom held out his hand. The look on Chow’s face was pure joy. Tom turned to the two men who were to help him with a little joke. “I can’t do it. Sorry guys.”

The three of them had planned to tease Chow by telling him that he wasn't needed on the trip. That Professor Martin was a graduate from the world famous culinary institute of Le Cordon Blue in Paris, France. He turned back to the happy-go-lucky cook and took him by the shoulder.

"Chow, it seems that I forgot one thing. The Moon is not made of cheese and so we need a cook. Are you up to it?"

"Hot dig-it-dee dog, it's 'bout time you asked. The old chuck wagon is full and already on board that contraption," he pointed to the spaceship. "Hey, boss, will I still fit and my old spacesuit? I mighta gained a few pounds since I last used it." The roars of laughter almost blew them off the stage.

"Enterprises tower, *Challenger* is ready for lift-off," Tom radioed fifteen minutes later. He was in the main control center in front of the floor to ceiling windows, which spanned almost half the width of the box. The professor was sitting next to him. Bud was in the co-pilot seat at the next window where the manual controls for the repelatron drive systems were positioned. Aaron was with him. Chow was in his beloved little galley in his own special seat. He had a monitor bolted onto the wall to watch the proceedings in the control room.

"*Challenger*, control is proceeding with lift-off in ten seconds and counting. Trajectory is clear for direct Luna insertion. Enjoy the trip... three... two... one... lift-off! Confirming the lift-off of the *Challenger*, at nine twenty-three EST," Patches O'Brian, the tower dispatcher, radioed.

"Roger, that, Patches, see you on the return trip. Out." The ship smoothly accelerated at a constant one-G of force. The '*Super Idiot*' computer was programmed for handling the whole flight to the Moon. Once Tom had filled in the destination, speed, the need of a turnaround point if appropriate, and other data, he had only to sit back and enjoy the trip. He did watch the added repelatron dish under the deck where the Minitron was cradled to see that all its programming was accurate. The *Challenger* stayed balanced and true even with all the extra tonnage of the Minitron on the back side of the ship. The Computer department proved their worth once more!

“Never, I tell ya. Never, had I felt a lift-off as smooth as this. Impressive, my boy, Tom, impressive!” and on and on the professor talked. Even when Chow fed them a snack after turnaround he kept up the prattle. Chow took the man back with him into the galley on the third level to give the others a rest. If anyone could outtalk him it was Chow.

Less than six hours later they were in a Lunar orbit some seventy miles up.

“Okay, Professor,” Tom asked from the control console, “what are the coordinates to this anomaly?”

“Mare Crisium, Latitude 17.0 degree north, Longitude 59.1 degree east.” Aaron cut in with excitement. He felt that he could just reach out and touch the Mare. It was so crystal clear and close looking. He was captivated by it.

“Actually,” the professor corrected him, “We’re going to Picard Crater at 14.6 degree north, 54.7 degree east, which is inside the Mare. Keep going, Aaron,” laughed the professor, “and explain the crater to them.”

“Picard has a rim that is three thousand feet above the mare and a series of terraces originating from the inner walls of the crater. They have not slumped like most terraces do and seismologists have attributed that to the collapse of the crater floor which is approximately 2000 feet below the mare. Picard also has a small hill at its center.” Aaron looked at the professor and the man motion him to go on.

Looking back out the window and sighing he continued, “Normally the anomaly, if it has a positive mascon—uh, that’s a concentration of dense material under the surface that gives a slightly higher local gravity reading—like Picard does, would be located in the center hill. But this one is off to the side. Maybe that’s what caused the floor collapse and the terraces not slumping? I don’t know.”

With a gleam in his eyes, the professor asked Aaron, “Do you want us to throw you overboard so you can be the first one to find out?”

“Sorry, Professor, I’ve been waiting my whole life for this moment.”

“Your whole life,” he roared back. “What do you call



my whole life, then? I'll tell ya. Hell, my boy, hell. When I was your age there wasn't even a rocket that could make it a hundred miles up, never mind actually going to the Moon! Aaron, believe me when I tell you, this is nothing. With people like Tom here, you'll end up retiring on another planet in some far off star system with twin suns and calling it home."

Even for Tom, this statement seemed like science fiction. Little did he know that the '*Galaxy Ghosts*' were on their way and would change his view of interplanetary space travel forever.

"Okay, the *Super Idiot* now has the second set of coordinates and will bring us down to two thousand feet above the surface and hold us there. Professor, if your information is correct, that will make us level to the surface of Mare Crisium. Ready?"

"Stop stalling, just do it, or I'll jump after Aaron does!"

\* \* \*

With the lift-off of the *Challenger* and things slowly returning to normal, Mr. P followed Sandy and Phyllis to the experimental vehicle division of Swift Enterprises. Going in the front door they were met by a curly red headed woman in her thirties. She wore greasy looking coveralls and had a smear of oil on her face.

"Sandy, and Phyl, is it that time already? Thanks for the breakfast, by the way. The Spectromarine Selector Division has the baby you want all checked out and the driver is the tech that will run it as long as you three pitch in. The pump station and hoses are all laid out and ready to go. Go see Slim in the garage, he's waiting for you, and have fun!" Off she ran through another door.

"Thanks, Rose," Sandy yelled to the fast closing door. "This way, Mr. P, and don't worry... the rest of her crew moves a lot slower than she does."

"I swear that woman is going to meet herself coming, as she is going, one of these days." Phyllis chuckled.

"Yoo-hoo! Over here," shouted a tall, thin man who was waving at them from the back of a flat bed truck that was two-thirds full with cylinders of all sizes. He climbed down

to meet them. "This baby is as ready as she'll ever be, Sandy. Let's rock and roll." He led them to the cab and told them to climb in. The cab could hold five people, the driver and a passenger in the bucket style front seats and three people on a rear bench seat.

"By the way, Mr. P," Phyllis said, "That's Slim Davis up front. One of Enterprises' best all-around pilots and techs."

Slim flipped a few switches and put on a mini-headset. He touched a button on the cab visor and the super sized hanger door in front of the vehicle rolled up out of their way. And with a powerful hum the twenty-two-wheel truck pulled out of the modified hangar. He talked to the air traffic tower for a moment and switched off.

"How is this vehicle powered?" Mr. P inquired. "I am hearing no diesel engine noises."

"Atomic power capsules," Slim informed them, "two of them, one to power the wheels because we have electric motors directly connected to each hub, and the second one for all the gizmos this baby carries. You can feel the grip of all the wheels on the ground from up here in the cabin it's so solid."

Mr. P tried to look out the back window, but there wasn't one. "What's this contraption all about, Sandy?" He pointed out to the flatbed, "You Swifts don't like to talk much at times, and at other times you can't shut them up." He pointedly looked at Sandy.

"This, Mr. P is your answer to getting rid of that slimy water in the pit."

"This is our test bed for a new type of hazard response vehicle," cut in Slim, "both chemical and biological. We've gone and modified Tom's original Spectromarine Selector, and we are now trying it out for this type of work. We've got several interchangeable sizes and types of vacuum hoses and head attachments on adjustable booms. The hazardous material is sucked into a separator that uses a version of Tom's chemical compound reader, like in his original tracker device, and the repelatron beams separates them and stores them into all those tanks we have on the back of the truck."

“Everything is pre-packaged for recycling or disposal,” Phyllis mentioned.

“Clean water is piped away if possible and nontoxic gases are release into the air. Quick and simple.” Slim finished up.

“You people are amazing!” Mr. P then fell silent for the rest of the trip to the sand pit. When they got there, they were not alone. A half dozen people were already there. And as the group climbed out of the truck, a young man in a white lab coat came marching over to them.

“Which one of you is Sandra Swift? I’m told you’re the one in charge of this project.” He was all in a huff, and had a clipboard full of papers that kept falling out and he had to stop to pick them up.

Sandy stepped forward and held out her hand.

“Sorry, I don’t shake hands, a filth habit of society. No wonder why I have no paper work on this project, with a *girl* as young as you in charge—what could you know! All work must come to a halt, and a full investigation to be held on this travesty...”

“Excuse me, sir,” Sandy interrupted looking at the man that could only be a few years older than her, “let’s start with who are you, and then I’ll get straight to the point and tell you that we have all the clearance we need for this cleanup project. Federal, State, and the Township of Shopton, New York. Do you want to see them? I’ll have them here in five minutes.”

“Yes, I do! And why don’t you have them here on site?” He demanded.

“Well, sir, who wants to remain nameless,” Sandy verbally jabbed, “this is a three site project. We have all the paperwork at the main site where we’re doing the digging and construction. Not at the two secondary sites. Oh, and by the way. This is a restricted zone, so how did you get in here?” Sandy demanded back.

“I was informed that you were going to do some illegal dumping, and I see that you are!” He was looking at three dump trucks full of rocks.

Phyllis handed Sandy a laptop computer, she looked at it and handed it to the man to read:

‘Files and licenses for Swift Enterprises Expansion and Reclamation Project. Information number...’ it continued for several pages. He got redder and redder.

By the time he finished reading, a jeep pulled up next to them. Harlan was driving and a distinguish looking man in a three piece suit walked over to the inspector and without a word took the laptop out of his hands and handed him a multi-page legal document to read.

The inspector’s face went white and the lawyer for the Swift’s led him to the jeep and put him in the back seat. Harlan walked over to the group, smiled, and said, “To protect is my job, and to get incompetent idiots out of your hair is my pleasure. It’s safe to go back to work. From now on I’ll have security walking the beach till this is done. An oversight on my part, sorry!”

He turned and addressed the other people on the site. “If any of you spot someone or are someone who might belong with that man over there, tell them they have exactly three minutes to vacate the premises. Those not vacating will be arrested for criminal trespass and will spend at least a month in jail.” He got back into the jeep where the other two men were waiting and drove off, leaving behind a plume of dust.

Mr. P watched as the jeep disappeared down the road and exclaimed more to himself than to his companions, “If that don’t beat all!”

Slim laughed. “Get use to it if you’re going to be hanging around here for long, mister. Someone’s always trying to stick their noise in the Swift’s business.”

“Slim, about time you showed up,” called out one of the men at the sand pit. “Let’s get this done. Go do what you have to do and the rest of us will hook up the clean water discharge lines to the pumping station so it can be forced up the hill and then into the lake.”

“Well folks, you heard the man. Up we go onto the front of the flatbed and you can watch the show.” In moments Slim took the cover off the controls and had it running on standby. He plugged a pocket memory stick into the

computer input jack and called up a program. "This program contains the chemical makeup of the lake water that Bud obtained yesterday," he informed them. "When this water is discharged from the selector machine it will have the same composition except for any hazardous items like petroleum-based substances, metals, and pesticides. The biological substances will be fed into a plasma arc and disintegrated."

He moved over to another set of controls at the far end of the console. It consisted of a duplicate set of truck controls and a monitor that showed the same view as if he was driving from the front. He started the truck and looked over to the crew foreman. The man gave Slim the thumbs up sign. Slim waved back and then drove the truck into the sand pit. The ground crew uncoiled several hundred-foot sections of hose and added them on to the water lines as needed.

Once in the water, Slim stopped going forward, reached over and lowered the vacuum head that was part of the front bumper of the truck. Checking with the ground crew once more to see that all was set to go, he turned on the suction vacuum. With a clanking of a few stones that were pulled into the hose and the purring of the electric pumps, it was relatively quiet.

"How long will this take?" Mr. P asked while looking over the side of the truck at the water.

"Not too long, I reckon. Once we see where the deep areas of water are we'll move over to them. Right now were only at low speed, but once I'm sure of what's what I'll speed her up." Not once while he was talking did he take his eyes off the controls. He sat back in his seat, smiled and watched the monitor.

Sandy, Phyllis and Mr. P were trapped on an island of metal and had nothing better to do than sit on the side of the flatbed and watch the water get sucked away.

\* \* \*

"Approaching the edge of the mare," Tom told everyone. "One thousand feet up and descending." They could see their own shadow crossing the outer boundaries of

wrinkled ridges of the mare and disappearing into the depths. The *Challenger* was gliding smoothly downward when it took a sudden tumble.

The ship rolled forward, pitching everyone out of their chairs or off their feet. Tom's chest hit the control board so hard that the wind was knocked out of him. Bud did a somersault over the controls and landed against the windows. Professor Martin and Aaron were slammed into the view ports also. A scream came from the galley just as the ship righted itself and flew on.

Tom, dazed and in pain, hit the big red emergency control button. This was a new control feature to allow a non-pilot to command the ship. Tom did not chose one of the many preset cause-and-action sequences so the computer analyzed their present status in space and choose the emergency program it deemed best. It stopped them where they where and held them in place just passing the ridges.

With a moan, Tom tried to get up and couldn't. Even in the lower gravity of the Moon he did not have enough air in his lungs to do it. The other three were slowly picking themselves up off the floor. The clump, clump of cowboys boots and a screech followed by a loud thump and a, "Oh, my back!" from the stairway could be heard.

This galvanized Tom. With gritted teeth he forced a deep breath of air into his lungs, pushed himself up and made his way to Chow. If Tom had the air to spare he would have laughed in spite of himself and the seriousness of the situation. Chow was now at the bottom of the stairs and trying to get up off the floor. He was covered with spaghetti and red sauce. A large bowl was at his feet. It dripped off his head, his ears, and his shirt. His face was red with sauce and embarrassment.

And from behind Tom, laughter could be heard. Tom reached down and took the overweighed cook by his shoulders and tried to lift him up. A moment later another set of hands reached in from the other side and Chow was again on his feet.

Chow pushed the sauce from his eyes and spotted Bud at his side. "You! You did this." He then flung what sauce

was still on his hands at Bud and missed. Chow did not wait to see if the sauce hit its target, he stomped back up the stairs. Bouncing high with each step.

Looking at the receding cook, Bud murmured, “What did I do?”

“Never mind that, Bud. We’ve got to find out what happened to the ship! We can’t stay here and we can’t move anywhere until we’re sure it’s safe to do so. Something caused that tumble and the next one might be our last.”

Back at the controls Tom replayed their last few minutes of the flight tape. At first he noticed nothing. Then he observed the forward repelatron reading. It was showing the regular lunar regolith surface, but suddenly changed to a soil mixture with eighty-five percent silicon and one percent of cadmium telluride, and then again the usual lunar surface.

The repelatron sensor had not been able change its chemical compound frequency fast enough, and for a moment nothing was holding up the front of the ship. It rolled forward, stopped and pushed back into position when the frequency realigned itself.

“Darn,” Tom chastised himself out loud. “Aaron, you told us about the silicon but not the cadmium telluride. Do you know what that makes when fused together?”

“Sorry, Tom, no.”

“A very low quality electric solar cell!” Tom was as shocked as everyone else. “It can’t be, and it certainly shouldn’t be, but it is, and there must be hundreds of acres of it. When we have time we’ll have to go back and check it out.” He shook his head slowly.

“I should have paid better attention to you. The repelatron beam pushed away the thin coat of regolith and exposed the silicon beneath, then in turn, that thin layer was pushed aside and the regular lunar surface was revealed.”

“That’s it, guys. We’re going back up ten miles and coming straight down to land on the outer most terrace of the Picard Crater. That has to be regular lunar surface. That way the repelatron beams will not have to adjust to three different ground compositions. Once on the terraces we’ll use the *Eel* for any other travel till we’re sure of our

ground!”

Bud, Aaron and the professor all nodded their agreement.

“Aaron, could you please check on Chow and tell him to strap in and to take no chances this time. Have him batten down the hatches. We’ve been too blasé on this trip, but no more! ‘The Moon is a harsh mistress,’ as they say, and we’ve been taking her for granted.

\* \* \*

“You all set in there, Aaron?” Tom radioed from within his spacesuit. He was in the second crane’s control booth.

“Yes, I am, and Tom... when we get back to Earth let me slave the two cranes together. That way only one person needs to run both of them.”

“Gee, what else did we miss for this trip? That makes us about two and oh, so far. Not good for the home team! Let’s put the booms up. Then check on the Professor and Bud. I want a preliminary ground sounding before we do anything else.”

“No arguments from me, Tom,” Aaron replied.

Chow was in his old-fashioned spacesuit. The new counter-pressure suits of Tom’s design were just not practical for Chow’s size. As he had believed, it was a tight fit. But fit it did! “Them two boys are ignoring me and I don’t like it.” Chow’s was feeling like a fifth wheel. He was always in the thick of things when he was with Tom and Bud. Now they only wanted him to cook and they nearly forgot about that too! “I’ll show ‘em,” he thought to himself. “Now’s my chance. I’ll hide in the Minitron and show ‘em!”

Tom had shown everyone how to use the keypad to get into the vehicle so there was no loss of air. The doors wouldn’t open anyways if there was a great air pressure deferential between the outside and the interior. Once inside Chow couldn’t find anywhere to hide.

“Aha!” he thought, “I’ll find me a place in the back fer now, and they can just go a lookin’ fer me. Ain’t no reason for them to open her up right away. Now, if only I can get



the hatch open.” He hit a few keys at random and had no luck. He tried twice more, and on the last try he set off the security program. All hatches locked down.

Chow realized what he had done and he had no choice but to radio for help. Somewhat sheepishly he called out for assistance and got no response. He tried again and again, hearing nothing over the speakers. He came to the conclusion that the suit radio could not penetrate the ship’s metal covering. He looked at the control console and decided not to touch it. He was in enough trouble already.

He could do nothing but wait. Not knowing how to move the seats back to get into them, he perched himself on the edge of the gravitex housing. In his suit, he sat in silence, humming a country western tune or two to himself. Slowly, as time passed, he fell asleep.

“Well, Professor?” Tom radioed as he and Aaron approached the other two men hunched over their gear the best they could in spacesuits.

“Gee, Tom, I don’t know if it’s the equipment or not,” the older man gave it a rap on the side, “but the readings are not conclusive as to whether if it’s safe to go out there or not.”

Tom tried to look at him through his visor, forgetting the reflective coating on the surface.

“The readings of the ground around us are good, but the further out we go the more scrambled the signal gets. We do have a solid reading on the object, it’s what’s in between that’s a puzzle.” He hit the box once more and the machine shut down. The professor tried to kick it, but for all his efforts, it just rolled over and stayed dead.

\* \* \*

With a lurch that startled Chow, he slid slowly to the floor. He could tell the Minitron was moving. He was struggling to get back up when another jerking motion caused him to fall backwards. Windmilling his arms, which did him no good in the vacuum of the craft, he fell onto the gravitex cover.

Tom had added the controls for the unit in front of the cup holders. Fate and bad luck meant that Chow landed on

them, turning the unit on. As he wiggled to get back up, he pushed a few more buttons. The gravity concentrator immediately pulled the Minitron down toward the ground with a force of several gravities. In less than a few seconds, the booms and cables strained to their limits and finally the booms bent toward the ground and collapsed with a snap.

Chow flew into the air as the vehicle slammed into the surface of the Moon, hitting his head on the ceiling. Even with his helmet on, he was stunned. He came down hard onto the gravitex cover once more and cracked it, causing a short circuit in the control unit. The circuit breaker popped and the device shut off.

It all happened so fast that Bud and Aaron did not have time to react to the situation from the crane's cab. Troubles with a capital 'T' had arrived.

Tom and the professor stood at the edge of the platform and stared at the ruined mess. He wondered where Chow was. They had not heard from him for a while.

While he ran to the ladder that was part of the main repelatron rails and landing gear, Tom radioed the professor and Aaron to search the ship for Chow.

Bud was just behind Tom as they reached the ground. Arriving at the Minitron first he called out. "Tom, he must be in there." Bud was trying to reach in past the crumpled boom. "The door's keypad is showing a lockout. I hope you've got the override numbers." He was trying to pull part of the boom away from the door.

Tom joined him to no avail. He could hear the professor huffing and puffing as he and Aaron rushed back off the ship to help them.

"The boom did not break totally apart. We'll have to shift it as if it were one piece. Each of us will grab hold of a section and when I tell you, just swing it way from the hatch. We'll need at least four feet for the ramp to come down in."

In moments it was done and Tom was running his fingers over the keypad. The door parted and the bottom and top sections louvered out, and the interior lights came on. In one leap Tom was in the Minitron with Bud right behind

him.

And there was Chow, spread eagle over the gravitex cover, his head propped up on the console, arms flung over the seats. They could hear his shallow breathing over the radio—he was semi-conscious making groaning noises.

“Thank God we’re on the Moon, Tom,” Bud chuckled in relief. “Even so, this is going to be one mean move getting him out of here and into bed for the night!”

## Chapter Seven: Into the Lunar Surface

In the morning, Chow was back on his feet and in his galley, safe and sound at last. By the time the boys got him out of the Minitron he was fully conscious and pushing their help away. “Dog-gone-it, I’m not a baby—lemme alone, and I’ll stand as good as any of ya!” He might have wobbled for a moment, but he stood his ground.

Now back in his beloved kitchen he was finishing up a breakfast platter of sandwiches. He set them on a tray that already had a large jug of juice and a carafe of coffee. This was his second trip with food and drinks to the recreation room. The crew was at the table talking over plans on what they were going to do on their second day on the Moon. The space suits had been recharged in the suit dispensary as they slept the night away.

“Professor, I don’t think anything was wrong with the sonic transmitter and receiver.” Tom reached over for another egg, ham and Swiss cheese sandwich. “I’m going to send Bud and Aaron out on the repelatron donkey and have them set up another half dozen transmitters and sensors around the top level of the terraces.”

He turned to face Bud. “The Professor and I need to thoroughly check out the Minitron after that crash landing and possibly do a quick run underground. “Chow, I need you to handle communications with everyone. You’ll have to use the regular radio for Bud and Aaron. The ‘big ear’ radio is the only good way to stay in touch with the Minitron while she’s underground, so remember not to turn her off, just to standby or we’ll lose contact. Can I count on you?” Tom looked at Chow and could see that it pleased him to stay onboard the ship for the time being.

Bud grinned and piped up, “Finish up, ladies; we’ve got a job to do! Oh, don’t forget the little boy’s room, unless you like a soggy suit.”

Several hours later Aaron was climbing back onto the ‘donkey’. It was way past noon and he was hungry—supper could not come fast enough. He finished digging the two deep holes needed for placing the probes for the sonic

transmitter and then stowed his tools in the donkey's tool rack while Bud did the connections to the transmitter and finally turning on the unit. A pocket receiver told him if it was working properly.

To keep the boredom down they had been switching jobs after each placement. It was Aaron's turn to fly the ten-foot wide circular platform and he loved it. Flying the donkey on the Moon had no counterpart on Earth. Standing at the control post, with only the waist-high railing to hold on to, and watching the ground rush past, was exhilarating.

Four legs held the platform off the ground high enough so the repelatron dish underneath them could point down to lift them off the ground and then swivel into various directions for travel. One of Tom's '*Little Idiot*' computers and a trio of gyros did all the work and balancing.

"One more to go, Aaron," Bud let him know, as if he couldn't count. "To tell you the truth I'm glad. A post hole digger I'm not!" Aaron was only half listening. He was gazing off at the *Challenger* in the distance, and realized he couldn't see the Minitron.

"I wonder where they are?" Aaron thought as he checked his coordinates, flew to the right some more and started to slow down. He landed and sighed.

"Don't worry, you'll be flying this toy again, I'm sure," Bud answered his unasked question as he hit him on the shoulders. "Come on, and let's get this done."

By this time each installation was taking only about twenty minutes. It was nearing minute eighteen when Aaron felt a rumble under his feet.

"Bud, get over here!" Aaron radioed him. He had turned on the final transmitter and sensor unit and his pocket reader was detecting something big and heading toward them fast. Before Bud had a chance to move away from the donkey the lunar surface erupted and flew into space. It was followed by the Minitron.

"Fantastic!" Tom's voice boomed out of their radio speakers. "Tomorrow, we solve the mystery of the Moon anomaly."

\* \* \*

“How many truck loads of rubble is that now, Phyl?” Sandy asked as two more made their way into the pit while two others left.

“Two hundred and thirty-four and counting,” was her reply. After two and a half days of nothing but counting trucks, Sandy was ready to pull her hair out.

Mr. P had gone off after the first hour, on the first day, as soon as the pit was dried out. He showed up at the end of each day looking refreshed and with a big smile.

He made the girls review the day’s work and how many loads were delivered, and of what type, yet steadfastly refused to tell them what he was up to. They were systematically refilling the sand pit. The top three feet was covered with a specific mix of soil and nutrients deemed best for growing pine and oak trees. A grader was leveling the earth as it was filled and grading it to naturally match into the bluff.

As the last set of trucks pulled up for the day and stopped, Mr. P hopped out and came over to the girls. “My dear and... and trusted friends, I have a surprise for both of you. Come, get into the jeep and... and off we go!” He took the wheel and, with a spray of dirt from the back tires, he headed back toward Enterprises. Just before the back gate he turned left and at the end of that fence he turned back toward the beach. They were now on the junkyard road.

“Did Harlan talk to you two girls about a little inspector friend from the other day?” He took a quick look at them and he could tell that they had forgotten all about him. Laughing a little, he continued.

“It seems that he *was* new with the inspecting department. When he received the bogus call about us, he took it upon himself to check it out. His over zealotness has cost him his job. So, I guess we have another bad apple to watch out for.”

“Well Mr. P,” Phyllis answered back, “they either love us or hate us. There is never an in-between.”

As he pulled up to the former junk yard Sandy and Phyllis let out squeals of delight. The junk was all gone and in its place was a log cabin two-thirds completed on the

outside sitting on pylons some four feet off the ground. That lifted the cabin and the wraparound porch just high enough to be able to see over the rise of beach sand and scrub bushes.

“Like it, girls?” Mr. P asked as his eyes twinkled with glee.

“Yes... Who’s... How... Why...?” all came out at once from both of the girls. And before he could answer, they jumped out of the jeep and ran to the cabin and up the steps. By the time he got there they had made their way to the back, peeking in through all the doorways and windows.

Mr. P stood at the front entry and waited for them to come back. He marveled at the view of the lake and the breeze wafting through his hair. He could hear their steps as the girls walked through the cabin and he smiled to himself. Before they came back out he yelled to them, “Don’t break anything in my new home!” That stopped the footsteps dead in their tracks.

Three minutes later they were all sitting on the top step of the porch and enjoying the view and lake breezes. Mr. P was explaining it all to them. “This was always part of the preserve plans. Your father and mother picked out this log cabin from a kit and had it delivered months ago to Enterprises. Both want a live-in caretaker, for it will be years before, if ever, that it won’t need vigilant care and... and maintenance. We’re talking about watching over hundreds of acres and... and the eagles.

“The caretaker will take care of the day to day things and small fix-ups and such. He will oversee the Heritage Park that you live in too, Sandy. It is starting to get overgrown and that’s bad for its health. If anything big has to be done then Enterprises will help by sending in a crew.

“No one has been picked for the job as yet, because I need to be here for at least a year or more. My wife will join me in the next two weeks. She’s finishing the packing and... and selling the house.” This was the first time he had ever mentioned a wife. “I have no family left alive and the winters in Alaska are getting to be too much for Patty. We are no longer rough and hardy kids. Cold and loneliness are hard to live with up there. Her sister lives in New

Hampshire and we very seldom get to see her and the kids. This is going to be our way to see if we like this area and then start anew when this is done.”

The loneliness on the man’s face was awful as he talked about his wife. He was missing her and he did not want anyone to know.

“I know it’s only been a few days, but I think this is the place for us. We’ll have our eagles to take care of—she a naturalist too—and... and we will be closer to her family. I sent Patty pictures and a video of the project and... and she just as excited about this as I am. So I asked Mr. Swift if I can stay on—”

Both girls tried to hug him at once and were talking over each other as they were both pleased at hearing the news. With Mr. P staying at the Swift’s and Phyllis staying with Sandy for a while, they had grown very fond of him and his tales of his life in the Alaskan wilderness. He had truly turned out to be a man worth knowing.

\* \* \*

After another night spent on the Moon, they were having their last bull session in the control room before heading out. “Right you are, Professor. This is getting weirder and weirder.” Tom pointed to the large monitor in the control room and the images on it. “With all those sonic transmitters out there we should be getting a clear picture of the whole Picard Crater. We’re not. Look at that screen!” he tapped it to emphasize his meaning. “Here we are and there’re all the locations of the transmitters.” They were blinking green, showing that they were working. “Off to the left of the small center hill,” he tapped the screen once, “is the anomaly and it’s colored in red indicating it as a danger/unknown zone.” He paused for a question that did not come.

“The ground for about six thousand feet around the transmitters is showing up and that’s about it. The surface is there, we can see it with our own eyes, but it’s not on the screen. Somehow sonic waves are not registering it. The anomaly is there, and it seems to be floating in the middle of a four mile stretch of invisible ground!” Tom’s mind was reeling at the improbabilities this wild set of contradictions was showing him.



“Well, Tom, I told Aaron when we first uncovered this on the Outpost that it may be the work of unknown space aliens and not of your space friends. I think this is proof positive that it’s of another extraterrestrial origin. Have you contacted your space friends about it?”

“I sent out a message last night on the oscillator, and I have not heard back from them. They are somewhat quirky about how fast they answer back. At times it’s right away and at others its hours or days—if at all!”

“So, Tom, were on our own?” Bud asked. “As usual.”

“That, my friend, is the truth.” A peeping sound started from the communication console and Tom reached over and turned it on. “Dad, are you receiving the signal?” Tom was expecting the call.

“Yes, Son, I am. I’m at the Outpost—just arrived five minutes ago—and I’m having the Megascope turned on to your landing site. Yes... there is Mare Crisium and you are... we’re zooming in closer... and... yes, there you are in Picard Crater—got you and the whole crater on the screen. Give me a moment, I’m just superimposing all of your data from the lunar satellite and the gravity flex generator and sensors on it and—” he let out a sigh everyone could hear. “I don’t have any more information than what you already have. Sorry, Tom, but it was worth a try.”

“Dad, I’m sorry to have wasted your time. You should have had one of the astronomers that are up there do this.”

“Tom, I had to come up in a few days anyways. The Van Allan generator cable systems is about to come on line and if it tests out the way I hope, we’ll have a new energy source for the world. Now we only have to figure out how to get it to the ground without frying everyone. Microwaves and lasers still have a lot not going for them.”

“You’ll find a way, I’m sure. Thanks, Dad. I’ll keep in touch.” Tom turned off the radio and sat back and stared at the monitor.

After a few seconds he shook his head and sighed. “Guys, if it’s alright with you, this is what I would like to do. Professor, you come with me in the Minitron, Bud and Aaron you follow above us with the donkey and bring along

the earth blaster just in case. It's loaded on its own donkey and it can tag along behind you. Chow, you've been invaluable on communications, it's all yours, if it's all right with you."

"You're the boss," he puffed out his chest and added, "You know ya can count on me."

"People, suit up and good luck. Bud, keep that blaster handy. If we get stuck that's the only thing that can help get us out."

"Tom, even if I have to dig my way down by hand, you'll be coming back!" And Tom knew that Bud meant it.

As the startup sequence was running in the Minitron, Tom panned the viewing screen and caught sight of Bud and Aaron twenty feet off the surface with the blaster platform trailing behind them. "Okay, flyboy, I have you on visual. We're just heading out."

"Skipper, let's get this mule train going. You guys have a lot of ground to cover, while Aaron and I have a more direct route to follow. But don't worry, we'll come around and stay right above you."

"Buddy, ya don't know what you're talking about," Chow cut in, "If ya want a mule train then get on the ground and mosey along behind Tom and stay out of trouble. How the heck can you have a train if you're twenty feet above someone?" They all heard Chow muttering to himself over the open radio channel.

Driving the Minitron through the terraces was the hardest part for Tom as the large boulders and small crevasses were a constant obstacle. Twice Tom had to reverse when he discovered they had strayed onto a dead end. Finally, Bud had to lead the way with his better visual height. After the first five miles the traveling got easier and the crater surface got smoother.

They stopped and took a sounding and samples every mile and slowly built up a graph of the ground below them. They could not believe their eyes. By the time they reached the position of the anomaly, some seven miles from *Challenger*, they knew what they were in for and what they were traveling on.

It sent cold shivers down Tom's spine.

They were roving over a dome. The four miles wide and instrumentally invisible ground below them was hollowed out ground.

The anomaly was, as far as they could tell, just below the solid ground that was two hundred feet thick at the apex of the dome. Either the rock of the dome's outer shell was holding it up somehow or it was holding the rock shell up by some unknown force. Either way it was a mystery.

"Bud, we're going down. Chow, only you will be able to hear us from now on, so relay the 'big ear' radio signal to them. If these readings are true we can only go as far as the top of the Anomaly or we'll fall into an empty space..."

"Tom Swift," Bud called out, "is reported to be the first person to fly *inside* the Moon. Hey, Chow, maybe it is made out of Swiss cheese and Tom is the rat in the hole!"

"Buddy boy, cut that out," shot back Chow. "Tom are ya sure you have to do this? It sounds mighty foolish to me!"

"Thanks, partner, but if I find it too dangerous I'll come back up and send the blaster down to find out what it's made of. Okay?"

"I'm holding you to that, Tom. By golly I am!"

"Professor, are you ready?" Tom asked him. They still had their space suits on, but not the helmets or air tanks. With such a long trip Tom had turned the air back on inside the Minitron, to save their suit oxygen.

"Ready? Yes! Nerves? Yes! Let's go!" the Professor called out.

Laughing, Tom tilted the machine down and bored into the lunar surface. It was like cutting butter. The combination of the gravitex and the Budworth Drive moved them smoothly down. Tom took them on a long downward spiral, ending it with the nose of the Minitron just fifty feet above the anomaly. Tom dared not get any closer than that. The Minitron moving through the lunar substrata and the gravitex could have caused a collapse of the 'land bridge' if it got too thin.

Tom still could not get any better readings than when

they were on the surface. “Professor, it’s time to pull out the big guns. The drill... feared by one and all. We’ll bore down and stop at the surface of the object, and take a peek at it. This vehicle comes with a remote, tethered drill and it features its own lights and mini-cam.”

Tom called up the appropriate control program on the computer and ran it on the side monitor. READY blinked back at him from the screen. He hit the ‘Deploy Drill’ icon and the repelatron dish under the nose slid into the Minitron while another dish replaced it. A lid in the center of it popped open. READY TO LAUNCH flashed on the screen, and Tom let it lose.

The three point grinding head whirled into action. Down it went, one foot per minute. Fifty minutes later there was a signal fluctuation on the main monitor but it quickly went back to normal and seconds later the drilling stopped.

Tom pulled the drill back six inches and turned on the lights and camera. A white film was all they saw—a second later it was gone. And all they could see was a muted milky-pink shifting and swilling substance. They could not tell if it was gaseous, liquid or solid.

“Tom, do you recognizes that material? Because I don’t!” What the professor thought he would see from inside a four-inch wide hole inside the Moon, Tom had no idea. But what the substance was...? He did not want to believe it because he had seen something like it before.

“Chow, how’s the video feed?” Tom was killing time. He needed to collect his thoughts and focus. Run a few more test, then...

“I reckon it’s all right. All I’m getting is this pinkish color.”

“Bud, what about you?”

Bud answered by saying, “Professor, I seem to recall the first time you told Tom about what might be down there. If I remember, you said it’s egg shaped. Did the Easter bunny leave it here for us? Tom, do you think what I think it is?”

“We’re only at the upper part of it, but from the scans I’d have to say yeah, I am. The shape is different, but that surface—let me run a few more test and we’ll come back

up. I want to clear the bore hole and take a spectrum reading first followed by a Damonscope scan. Which reminds me. Chow, did you notice a flicker on the sonic transmitter monitor just before we hit the 'Egg' with the drill?"

"I thought I did, Tom, but I figger'd the old peepers was just playing tricks on me."

"Thanks, partner, now I'm sure we're a step closer to solving this thing. Give me ten... fifteen minutes more." For the next few minutes only the clicking of the keyboard could be heard. The professor could not think of a time in which Tom was so quiet for so long a time.

Hours later Tom was back at the ship and had all his facts lined up in a row. He was in direct contact with his father once more. This time they were using the 'big ear' radio. He wanted to be absolutely certain no one could intercept that radio signal; Tom did not want this information to become public, yet!

"Dad, I'm going to start with the interference signal we got just before we reached the Egg with the drill. That turned out to be a microburst of sensory information, not static, but of the actual ground readings. Something down there is trying to shield the Egg. My guess is that when we drilled past the shield point we must have grounded it out for that split second. But for some unknown reason the shield is not doing what it's supposed to be doing. It's probably doing the opposite, and I think I know why."

"Let me guess, Tom," Mr. Swift answered back.

"Okay, Dad."

"One word, no two words. Gravity anomaly."

"Just what I was thinking," Tom replied.

"Tom, you've got to be kidding!" Professor Martin shot back to his friend and colleague in a tone that took everyone by surprise. "That's why we're here... because of it, so pick another number!"

"No, think about it," Mr. Swift radioed. "When that object was first put in the Moon its mass was less than the lunar rock that surrounded it. It was shielded and turned, for a lack of a better word, invisible. Through the centuries it

has somehow gained mass and the surrounding rock has lost it, in about the same ratio. Eventually the Egg became denser than the rock and the bedrock's mass fell below the setting of the shielding. The invisibility field must have been set up to make everything look the same, and thus protect the Egg. When the Egg and the surrounding rocks swapped mass, the invisibility field—set at a fixed level—just started to shield the rocks instead of the Egg. And when the mass of the now hollowed out rock fell below a certain level the shielding turned it invisible.”

Tom Jr. was smiling and nodding his head at his father's shrewdness and correct assessment of the situation without seeing the microburst images.

“I imagine,” Mr. Swift continued, “that if we are able to look close enough at the shield we will find that its actual shape will turn out to be a bubble. We only see the part of it that's covering the less dense ground.”

“Tom—Mr. Swift, if I may ask both of you,” Aaron spoke up, “I understand what you are saying and will agree with it. But don't you think that it was very bad programming on the part of the aliens that left the Egg? If they are advanced enough to put it there, would they not see that if they let the Egg continue to grow unabated that something like this would happen in the future and then the anomaly would call attention to itself?”

“Dad, I'll take that one. Aaron, that seems obvious to us now—good old twenty-twenty hindsight—but at the time the Egg was buried, I believe it was not. The soil that's covering the Egg has not been touched for over sixty-five million years. My electronic retroscope dated it for me.”

The outburst of comments from everyone in the ship was understandable, but he pushed on. “And to think that it is still working at all is what's mind-boggling.”

“Then, Tom,” Bud said in awe, “that means that your space friends did not leave it?”

“I would have to guess not, Bud. I ran several samples of that lunar soil through the spectroscope and it shows the rocks on the surface are the same as the rocks right above the Egg. So that means that a hole was dug, the Egg put in

it, and then covered over. When I tested the rest of the crater samples we picked up on our way to the Egg with the retroscope, the crater came out to be 3.2 to 1.1 billion years old and for comparison the mare is 4 billion years old.” Tom just happened to be looking at Bud and watched his eyes do a loop-de-loop in his eye sockets.

“Tarr-nations, Tom,” exclaimed Chow as he scratched his bald head, “that’s got to be older than my home state of Texas!”

“Yeah, Chow,” Tom answered back, “but not by much. Now I would like you guys to take a look at the microburst, but don’t blink or you’ll miss it.” It lasted all of two seconds. The regular screen image showed first, and then the empty space was completely filled with dots and lines. The dots were all the same sizes and connected to each other by the rods, and then they were gone. Tom ran it again and froze the image at the dots and rods.

Professor Martin simply declared, “Those dots are what’s left of the rocks, right Tom? What’s their composition?”

“That, Professor, is the million dollar question. First off, is it rock and soil represented by the dots or is that the space in between the dots? Second, who knows what it’s made of? We’ll have to get a sample to find out.”

“Gee, Tom. Can you make that pinkish stuff out of the Moon dust?” Chow wanted to know.

Laughing, Tom replied, “I really doubt it. I think no one from Earth could.”

“Then how’s that Egg thing doin’ it?” Chow may be an old prairie cook, but he did have his natural smarts.

“Yes, pray tell,” Bud added. “And, where’s the cheese? I’m hungry,” he smirked.

“Okay, class, listen up.” Tom threw a disapproving glance at Bud. “You need two things to do something like that. One, electrical power. Two, a particle accelerator. The Egg has the power, we just did not realize it—Mare Crisium is one big solar cell. As for the particle accelerator, the Egg could have one, it could even *be* one, but I think the better answer is nano-technology.”

Bud and Chow gave Tom a confused look and the two scientists nodded their heads in understanding.

“Son, isn’t that a tall leap from just the information we have at hand?” Mr. Swift radioed. He hadn’t seen that one coming.

“No, Dad, it’s the only way! The Egg is growing by microns every two weeks. The lunar day is two weeks long. So that’s when it has the extra power to grow. The material is coming from the rocks and the rocks are not being moved. They are being processed right on the spot. Molecule by molecule, or even atom by atom, and systematically left in position to help hold the Egg from shifting out of place. No conceivable machine could do it, so it has to be a nano-robot!”

“Tom and the rest of you guys listen up,” Mr. Swift’s voice became serious and rushed. “Don’t take any unnecessary chances out there. Always have a backup plan and stay together. Get a good night’s sleep and stay in contact with me. Good work so far, keep it up. Son, I need to head back home right away so contact me there.” The radio signal went dead and Tom was left with an uneasy feeling in the pit of his stomach.



## Chapter Eight: Avalanche

The breeze tugged at Sandy's light flyaway hair as she was trying to get it in an elastic band to hold it back. Phyllis' hair was not even moving. It hung straight, thick, and silky smooth. Mr. P stood a few feet below them and never even noticed the breeze. He stood with his feet apart, his hands on his hips, and a smile on his face.

They were on the top of the bluff overlooking the newly completed feeding field for the eagles. What once was a sandpit was now a rolling field with a few selected shrubberies on it. Wild grasses were seeded into the soil and now nature had to do the rest.

A few new trees, some as high as thirty to forty feet tall, were planted several feet inside the field's edges to become hunting perches for the eagles. Three or four more trees would be added to the top of the bluff next week so the lake could be added to their feeding grounds.

In the spring, after the grasses started to grow, several selected species of small field animals would also be added, given a month to become established, and the young eagles would then be brought to their new home.

A puff of dirt flew into the air right next Sandy's foot, missing Mr. P by inches. He had been at the receiving end of such puffs before and his old military training kicked in. The shot echoed out as he spun around, reached out with both arms and hooked them around the girls. He lifted them up and forced his way up and over the bluff taking them with him. As he crested the bluff, one more shot rang out and then silence.

Both girls lost their footing when they hit the ground again and tumbled down the hill a few feet before coming to a stop. "Mr. P!" Sandy called out in utter surprise, not recognizing the echoing sounds of the two shots. She rolled over into a sitting position. Phyllis was flat out on her stomach and sputtering sand out of her mouth. Sandy crawled over to her and they both helped each other up. As they called out to Mr. P again they slowly turned around, brushing the sand off their clothes and looked up.

Mr. P was lying on the ground, his face fully in the sand, and not moving. A red stain was slowly covering his back. Two amulets beeped and sent out their alarm signal as one.

Phyllis fell to the ground next to his head and turned it to get the sand out. Sandy was taking his pulse and her face turned white, “Phyllis, he dead!” she cried out in anguish.

“The hell he is!” and Phyllis tore open the back of his shirt and used part of it to wipe away the blood. Reaching into her pocket, she took out a new handkerchief and refolded it to expose the inside cloth before applying it to the hole. “Sandy hold it down, hard, while I make a wrap for it. She pulled her own top off and using her teeth she ripped it in half down the front and folded the back piece up. She then stretched it around his chest and knotted it on the wound.

“Sandy, get your top off and spread it out. We must place him flat on his back to give him CPR. You’re doing chest compressions. Hurry!” Sandy complied. The far off sound of a helicopter could be heard.

“Breathe, Mr. P, breathe,” Sandy coxed as she paused and Phyllis exhaled once more into his mouth. Sandy started to give compressing pumps again, hoping they were doing more good than harm. With a bullet in his back and him not breathing, what else could they do? Firm hands pulled them away and two med techs took over.

“He’s been shot in the back and bleeding... please save him!” Phyllis cried out as she was taken away and lead to a waiting car with Sandy at her side. They were in shock and only after Harlan put blankets around their shoulders did either of them remember that they had no shirts on.

Harlan prompted them to get their story right to the point and the girls related what had happened to them. Within seconds he was over the hill with two of his men. A stretcher rushed by carrying Mr. P and headed toward the helicopter. When both girls tried to follow they were stopped.

“You’re needed here right now,” one of Harlan’s assistants told them “There is nothing more you can do to save him than what you’ve already done. Help us get the

creep that shot him...” The man’s radio beeped and he walked away to answer it. He was back in a minute and asked the girls to come with him to where they had been on the other side of the hill.

Ames held a bag with a bullet in it and was scanning out in the distance with a pair of binoculars looking for something. Another man standing next to him was relaying directions to him from a radio when Sandy and Phyllis came over the hill.

Hearing the girls coming he turned to them and said, “Do you mind telling me how both of you got from here—” pointing to the ground where their last foot prints were, “—to way over the crest without leaving a single mark?” He was shaking his head in amazement. It was at least ten feet to the other side.

They looked at each other and Sandy spoke up, “Mr. P was standing there looking out at the new field when he turned around, grabbed us and hauled us over the top. I’ll tell ya, I never would have believed he could’ve done it with one of us, never mind the two of us!”

“Well girls, be grateful that he did, I’m sure that saved your lives.”

Phyllis pointed to the bag. “Is that what hit Mr. P?” A look of horror crossed her face at the size of the spent bullet. But before he could answer one of Ames’ men stepped up and pointed out a spot across the field, to a boulder and some bushes growing beside it and to two of his men.

“What you find,” he asked into his own radio.

“Two bullet casings and several foot prints, a complete set of rights and lefts. Whoever it was is no expert. Any fool that watches TV now a day’s knows better. I’m sending Jake to follow the footprints while I take pictures and cast molds of the prints for evidence.”

“Good work. Give me a follow up on the database reports later... out.” Looking at the girls, he told them, “Ladies, let me take you both home. Those blankets look kind of itchy and they’re making a bad fashion statement even if you two are wearing them.”

“Oh, yes please, Mr. Ames,” cooed Phyllis, pulling the

blanket in tighter than ever, “but please take us to the hospital afterwards. Sandy, we must call Mrs. P and tell her what happening.”

“No need,” cut in Harlan. “I’ve got people arranging air transport for her as we speak.”

Mr. and Mrs. Swift came into the waiting room an hour later and Sandy and Phyllis rushed off the couch to hug them and cry onto their shoulders. No matter what they had gone through in the past, they were still young girls. After a minute Mr. Swift pushed Sandy away and dabbed her eye with a handkerchief. “Here, here, kiddo, this isn’t doing Mr. P any good. Both of you,” taking Phyllis into his arms also, “are heroes. You both did the right thing and more than probably saved his life. We’re very proud of you!”

“Have you heard from the doctors yet?” Mrs. Swift asked leading them back to the couch.

“Only from a nurse,” Sandy answered. “He’s out of the operating room and is in recovery. Later he’ll be in surgical intensive care. The doctor was supposed to come out, but we haven’t seen him.”

“Were you able to get ahold of Mrs. P?” Phyllis asked.

“Yes, dear, we did,” Mrs. Swift said taking her hand into hers, “and it’s all arranged. Someone will finish packing their stuff and ship it to them here. Mrs. P should be here soon; she flying in on a Swift’s Strato-Skimmer.” It was one of the newest supersonic planes that the Swift’s were equipping with sonic-boom eliminators that are now allowed to travel across the country.

“When?” Sandy wanted to know.

Mr. Swift looked at his watch. “In about thirty-five minutes, I’d say, if not a little sooner.” They all sat back and waited for the doctor to come out. Thirty minutes later the surgeons came out—one was Enterprises’ own Doc Simpson.

“Hello Tom,” Doc Simpson greeted his boss as he held out his hand. “This is thoracic heart surgeon, Doctor Wallis. He did the operation and I assisted him...” but before he could continue, the outside door opened and a middle-aged woman with Asian features came in; petite and refined

looking, she had an aura of command and calm.

She took one look at the people in the room and held out her hand to Doc Simpson, “Mrs. Pichincha. How’s my husband and when can I see him?” She was direct and yet not overbearing, just concerned and anxious.

“Come with me please, I would like to speak with you privately,” and he tried to lead her away.

“No sir, tell us all. It’s as much their worry as it is mine.” She looked at all of them and beckoned them to come in closer.

“He’s stable, but critical,” answered Doctor Wallis, “so we’re moving him to SIC right now, and in a minute or two you can look in on him, but you cannot stay. In fact,” he looked at her with concern, “it might be best if you did not try to talk to him or even touch him right now. Tomorrow he’ll be awake and responsive. He’s hooked up to a lot of equipment and has several IV’s running. Barring no unforeseen complication he should be out of here in a week, maybe less.

She bowed her head and nodded. “I understand,” she said sadly. Mrs. Swift moved over and put her arm around the small woman’s shoulders.

“I’m sorry to rush off like this but Doc Simpson is going to be the primary physician. He called me in as a personal friend, even though he could have handled it as well as I did. Don’t let him kid you... he’s one of the best surgeons to come out of med school or I wouldn’t leave your husband, Mrs. Pichincha, in his hands.”

Looking straight at Doc, he stated, “Simpson, I do wish you would reconsider my offer and join my group. Your skills are being wasted where you are. Call me anytime, Mrs. Pichincha. Mr. and Mrs. Swift, I like those new inflatable splints and casts your company are making—keep up the good work.” He turned and left the room.

They all stood there watching Doctor Wallis leave and as one they turned to Doc Simpson. “As a surgeon he’s one of the best, but his patients go to him to save their lives and not for his tact or conversational wit. If you’ll please follow me I think it’s time for a quick visit, and afterwards I’ll go

through the operation and what to expect in the future.”

\* \* \*

The *Challenger* slowly came down from the blackness of space, and settled about a mile from the anomaly radio beacon they had left before. A moment later a repelatron donkey flew into the hangar of the ship and the Minitron parked outside it, below the hangar deck.

Air lines came snaking down from above and Aaron and the professor clamped them in place and opened the air valves. It would take twenty minutes to refill the tanks. To kill time the two men went out and collected rock samples and took pictures of the area. To be exploring the actual surface like the Apollo Moon mission astronauts of old was far beyond their wildest hopes and dreams.

Two more figures came out of the *Challenger* a half hour later and unhooked the air lines. When the tanks topped, the valves closed automatically. “Attention please. Will the two missing rock hounds please report to the Minitron, immediately,” Bud spoke into his suit radio, “unless you are now prisoners of the ‘Queen of the Lunar Virgins.’ Then you are excused!” Bud could not help himself, being a big fan of the old time science fiction ‘B’ movies of the fifties and early sixties. He received immediate responses and five minutes later the two men, dragging a bag between them, came into view.

“How many paper weights are you two making for Christmas presents this year?” Bud teased both of them as they leaned the rock bag against one of the landing pads.

“For that, my friend, yours is going to be a piece of coal,” retorted Aaron.

Tom was inside the Minitron by then and radioed out, “Chow, please keep out two scientists inside the *Challenger* and at the ready. No more rock hunting for them. Heck, Chow, I forgot to change the transmission crystal in the big ear radio after I talked to dad last night. You’ll have to do it, okay?”

“Sure Tom, I’ll do it right away and call ya on it in a jiffy!”

“Thanks, Chow, but give us a few minutes to pressurize

the ship.” Tom and Bud busied themselves with sealing the vessel and waiting for the air pressure and temperature to become normal inside before taking off their helmets and air tanks. A green light blinked on the control board and the boys made themselves comfortable at the control console before engaging the engines.

\* \* \*

Tom had decided that approaching the dome at its midpoint was the safest way to proceed. He needed to get the front quarter of the Minitron into the dome so its full array of sensors could be employed. He also had to be certain that the Minitron had solid ground under it. They could not afford to go fall a mile or more to the bottom of the anomaly.

“We’re closing in on the three thousand two hundred and seventy-five foot mark below the surface, Tom. It’s time to head toward the dome.”

Tom was driving the Minitron spiraling downwards in a large gradual descent. They had begun their tunneling a mile out from their new landing position. Tom did not want to probe the shield barrier and the ground beneath it too close to the Egg or the *Challenger*, in case of difficulties.

“Shield coming up,” Bud informed Tom, “twenty feet... ten... five...” Tom stopped the machine as a big hole formed in front of them from the force of the Budworth Drive. The spiral repelatron beams had carved a hole into the modified lunar rock and it just fell away. The tunnel extended hundreds of feet past the normal length of the beam.

Tom slowly moved the machine forward until the nose of the Minitron was inside the newly made tunnel, bringing the full array of sensors past the invisibility shield and into the dome. Tom tried several combinations of radar, infrared, magnetic and searchlights. The best view was the lights. What they saw was mystifying!

The high-powered lights reached the end of the tunnel and a red wall of what looked like sticks and discs, just like the old fashioned Tinker Toy. Rods came out in eight different directions from each disc rim and another one right

through the center. They were all interconnected and formed a repeating design. The whole space was filled with this phenomenon. A forest of discs and rods, but there was more open space between them than the rock type matter left in place.

Bud, with a nervous laughter, said, “Tom? Tinker Toys on the Moon? Is this were all my lost pieces went?”

“Yours, mine and everyone else’s from what I can see right now. We’ll have to get a sample of this stuff. If this is what’s left of the substrata inside of the dome and under the Egg it’s definitely not holding anything up. Did you see how it fell away when the repelatron beam hit it? It crumbled just like dust. Let’s see if we can find out how far it fell, Bud.”

Tom took the Minitron a few more feet forward, just enough to get the first downward sensors free and in the dome. With only one sensor array pointed downward it was tunnel vision to the extreme. By zooming in they located the debris over a mile down at the base of the dome. It looked like a knife got jabbed into a cake and sliced downward leaving a furrow right down to the plate.

“Well Bud,” Tom softly spoke, “it’s a stable design. You notice nothing else fell, it just sheared onto itself all the way down.”

“So, now what? Can you get a sample from up here or do we have to go to ground zero?”

“Ground zero, Bud. That way we can pick up our prize and actually step out and examine it in person.”

“You’re the boss. Hey, Professor,” Bud called out into the big ear radio, “do you have another bag? Tom now wants to make paper weights too!”

The downward journey to the base of the dome was as easy as going through sand. They reached it eight minutes later. Five minutes after that they were outside the Minitron.

It was eerie to be standing in a pile of Tinker Toys disc parts greater than twenty-four feet in diameter and six feet thick with rods about four feet in diameter. The length of the original rods was still unknown; none of them were longer than four or five feet by the time they hit the ground.



Giant's toys for sure.

In the glare of the Minitron lights the two boys moved slowly and with care. The edges of all the pieces were razor sharp and in the shadows the points and edges waited to stab or slash something open. They had taken samples from both the discs and the rods.

"Tom, is it like this all the way across the dome?" Bud was staring off into the distant blackness.

"Hard to tell from here, Bud. We've learned all we can right now, so let's go find out." They returned to the Minitron and stowed their samples.

It didn't take them long to reach the end of the cut even though they were using the caterpillar treads, and Tom once more turned on the Budworth Drive. This time at a very slow rate of rotation and as wide a beam as he could make, extending some ten feet wider than the Minitron on either side. The dome floor was as smooth as a highway and any wreckage was pushed aside by the beams with ease.

"Hey, Tom, we're almost under the *Challenger*," announced Bud. He was watching their position on the monitor and did not see the black wall emerge as the rods and dices were crumbled out of the way. Tom had turned his head to look at what Bud was calling his attention to. The Minitron hit the wall and careened sideways along it. Both boys were almost thrown out of their seats. Tom's hand pushed the throttle forward and snapped the joystick off the armrest as his full mass hit it.

The Minitron continued to smash its way through the thick black wall at a higher and higher rate of speed. The repelatron beams helped to keep the craft accelerating by removing the wreckage. Emergency webbing flew out of the bottom of the control console and pinned the boys down in their seats, and it would not release them until the Minitron stopped.

Bud was caught in a precarious position and did not realize that Tom had no control over the Minitron. Currently trapped, he couldn't do anything even after Tom yelled out for him to stop the machine. Bud was caught by the safety webbing that had tightened and turned him sideways. He

couldn't have reached his control joystick to help if he had wanted to. It was all up to Tom.

Tom tried to pull his left foot up. It was being hindered by his spacesuit and the webbing, but he tried again. On the third try he got it on top of the control board. Pulling his leg up again, he hooked his foot on Bud's joystick and pulled it back as hard as he could, applying the brakes. The Minitron slid sideways in a partial spin and came to a halt. The webbing disengaged automatically once the vehicle stopped and they were free once more.

"What the heck was that?" Bud wanted to know as he finally got himself settled back upright.

"I don't know, but I intend to find out. That structure came out of nowhere. Nothing we have on this machine seems to be able to find anything until after we hit it, and then it's too late."

"Well boys," Chow's voice came over the radio nice and easy, "would you two mind telling us," and the volume went off the meter, "*WHAT IN TARNATION HAPPENED DOWN THERE?*"

Tom and Bud knew that he was steaming and his whole head would be red with anger, and that he was actually frightened for them more than anything else.

While Chow was being calmed by Tom, the dome was reeling in its own problems. The wall that Tom had managed to hit was part of the structure holding up the Egg. Its tensile strength was enormous and it would never give under any weight. But it was brittle and cold. Once cracked, it fractured into a billion pieces within minutes. The thickness of the wall held it for a moment and it might have stayed up on its own but the Minitron had cut out a very large portion of its base. Now, it was doomed.

Tom was out of the Minitron and examining parts of the wall. Bud was still talking to Chow and the others on the surface. Tom could feel a sensation though his feet from the floor. As he looked around, small pieces of black flakes started to rain down on him. He immediately pointed his flashlight up and gasped at what he saw. The small flakes were giving way to larger ones. He started to back up

toward the Minitron not wanting to take his light off of it. He started to back up even faster.

Bigger and bigger pieces were now falling. The whole sky was moving—and it was coming down on them. Two miles above them the Egg rocked in its cradle for the first time in sixty-five million years.

“Bud!” Tom yelled out in what was fast becoming terror, “get us out of here! Now—move it or we’re dead!” and he dove head first into the Minitron.

“What’s happenin’ now?” Chow wanted to know.

It took Tom a moment to get to his feet, and before he could call out he was knocked off them again as Bud floored it. Scrambling to his feet once more he yelled out, “Avalanche! Launch the *Challenger*, Chow! Flip the readout dial to ‘*Emergency Orbit*’ then hit the Red emergency button and hang on.”

With Bud getting them moving as fast as the vehicle was able, Tom readjusted the top and side repelatrions to the falling wall composition. He did not have time to get into his seat, so he just hung on the best he could. Bud was taking them back out the way they had come in—it was the shortest route and the tunnel they came in through would make an easier escape route.

Above them the Egg was slowly tilting. Then the black cradle fell away. Gyrostabilizers and gravity motors came to life deep inside the Egg. They had been silent for sixty-five million years—silent and waiting. Robotic repair units in the Egg kept them in tip-top shape. A few relays stuck and they were immediately cut out of the circuitry and replaced. The gyros rebalanced the Egg while the gravity motors fought to hold it in the air. The engines designers had over engineered them, making them capable of lifting ten times the original Egg’s weight but even that had been surpassed untold eons ago.

The Egg was falling. It was a fact and it could not be stopped. The ground below was littered with discs, rods and cradle debris. The only clear spot its sensor arrays could find was around the moving Minitron and it could detect that it was heading out of the dome. That became its target

to land on. The AI computer had nothing in its programming to realize how gigantic it now was in size and weight.

Tom's call was seconds too late. As Chow reached for the red emergency button the ship tumbled abruptly, throwing all three men off their feet and across the control room. The box of frequency crystals for the big ear radio was still sitting on the communications console and it went flying across the room.

The box hit the far wall first, coming in on one angle. Chow hit the same spot coming in on another. Hit, oomph, tinkling of crystals, and "Oh, my haid!"

The rock-bridge above the Egg held—that is most of it held. The part that Tom pushed his Minitron through did not. First that area cracked along the spiral that Tom had made—stretching from the surface to the inside of the dome—and it dropped out as a solid plug. Fractures appeared elsewhere and spread outward with increasing speed. Where Tom had gone down earlier it did the same thing, but the plug stayed in place. The ground continued to crack.

Fractures and cracks rushed toward each other and met under the *Challenger*. The thinnest ground gave way first, and the big ship started to tilt. The rest of the lunar surface above the dome collapsed a moment later and it all fell into the abyss as one big avalanche.

"There, Bud," Tom pointed to the monitor, "the original tunnel, if we can make it we'll be safe, I think?" This was all happening so fast that Tom wasn't sure of anything.

Bud was rocking forward and back as if trying to push the Minitron faster. "Go, baby, go!" Tom could hear Bud murmuring to himself.

Tom had one of the side screens turned to the sky with radar on it. "Hell, the sky is falling, and that darn Egg is falling right on us too!" Tom whispered half out loud.

Bud took a quick glance at the screen, "oh sh..." and they plunged into the lunar tunnel.

The Egg tried to follow but it was far too big.

## Chapter Nine: Bud Comes Through

“Ouch and tarnations! What happened?” Chow moaned as he picked himself off the floor with the sound of snapping and crackling crystals under foot. The floor was tilted at an odd angle and the twin view ports were now looking some sixty degrees to the right and somewhat upward. They could all see the bottom of the slide and almost to the top of it. *Challenger* had slid half way through the dome and was almost under the part that had not fallen in, leaving them in the sunlight, but not for long as the sun advanced in its lunar cycle.

Because the rest of the dome was in darkness Chow could not see the stub of the fallen cradle that rose a quarter mile into the sky, or all the broken and non-broken discs and rods that filled a small portion of the dark, undamaged dome. Elsewhere on the Moon’s surface several seismographs automatically detected and recorded the disturbance and sent the information to Earth.

Aaron helped the professor to sit up and they carefully slid over to look out the windows with Chow. Chow pointed to the circular deck below them. The downhill side was free of rocks but the other side was covered with several feet of it, and piled against the ship’s wall.

“Don’t reckon we’ll be skedaddling out of here anytime soon.” Chow remarked. “Oh! Holy stampede... the boys!” He was off pulling his way up the tilted floor to the communication console. The green light was still on for the ‘big ear’ radio connection. Chow let out a sigh of relief for with that still on all was not lost.

“Tom, Bud, do you hear me?” the cook’s worried voice echoed through the command module. He repeated his call over and over, hoping that Tom and Bud would answer him.

“Chow, why don’t you leave me alone,” Bud growled to himself, “it was nice and quiet before you came in and interrupted my sleep—sleep?” His eyes flew open and he found himself in the Minitron with emergency lights on and Chow’s voice issuing from the big ear radio.

Bud reached out and found the dangling head set, “Chow, Bud here, I’ll get back to you.”

“Do that, Bud. I’m a-standin’ by.” Chow sank into his seat with relief.

Bud forced his way to his feet, afraid to look for Tom, but he had too. He saw the smashed monitor and knew that type of damage could only have been done by a head hitting it—hard. Tom was crumpled on the floor, his head covered with blood, but the blood was not flowing. It meant one of two things. “No! Never that!” he swore to himself and got busy getting the first aid kit to tend Tom.

“Pulse good,” a relieved Bud thought to himself as he touched Tom’s neck, “but head wounds bleed like crazy no matter what. Don’t judge till it’s clean... oh, good, it’s small,” he muttered while adding antiseptic spray and wrapping Tom’s head with things from the small emergency medical kit. He followed the first aid procedures to the letter. By the time he was finished, Tom was still was not conscious. The smelling salts did not help either.

“Tom hit that monitor real hard by the looks of it”. This thought made Bud very anxious and he would not be happy until his friend regained consciousness. He made him as comfortable as he could, leaving the stiff spacesuit on in case of neck or spinal injuries. Unsure how secure the Minitron was, he carefully replaced Tom’s helmet. “Now, back to Chow and then the power situation.”

Talking to Chow took longer than trying to fix the power. He finally got the back hatch opened and was standing next to the atomic motors and the auxiliary control boards. Both master circuit breakers had tripped and Bud, with his fingers crossed, clicked them off all the way and then reengaged them. The first one hummed to life and the ship’s instruments flicked on. The second one threw sparks, the smell of burnt wiring filled the air, and light blue smoke started to form just as it clicked itself back off. The repelatron could not work without the second motor. Even if he switched motors there still would not be enough power for the repelatron system. They were in a real jam.

Back on the radio, “Chow, it looks like you’ll have to get the blaster down to us... and have you been able to

contacted the Outpost liked I asked you?”

“Bud, I tried, but we now have a problem. The long-range radio is not working and when we went down to the ee-lectronics room to check it out we found the blaster had broke loose from the donkey-sled and smashed into the wall. It’s got a split in the casing. The Professor and Aaron are sprayin’ Tomasite foam on it now tryin’ ta seal off any possible radiation leaks. The radio seems ta work but the dish antenna has broken off its base. It’s got buried under a ton of rocks.”

“Gee, Chow, just use the big ear radio. Switch crystals and... but you can’t, can you? Good thinking, partner. If you did do that we’ll lose contact with each other and I won’t be able to reach you again until we’re above ground. What a pickle we’re in.”

“Not only that Bud, but I... oh never mind. Won’t Kenny Horton or Mr. Swift be missin’ us back at the station?” he tried to cover up his bumbling statement.

“Yeah, but will it be in time to get here before our air down here runs out? I’m thinking not. Only the *Challenger* can do it fast enough. The Dynasphere is being overhauled on Fearing Island right now, so it’s of no use. Chow, you’ve got to get the *Challenger* free of those rocks somehow. You’ll have to do it in the next five hours by my calculations.”

Aaron cut into the conversation, “Bud, the Professor thinks he has a way to move those rocks, but we’ll need Chow to help if we’re to do it in time. We’re going to cut the repelatron motor out of the donkey and use it to push the rocks off. If we wedge it against the walls of the cabin first, it should work. We only need to clear the back half of the deck of the biggest rocks. Chow can check up on you guys in an hour or so.”

“Go for it, Aaron. Chow don’t you forget to put us on standby only.”

“Have no fear, Buddy boy, we’ll get you ‘n Tom out! Say, how’s Tom?”

Bud didn’t want the older man to feel any more stress than he already was under, so he chose to lie. “Tom’s busy

under the dash. Hurry up and get those rocks moved.”

“Right. I’m gonna put ya on hold now—”

“Chow, wait!”

“Yes, Bud.”

“Heck, Chow, you know, in case we don’t make it, give everyone our love.”

“Bud, forget it! Ya can say it for yerself when ya get back home. Talk to ya in an hour or so.”

Sitting next to Tom, with his legs crossed and flipping slow moving coins into the air and watching them land in his lap, Bud could do nothing but think. Jets and planes? He was their master—he could take them apart and put them back together again. Repelatron drive systems were another animal all together.

They took power, electrical power, and it was in short supply right now. Sure he could shut down most of the nonessential systems but that was still way below the amount he needed. The *Challenger* could supply it easily if they could get it to him. The only connection he had with the outside world was the ‘big ear’ radio.

Bud glanced over at Tom, “Still not talking, genius boy? Bet you don’t think this is all fun and games now. Wait till you wake up. I wouldn’t trade you for that headache for all the ‘Moon Virgins’ in this blasted hole.” He stopped as a thought hit him. “That’s what I need, a hole with power in it. That big ear radio travels through a square hole of sorts and confines the radio signal in it, but I can’t run anything on that! What kind of radio waves supply power? Think, Buddy boy, think. You just heard Tom and Mr. Swift talking about it.” His mind was a blank and thumping himself on the forehead didn’t help.

“Howdy, partners,” Chow voice broke the stillness of the Minitron, “Got good news and some bad.”

“Start with the good news, Chow, and leave out the bad. I’ve heard all I can take right now and I just thought of other problems. So I don’t need more right now.” Bud sighed in return.

“If that’s the way ya feel ‘bout it, I’ll just sing yeah a



few bars of one of my fav-or-ite song,” and in his hash baritone Texan voice Chow bellowed out, “Hooome, hooome on the range... were the deer and buff...”

As Bud’s brain tried to tune out the singing, a thought hit him. “Yes! Chow, I could just kiss yeah on that bald head of yours!” Bud shouted out as he hit the control panel with his fist. “Get me the Professor and Aaron on the radio, pronto, Tonto!” Bud was ready to burst with excitement.

“Okay, Bud, what’s yer plan?” Chow asked a few minutes later. “We’re all here.”

“Professor, you and Aaron used radio telescopes of very high and ultra high frequencies, right?”

“Of course, Bud, all the time.”

“And you use microwave communications?”

“Yes.”

“Do you know about Mr. Swift’s ‘Van Allan generator cable system’ he’s experimenting with right now at the station?”

“Certainly. I’ve been out to it a couple of times.”

“Great! Now, professor, this is the hard part. They were going to use lasers or microwaves to transmit and receive the power from the generator. Did you see the setup and can you build the microwave one—no wait, can you build the transmitter and tell me how to make the receiver?”

“That’s a tall order, Bud. The receiver should be no problem. The Minitron is loaded with microwave receivers. You’ve been using them all the time with your sensory equipment. We just have to adjust them to the right microwave transmitter frequency. The problem is at my end, I’m afraid. I doubt that I can make the emitter cavity that takes...”

Aaron tried to rush out of the control room the best he could on the tilted floor calling back over his shoulder as he went, “Be back in a minute. I want to check something out that I saw in the radio room.”

They just waived him off.

“Bud,” the professor asked, “how does this help you?”

That type of microwaves can't penetrate anything solid."

"I know, professor, but the big ear does. The inverse square wave traps the radio signals inside it and makes it possible, as I understand it, so if we take out the radio and substitute the microwave with a high power density then maybe I'll have the power I need."

"Sounds possible. Have the Toms senior and junior discussed this with you?"

"Afraid not. This switch-a-roo thing is my hair-brained idea, but it could work. I'm not solid on the science, but I just know it could."

"And you're willing to bet yours and Tom's life on it?"

Bud changed the subject. "Have you tried to power up the Drive systems yet on the ship? You've got to be sure that the ship can get free and it's not hung up on something you can't see. Those four landing pads are awfully big and there must be tons of rocks on them even by lunar weight standards."

"God, Bud, we never gave that a thought! We still may be stuck here on the Moon."

"That's what I'm nervous about, professor. I know the ship and the track ring railings have holes in it that are probably full of rocks. I'm willing to go with my idea over you being able to take off in the next few hours. Send Aaron out and see if he can find a way under the ship from the uphill side, but tell him to take absolutely no chances. We can't afford another accident."

"Bud, I'll do that right away," Aaron responded. He had come back a moment earlier. "But first, let me tell you what I went to look at. I guess Mr. Swift was going to use the *Challenger* as part of the power generator testing. When we were in the electronics room earlier I notice some unpacked boxes strapped down in a corner. I just took a look at them and they contain a full microwave setup."

"Jetz! It's about time we get some good luck! Professor, Chow, uncrate those puppies and make sure we have all the parts. Aaron go spelunking, carefully, mind you. Be sure to tie yourself off to something solid. Get back to me ASAP. Move it guys, 'cause we've got no time to waste."

Bud sat checking on Tom and drumming his fingers for a full thirty minutes before they got back to him. In that time he ran the microwave scenario through his mind a dozen times, looking for loopholes in his logic.

Chow's voice was not happy when he finally called back. "Aaron didn't like what he found, Bud. The forward pad was partly clear. The other three pads he cain't even see. He didn't try to go any farther. Guess we're stuck here for a while. But, the professor's got good news. I'll put him on."

"Bud, I can swap out the two units, and I have all the frequency information for you. I'm sure that you can raise the microwave receiver on the radar unit. Just understand that it will overload after thirty to forty minutes; there's going to be a lot of power going through it. Does that give you enough time to get you and Tom out?"

"More than enough time. You're sure that you can hook up the microwave without turning off the anti-square wave generator? If it evens blinks, we're done for."

"They are two separate units that plug into each other. It's the nature of the beast. You know that you have to make regular radio contact first, and then you narrow and direct the radio beam. Then you encase it with the anti-inverse square wave and lock it down. When you go to standby you only turn off the radio part of it. Tom has refined the big ear so much that it's all automatic. You can forget about all the steps that it actually takes. That boy is a genius when it comes down to refining something."

"You don't have to tell me, Professor. How long will it take you to be ready to make the exchange?"

"An hour at least, but once I start you'll be out of radio contact."

"I realized that from the start. So let's synchronize our watches, and you can tell me what I have to look for in the electronics bay and how to change it. When I'm sure of everything we'll start the clock." He glanced at Tom and whispered, "I could sure use that brain of yours, pal!"

The professor's voice broke his thoughts about his friend and they went to work.

“Professor, you start the power flow on the low side and build it up to what you think the maximum is for the equipment. Then hold it steady and keep it going. If you don’t see us inside of an hour after that you can stop. Just wait for the rescue ship from Enterprises, I sure it will show up in a couple of days.”

*I wish we had that long,* Bud thought.

Bud was watching the clock, and only a few seconds remained. He was fully sealed in his spacesuit and so was Tom. The changes he had to make only took minutes after he was sure of what to do. He had buckled Tom into his seat and depressurized the Minitron. All systems were off except for the forward visual screen using sonic waves, the Budworth Drive, and the repelatrons for top and sides only and set to the minimal distance allowable. The caterpillar treads would be used to move them forward. They consumed a lot less power to operate.

The second counter hit twelve and the power meter jerked upwards. A moment later, when the power reached the threshold point, the repelatron systems turned on and the *Little Idiot* computer took over, firing up and engaging all the repelatron primaries and synchronized the Budworth Drive and the Gravitex generator. Bud clicked on the tread dive on top of the joystick and tilted it forward. The treads dug in as the Gravitex gave them holding power and the screw drive pushed the lunar substrata out of the way. The Minitron bucked and surged a few times but slowly moved forward.

When the Egg hit the dome wall and floor as it attempted to zero in on the Minitron, it had pulverized the surrounding area and plowed in over a hundred feet. The shockwave and the violently moved material had rammed the Minitron with such force that it was thrown askew and that’s what had killed the atomic motors and thrown Tom into the monitor.

Bud was now fighting his way through the compacted soil and turning in the direction of the lunar avalanche.

He was so busy and concentrating so hard on what he was doing that the sound of Tom’s voice coming over the head set shocked him. It was raw and scarcely a whisper.

“Bud, I’m going to be sick!” was all he said and he started to reach for his helmet to unlatch it.

Bud had no choice. He hit the re-pressurize control switch and the emergence air fill buttons. He had to keep driving or blow every circuit breakers and relay in the vehicle with a power overload. Better that Tom was sick and a little oxygen deprived than dead.

They were not moving that fast—there was not enough power for more than three or four miles per hour, but they were heading out. After a few minutes Bud felt a touch on his arm. It was Tom with that lop-sided smile that Bud knew so well. He laid his head back and cradled his helmet in his lap as not to drop it.

Bud didn’t have time to think about what might be sloshing around inside the helmet.

Tom knew that they were in trouble of some sort, but Bud seemed to have a handle on it. He was almost too sick to even care.

With a grin now threatening to split his face, Bud was the happiest man in the world—no, on the Moon! They had only two miles to go to get out, but when the clock read thirty-five minutes the grin slowly turned to a frown.

“What’s up, Bud?” Tom asked with concern, “You’re not looking so happy anymore. Keep going straight and you’ll find the outside wall and then you’ll just have to follow it up. I can see the power is low and that were not going that fast but those atomic motors will run for months.”

“Tom, we’re only running on one motor and I don’t know how much strain it can take.”

“Bud, that can’t be! You need part of the second one just to power the repelatron, never mind the rest of the stuff.”

“Yeah, I know, but I got around that for a while.”

Tom was going to say something, his mouth was open to do it and he was pointing a finger at Bud, but the rocks gave way and they were in the open.

Bud immediately turned off the big ear radio, fearing an overload when the repelatron systems no longer had

anything to work against. Tom's face really showed surprise, especially when the Budworth Drive went dead along with all the other repelatron systems.

"Bud, why did that happen?" he asked at a total loss.

"Skipper, ask me later. Right now we're as blind as a bat. We need to switch to normal viewing so we can find the *Challenger*. It's stuck somewhere in that avalanche."

"Boy, a young inventor can't even take a little nap around here without everything going flooey!"

"Buddy boy—," Chow's voice cut in on their suit radios, "its sure good to see you with these sore old eyes. You're 'bout a half mile right below us. Just turn around and head up hill. We'll turn the lights on for ya!"

"Forget the lights, Chow. What about you whipping us up a couple of steaks. It has been too long since our last meal."

"Sure—TOM!" Chow's voice rang out with joy, "talk to me, son."

"Hi, guys, glad you stayed until we came back out. But I have to warn you, you might wish otherwise when you get to smell me."

"Tom," cut in Aaron, "a shower can take care of that one, but the other... "

"Thanks, Aaron. I'll take the shower over the alterative." A minute later he radioed, "I see we can now park the Minitron right on the deck, no cranes required."

"Hey, Tom, we aim to please. I know you didn't like the way we did it the last time." The professor returned with a laugh.

That was just what Bud did, and the only thing he asked for was a special delivery of a new helmet for Tom and a bag to put his 'fish bowl' in.

Three hours later Tom had them in contact with the Outpost. A fifty-foot wire stretched between two hastily erected poles and the radio tuned to the amateur radio frequencies did it.

Twelve hours later they were ready to leave the moon.

The Minitron had to stay behind. There was no way to get it into its cradle in their current position, and its weight was an added factor that Tom knew they could do without.

“Anyways,” Bud stated as he buckled into his seat, “if it isn’t safe on the Moon, then there’s no safe place for it.”

“Okay, everyone, it’s time to leave.” Tom took one last look at the lunar avalanche and shook his head. Only on the Moon could something like this happen and you could walk away from it. “Bud, man the auxiliary rockets and when I tell you to fire them up, give them full power. The rest of you, hang on, Once we break lose we’ll be off like a shot.”

The four main repelatrons were pointed away from the ship at several angles and in the tightest beams possible. Tom had calculated and re-calculated the angles to be certain to get them right. Aiming straight down would only force the lunar rocks tighter together.

For the first time in its life, the *Challenger* groaned as it tried to take off. It shook, it rattled, it even moaned as if in pain. Tom turned it off for a second and then back on at full power, quickly the power consumption readouts went into the red. “Now Bud! I think we’re breaking lose. I’m adding the Minitron’s takeoff assist repelatron to the mix. We may start to flip over if I don’t get it adjusted fast enough.”

With the roar of the six emergency auxiliary rocket engines positioned around the outer ring, the *Challenger* shook even harder and then it started too tilt to one side. It was slowly pulling free because of the extra repelatron unit under the Minitron holding bracket. Tom redlined the two opposite repelatrons and then fed in even more power. They went critical. But the ship stopped tilting.

With a tearing sound that overpowered all other noises on the ship, it lifted, taking along tons of rocks and debris. As those fell away, the *Challenger* rose higher. By the time it reached what was left of the top of the dome it was accelerating pass 2-Gs.

## Chapter Ten: Space Friends

Back at the Outpost, Tom and the others hurried to see Mr. Swift. Ken Horton met them instead as they came out of the airlock at the Outpost. He looked at everyone and could see the stress of the last few days in their faces.

“Sorry Tom, but your father is not here; he took an escape ball back to Earth yesterday, to Enterprises to be exact. You’ll be pleased to know that he stepped out of the ball right on top of the Flying Lab’s underground hangar doors.”

“Ken. Explain this really fast. Was dad hurt? I don’t think this is funny at all.”

“He’s fine, Tom and Bud. It will be best if we talk this over in my office.”

“No Ken, here and now. What happened?” Tom grabbed him by the arm.

“Okay. There’s been a shooting. Mr. Pichincha was shot in the back as he got Sandy and Phyl to safety.” Both Tom and Bud turned white and the others around them fell back a bit to give them a sense of privacy. “The girls were not hurt but Mr. Pichincha is in serious condition,” Ken continued. “Maybe it would be better if you all returned to Earth. You’re going to anyway, I can see that.”

“But, why did dad use one of the emergency evacuation balls?” Tom asked.

Unexpectedly, Ken smiled at him. “He missed the last supply shuttle by an hour. It was the only way to get back dirtside in less than a full day. You have to hand it to your dad. Not too many people would gladly hop into one of those unless they really needed it!”

Now, Tom grinned. It was something that he could well see his father doing. He would as well if it ever came to that.

The others were already returning to the airlock. Tom called out to two of them. “Professor and Aaron, you two can stay here if you want. Both of you have gone through



enough already.”

“Sorry, Tom, but where you go, we go until this is all settled, both at home and on the Moon,” the Professor replied with Aaron nodding his head in agreement.

“Mr. P is our friend too,” Aaron added.

Tom and Bud walked into the airlock and turned back to face Ken, “Sorry about grabbing you, Ken. I hope you understand it was nothing personal.”

“Tom, go to your family, they need you right now. I’m the one that blew this one, not you. I’ll radio that you’re coming in. Go, and God speed!”

Once more the *Challenger* raced around the Earth and streaked across the sky to a landing behind the Barn at Swift Enterprises.

Harlan Ames met them with a minivan. They all piled in without saying a word, and went to the hospital to comfort their friends. After a short visit and a meeting with Mrs. Pichincha they left to go back to Enterprises to fill out their mission reports.

Tom received, and reluctantly complied with, a call from Doc Simpson. “I need to check you for a concussion, skipper. You know the drill.”

It was later in the afternoon when they received a call to go to the main conference room in the Administration building to meet with Mr. Swift. He was amazed as he heard Bud’s account of their adventures on the Moon. His admiration for the young pilot skyrocketed as he related in his own words on how he solved the power loss in the Minitron.

Mr. Swift and Tom had spent the last couple of months trying to overcome that final “getting it from point A to point B” hurdle in the Van Alan Generator System, and Bud seemingly pulled it out of his hat!

“You’ve seen the changes he made, Tom?” Mr. Swift asked.

“Yes, Dad, I did, both in the Minitron and in the *Challenger*. They are sound, and before you ask, the second atomic motor was a total loss. There was no way it supplied

any power to the Minitron.”

“What I can’t figure out is who do we give the credit to.” Tom secretly winked at his father as he continued. “Chow with his bullhorn singing voice, Professor Martin for his electronic skills, Aaron for noticing the crates that contained the microwave equipment and helping Professor Martin, or to Bud for having the insight for pulling it all together in the first place?” Tom laughed.

Mr. Swift looked at all the men in the room and reached for the intercom, “Miss Trent, please come to the conference room and bring your ‘Notary Public’ stamp with you.” He pushed back his chair, stood up and smiled at them. “Gentlemen, Swift Enterprises’, every year at this time, gives a reward to all employees that contribute to our safety, improvements, and growth of the company. The winner usually comes out of our ‘Employee of the Month’ list. We have a separate list for all our scientists, their inventions and works.”

Mr. Swift picked up his briefcase from the floor, and as he placed it on the table and opened it, Miss Trent came in. She sat down and activated her dictation station at a small side desk. She nodded in readiness. Mr. Swift took out two pieces of paper and holding them in front of him, ripped them in two, then into eight and dropped them back into his briefcase.

“The combined cash reward is slightly over two hundred and fifty thousand dollars. I, as director and major owner of this company now declare that the ‘Lunar Anomaly Investigation Force SE8-12’ is the winner of both the Employee and Scientist awards for this year to be shared equality by all, with the exception of my son, Tom Swift Jr. I’m also giving them shared rights to the patenting of the ‘Anti-Inverse Power Tunnel’ as named by Budworth Barclay in his formal report and counter-signed by all members of the SE8-12 expedition.”

The ensuing bedlam that followed lasted even longer than Mr. Swift thought it would. But he and Tom Jr. just sat through it and smiled to each other. Both of them knew that the money was of little value over what these men had done to save Tom’s life. And, although Bud’s life was in as much

danger as Tom's, he never once gave his own safety or comfort a thought.

It all came to an abrupt end when the intercom beeped and George Dilling from Communications was on the line.

“Tom, the oscillator at the observatory just buzzed and space symbols are coming through. I know that Tom Jr. radioed the space friends a few days ago, so this may be the reply. I'm hoping you know were Tom is? I called his lab and the office but I still can't find him.”

“Thanks, George, Tom is with me right now and we're both on our way to the observatory. Be there in a few minutes.”

By the time the Swifts and everyone else from the meeting arrived on the second floor of the observatory and to the space oscillator office, dozens of complex mathematical symbols had appeared and were replaced by other intricate signs. The Little Idiot computer was storing all of them and processing all recognized symbols into English.

Over a year had passed since the very first encounter with the space friends in the form of a rocket deliberately crashing into the grounds of Swift Enterprises. The midsection of the rocket was covered with the mathematical language used by the aliens and it asked for the Swifts to help them land and survive on Earth. The father and son team had been struggling with the various meanings and concepts that they represented ever since.

Each message received was more complex and made subtle changes to the previous meaning. Now it was becoming apparent that even the spacing of the symbols added or modified the meaning in the form of time passing to the subject. The longer the spacing, the longer the time had passed and the reverse held true. Now they only had to guess as to whether the space was meant to represent the past or the future.

After only twenty symbols, the message started to repeat itself and continued to do so five more times before ending. By the second time the message repeated itself the Little Idiot computer printed out the translation. Tom

reached out and ripped the paper off the printer and started to read it out loud.

*“Friends, Must have Moon Cache. Vital to our continuing (short space) existence. Remove from Moon sub-surface and place into lunar orbit in the next (long space) cycle.”*

Tom was stunned. If it were to be taken literally, according to this message the Space Friends only had a short time to live and Tom somehow had to get the Egg into lunar orbit in the matter of an unknown amount of time. Were they referring to a span of Earth days or a lunar one of twenty-eight days?

Tom sat down at the desk and jotted out a new message to the space friends asking for clarification of the time needed to get the Egg into orbit and available to them. He then asked them about the connection between the data cache that was on Earth and the lunar one. He handed it to his father first, who nodded approval. Tom then typed it into the computer for translation into the alien’s mathematical symbols and transmitted it into space.

The top question on everyone’s mind as they left the observatory was *could it be done in time?*

Tom completed his work of storing the lunar dome’s discs and rods for later study and left Enterprises for the night.

When the phone rang at his bedside he instinctively knew that it was an incoming space communication. It was two-thirty in the morning. He answered it on the second ring, talked briefly to the night shift communication man and got ready to go back to work.

He met his father on the way out and sent him back to bed, suggesting that there was no use of both of them losing a full night’s sleep. As Tom stepped outside he looked up at the night sky and wondered which star was the home of the space friends and what reason did they have for coming to Earth. Maybe, just maybe, they were on the verge of finding out.

When Tom strode into the oscillator room in the observatory he was surprised to find George there and not

the night man. He was ruffled looking, his clothes did not match and he still had on his slippers.

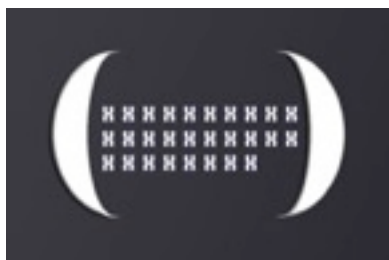
Seeing Tom raise one eyebrow, George just laughed and said, “I’ve been the lead man in your space communications with your space friends since you started using the oscillator. I know the symbols as well as you and your dad. If you think I’m going to miss the most telling message they’ll probably ever send to us...”

“George, I’m glad to have you here. If this is the revelation we hope it to be, there’s going to be a lot of new symbols and your insight is more than welcome. You might have been originally hired for your writing skills, but your knowledge of math and language are really important, and not to use them now would be ridiculous. So check the printer and I’ll get us some pencils and lots of paper. And how about a pot of coffee, I think we’ll need it.”

When Mr. Swift showed up a seven that morning, Tom and George had three stacks of papers ready. Smiling at his father, Tom handed him the only sheet in the first set of papers. It was the idiot computer printout:

*Friends, One lunar day and night*

Tom then placed a screen shot in front of the older inventor.



“Tom, this is a totally new approach to sending messages. They have never diverged from the symbols before. Do you think that they finally understand our thinking process? How we visualize concepts?”

“I don’t know, Dad. That is the only symbol change we found.” Tom then handed him the second pile of six papers. “These are new or old symbols used in a new combination.

We have yet to translate them.” He tapped the third pile. “We have a rough translation on all the rest of these symbols.

“George and I were just finishing up on the translation. We put in what we think the unknown symbols mean by context, except for two places. We could be wrong, but the message makes sense as is. This has to be the longest communications they’ve ever sent. It fills in a lot of the blanks we have over why they’re here. Care to read it?” Tom held it up for him to take.

“No, Tom, I just want to see that you’re earning your keep. I’ll read it tomorrow if I have time.” Mr. Swift turned around and started to leave. Tom’s mouth dropped open in disbelief. An arm shot back and a hand whisked the sheet of paper out of his hand. A chuckle filled the air as Mr. Swift sat down at an empty chair and started to read.

*Friends. 1 lunar day and night (28 Earth days).*

*Lunar Bio-Cache placed in Earth orbit for safe keeping. No knowledge why it was not, except we did not know your world contained intelligent life. Bio-Cache necessary to start life at destination. Original colonist had no method or plan to return to home planet. Ecological disaster is ongoing. Colony one of many endeavors to save our civilization.*

*When ship arrived at planetary system expected to find colonization effort of two thousand years. Twenty-five on ship are last from home planet. Now dead world.*

*Found message in one colony ship waiting in fifth planet’s orbit with distress beacon on. Crew dead, believed to be by selfs. Message to seek out Data Cache, lost in Earth Ocean with forty-nine ships of colony armada. All lost, Earth deadly. Sentinel ship leave warning message for future ships from our planet. Destroyed our planet by wasting resources. Not because of war. No fight for centuries, no fight again.*

*Bio-Cache buried for protection from Earth many*

*fighting factions. Contains our sciences plus many life forms. The Data Cache from Earth fail reveal Bio-Cache location. That part of the data systems damaged beyond repair/data retrieval.*

*We survive on Jupiter moon systems. We have made base with resources of other ship, barely surviving. Findings of the Bio-Cache on Moon by Swift/Enterprises raise hope. With cache could survive.*

*Our need outweighs yours for Bio-Cache. Not fight for it. Die, no kill. Survive four —???— at present numbers. Take two/three —???— renewed food stock from Bio-Cache.*

*At your mercy. Longer retrieve Bio-Cache bigger our loss. No Bio-Cache, we cannot survive.*

Mr. Swift put down the message and looked at Tom. “Son, you are sure of all of this, and there can be no mistake in the translation?” His face was white with the anguish he felt for their space friends.

“We’re as sure as we can be at this time without the other symbols being translated. This is just horrible, Dad. I intellectually understand their reluctance with getting involved with us because of our warlike tendencies, but to let all your people die, that I can’t understand.”

“That’s because you’re young, Tom,” Mr. Swift took him by the shoulders, “but at a certain point, especially without children, and it seems they have none with them, it becomes impossible to see a life worth living. And to bring children into it knowing that they most likely face certain death is almost impossible to contemplate. No, they are a noble race, Tom, and we must save them. I can’t count the number of times they have come to our aid. We can only become a better people because of them.”

“I just wish one thing, Dad. The time discrepancy between the lunar Egg and the colonist arrival of sixty-five million years is not to be ignored.”

“Somehow there must be a mistake in our time data, that’s all there is to it, Tom. We’ll find it eventually and

laugh about it later. For now let's concentrate on saving them. To make you feel better, Tom, give me all your work and the original message and I'll go through it myself. Oh, and George? Can you wake up the Professor and his assistant and have them come over here, please?"

Tom nodded in agreement with his father and started to gather up all the papers they had worked on and he asked George to make a data copy of the *Little Idiot's* files for his father. Before they had a chance to finish, Professor Martin and Aaron came in looking for them.

Mr. Swift looked up from the papers he was re-reading and held them out to the professor. "Read this, Chuck, it's from our space friends."

Instead, the professor handed him the morning copy of the *Shopton Bulletin*. "This, Tom, may be more important right now. It's from your old friend Dan Perkins, the editor."

Sighing Mr. Swift began to read the paper with Tom looking over his shoulder.

## **Lunarquakes Explained**

### **Is Swift Enterprises at it again?**

"In the picture below, taken from the latest Chinese lunar reconnaissance satellite, is the Swift's *Challenger* spaceship. It is resting in the middle of the lunar avalanche that caused the Lunarquakes of three days ago. These seismic disturbances have been recorded by several seismographic instruments left on the moon by different countries. The epicenter was found to be in the Picard Crater located in Mare Crisium. This was the same location where that the Russian's retrieved lunar samples back in the Nineties.

This demands answer to questions:

Why was the *Challenger* there?

Why were they testing a new earth-tunneling device over a week ago as reported by this editor?

Why was Professor Charles Martin of Grandyke



University off on a lunar expedition with them? He is known for his studies on moon gravities anomalies.

Did the Russians find more on the moon than they were willing to disclose and now the Swifts are raping the moon for it?

Do they have the right to mine the moon? Is this an unlicensed operation? Is not the moon being held in trust for all mankind?

Should they be allowed to spoil the moon as other companies have done on Earth?

Should the Swifts be stopped? Should they be called before the people of the world to explain their gross destruction of man's nearest natural space resources for their own illicit gains?

These are questions that need answers. Answers that can't be brushed off by simply saying, "It's in the name of science!"

I say, is it science or is it profiteering of our Moon, of *our* last frontier!

Mr. Swift's eyes blazed with abhorrence towards the man he once called a friend. He also shook with rage that a man with his influence could utter such nonsense.

This was the second time in a week that he has going after the Swifts. Did Perkins enjoy having to eat his own words, and why this unprovoked attack now, of all times? He didn't even bothered to mention the shooting of Mr. Pichincha on the preserve property. Mr. Swift resolved to talk to Harlan Ames and his assistant Phil Radnor. There was something fishy about this whole thing. But he could not put the preserve project and the Moon investigation in the same box. No matter how hard he shook it, the pieces never fell into place and made sense.

Professor Martin took his arm and squeezed it. That brought Mr. Swift out of his reverie. "Thanks, Chuck, for showing us this. I'll have to go to Legal and hash it out with

them first before making a move.”

“Tom, that’s not all. Aaron, give him the rest of the papers that we found out in the stands this morning.” There were three national and two New England papers. They all picked up and carried the Bulletin’s byline.

“This is horrible, Chuck, just horrible!”

“I know Tom, but if you would let me handle the Moon thing, I think I have a way out for us.”

“But I don’t want the space friends or their lunar Egg mentioned just yet. I’m afraid it could start a claims war. I can see the Russians saying it belongs to them. They were the first to land on Mare Crisium and they have the dirt to prove it.”

“My friend, do not fear. You and your company will come out smelling like a rose, I promise you!”

The phone rang and Tom Jr. answered it. He listened for a moment and then hung it up. “Dad, more bad news. The front gate is crawling with reporters and they’re demanding an interview with you and no one else.”

“Are you sure you can pull off this stunt of yours, Chuck? It seem we’re going to need it now. No one gets hurt, right?”

“Sure, I can do it, but I need one small favor? Don’t let Aaron open his mouth, no matter what and be ready to back me up with a tiny little lie.” Aaron looked at him and the professor smiled back at him. “Son, don’t worry, we’ll be back on the Moon in no time. Wait and see.”

At the gate the mob of reporters grew by the minute, with national and local television cameras everywhere. News vans with dish antennas had begun sprouting like mushrooms all along both sides of the country lane that fronted Enterprises. Some had even spilled over onto the private property directly across the road from the gate.

Harlan and Phil Radnor were in body armor and so were the rest of the security force. They started to move the reporters back enough to clear the gate entrance and the road. They corralled them into the outside visitor’s parking lot.

When the gate opened and Mr. Swift and the professor came out in a jeep the crowd surged forward and the security forces pushed them back. The two men came to the front of the line of reporters and Mr. Swift asked for a place that he and the professor could be seen and heard by all. It was arranged in minutes and before Mr. Ames could do a thing the two men let themselves be led to the raised platform.

Mr. Swift stood there for a minute or two waiting for silence. It was finally achieved and he cleared his throat. “Ladies and gentlemen of the press, please hold off your questions until we have finished speaking. I know that right now you all believe you have reason to say that we are the worst of the worst, but I’m here to tell you that what our local rumormonger printed is not true. Where Mr. Perkins got his information from is unknown to me. He is well known to this company for printing first and *then* fact checking, in that order. If you look back at his story of last week you’ll find that he had to retract it.”

The crowd began muttering and several hands shot up, waiving for attention. Mr. Swift pointedly ignored those individuals making a mental note to not call on them once he opened up for questions. That is, if he allowed them.

“We are in the mist of two projects here at Swift Enterprises. The first one is an expansion of our underground hangar space. To save surface space we are moving about sixty percent of them underground instead of extending outward. We as a company do not want to sprawl all over the place and to that end we’re going to move most of our large transport and commercial jets and all its related research and development to the Citadel in New Mexico.

“With only civilian and medium range aircraft types being built and flown here at Enterprises it’s going to change our air traffic usage considerably. This will allow us to finally put in an eagle preserve and nature habitat for all the citizens of Shopton to enjoy. We have been at this for the past several years, and the entire project is available as public record.”

Mr. Swift stopped to catch his breath and a reporter yelled out, “What about the Moon? Explain that one, Mr.

Big Shot!” Others joined in with their questions. Mr. Swift held up his arms and when they quieted down he continued as if nothing was asked.

“As for the Moon avalanche all I can tell you at this time is that I was not there. So I have nothing to say about it.” The uproar from the reporters lasted for five minutes. Neither Mr. Swift nor the professor moved from the platform. Eventually the reporters knew that more was going to be said and settled down.

“If I may, I’ll turn this over to Professor Charles Martin, who was the head of our lunar anomaly research projects. Professor, please make your statement.” He said it flatly, not know what else to say.

The professor stepped forward and held out his arms out in front of him and said, “If there is any policeman out in the crowd please come forward an arrest me, for I am a criminal.” The reporters went wild.

Mr. Swift stepped up to his friend and whispered in his ear. “Are you crazy?”

“No, but that might help,” he mumbled back as the clamor receded.

“I’m no longer doing research with the Swifts. I did not like the way they wanted to search the Picard Crater with a robotically controlled probe from their outpost. After the probe was loaded onto the Moon transport ship I commandeered it and went off on my own.”

He waited for a full minute before continuing.

“The long and short of it is that I blew it. We already knew that there was a cave or a dome of enormous size in the crater. I drove the tunneling drone right into the roof of the dome at an angle and got it stuck. I over heated the engines trying to get the probe out, it exploded, causing the collapse of the roof and that is what started the avalanche.

“The transport ship was pulled under the dome with me still in it. I could not get out. Tom Swift Jr. took it upon himself to save me. That photo in the paper simply shows him rescuing me from myself. I have caused them to lose over ten million dollars in equipment. While they fired me from my research without making it public, I believe my

stupidity must be laid open to scrutiny now. The only thing this wonderful organization is party to is that they wished not to embarrass me.”

The small sea of once angry faces was now a mass of confused looks. None of the reporters knew quite what to make of this turn of events.

“If they are to be blamed for anything it is in being too trusting with people.” Professor Martin then stepped down from the platform, walked out to the road, and stopped at one of the police cars that had shown up. He was put into the back seat and the car drove away with its lights flashing and its sirens blasting.

Mr. Swift started to get down also when he was bombarded with questions. He stepped back up and made one last statement.

“If we are to be blamed it is as Professor Martin stated, we are too trusting. But the question you need to ask yourself is who do you trust as a reputable news source, and when do you stop trusting them?”

## Chapter Eleven: Rock Tossing 101

Tom was just sitting on his stool in his underground laboratory, doing nothing. He was facing the glass wall that partitioned his lab from the hangar. His hands sat, unmoving, in his lap and his eyes not quite closed but unfocused. His father had told him to go there and stay out of sight until he summoned him. It had been hours ago and he still waited.

The room was dark and silent. The only light was spilling in through the lab's windows from the *Sky Queen's* hangar nightlights.

The atomic powered aircraft, which was housed in the hangar, was Tom's first major invention. It was the love of his life, next to the *Challenger*. Where one ship cruised the stratosphere, the other ship took him closer to the stars—the Pleiades star cluster still beckoned to him.

Bud stood behind the ten foot high, quad landing wheel nose assembly watching his friend. He hated it when Tom was like this, lethargic and moody, his mind's wheels and gears spinning with nowhere to go, just wasting time. Something was wrong and he knew what. Tom had been forgotten by his father in the ongoing ramifications of this morning.

Bud missed the morning's antics out by the front gate because he had to test fly the final upgrades on a new supersonic, eight passenger executive jet with SNE technology for the Swift's Construction Company. He was never worried about Professor Martin, he only had to locate Aaron and explain things to him and to Tom. He put on a happy face and walked out into the light of the hangar and into the dark lab.

"Hi there, genius boy. Where is the new contraption of yours to get the Egg off the Moon? You had all day to invent it or do I have to save your bacon again?" he teased.

"Bud, really, Aaron and I are not in the mood..."

"Aaron! Come on out here!"

"Hello, Bud." Aaron's gloomy voice came from a dark

corner in the back of the room where he slumped on the small sofa. Bud reached out and turned on the lab lights.

“Guys, we’re not at a funeral. Mr. Swift and Professor Martin handled the situation quite well this morning. The reporters are all gone, aren’t they?”

“You called that *handled well* this morning?” Aaron retorted. “The Professor is in jail!” He was upset, and sprang up to stand next to Tom.

“No, he’s not. I just dropped him off in New Mexico.”

“What!” They both exclaimed together.

“Yeah, I received a radio call to land here with the *Silent Sky* after the test flight was completed. Phil Radnor handed him over to me and told me to take him to the Citadel as fast as possible, and to keep mum about it. The professor told me what happened and he gave me a message for you and Aaron. He said that he’ll be waiting at the Outpost for us to go get the Egg off the Moon.”

Both of them looked at Bud with uncertainty. Was he pulling one of his off-colored jokes? Bud knew that look on their faces instantly.

“Honest guys, he’s at the Citadel! I don’t know why nobody told you two. I’m sure it was just an oversight.”

“Come on, Aaron. Let’s go find my dad or Harlan.”

“I can save you the trouble on that too, Tom. Right now your father is with Phil Radnor and Chief Slater at the local police station trying to pick up your old friend, Dan Perkins. Harlan is with Captain Rock, of the State Police, looking for young Cioe. You *do* remember the real estate Cioes?”

Tom sat back down on his stool. This was too much for him. Shaking his head in disbelief he sighed. “What else can happen in one day? Then he asked, “What the heck are both of them wanted for by the police?”

“That, I can’t tell you. The Professor did not hear that part of the conversation. I guess you can only find out so much while you’re in jail for barely two hours. He was never booked, you know. There were no official charges against him. Like he really did any of those things he told the reporters! Tom, he wasn’t joshing me, was he? He really

did tell those reporters that he stole a transport ship with the Minitron on board and caused all that trouble?"

Both boys nodded their heads yes.

"Phil," Bud continued to tell them, "simply picked him up after giving the officer at the police station a letter from our lawyers that stated there were no criminal charges against him right now and that Enterprises would take care of things in civil court. They had to let him go free.

"It appears to me that they might not have told you anything on purpose. As in, to keep both of you here and out of trouble." Bud raised his eyebrows to emphasize the point. "I'm sure they had a good reason for doing what they did. Let's let them do what they have planned right now and tomorrow we can yell and holler at them. You don't want to be responsible for messing up their operations, do you?"

"Bud, we don't like it! But what you're saying makes sense. We'll give them the benefit of the doubt, for now! And by the way, what's this you said earlier that you'll have to save our bacon again, chum!" Tom poked him in the chest and said, "Put up or shut up!"

Aaron nodded in agreement.

"Okay, how's this for starters. How many things have *you* combined with the anti-inverse square wave generator? You made the big ear radio and the Megascope with it. I stumbled on the microwave containment field configuration. What else can it do?" Bud asked.

"Flyboy, that's cheating, and it's no answer. I guess it can be combined with a lot of things on the electromagnetic spectrum. Pick one, Bud, and it will probably work in some form or another. But, that doesn't help us get the Egg off the Moon and back into space."

"So, Tom, we have to remove the rocks and debris and then get the Egg off the surface. What is the common dominator with both the rocks and the Egg?"

"They're both massive in size," Aaron answered for Tom.

"And?" Bud asked, making 'come on' motions with his hands, leading them on.



“Heavy, real heavy,” Aaron continued.

The dark haired flyer bowed. “So, Tom, there’s your answer. Make them both light and float them away.” The grin on Bud’s face was comical.

“Right, Bud! I’ll invent anti-gravity and just let both the rocks and the Egg drift off into the lunar sky! I think you’ve been flying too much today. Maybe the oxygen mix wasn’t right. Why don’t you take Aaron home with you and get a good night sleep. We’ll continue this conversation more seriously tomorrow morning.”

Laughing, they all went home for the night.

Bud received a phone call from Tom at seven-thirty the next morning as did Aaron. He asked both of them to go to Engineering and pick up two small gravitex units and bring them to his underground lab. He was going to storage to get something else they were going to need.

Both Bud and Aaron were loading their boxed units onto the service elevator when Tom showed up driving a forklift with a big wooden crate on its forks. He pulled up alongside their boxes and waved to them. “Going down?” he asked.

They unpacked all three containers in the back section on the hangar, as far away from everything as possible. Besides the two gravitex units, Tom had his scaled working model of the Megascopce space prober.

Arv Hanson had outdone himself in miniaturizing the space prober. Even the small liquid helium tanks were usable and Tom asked Aaron to get them filled at the extreme cold materials lab.

By the time Aaron came back, Tom and Bud had the Megascopce’s casing off. Parts of its electronics were then taken out and replaced with the gravitex units and some rewiring. Tom then reconfigured the control board. When he was done with that, he connected the helium tanks in place.

Bud and Aaron were busy running high voltage electrical lines from the power room of the hangar and hooking them up to the device as Tom directed them. Working as a team it took them over an hour to be ready for the first test run.

They were anxious to see what Tom had accomplished by combining both of the devices. Had he actually found a way to reverse gravity? They knew that Tom was not going to let the cat out of the bag until he was ready.

Turning on the unit he let it warm up for a few minutes. Because this was its first time in operation, the air in the liquid helium lines had to be bled off and the magnetic fields inside each amplifying magnetic alignment donuts had to be stabilized and calibrated to increasing strength as it was sent out of the antenna.

Tom aimed the stack of donuts of the anti-inverse square wave generator across the hangar. He quickly turned on the generator and the wave field formed, as it should. Tom had it adjusted to the smallest anti-inverse wave possible. It went right through the wall and into the ground, not having an end point to cause it to stop. There was no picture on the monitor because of this. Tom then added the gravitex wave to it. It worked! The gravity concentrator stayed within the anti-inverse containment field. It did not spread out. He turned off the gravitex.

He aimed the Megascop at a chain and hook on the far side of the hangar along with part of the movable crane system that ran along the roof. Forming a terminus point by aligning the two inverse wave fronts to meet it produced a picture on the probe's viewing screen.

"That's a nice picture, Tom," Bud informed him. "But that's what the Megascop does in the first place."

"Yes, but it can do *this* now..." Tom focused the probe right on to the hook's exterior and then fine tuned it a couple of inches further into the object. He flipped a switch turning on the Gravitex and slowly turned a rheostat, feeding more power to the unit. The hook started to quiver, and suddenly it was pointing right at them. A moment later the metal framework above the chain started to groan and shake. Slowly the whole crane arm was moving towards them.

Tom, realizing the danger, reached over and turned off the power. But he was too late. The hook and chain came flying toward them. The locking pin had broken and the flywheel was spinning out the chain. Instinctively the three

boys ducked out of the way. The chain ran out and cracked like a whip as it snapped to a stop at the end of its length and fell to the ground with a thump as the power was drained out of the device.

“Tom, that went... uhhh... well,” Aaron quipped before Bud could say a word as they picked themselves off the ground. “Would you care to explain your new invention to us?”

“Glad to, Aaron. I took Bud’s advice and combined the two devices as you noticed. The Megascope kept the gravity concentrator in its containment fields and the focus point acted as a stop for it.”

“But Tom, I thought that the gravitex *concentrated* gravity?”

“It does Bud, but all objects have mass and that means they all have gravity, too. So the gravitex concentrates the gravity of the object being focused upon, and the hook having the less mass moved towards us.”

“Why did the crane move instead of the Megascope moving toward it? The crane is way heavier,” Aaron asked.

“Well, I was using the second gravitex as an anchor to hold the scope down. The floor and the ground underneath has more mass, so...”

“That part sure worked,” laughed Aaron.

“Now, all I have to do is figure out why it went spastic. I wasn’t feeding that much power into it.”

“I guess, Tom, that your concentrator was really concentrating.” Bud wisecracked.

“Yes, Bud, that’s it!” Tom’s eyes lit up. “The waves were locked in and couldn’t disperse. So the more power I gave it the stronger it became.”

Bud, unsure whether to be proud or puzzled, simply nodded.

“But, Tom,” Aaron asked a little confused, “how does this lift anything off the ground? Won’t it also concentrate the gravity of the ground under it? You can’t pull up miles of ground with the object you want to lift?”

“You’re right Aaron. But you’re forgetting that the focused point stops the gravitex wave. After I focused on the hook, I moved the stopping point a few inches in and that sealed the hook right in the field. So to move a large chunk of rock all I have to do is focus into it and it will come all by itself.”

“Come on, that Egg has to gross over five hundred tons. You can’t possibly move that even with the Moon’s gravity?” Amazement mixed with doubt was in Aaron’s voice.

“Four days ago you would have been right. But thanks to Bud we have a way to do it. Why don’t you two go find my father and set up a time, at least two hours from now, with him and Uncle Ned to see this device in action? Tell them it will be in the Barn. We need more room to do this right. Meanwhile I’ll try to figure out how much power we will need to get the Egg off the Moon. While you two are at it get Harlan and Hank Sterling there too. We might as well make this a free for all. If Harlan won’t tell us what’s going on with Perkins and Cioe we’ll just put him in the beam and pull it out of him!”

Three older men and three younger ones stood around the modified Megascoppe three hours later. Harlan would not be there for another half hour. In the time before the meeting, Tom, Bud and Aaron set up a display for the two men that needed to release the money to make the Luna-Tronics Excavator or the LTE as Tom now called the machine. For once he’d beaten Bud to the punch.

Bud took one look at the initials and quickly added the ‘u’ from Luna to it. He had done it again. He just loved to change the names of Tom’s inventions.

Tom had the newly named *LuTE* moved to the top inspection catwalk that ran around the top of the Barn. This walkway was reinforced from the floor with extra iron I-beams. Running off the catwalk were the light suspension platforms for the building. They were seventy feet above the ground. The antenna was pointed downward off the edge of it.

On the ground Tom had asked Bud and Aaron set up several different containers with various size rocks and large

metal slugs from the recycling plant. The largest weighed a ton.

After an explanation on how the *LuTE* worked to his father and Uncle Ned, Tom started his demonstration. A small rock slowly drifted off the floor and right up to the top of the antenna. Bud—with the help of a broomstick—pushed the rock out of the beam and it fell back to the ground.

“That,” explained Tom, “was to show how easy it is to get the lifted item out of the way. We could do this in the working model by putting a diversion slide in the way or by having another Gravitex field pull it out of the way from the side.” Tom slowly swept the beam across two of the piles and they both went into the air, one after the other. Tom was able to hold them steady for a few seconds, but the balancing act became harder to maintain and he dropped them. “A *Little Idiot* computer could hold the balance on a lot of loads at one time, switching the end point back and forth hundreds of times per second. I was trying to switch the focus point manually and just couldn’t do it fast enough so I lost control of both of them.”

Mr. Swift nodded, but Ned made a lengthy note on a clipboard he was carrying.

Tom then aimed the probe at an iron slug across the barn. It rose into the air at an angle. When it reached the half way point toward them, Tom turned off the gravitex field and the slug just arched as it fell to the ground like a spent artillery shell. “As you can see we can place the material anywhere we want, back to the ground, into space as a continuous stream, or divert it to wherever we please. This should free the Egg from its lunar grave.”

“But, Tom,” Uncle Ned asked, “The reporters were upset about us littering the Moon with an avalanche. What would they say if we dropped it all over the surface in piles, or put it in space where it would become a hazard to future space flights?”

“I thought of that, Uncle Ned. What is the most hazardous part of space travel? Radiation from solar flares,” he answered for them. “What if we crush up the lunar rocks and press them into thick sheets to form a radiation barrier

or even turn it into wall sheathing to expand the Outpost. We won't have to bring up material from Earth. Sure it would have to be thicker and possibly several layers of it pressed between some kind of sealant. I'm sure you see my point. The cost savings would be enormous." He thought of something else. "We could even be good lunar neighbors and build a safety fence around the enormous hole that will be left after the Egg comes out."

Mr. Swift looked at Ned and then at Hank Sterling. "Hank, building the *LuTE* will fall on your shoulders, so what do you think?"

"Oh, we can bang out a unit fast enough. It's all tried technology. But it's the size that we need to find out. Tom, you want to lift the Egg off the Moon and place it in orbit, and I'm sure you figured out the power requirements. Let's start with that number and then discuss the size of the *LuTE* device."

Tom smiled and said, "Take the Citadel with its three reactors running at full power times three." Hank made a whistling sound, Ned shook his head no, and Mr. Swift simply replied:

"I guess we're going to have to build nine very large Van Allan power generators. You do know that you won't be getting a rise in your allowance for a long, long time to come after this."

"No, Dad," Tom answered back. "When I'm finished with the *LuTE* and power generators, you're going to have Uncle Ned sell the power from seven of the generators to the electric companies. The *LuTE* will continue to use two of them so we can use it as a freight elevator. We're not going to need rocket boosters anymore for routine space lifts, just accelerate the load up using the *LuTE* until it reaches orbit or escape velocity."

Mr. Swift laughed and turned to Ned. "I guess we can scrap those plans for a space elevator. Tom has shut us down before we even got them off the drawing board."

"Hey, you guys up there," shouted Harlan from the ground, "Do I have to come up there or are you all ready to come on down?" They all waved at him and Mr. Swift

started to lead the way down. Tom had given him and Ned a lot to think about. Swift's Space, Inc was about to take command of all future space travel.

Tom took a moment to power down his machine and he took out the computer memory chip, just in case.

Once on the ground, Tom looked Harlan sternly in the face and asked why he was not included in the previous day's round up. He waited impatiently for his answer. The Security chief looked at Mr. Swift, and he nodded his head to go ahead and answer.

"Tom, first off I'll start with Perkins. In our investigation on why he was printing negative stories about what the Swifts were doing we found out an interesting fact. Perkins and Cioe are related. Not directly, but kissing cousins type of thing. We also found out the old man Cioe was broke—had been for years. All his money was tied up in that land he wanted to develop into one-acre parcels. That way he would have gotten the most money he could from it, and he needed it badly."

"How broke is he?" Tom asked.

"He did not even have enough money to pay the taxes on the land. Perkins was loaning him the dough and Cioe was paying him back by giving him IOU's on the land. After all this time Perkins owns fifty percent of the land and he wanted to sell it at any cost." Harlan could see the disbelief in the younger men's faces.

"The fixed election was their last effort to make money off the land. They almost pulled it off, too." Harlan shook his head before continuing. "We went after him for questioning because we traced a money transfer from Perkins to an arms dealer in Virginia. This dealer is known for supplying small RPG's to gangs in Mexico."

"Where is Perkins now?" Bud asked in anger. The memory of Sandy in that crashed helicopter still haunted him at night.

"We let him go. I have a couple of men tailing him in the hopes that he'll do something stupid like go and see Cioe. Now for young Cioe, he has a troubled past. He's been in and out of therapy most of his life, for anger and

authority issues mostly. They sent him to military school and all that type of stuff to try to straighten him out. It didn't work. He was even discharged from the Army under questionable circumstances. He was at sniper school and one day a certain drill sergeant was shot at—one that he had a grudge against.” Ames licked his lips and raised an eyebrow.

“Given his past, it was surprising to find out that he has a gun license, and one for the same type of rifle that was used to shoot Mr. Pichincha. The footprints at the sniper site matched a pair of his shoes, and now he is missing. We assume that he is in hiding.”

Several heads swiveled from side to side as the others looked around. It was shocking news.

Harlan went on. “By talking to people that know him, mostly drinking buddies, we found out that he thinks that getting rid of any Swifts or the people helping the Swifts to make the preserve would cause it to come to a halt and he'll then get the land and sell it. To be rich ever after, like it's some type of fairy tale. We're afraid that he'll pop up from nowhere and try to kill someone. So we are thinking it's best to keep all of you out of the way. There is only so much a twenty-four hour guard can do in this kind of situation, especially if you're out in public.”

“Dad, what about Mother and Sandy? Do they know?” Tom did not like this at all.

“They know,” he replied with a worried shake of his head. “They're women and unless I go, too, they refuse to go into hiding to be out of danger. As for you, we figured that you'll be on the Moon most of the time and out of harm's way.”

Harlan pounded his fist into his other hand. “Well, if that is what you all think is going to happen, you'd better think again. If Cioe wants Swifts then I say the only way to get him in our sights is to give him Swifts. This is what we should do!” He related his plans.

The next day at four in the morning, a nondescript minivan pulled into the Swift's driveway with no lights on. Mr. and Mrs. Swift came out carrying one suitcase each.



Tom came out next with a small case of his own and two for Sandy. Sandy came out tugging an extra large roll-a-way suitcase and an overnight bag dangling from her shoulder.

Mrs. Swift glared at her daughter, "Sandra, I told you just one."

A hissed, "Mother!" was all she heard in reply.

The minivan drove off a minute later and a black sedan fell in place behind it. They took the interstate north, passed Lake George and all the other Finger Lakes region to a secluded cabin nestled in a valley. It was next to a fairly large pond and a slow running river that wandered its way out of the valley going south.

They were in the middle of nowhere. The cabin was Harlan Ames' escape from the world. The only concession he had made to modernization in the past twenty years was to add one of Tom's *Mighty Moe* atomic power plants. He had enough electricity to last a hundred years or more. And that was only because his daughter insisted on it.

For the next two days the Swift's went swimming and Tom tried to fish with a South Pacific casting net in the pond. They played horseshoes and croquet by day and cards every night in the screened in porch until midnight. On the second night two hours after they went to bed, they quietly left the cabin by the back door and walked over to the next valley. At only forty feet wide, it was more like a dried out gully with high sides than anything else.

Mr. Swift flashed his pocket light twice into the ravine. A similar light blinked back. Satisfied, he led the group toward the light.

"Over here," Bud's whispered voice sounded out a moment later. He had the doors open on a *Seeker/SNE-4*. "A little crowded folks, but it's the best I could do with the limited space we have here. Mr. Swift, if you will, please come up and be my co-pilot, which will leave the three smallest people to fit into the back two seats."

Mr. Swift knew that Bud had something to tell him. Tom was always his co-pilot of choice.

As the two women and Tom tried to squeeze their bodies into the two back bucket seats, Bud murmured to Mr.

Swift. “Harlan thinks that they spotted Cioe down in the valley where the river is. It was right after you left the cabin to come here. They’re using infrared night vision to track him down. Here’s hoping!” Louder he said, “All set back there?” Bud had a chuckle in his voice. With reluctant go ahead’s from the back seats, Bud started the engines and silently flew them away.

In Bangor, Mane, as they switched to a waiting seacopter, a man delivered a message that told them that they had lost Cioe in the woods. Using an underwater route they made their way to Fearing Island. By the time the sun had been in the sky for an hour they were winging south along the east coast, crossed over Florida and then bee lined it west to the Citadel in the heart of New Mexico.

Back at the cabin, the Swifts got out of bed and did their various routines of the day. The only difference was they were phantoms—projection from Tom’s 3D telejector, hidden in a cave on the hillside. For the first two days of their stay at the cabin the telejector had recorded all their activities. Now a computer program was running their lives, mixing up the past two days of events into new action sequences.

The trap had been set and Cioe was nearby in the woods!

## Chapter Twelve: If You Build It...

It rained hard the next day and into the night. It was the first tropical storm to hit New York State that summer. Ponds swelled up, the rivers ran deeper than normal. Visibility was down to nil and the swirling winds blew down trees.

Harlan was increasingly tense all day and now that it was night and they had no way of seeing what was approaching in the darkness. The night vision goggles were of no help in this rainstorm. He knew that tonight was the night. The big questions now were, how and when?

A black shadow forced its way through the fast flowing river. Normally it ran only three to four feet deep, but the torrents had swelled it to six or seven feet.

Moving through the river was turning out to be harder than Cioe had thought it would be. He heard so many wonderful reports on the abilities of the Fat Man's diving suit. They were just like miniature, one-man submarines, except they were equipped with pantograph arms and legs to enable great maneuverability and dexterity in the water.

The problem was not the suit, but the way Cioe was using it. No Fat Man was meant to be fighting its way up a muddy river bottom. It could walk, clumsily, on land and on the bottom of the sea, but not forge its way half in and half out of the water. It took him over an hour but he was almost at the pond. He could see it each time the sky filled with lightning. Just a few more meters...

Then, one mechanical foot got caught between two boulders.

He jerked his real foot forward and the Fat Man strained to pull the leg free. It came loose, but at a cost—the knee joint popped and it ground to a halt. Its motor burned out as the watertight seals let go and liquid started to enter the motor cavity.

Now he was forced to drag the leg using a modified

hopping motion with the other leg—another thing the Fat Man was not designed to do. But, as he told himself, it was useless to try to stand in the muddy water or walk on land.

By sheer determination he made it to the pond and let the suit settle low in the murky water. Using the pressure water jets, he submerged and moved through the deeper algae and weed filled pond. Cioe made his way to the dock that sat in front of the cabin. Using the wharf as a crutch, he got the Fat Man far enough out of the water to be able to open the viewing hatch.

It stood there, now black with muck, egg shaped, dripping seaweed with one enormous pale glowing green eye, supporting itself on its one good leg. A flicking dark shadow was behind the green misty light. A flash of lightning filled the sky, and the wind picked up and blew froth filled waves over the dock and against the suit. The mechanical beast raised its arms upward and shook its fists to the heavens. The man inside roared out in a moment of insanity. Frankenstein's monster had met its match, and it was as inhuman as he was.

“Did you see that,” asked one of Ames' security men as another sheet of lightning flashed outside. The two of them were in the cabin, looking out the windows, sitting in the dark.

“Yeah, I did,” the other man replied. He reached for his radio and spoke softly. “Bogey at the dock... repeat, bogey at the dock. Mr. Ames you won't believe this, but Cioe is in a Fat Man suit. Unless he comes out of it we'll never take him.”

“Listen up,” Ames ordered. “We have two captive net guns. We're coming down with them. Jay and Hoya... get out of the cabin. Use the back door, and get to the left side of him. Do not engage. I repeat, do not engage, and wait for me to show up with the captive guns. And for god's sake be careful.”

Cioe extended the arms and had the Fat Man grip the edge of the dock to help keep it upright. He opened the view port and placed two cylinders with what looked like handles on the dock. He then awkwardly tried to get out of the Fat Man suit but fell into the water. He froze in place after he

surfaced. Sweat and icy water were dripping down his face; his hands were shaking at his side and he found he was now tangled in the casting fish net that Tom had left on the dock.

After a moment he reached down and untangled the net from his legs and let it go into the water. He seized the first dark green cylinder and pulled off the end caps. He pushed in two small buttons toward the top of the tube and it popped out to double in length and exposed an aiming sight that folded out from what looked like one of the handle. On the opposite side of the sight was the trigger. Cioe placed it on the wharf and picked up the other tube and repeated the process.

Rain poured harder out of the sky, and the wind howled more loudly. He could just make out the darkened cabin through the downpour. He could hear nothing but the wind and the waves slapping against the pillars of the dock. With each bump of a wave he was reminded of how cold the water felt on his lower body and legs.

He lifted the RPG launcher that was still in his hands to his shoulders, and took aim at the cabin just as a swishing sound came from above and to the side of him. He felt something hit him. It pushed him back against the Fat Man suit and the gyroscopic balance caused the suit to shove back.

He pulled the trigger on the launcher as he stumbled back, flames shot out the back and into the Fat Man, engulfing it with fire. The RPG launched forward into the net, it almost made it through but the back fins unfolded out from the sides and got tangled in the mesh. The last of the rocket exhaust seared across Cioe's chest.

He screamed out in pain as he dropped into the water. The RPG had pulled the capture netting from him, and though burned, he was free. In fear for his life, he swam under the dock, surfaced, gulped in a deep breath and dove under water heading out into the pond.

The rain and the wind were his salvation. One helped hide him and the other pushed him away from the dock and cabin. He made it to shore only one hundred feet down from the dock. He could not swim any further, the pain was too great, and he could not breathe.

Clumps of bushes and then trees helped to hide him. The pain helped to keep him moving away from the cabin. “A place,” he growled to himself. “I need a place to hide and to heal. A place... a place...” It became a mantra to him as he stumbled through the woods and the lessening storm until a false dawn shown in the cloud-laden sky.

Exhausted, he tripped and fell to the ground. He twisted himself so he would land on his shoulder and not hit his chest that continued to feel like it was on fire. Pain ripped through his mind once more. He slowly sat up and moved his arm. It hurt, but it worked. Panting, he lay back to rest for a minute. He nodded off to sleep, despite the pain, right where he landed. A tree helped to support him in a restless sitting position.

The sky was still full of black clouds when he woke up, but they were moving swiftly away. While he slept a plan formed in his mind. He knew exactly what he was going to do.

First off he had to get back to the all-wheel drive truck he had hidden a couple of miles downriver and make it across the state line to his stepbrother’s place without being seen. The stepbrother was years older than himself. He had only met him once when he was a young teenager. Young Cioe had been told at that time by his father that his stepbrother was a recluse and a little mad, and now that fell into his future plans and made things a lot easier for him.

He was feeling woozy, hungry and hot. And when he tried to get up to his feet, he fell flat onto his face. His chest was in agony again. When he tried to open his shirt to look at his chest, the cheap polyester fabric was stuck to him. Clutching his teeth he pulled the shirt open. The skin was raw and bleeding with pockets of puss oozing out. He blanked out from the intense pain.

When he came to, he knew he was in trouble. He could hear men talking and moving close by in the woods. Looking around in a panic he spotted a row of thickets nearby. He slithered under them just in time as two men stopped before his hiding place. After a moment they moved off. Cioe’s lip was now bleeding from biting down trying not to whimper. Some of the scratches he received when he

crawled under the barbed bushes still had thorns in them and he was bleeding.

He moved slowly in the opposite direction and when the pain was no longer enough to keep him going, his new born hatred for the Swifts did.

Revenge, he snarled inwardly. He would live for revenge, *even if it killed him!*

\* \* \*

Nothing! Ames was fuming; all this work for nothing. Cioe was definitely hurt. They all heard him scream in pain and saw the flames of the RPG rake his body. Dead, maybe, but Harlan did not like maybes. They always kicked you in the face when you least expected it. He wanted a live handcuffed man or a dead body, not one that disappeared into the night.

When the storm stopped, they would have to drag the pond and walk both side of the river for miles. Ames was not looking forward to calling to the Swifts. He was starting to feel old. “Maybe I’m too old for this type of work anymore,” he thought. He sighed out loud. “Later... I’ll have time to decide later when this is all over.”

\* \* \*

Tom was able to draft the new spacecraft design, in his small lab, in the first twenty-four hours after arriving at the New Mexican hide-a-way. The team of Sterling and Hanson were going to work miracles for Tom once more.

Hank Sterling started to break down the design of the colossal machine into manageable sizes for air transport and then it had to be able to snap back together again at the atomic power plant. Hank had his team of engineers milling the framework and the covering within hours of receiving the master blueprint.

Arv Hanson—with little to no model work to perform—had been given command of the crew doing all the electronics, living quarters and the all important control room. Everything was test fitted first before being sent out. And that was only one-fourth of the total project.

Mr. Swift, once sure that his wife and daughter were

secure at the power station, flew back to Shopton to oversee the construction of the nine Van Allen Power Generators at the Swift Construction Company. He would not leave the company again until he was done with this job. As each one was finished and tested, they were shipped off individually to Loonau Island, located on the equator in the Pacific Ocean. From there they were launched to the space outpost for final assembly and orbital positioning by Ken Horton and his crew.

The third component in this massive operation was the self-contained processing plant that would turn the raw lunar rocks into Tom's special sheathing. It was being constructed at Swift Enterprises. It was to be a completely robotic unit, needing human intervention only for repairs. It was to be picked up later.

The fourth segments of this operation were the ten individual, twenty foot thick, seventy-five foot wide, magnetic donuts that would be shipped out last. Each donut needed its own set of cooling coils, and mile upon mile of superconducting wires that had to be wrapped around the cooling coils in bundles right inside the donuts.

Even the icy chill of outer space had been deemed to be, "A little too warm," to do the trick.

The cryogenic temperature achieved by the liquid helium was the only way to maintain the anti-inverse square antenna's intense magnetic fields.

It only took five days and nights to get the main structural parts of the ship done, the Cube as it was called. They then started carefully taking it apart to ship out to New Mexico. It took seven days for the Luna-Tonics Excavator to be constructed, and a further three days to take it apart and to start to ship it out by air using a small fleet of Swift Super Hauler jets.

Tom, Bud, Aaron and the Professor, who had stayed on at the atomic power plant instead of shipping out to the Outpost, constructed the largest Gravitex unit ever, while waiting for the spaceships parts.

Tom was burning the candle at both ends. He was also working with the Metallurgical Labs in designing and



building the lunar processing plant to forge ahead with their new sheathing/outer walls for the Outpost. They were trying to limit any added substances necessary to be mix with the processed rocks from the Moon. Bud and Aaron were scheduled to go back to Enterprises in about a week's time to talk to the engineers and to take lessons on how to fix and operate the processing plant.

The Mineralogy scientists were working with the metallurgy people over the crystal-like substance Tom had brought back from the Moon. They were in a state of euphoria over the lunar material and hinted at great things to come from its study.

Tom anxiously watched the first Super Swift Hauler making its landing at the Citadel. For the next week two Haulers per day would be delivering all the jigsaw puzzle pieces of his extractor. Cranes, flatbed trucks, forklifts and the muscle of twenty highly skilled people per shift were enlisted to put it back together again.

The one hundred and twenty-five foot square Cube had to be reconstructed first. It only had three holes in it: a twenty foot square airlock, located in the middle of the back wall; a seventy-five foot wide circular opening for the donut assembly in the front wall; and the access hole for the control room in the top of the Cube, near the front edge.

With only two rooms in the Cube, it went fast. The top fifteen feet of the Cube contained the living quarters and all its related machinery. The rest of the space was totally open. The gravitex concentrator cone had to be aligned directly behind the donuts aperture and bolted in place. All the other equipment and storage tanks were supported in place around it by a jungle gym framework of three levels and accessible by ladders and walkways.

An airlock separated the crew quarters from the main part of the ship. A spiraled staircase gave access to the control room and its numerous computer controls for space flight and excavating.

The next thing needing to be reconstructed was the single massive repelatron ring, much like what the *Challenger* had. But it was not mounted into place yet. The four, twenty-five foot diameter repelatron dishes had to be

fitted on super over-size actuators that could be rotated from front to back, a full one hundred and eighty degrees. They had two opposing functions. The first was to supplying the motive force for the craft in space. The second one was to hold it in a stationary position above the excavating zone while the *LuTE* device pulled up the lunar rocks and—eventually—the Egg.

At present, the ring sat on the ground, with its repelatrions pointing upwards. Two cranes stationed outside of the ring, one manned by Aaron and the other by a Citadel technician, were lifting the Cube off the ground. Once there was enough clearance, a bulldozer attached to the Cube with several tethers moved forward a few yards and flipped the Cube, so that the front wall was facing upward. The Cube was lowered back down and Tom, Bud and several workmen took the crane's lift lines off of it.

Reattaching the cables to the ring, it was lifted until it reached the mid-point of the Cube and mated with its four cone shape attachment points. Riveters and welders went to work and a few hours later the ring was secured to the inner structure. As the seam-sealing work was being done, Tom and the Professor started the arduous task of wiring the repelatrions and the rotation motors.

They were totally immersed in the work and had missed lunch. By seven that night, Mrs. Swift poked her son in the back, startling him.

"Tom Swift junior, supper was ready an hour ago. You march yourself out of here right now or I'll send you to bed without any food," she teased.

"You'll let me come back after I eat, Mother?" he asked with a child like voice.

"Only if you eat all your vegetables." She gave him a peck on his dirty cheek, took his hand and led him out into the rapidly cooling desert night air.

Chow's had his old portable cook wagon set up and a long table full of food waiting for everyone. A cheer went up from the workers who had been waiting for Tom and his mother to emerge from the ship.

"Chow's on," sang out the happy faced, roly-poly cook.

Even those workers that had taken their lunch break ate heartily. By nine-thirty Tom was asleep by the cook fire with a smile on his face.

The seven-thirty flight arriving from Shopton woke him up. His back was sore and numb, but he felt great under the blankets. It was the best night's sleep he'd had in a week. By the time he got to the plane, its passengers were disembarking. Phyllis was the first in line, followed by Mr. and Mrs. Pichincha. Hank and Arv brought up the rear pulling a cart full of luggage.

Before Tom could do anything, the blasting of horns and the sound of approaching vehicles attracted his attention. Mrs. Swift and Sandy were in the lead car, Bud was driving a minivan, and Aaron and the professor were in a light cargo truck to handle the luggage and other supplies that were on the plane.

By the time everyone had gathered together their voices were drowned out by the approaching sound of ten, twin rotor helicopters coming in from the East. They were each hauling an anti-inverse donut segment and had left Shopton three days earlier. Even the largest of the cargo jets could not fit a single ring inside, so this "drag through the air" method had been employed. The wind they whipped up forced everyone into their vehicles for safety.

The 'copters took turns placing their loads on the ground in various spots. They detached their cable lines, and flew off to land several hundred yards away in the desert.

Once the final ring was resting on the ground, Tom was in a quandary. His mind told him he had to visit with his friends for a while first, especially Phyllis, but his inner self wanted to finish the spacecraft.

Hank and Arv sensing the problem once more saved the day. With firm handshakes of welcome and a laugh, they told him to stay with his guests for a few hours as they arranged to get the anti-inverse donuts to the Cube.

To everyone's delight Tom took Phyllis's hand and stayed. The biggest surprise was seeing Mr. P on his feet. He was supposed to be getting continuous home-based rest and therapy, and no exercise not approved by Doc Simpson.

Mr. P figured that he could get that anywhere. Beside the desert air was always considered healthy, was it not?

The happy group of people made their way to the *LuTE* after Chow fed them a Texas style barbecue chicken and potato salad lunch. To Tom's amazement two of the donuts were already in place and the third was in the process of being lowered onto its brackets.

He had to laugh to himself when he notice the big red arrow stenciled on all the donuts and the words running along it:

**Align with and in the detraction of the arrow**

"Leave it to Hank and Arv to do something like that!" Tom thought.

By the end of the day they had only one more donut to place on top of the stack. They had used up eighteen of the twenty-eight days set as the limit from the space friends.

An hour after sunrise the next morning the final donut was lifted into place; the rest of the day was taken up with connecting hundreds of power lines, and wiring in all of the diagnostic and sensor units. Finally, the cooling coils were connected and pressurized. A little after midnight the ship's control board showed nothing but green active systems.

Five weirdly dressed men stood before the ascent ladder to the space vehicle. They were all wearing pale green jump suits with a decal of a wide-eyed, oval shaped, pasty white space alien face on their chest.

"Gee, Tom," whispered Bud. "We all look ridiculous. I mean, these are really too much. Although..." he snickered, "take a good look at Chow. Put a red nose and big shoes on him and all you gotta do is ask 'where's the clown car?'"

"Bud, be a team player and shut up and smile. Phyl made these jumpsuits all by herself while she was struck at home for the past two weeks. She feels left out of a lot of what we do. Give her a moment in the 'spotlight' okay? Here she comes now." With his hands held out to her, he asked, "How do we look, Phyl? They all fit just right!" He was all smiles.

Love, Tom thought, what you do for love! He sighed.

Mrs. Swift was the last person to see them off. She kissed them all good luck and whispered in Tom's ear, "You make me proud. Only a truly devoted man would wear those jumpsuits. What *was* that girl thinking?" She walked away shaking her head in amusement. She followed the others to the hastily built launch bunker. It was a safety precaution only.

It only took Tom and Bud five minutes to prepare the craft for liftoff. Reorienting the massive repelatrions took up most of the time. From pointing skyward to earthward was a slow but steady swing. This was probably the last time the spaceship would be on a planet.

Tom radioed the Outpost and they told him which Van Allan power generator (VAP-generator) radio frequency chip to plug in—only seven of them were ready at that time. Tom had received the entire set of big ear chips from his father the other day when his friends had arrived. He placed the proper chip into the radio signal generator and made contact with the VAP-generator/2. Instantly the microwave power started to fill the liquid helium cooled capacitors. This way they had a backup power source in case of transmission failure.

Bud was at a loss as he had no designation for the new ship. "Swift's moon ship," he cringed at that, "to ground control, ready for flight. Countdown beginning in ten, nine..." At "three," Mrs. Swift pushed a button on a small pocket fob. A champagne bottle swung in on a line suspended from one of the cranes. "I christen thee, *Life LuTE*," she sang out as it hit the *LuTE*'s drive ring. It shattered inside its clear puncture-proof plastic safety wrapping, and the ship majestically soared into the sky, never to return to Earth, the planet of its birth. Space was to become its new home. The sun and the planets becoming its new companion's in the black cold void of space.

In its fifty years of service it would touch six planets with its excavator, ten moons, and numerous asteroids, as well as being the first space elevator for Earth. Its untimely death in the Sun was still beyond anyone's knowledge.

The *Life Lute*'s had a unique piloting setup. The four command seats faced the long sweeping view port. The

special six layer composite glass had several chemical changing abilities. It had automatic glare and spot darkening abilities from sun or bright lights. It was ultra violet and infrared controllable, and portions of it could be directed and made to magnify over a thousand fold.

The right two seats were for flight control and the two left ones were for the space excavator. Behind those seats were four extra ones that folded down into the floor and when deployed rose several inches above the floor. They could be pulled up individually as needed. This left the command blister with an open airy feel. The RepelaGrav light strips were an added plus and welcomed on all three decks.

Chow was happily perched in the jump seat, Tom and Bud were at the ship's flight controls and the Professor and Aaron were in the excavator seats.

“Swift Outpost Control, *Life LuTE* is on her way.”

Bud was acting as the communication officer and for the first time heard the ship's name from Mrs. Swift. “*Life LuTE?*” he inquired?

Tom smiled back, “Yeah, mom thought that because we're trying to save the space friend civilization we're giving them life with this ship, so...”

\* \* \*

“Skipper, we're clear to approach the Outpost. Did you know that the *Challenger* is going to the Citadel? Outpost control is telling me it's landing there in five minutes.” Bud sat back in his seat and looked at Tom, “I don't remember you saying that it was going to pick up something before meeting us here at the Outpost?”

Tom gave him a quick, worried looked. “A last minute change. Mom and the rest of them are coming up too. Dad and Harlan are still really worried about that Cioe guy. They still haven't found hide nor hair of him. Harlan believes that a wounded animal is the worst kind of enemy to have. They have nothing to lose, and both dad and I agree. So dad and Zimby are picking up mom, Sandy, Phyl and the P's first before coming up here. Doc Simpson has cleared Mr. P medically because the *Challenger* can give a no G's lift-off.

Now, Harlan only has to watch the Newton's. Uncle Ned refuses to come and so does Aunt Helen. He says someone has to watch the chicken coop for the mad *fox*."

"How is Harlan taking that?" Bud inquired.

"He has his security forces tripping over each other trying to protect them." Tom laughed for a second but it was too serious of a deal to really make fun of it.

A half hour later they slowed down as they approached their destination. "Outpost," Bud keyed his headset and informed the space station, "we've picked up the approach radio beacon and are zeroing in on home base, matching orbital speed."

"*Life LuTE*, you may disembark at your leisure after you have parked. Welcome to the Outpost."

"Thanks control," Tom answered back on his microphone. "But we will be staying onboard; we have some unfinished work to do. Tell Commander Horton that he is welcome to join us, if possible."

"Thanks, Tom," Ken's voice cut in, "I've been watching the whole trip on the Megascope. Great little ship you got there. Does *Kodak* know that you stole their box camera design?"

"You know, Ken," Bud spoke up, "I *knew* I'd seen this ship before. But I never thought it was that!" Everyone laughed.

"Ken, do me a favor, will you?" Tom asked once he had the ship in position. "We're going to haul up the processing plant from Swift Enterprises, do you mind recording the lift for me with the Megascope?"

"Not at all, Tom, I'll just add it to the *Life LuTE* video chip. I'm sure this will be a historic moment some day."

The *Life LuTE* slowly rotated itself on its gyroscopes and faced the Earth. The repelatrions were brought to bear on the planet. Tom plugged into two more VAP-generators—he needed only two, but he wanted to be sure that he had enough lifting power. Dropping the eighty-five ton processing plant from twenty or fifty miles up was not a prospect that he liked to consider.

“Bud, please feed in the GPS coordinates of the processing plant and get a visual on the scope, say from two thousand feet up. Meanwhile, I’ll warm up the Gravitex and set up the weight parameters and the aperture size.”

The long flat processing plant still looked small from two thousand feet, but as Tom zoomed in it steadily grew on the screen, finally stopping on the very surface of the self-contained plant. In the middle was a red ‘X’ that marked the carefully calculated balancing point. Tom added fifty more feet in the downward detraction and locked both fields in place.

A strange, tight strumming sound started as soon as he did. Everyone looked at each other. “Who’s playin’ the old gee-tar, Tom?” Chow asked. “She sure sounds kinda like she struck on that one note.”

“You’re right, Chow,” Aaron returned. “I use to play a lot of string instruments, but I think it sounds more like a classic Lute.”

While they were talking, the computer generated a graphic representation of the two interacting electromagnetic fields over the processing plant visual on the scope, and Tom could see that the object was fully encased in the gravitex field. He could even rotate and view the picture in 3-D.

Ignoring the sound, Tom increased the field intensity and the computer added an equal amount of power to the four repelatrions that were to hold them stationary in orbit.

The musical note changed in pitch also. With the processing plant lifted off the ground he held it there, letting things run, giving time for any bugs to develop while it was only a few feet high.

For the fun of it Tom widened the aperture opening and the sound became deeper. Closing it, the musical note went from bass to a higher tenor note. He adjusted it back to the original setting.

He then went meticulously over all the gauges and sensor units. All were within specs. Smiling, he sat back in his seat.

“Gentlemen, what we’re hearing is a resonant sound



caused by the interaction of the anti-inverse waves, the gravitex field and the super conductive wires and cooling coils in a confined space. The antenna is acting as the neck of the instrument and the Cube is the soundboard. No mystery there, boys!”

“But, Tom,” Bud asked, “it didn’t happen on the test model?”

“It probably did, Bud. But the sound was so high pitched we couldn’t hear it.”

“Do we have to listen to it all the time?” The professor wanted to know.

“I think so, Professor, at least with this *LuTE*. We have no way of silencing the noise.”

“What about one of your Silentenna noise deterring devices?” Aaron wanted to know.

“I don’t think I would want to chance that. The sonic sound wave it produces would have an effect on the *LuTE*’s antenna performance and upset the wave balance in it. If the sound really bothers you, you can always put in personal ear plugs.”

## Chapter Thirteen: It Will Come

Five minutes later he fed the computer the lift command. The *Little Idiot* took over and slowly raised the processing machinery into the sky at ever increasing speed.

The musical note changed as the distance shortened between the processing plant and the *LuTE*. In less than a minute it was above the clouds and heading off at a high speed rendezvous with the Moon.

The Professor, looking at the relative speed indicator of the processing plant, spoke to Tom. "It's amazing that the processing plant is already going well over the escape velocity needed to depart our little Earth. It's at twenty-six thousand miles an hour already. You're going to lose her to interplanetary space."

"I hope we have it all in hand, Professor. But no need to worry, because we'll pick her up before she goes too far and take her in tow to the Moon. To make that happen we must release it as soon as it reaches fifteen thousand miles altitude... and that is going to happen very soon. Stand by for power cut-off," he called out to the others.

Tom ran his fingers over the excavator's keyboard and pulled up a list of numbers. He quickly ran them side by side with the program already in the computer. The altitude and speed indicators were nearing the match up with the cut-off point.

When all the numbers matched the ship suddenly filled with a long moaning sound, it was eerie and it was felt in their chests. Then, silence.

"That, Tom," spoke up Chow in a whisper, "is the sound of a lone dyin' coyote out on the prairie. It's a bad omen to hear it! Something dreadful is goin' to happen, I just know it!" Chow had turned pale. They were all stunned to hear the old cook give out his prophecy of doom.

Bud opened his mouth to ridicule the idea, but the mask of dread on Chow's face as he turned to look at the older man stopped him. Tom went to Chow's side as he just sat there in his jump seat. Taking him by the shoulders, he

turned him so he could look directly into his eyes. He softly spoke to him.

“Chow, you once said to me that an old Indian friend of yours told you that you would live the most amazing life and that you’ll die at a very old age. Well, you’re not old yet, even if you’re no spring chicken. But that wolf is not singing for you or for any of us.”

The nervous westerner did not look up at his young friend but gave a small nod.

“If anyone is in danger of dying it’s our space friends, and we’re here to see that it doesn’t happen. So get that thought out of your head, my friend.” Chow returned Tom’s look and the inventor was pleased to see his color returning. He reached up and took Tom’s shoulders in his hands too. After a squeeze he let him go and looked at Bud as Tom stepped away.

“Buddy Boy, not a word, ya hear me? Not a word!” His voice had a sternness that Bud never heard before and hoped he would never have to hear again.

Tom returned to his seat at the excavator’s controls. By the time he slid the seat back into position the radio squawked.

“Captain Cox here. Where the tar-nation are you guys? We’ve been sitting here for the last couple of minutes and have received no hail from you all!” Cox’s southern drawl was coming through. Normally he sounded like a New Englander—he moved up North when he was ten—but it still came out at the weirdest times.

“Sorry, Captain Cox,” Bud answered back formally. “We had a glitch with the extracting beam, but it’s copasetic now. Tom took care of the problem.” Bud looked up into the small rear view monitor that showed the back of the control center and Chow who was nodding his thanks.

“Captain,” Tom spoke up, “please proceed with the lunar flight plan and we’ll be with you shortly. Keep an eye on the package ahead of you. The traffic is getting heavy up there! And, congratulation to all our tenderfoot folks. Sorry mom, but until you take your first space walk you’re going to be called a tenderfoot by all! You can thank Chow for

that one too! He came up with it from all his years out on the trail, and I agree with him. *Life LuTE* out.”

Bud gave such a look at Tom. “Brother,” he half hissed between laughs. “You’re going to pay for that one, believe you me!”

Giving his friend a quick grin, Tom busied himself with the final trajectory reading on the processing plant. With the excavator lift beam now turned off, normal orbital mechanics took over. With its tremendous speed it was arcing out into space, rushing toward the Moon.

Tom asked Aaron to set up a course for them to overtake the plant at one half-G, so they could “hook up” with it. He and the Professor were giving training on both the flight and excavator controls. Chow, as always, tagged along and picked up what he could, and that was surprisingly a lot.

With a, “Yes, sir,” Aaron went at it and, in a few minutes had the course laid out. “You have the Con, mister,” Tom informed him when he told Tom he was done, “so make it happen. Chow, I think we have time for a little smack, let’s go fix something for everyone.”

With the new set of spiral coordinates in the computers, the repelatrons rotated to a new position and the chase was on. The Cube was also positioned so that the acceleration forces were pushing them down to the floor. The RepelaGrav was not needed. In less than an hour the plant was safely in tow, and its own small gravitex and repelatron engines holding it at a steady thousand feet back on an invisible leash.

In no time at the small fleet of ships were inserting themselves into a lunar orbit. Everyone transferred over to the *Challenger*, leaving the other two ships on computer-controlled standby.

They were standing in the rectangular area of the *Challenger*’s control room. It offered the best view for what was going to happen.

“Is that wise, Tom, to leave those two ships by themselves?” Mrs. Swift asked.

“Momsie,” he answered back with a chuckle, “they are safer than any of the satellites up in orbit right now. The

Moon is better. No space junk floating around. Don't worry; people will be in those ships before we start extracting any of the lunar rocks. In fact no one will be on the Moon when we began the process as a precaution." He turned to one side.

"Captain Cox," Tom continued, "You have the landing coordinates of where we left the Minitron, please take her down."

"This is Captain Cox speaking," he looked at everyone and pretending to have a microphone in his hand, "please take a seat and if there are not enough just push one of the white glowing buttons with a picture of a chair on the back wall and a seat will be provided for you. We will be landing shortly. Thank you for flying Swift Space." And with that said, they made a five-point landing right next to the Minitron.

"Look at all that desolate ruin of a lunarscape," Bud quipped as all the tenderfoots gathered at the windows and looked out. "Just the way we left it, too. The Lunar Fix-it Committee is sure off its game! How the heck are we to run a tourist attraction with all these rocks in the way?"

"I guess that's my cue." Tom spoke up. "Let's get the Minitron back up on deck, give her a once over and replace that atomic motor. Everyone knows their job assignments?" He looked around at a sea of nodding heads. But he reviewed several points anyways.

"First, the tenderfoots. Be ready to check over and to learn how to operate your new spacesuits. All of you—there can be no exception." He looked at his mother and continued, "A well fitted spacesuit is a life saver, both yours and probably some else's. They're not like the old bulky pressure suits that we use to have. These are like putting on *Spandex* leggings and tops and all you have to do is align the front two tabs together and the seam will seal itself and make the proper connections for air, power and temperature controls. If this does not happen, the suit will let you know. They're made with shape-memory material to regulate the suit's counter-pressure to vacuum. A word of caution, they are form fitting." He looked again at his mother. She smiled sweetly at him and stuck her tongue out.

“They have soft protective ceramic shells for knees, elbows, and chest area. They feel hard to the touch but they are not. The shells become fully rigid on impact. That way they don’t restricted movement in any way. There can be no high-pressure blowout with these suits and they are very easy to get used to. The helmet is augmented with a full fiber-optic display in the visor and it is voice activated.”

He pressed a switch on the control board and an image of the helmet’s readouts appeared. He described what each one meant.

“The suit monitor will measure you first and dispense the appropriate size suit and mark it as yours. In future outings, just tell the computer your name and that same suit will be made available to you all pressed and clean, at no extra charge. Zimby, would you mind showing the tenderfoot’s the in and out of the spacesuits with dad?”

“Glad to help, Tom.” Zimby told him. He wanted to be more than just a taxi driver on this trip. “Let’s have everyone else get theirs suits first and your father and I can get the others settled afterward.” Never before had so many people tried to use the suit dispenser and Tom could see that a new way had to be developed to stop this kind of log jam.

The system was simple and elegant. Existing users did as Tom described and their personal suits were delivered in under twenty seconds. Anyone without an assigned one stood on a disc located just outside the hangar. IR lasers spun around them taking thousands of measurements that were stored in the computer. It, in turn, assigned the nearest size suit, but not before electronically adjusting it for a perfect fit. Total time: one minute.

“After Aaron, Bud and the Professor have hoisted the Minitron into its cradled they will take over for you, Dad, so you can come out and help me. They will take all of you out for your first excursion. One person can’t oversee this many neophytes at one time.” The indicated men nodded.

“Chow, you’re our radio man, and you must keep track of everyone out there. With the new radar locator beacon on each suit, it should be a snap. The computer will generate an outline of the ship and all large objects in the immediate area on the radar screen. You can add labels to the objects as

you want... ”

“Right on it, Tom,” Chow cut in, “I’d made darned sure that I didn’t fall asleep in that class. Son, that’s gotta be the first ‘A’ I ever got!” He was beaming with pride. Tom held up his thumb and Chow beamed even more.

“Any questions... Anyone?” Tom asked. Receiving none, he called out. “Let’s go people!”

Tom made this way to the Minitron sitting on the lunar avalanche. Bud, Aaron and the Professor manned the newly rebuilt cranes. They were now slaved together and both could be operated from either unit. Bud watched Aaron as he took command and went to work. The Professor began taking the cable straps off the crane’s booms and guiding the hooks so Tom could bolt them into place for lifting the vehicle. Once it was firmly attached, lifting and placing it in its cradle took no time at all.

The trio of men went on to their other task of teaching the tenderfoots. Mr. Swift came out and took on the job of repairing and upgrading the big ear radio and adding an Anti-Inverse Power Tunnel connection as an emergency power backup.

Tom had the harder job of replacing the atomic motor. Mr. Swift had to stop what he was doing to help Tom get the new motor out of the *Challenger’s* hangar. Its mass was still formable even on the Moon. Getting the old motor out and the new one in took their joint efforts. They were both thankful for the lightweight Tomasite anti-radioactive covering that made it liftable by hand.

Once all the electronic and mechanical repairs were done Tom turned on the vehicle and ran diagnostics on the whole ship. Several minor red flags appeared and they were quickly handled thanks to the well-equipped electronics bay onboard the *Challenger*. The last thing they did was refilling the air supply tanks. By the time they got back into the ship they were exhausted. Working in a spacesuit, no matter how well designed and improved, was taxing to say the least.

After breakfast the next morning both Tom and Bud boarded the Minitron and headed down and into the lunar

avalanche. The ground transducers were showing missing lunar soil like before. At the meeting before their departure it was discussed by all the crewmembers. The only outcome they all agreed upon was that the Egg's repair systems were still working. The how or why was a mystery.

On arriving at the Egg they were surprised to find it in an upright position instead of being lopsided following its tumble into the dome wall. New disc and rod formations were evident and more were being built around it too. The cleared area was small, only ten feet around the Egg.

"Well, skipper, at least it can't fall on us this time." Bud was enjoying himself in the copilot seat and not having to save anyone. 'Yet' was always on the edge of his thoughts and it kept him sharp and alert.

They had nosed the Minitron in enough to take sensor readings on the new dome structure. It was exactly like the old one and as they watched they could see parts of it growing like magic. The speed of it was fantastic.

"Skipper, we didn't see this before, so why now?" Bud was wide eyed with wonder.

Tom laughed and answered. "Do you remember the original size of the cavern? Now look at the size of this one. I believe if you take all the nano-machines that the other one must have had and put them in here working all together, that this is what you get—nanobots on steroids."

"Gee, we better back up, or they'll be tearing us apart for material to use!"

"No, I think we're safe. They're programmed for lunar material and I doubt that they recognized us as useable. At least they didn't before and we can only hope it has stayed that way. We never did get a sample of the nanobots on our last trip. I expect to do better this time."

Bud moved them forward while Tom activated his headset.

"Aaron," he called up to the *Challenger* by big ear radio, "do me a favor, and team up with someone and take the donkey out to the end of the dome that has not collapse and see what's going on out there. Check the cradle and the rods and discs to see if it's repairing itself or if it's



dormant.”

“Sure, Tom, I’ll get right on it.” He left the connection open, and Tom and Bud could hear him calling out for volunteers to go out on the excursion.

“Bud, now’s the time for us to find their power lines. In this confined space we should be able to obtain a reading on them with the electromagnetic scanner. Let’s turn that on and match it in with the radar image on the main screen.”

The three hundred and ninety foot dome came on the radar display with the Egg in the middle of it. The electromagnetic lines of force slowly began to build up with each radar sweep. They radiated out of hundreds of points along the circumference of the dome and faded as they went toward the surface, branching and branching again. They became uncountable as they spread out to cover the whole underside of the surface of Mare Crisium in a spider web of energy lines.

Tom was right. The mare was one gigantic solar cell. With darkness about to descend on it in two Earth days, Tom was delighted. That should shut down the nanobots and make it easier to extract the Egg. There was no telling what they were designed to do to help protect it if it was forcibly removed.

“Do we try to get a sample of the nanobots now, skipper?” Bud asked.

For an answer, Tom called up a newly installed program and ran it. A tube came out of a small port that opened between two front repelatron dishes. Small electrostatic whips shot out and slid along the one row of *Thinker Toys* rods and discs that surrounded the Egg. When the whips pulled away the ends fell apart into nothingness.

Bud’s eyes bulged out and Tom called up the video replay of the event. He magnified it as much as he could before replaying it in slow motion. This time they could see portions of the whips disintegrate. It looked like minute sparks going off. It was now clear to see that both the whip ends and the nanobot’s materials had disappeared.

“I guess we real don’t have to worry about them. They self-destruct if they get separated from the rods and discs. It

must be a safety precaution, that way they can't spread outside the work zone. Very ingenious!" Tom exclaimed in delight.

They replayed the video again, trying to determine how the nanobots destructed, but even with computer enhancements nothing definite could be seen.

"Let's go back, Bud. We're finished here I think. We might as well start removing rocks." Tom turned to face the small video camera now mounted above the monitors. "Dad, do you want us to do anything while we're down here?" The top left corner of the monitor screen activated to reveal the back of the head of Mr. Swift as he asked the crew if they had anything to add. He turned back to face the camera.

"No, Tom, no one can think of anything for you to do. They're still all in awe right now. Only the Professor is standing here with his mouth closed. The new video hookup is working fine. And what we got in addition to the instrument readings really put us in the room with you."

The older Swift leaned closer to the camera and microphone pickup, and winked at Tom and Bud.

"Aaron has just reported in and he thinks that he is giving us bad news. He can tell that some of the rods and discs are being repaired. Wait until he finds out that its good news and not bad, a least for us."

"I'll break the news to him, Dad. We're turning around and heading back up."

"Chow just went off to cook lunch, so if you want it hot, you better hurry, Son."

After lunch they lifted off the surface of the avalanche and put down on the edge of Picard Crater so they could go investigate the mare more closely. They all wanted to find out how the lunar photoelectric cells worked.

Aaron opted to remain with the ship and keep Zimby company. They were hitting it off as friends so Chow joined in on the outing. They broke into two groups—Tom led his family and Phyllis out while Bud followed with Mr. and Mrs. P, the Professor and Chow. A quick check of Mr. P's vital signs showed that he was able to tolerate the minor

exertion thinks to the low lunar gravity.

The members of the groups were roped together at ten-foot intervals as mountaineers do. Tom and Mr. Swift also pulled along a small, self-balancing two-wheel cart that had their video-magnifying setup and a few other pieces of electronic probing equipment to experiment with.

They had landed a good two hundred feet in from the crater's edge not wanting to have any repelatron troubles. Once out on the mare the two groups started to walk side by side. Tom pointed out to a large boulder out on the mare some distance away.

"That looks like a good place to start. What do you think, Dad?"

"Well now," he radio backed, "it does have a good mix of flat ground with plenty of sunlight and an obstacle in the middle of it. We should be able to find a transition point somewhere in that area."

"Okay, everybody listen up," Tom radioed to everyone. "We can break into groups of two or more. No singles and stay within sight of everyone else. Dad and Professor Martin, please switch to channel 'B', so we don't have to over talk everyone. Aaron, do you have radar contact on all of us?"

"Sure do, skipper, and I have a visual on all of you, too. I'm recording, so wave back to me!" They did.

Both Toms and the Professor got busy with their examination of the ground, looking for signs of how the power cells worked beneath the thin layer of regolith dust. They unpacked their instruments and set them up, trying not to disturb the ground around them.

Bud stayed with the P's, for they were the most inexperience of the group—with the exception for Mrs. Swift. They took out a 35 mm camera especially built to be used with a spacesuit and started to photograph the men at work, the *Challenger* out in the distance, and the lunar landscape itself. The vista was just incredible. The black sky was deeper than they had ever seen, and the stars shinning in a multitude of colors.

The three other women hooked up and Chow took the

last position and went along with them. They decided to take a long walk around the work site. Bud kept an eye on his two charges and the roving group out in the distance. As they past behind the boulder Bud knew that they were going to be out of sight for only a few moments. Then, his heart nearly stopped.

“Ma!” Sandy’s voiced screamed out of the radio headsets.

It was followed by Phyllis’ pleading, “Chow, save us, I can’t hang on any longer, help!”

Aaron’s voice cut into all the radio’s frequencies. “Emergency, emergency alert. Lost radar contact with both Mrs. Swift and Sandy! Last location, two hundred feet beyond the boulder. I can’t see them or the rest of their party.

Bud was off in a run, lopping off in a half hop and half skip, as fast as he could in the lunar gravity. At least he knew where they should be.

“We’re coming out,” Zimby announced over all the radio channels, “with the donkey and two inflatable life support igloos, Aaron is coming with me, out!” They rushed off to complete their part of the rescue.

The Swifts and the Professor were also reacting to the call, but Bud had a head start and was rounding the boulder already. He saw Phyllis hanging onto the edge of a hole by her arms. Chow was desperately trying to hold her lifeline in his gloved hands, and at the same time trying to keep his feet from slipping on the silicon coated soil. He watched as Phyllis disappeared into the hole and Chow teetering on the edge, his feet pushing on nothing but space.

Bud reached out in time and kept Chow from going over. Luckily the rope was tied off to Chow’s belt because Bud could not reach it without letting go of Chow. The women were strangely silent, not a sound came over the radios from them.

“Pull, Chow, pull,” Bud chanted, hoping to get a rhythm going. Two more set of hands reached in from the sides and grabbed the line. Chow was now able to slowly back up.

The professor jumped over the three-foot wide, ten-foot

long crack in the ground and dropped to his knees and crawled his way to the rim and looked down with the powerful flashlight in his hand.

Immediately below him was Phyllis; she was trying to hold onto the rope above her head. The rope was pulled taut from her waist belt by the weight of the two other women dangling below her.

Ten feet farther down was Sandy. She was struggling with the rope that somehow, in the fall or while they were walking, got tangled around her legs. She was hanging somewhat upside down and, even in the lower gravity, the rope was cutting into the fabric of her spacesuit, getting tighter and tighter around her legs.

Mrs. Swift was just hanging there. Her head drooped forward, arms and legs as limp as a rag doll. Her body slowly twisting back and forth.

As Phyllis was pulled up to the edge of the hole, the professor snagged her by her backpack and kept her from scrapping the sharp edge of the pit. She blindly grabbed at someone and hung on for dear life. A whimpering sound came from her lips. Chow pulled her hands loose and took her to the side, away from the hole while the men continued pulling the other two women up.

Sandy was not that easy to lift out. She was desperately trying to pull herself up to loosen the pressure on her legs, but her mother was a dead weight below her.

As her first foot appeared above the hole, Bud dropped to the ground and reached down and tried encircled her with his arms. He had to settle with locking his finger onto her safety belt. He almost slid in himself, but Chow grabbed his feet and anchored him. The ground was getting slipperier. Both Tom's seized Bud and with a mighty heave pulled him up with Sandy in his arms. They tumbled to the ground and had to be helped up to their feet. If they were in the old style suits Sandy would have been in serious trouble.

Mrs. Swift was left dangling only for a second more before she too was out of the hole and on solid ground in a sitting position. Mr. Swift pushed up her golden visor and was awarded with seeing her eyes flicker open. The word

'Tom' formed on her lips and she closed her eyes and swallowed hard. She opened them again and faintly smiled at her husband and whispered. "Now, Tom, I remember why I don't go adventuring with you anymore. Someone always gets hurt!"

"Oh Mary," he sighed, "and how I hate it when it's you."

## Chapter Fourteen: The Egg

The repelatron donkey skidded to a stop. Aaron and Zimby stood at each side of the control pedestal and were holding on the front railing with one hand. They were counting people. Ten... there were ten! They were all there and on their feet. Both men had never felt so relieved in their lives.

“A to Z’s taxi and hauling, at your service!” was all Aaron could think of say to them. They climbed down from the donkey and walked over to where the others were standing in front of the gap.

“What happened?” Zimby asked.

Tom took them over to the crevice in the ground and shone his flashlight into it.

“I’ll be...” was all either of them could say for a moment.

“Mrs. Swift and Sandy fell into that?” Aaron asked not seeing the bottom of the fissure.

“Not only them,” answered Bud, “but Phyl, too!”

Mr. Swift spoke up. “If everyone feels up to it now, I think its best that we pack up our things and fly back to the ship on the donkey and call it a day!”

With ‘ayes’ all around, they did just that. Once back on the ship and out of their spacesuits Mrs. Swift asked Tom Jr., “Do we have to stay here or can we go back into orbit?”

Tom could see that his mother was still shaken from the experience. He walked over and gave her a hug. “Momsie, whatever will make you feel better. If it’s up in orbit, then we’ll be there in a shake of a lamb’s tail.” Turning toward the control board he spoke again, “All hands, man your stations, or take a seat. We’re lifting off.”

They had a leisurely supper in orbit and talked about what the two Tom’s and the Professor found out about the solar cell process in the mare.

From their observations, it seemed that each particle of the solar cell had it own nanobots to it connected to the power grid. The nanobots did not do all the work alone. Carbon nanotubes were combined with a liquid-crystalline

elastomer that contracted when it heated up causing the silicon cell particles to tilt toward the sun. Each cell was like a sunflower following the sun across the lunar sky.

They were all in bed early. A few of them had aching muscles to keep them awake a while longer than the others.

Bud and Aaron were up early the next morning and playing rock, paper, scissors to see who was going to suit up and babysit the processing plant. Someone had to be on board for the shake down run. Aaron lost the game.

An hour later, the processing plant was slowly coming alive. Aaron was in the small pop out control center located in the top left corner of the plant. The MIC (Magnus Idiot Computer) was bringing the plant into operational distance to the *LuTE*.

Three large gates swung out and expanded in length, two from the front side of the plant and one from its midpoint on its side. Laser lights guided the gates into locking clamps in the side of the *LuTE*. This would act to keep the two machines from being drawn into each other without wasting power because the secondary gravitex beam that pulled the material from the main lifting stream of the *LuTE* would gradually pull them together.

One of the locking lights started to blink. It registered no contact and lock down. The computer could not zero in on the beam—something was out of line. Aaron pushed himself out of the open control room and maneuvered to the problem gate. Getting there he spotted the problem. He reached out and turned the laser beam to its center position and tightened the locking ring. Somehow it had become turned to the side and not screwed down tight.

In the *LuTE*, Tom was making last minutes adjustments to the excavator. Bud was the flight pilot in case of an emergency and the Professor was an extra pair of hands for either of them. The *Challenger* had moved off a few kilometers to be out of the way. In the processing plant everything was green on the control board and waiting for its first delivery of lunar materials.

With power now flowing into the *LuTE* device, a musical twang of a string instrument was heard and the process began. The *LuTE* was finding her voice fully for the



first time. Tom started slowly; using the magnifying properties of the view port he could see the lunar surface like he was just above it. He moved the large machine to one side of the ruined dome so he could pick up one large sections of rock one after another and let them fall back into another broken segment of the dome.

He was removing only the debris that was above the Egg and its surrounding area. The unbroken wall of the lunar dome followed him down. Sometimes it held up and at others times small sections of it collapsed and he had to back up and start down again. After an hour he let Bud take over and then, another hour later, the Professor.

In those first three hours no rocks were lifted into lunar orbit. The *LuTE* played them a slow melody that—at times—made musical sense. Finally they reached a mixture of red rods and discs and a smattering of black cradle wall substances. They were only now finding pay dirt, and this was what Tom was waiting for.

He retook the controls and started to lift the mixture all the way up. The power requirements increased and the musical tones did too. They became faster and deeper. The machine strummed other strings as different load sizes were lifted. When the first load of lunar mixture almost reached them, the processing plant's gravitex grabbed hold of it and pulled it into its waiting maw to be sorted by their molecular wave frequencies—gray lunar rocks, black cradle material, or red discs and rods—then crushed into red pellets, shattered into black thin splinters or ground into lunar sand like particles.

The three different substances went into separate storage bins, and when enough of each was obtained they would be mixed in a ratio of 3 - 1 - 1.5 and then heated and tumbled in electric kettles until melted into a heavy, dry paste and spread into beds to be cured by infrared lights. By the end of the first ten hours Tom shut down the lifting and started to pile the three substances in separate locations of the wrecked dome behind the earlier piles.

Aaron had come back hours ago from babysitting the processing plant that never missed a beat, and he took a turn at the *LuTE* controls. After another six hours Tom turned off

the *LuTE* for the night. They all returned to the *Challenger* to eat dinner and to go to sleep.

In its low orbit, the processing plant continued to form sheets of LunaMix, as Tom and Mr. Swift decided to call it, and before long there were forty-two sheets, five inches thick, fifteen feet wide and thirty feet long. Its properties were amazing. Small-scale tests showed it was better than Tomasite for stopping radiation and cosmic rays. It was tougher than tungsten steel and slightly flexible. Sheets could be interlocked like ceiling tiles and cut and drilled with the right type of tools.

A real bonus was that space was its natural environment and it could be bundled and shipped without any special care. They could be lashed to the outside of any spaceship, saving precious cargo room, or just pushed off in a slow moving trajectory with a small navigation computer and a few high-pressure steering rockets.

Tom's biggest worry was that the supply of the two artificial lunar substances was limited to what was in the dome. But from what he had seen and what Aaron had reported showed that there was hope that the nanobots would continue to make the substances even without the Egg being there.

Time would tell, it was going to take two more days to free the Egg before he would know for sure. In time he knew that he could find a way to make the needed items. He was not beyond taking a freebee when it is handed to him.

Alarms were sounding throughout the ship. It was the middle of the night, ship time. Waking from a sound sleep, Tom recognized the warning sound. Something was approaching the ship on a collision course. Rushing to the control room he looked out the viewing ports and stopped dead.

Floating toward them were sheet after sheet of LunaMix sheathing. Somehow no one had given a thought about what was going to happen when the sheets left the plant after they came out of the hardening beds.

They were systematically being pushed out of the side of the plant and continued to drift in space, one after the other, finally making their way to where the *Challenger*

happened to cross their own orbit.

The *LuTE* and the processing plant were in a synchronized orbit above the dome, but Tom had lowered the *Challenger's* so it would circle the Moon in an elongated path and give an ever changing view of the lunar surface to his guests.

In another few minutes the sheets were going to start hitting the ship, but they were going far too slow to do any damage. They were nothing more than a nuisance and were about to waste valuable sleep time.

Bud placed his arm around his friend's shoulder murmured loudly enough for the five others who had gathered in the control room to hear. "Is this your way of telling us that we're stuck here and that we should to build an outpost of our own to live in?"

Without answering him, Tom silenced the alarms and sank into the command chair. Placing his face into his hands he started to laugh. Before long everyone joined in and was laughing at the ridiculous situation.

If they did nothing, the sheets would start bumping the *Challenger* and bounce off. They in turn would hit other sheets and they would be scattered all over the place and possibly begin rotating and spinning making it harder to get hold of them later. They had to catch and stack them up now while there was some semblance of order.

Tom and Bud suited up and were out first and managed to snag the first sheet as it brushed the outer repelatron ring. They could see the next sheet but it was minutes away. "This is going to take all night. Eventually we'll be out of their way, but we still have to pick them up." Bud informed his friend.

"Suggestions?" Tom requested.

"Why don't we open the hangar door and I'll maneuver the ship so they all go into the hangar. All you'll have to do is put a little repelatron spray on them as they pass by the deck and let the RepelaGrav do the rest. Stack and use packing bands to hold the bundles together so we can take them back with us. We could be done in an hour!"

"That, my friend, is why I keep you around. Let's do it

and get back to bed. But, Zimby can drive while you stay out here to help me. It's going to be a late start with the *LuTE* in the morning, that's for sure."

At a very late breakfast Tom and his father discussed the problem of the LunaMix sheets and Mr. Swift volunteered to draft a stacking and storage device that could be added to the outlet slot. With his son's approval he sent it off to Hank to construct. When it was done it would be sent up to the Outpost so it could be added to the plant the next time it was brought home to wait for its next assignment.

The second day of rock lifting went off without a hitch. The Professor and Aaron hastily attached several cargo nets together and secured it around the exit port of the processor. A tangled mess was to ensue but it was better than chasing after them.

The *Challenger* took everyone else sightseeing over the Moon and even landed briefly at the "top" of the Moon to collect samples of lunar ice that were still in some of its deepest craters.

After supper that night Harlan called with good news of sorts. He smiled broadly at all of them from the video screen. "Tom," he was talking to the senior of the two, "we found Cioe at last..."

"Where was he?" Bud cut in still angry over what had happened at the sandpit.

"Bud, you may be happy to hear this," Harlan returned in a somewhat irritated voice, "but I'm sure others won't be. He's dead."

Whispering broke out in the group. Harlan gave them a moment before continuing. "We found him in a small ravine some miles downstream. By the looks of him he's been dead since he tried to attack the cabin. This is a little gruesome but the wild animals did a number on him in the past two weeks. Mostly we found bones and they were scatted all over the place. We also found a camouflaged pickup truck with a lift-gate and a Fatman storage case."

Mrs. Swift gasped in horror at hearing this and Mrs. P reached out to her to let her know that others felt the same way. Tom senior quickly looked over to his wife to see if she was all right. She nodded to him that she was.

Turning back to the screen he inquired, “Harlan, I presume that you used DNA to check that the bones belong to him?” Mr. Swift was trying hard not to get excited over this information. He didn’t like to see anyone die, especially that way, but the man had been out to attack them.

“Affirmative, Tom. We checked our results against his military medical records. We’ve got better than a fifty percent match. It’s him all right. There’s a few loose ends but nothing serious that we can’t handle.”

“Like what, Harlem?” Mr. Swift inquired.

“It may be nothing, Tom. But we can’t find the truck’s key. It’s not in the truck or anywhere around him on the ground. With all that went on that night it would have been miraculous that he didn’t lose them. Or, some animal probably carried them off. Still...” Harlan shook his head and sighed. “You never get all the answer in cases like this. You can all come home without fear. This chapter of the book is closed!” He pantomimed slamming a book closed with his hands, slapping them together hard.

“How’s your little project going, if you don’t mind me asking?” For Harlan, this was getting chatty.

“Not at all, Harlan,” Mr. Swift answered. “We should be doing the final lift tomorrow. So we might be back by tomorrow night, and to tell you the truth there is only so much one can see on the Moon before it all starts to look alike.”

“I guess, Tom, it’s like being in the desert or at sea. That why I do nether... it becomes dull really fast.”

They finished removing the last of the avalanche off the Egg in a few hours the next day. Everyone wanted to be on the *LuTE* for the occasion, but Mr. Swift put his foot down. No one but Tom, Bud, the Professor, Aaron and Chow were going to be on board. This was their mission and they did not need a bunch of onlookers in the way. Available space was small, anyway. Everyone else could watch from the comfort of the *Challenger*.

The processing plant was moved off to a safe distance along with the *Challenger*. Tom took his time. He inspected the enormous hole using several different angles from on high. He refused to let anyone go down personally, it was

too much of an added risk.

The excavation was over two miles deep and over a thousand feet wide at the top and slanted inward toward the bottom. The Egg was free and a final display of sparks shone briefly as the rods and discs of the outer workings of the dome were sucked up by the *LuTE*. Now nothing stood in the way.

Tom plugged in the six remaining VAP-generator's and readied them so he could add their power when he needed it. He looked over at Bud, who was in the flight command seat, and they nodded to each other. This was not the first time, nor would it be the last, that they would put everything on the line to help someone.

Looking at the Professor and Aaron he could sense their excitement and tension on what they were about to accomplish. They were both good men and it was because of them that all this was happening, and Tom knew they deserved being there.

Nimble fingers typed away on the keyboard to adjust the aperture setting of the anti-inverse square wave, at slightly under four hundred feet, the widest setting yet used by any of them. Slowly he fed in power to the gravitex. One VAP-generator was added to the next until eight of them were delivering power to both the repelatrons—holding them in orbit—and the gravitex trying to lift the Egg.

The *LuTE* was strumming a fast deep beat and picking up its tempo all the time.

It took a full half hour to raise the power requirement to what was needed. The liquid helium cooling lines would only cope with so much heat being produced by the stacks of electromagnetic donuts. Other gauges were showing components slowly rising toward their red zones and if exceeded for too long could lead to possible failure.

The Egg quivered for a moment and then started to ascend toward the top of the dome. More power was being used than Tom thought would be needed and its speed was not increasing while it rose as it should.

Once past the dome and above the crater, the Egg slowed down and came to a stop. Tom hastily looked over all his instrument readings. They were still functioning

within their parameter, high, but stable.

“Tom, take a look at this,” and Bud pointed to the mass reading of the Egg. It was fifteen percent higher than when they started to lift it. The Egg was fighting back. It did not want to go. Could Tom triumph over it or would the Egg be drawn back to the Moon.

“Dad,” Tom called out to his father on the open radio link between the ships. Have *Zimby* take the *Challenger* down below us and to one side so he won’t get in the lifting beam and turn the upper repelatron toward us to hold us in orbit. That way I can free up power from our own repelatron and fed it into the gravitex. That will give us the power equivalent of two more generators.” Tom could not see any other way to overpower the Egg’s reluctance to being raised.

“Son, you’re sure the equipment will take it?” The senior inventor had been so busy on his part of the project that he never had time to review the *LuTE* abilities.

“I’m sure, Dad. It can take at least four more generators into its systems.”

“Okay. *Zimby* has us on the move, and is maneuvering us so that your new Minitron repelatron will be aimed at you with two others. We’ll need the rest of them to hold both of us in geostationary orbit. You realize that you’re going to be pushed sideways because of the angle?”

“That’s all right, Dad. The Egg is far enough above the dome, so as long as we can hold it that high we should be okay to drift off base. When you’re in position let me know and I’ll switch the power over to the gravitex.”

“Tom, *Zimby* here, I’m in position and aiming three repelatron at you. Engaging them now, you should start to feel the push.”

“*Zimby*, this is Bud, I’m in flight command. We’ll do this together and let Tom do his own thing with the Egg. We’ll go in increments of ten...”

Tom stopped listening and started to concentrate on his own problems. He now knew how much power to increase by and set it up as an automatic power fed.

Once more the Egg began to rise and drift across the

lunar landscape. The *LuTE* began to vibrate slowly but it became harder and faster every second. The musical noise became erratic, starting and stopping.

The Professor gasped out between clenched teeth, “Tom, do something before we shake apart!”

“Trying to!” and a sharp snap was heard and a hissing sound for a few seconds and a warning light flashed on the control board for the Megascope’s cooling unit. Another snap and hissing followed the first and another light came on.

“Aaron, take a look at the junction between the gravitex and the Megascope donuts. I think they’re coming apart. Watch out for the coolant lines too, and hurry!” Bud flashed Tom a worried look. The Egg was now ten miles high and accelerating. They needed to get it to a minimum of sixty miles up and with forward motion of several thousand miles per hour if it was to stay in orbit for any length of time.

Aaron stumbled his way down the staircase into the crew’s quarters and by the time he had the airlock cycled through Chow had joined him with the Professor close at his heels. Aaron didn’t waste time in arguing with them.

The airlock opened out to the top level of two walkways that ran across the center of the ‘Power Cube’. This top passage led to just below the crown of the gravitex. The next level ran through the center of the cube and ended in the mid section of the giant machine. The base of it was accessible by ground level.

Looking up they could see that two of the three inch helium lines had snapped in half and were dangling loose from their ceiling brackets. They had been automatically shut off as backups turned on coming in from a different level took over.

Aaron immediately swung onto the access ladder and slid all the way down to the floor. Chow followed suit and stopped on the second level.

The professor ran, more like lurched his way, to the gravitex and started to inspect the six large locking bolts that held the two units together. The whole fixture was rapidly vibrating and the cooling and power lines were rattling in their mounts and in danger of tearing apart. One



compression nut was gone and the other five had almost vibrated off the remaining bolts on the top section that held the gravitex to the donut housing.

He grabbed one of the nuts and had his finger pinched and bloodied—everything was vibrating too fast to hold. He yelled out in surprise and pain. Loudly he warned the other two men. “Don’t touch any loose nuts with your hands. We need to find some kind of socket wrench or something!”

Aaron and Chow could see loose nuts also and Aaron had two nuts missing of his six. Standing upright was getting to be almost impossible to do. The whole ship was in danger of vibrating apart!

Aaron, on the ground floor, made his way to the tool locker that was located under the external airlock. He found three adjustable wrenches and on his way back out he spotted two of the missing nuts sliding across the floor. Snatching those up he threw two of the wrenches to Chow on the next level. The Professor, now lying on his stomach, was reaching down to try to catch the one thrown to him by Chow.

Aaron had a hard time getting the wrench on the loose nuts but he finally got four of them tight, and as he desperately tried to get on one of the two missing nuts the vibrations slowed down. Chow and the Professor were tightening their nuts. Aaron finished a minute later.

The “Yahoo” from Bud’s could be heard over the ship’s intercom system. “Thanks, boys, you did it! Tom got the Egg in a low orbit and we’re safe for now. We’re shutting down power!”

A wrench landed at Aaron’s feet, missing him by inches. Looking up he watched as Chow crumpled and bounced off the hand railings to the catwalk floor. He was clutching his chest and his face was contorted up in pain.

## Chapter Fifteen: Taken

Aaron yelled at the top of his voice, “Tom, medical emergency! Chow is down. I think he’s having a heart attack!” He had scrambled up the ladder by the time he was done talking. The Professor was making his way down from above.

Aaron reached Chow first and rolled him over to his back. He tried to find his pulse and found one that was weak and erratic. His was not breathing, his face was blue and he was starting to convulse. He opened Chow’s mouth and looked in. He saw no tongue. Reaching in, he eased it out of Chow’s throat with his finger. He had swallowed it. Chow gasped for air and stopped shaking.

He checked the stricken man’s heartbeat again and found it slow but stronger. Tom and Bud showed up and Bud had the defibrillator with him from the medical closet.

“He still with us, Tom,” Aaron informed him telling them about the tongue. “We have to get him back to the Outpost for medical treatment. We have to leave the Egg where it is and go!” Tom had to agree with him. There was no way they could get Chow into his space suit and to the *Challenger*.

“Tom, wait,” his father voice came over the open links on the ship. Zimby has a brainstorm and I agree with him. He’s on his way over on the repelatron donkey with an inflatable life support igloo. Put Chow in it; he’ll be better off in our small sick bay unit where we can monitor his life signs and send signals to one of the doctors at the Outpost. At least we have IV’s and an assortment of medicines available.

Tom signaled Bud to open the external hatch of the airlock so Zimby could maneuver the large repelatron donkey into it. Luckily the catwalk was on the same level as the airlock. A few minutes later they heard sounds from the lock as the donkey landed inside. The hatch closing light blinked on and after a few moments the inner door slid open.

Zimby, in his spacesuit, was already inflating the igloo and tying it down to the donkey. It took the four of them to get Chow's bulky body into the igloo. The professor volunteered to go with him and keep him safe. They were gone in minutes.

Tom, Bud and Aaron went back to the control room. Aaron's eyes almost popped out of his head as he saw the Egg up close for the first time floating below them. It was nearby and slowly spinning on two axes. Watching the faceted, milky pink flowing material was mesmerizing. It dwarfed the *LuTE* in size and no noticeable entryway could be seen. The *Challenger* was visible slightly above and behind them. The Donkey was not in sight.

"I just can't believe that you actually got that off the Moon. Tom, this is fantastic!" He fell into an empty chair at the excavator controls. Tom and Bud both took flight control seats as the radio crackled and Mr. Swift voice came over it.

"Chow's safe and resting. We're hooking him up to monitors and Doc Simpson is on line. We can't possibly move out until he gives us the okay." Tom's father sounded relieved.

"Thanks, Dad, and we're ready to go when you are. In the meantime I'm going to let our Space Friends know that the Egg is in orbit ready for them to pick up, and that we need to get back to Earth immediately. So they are on their own for now."

"Tom, listen to me," his dad's voice was serious. "It may be best that you stay for awhile. Just for a couple of days to offer our space friends a hand, if they need it. I'm sure the Chow would not want you to miss out on this opportunity because of him. He would hate himself if you did. Please, think about it, and don't make a decision until Doc talks to us."

Tom sat there and his two friends watched him closely. Aaron finally turned on the visual amplifier and started to study the Egg's numerous faceted surfaces to see if he could detect a slightly modified one that might be an entry point.

The inventor sighed and went to the back of the control

room to the oscillator where he composed a message to the space friends and sent it. He just about had time to turn from the machine when the incoming alarm sounded. The reply was in both English and in symbols like the last one:

*Friends, I am breaking our rule of secrecy. You are in immediate danger. One of our kind has turned Betrayer and has disabled our engines beyond repair at the present.*

*He is determined to steal the Bio-Cache and is willing to destroy anyone in his way. He is by our standards insane. We cannot help you! All we can say is that the Bio-Cache means a new chance of life for us. He will not return to help us. He wants to start a new social order with himself as Prime Leader. If you let him succeed he will eventually destroy you and your planet.*

*You have only minutes to help or retreat.*

*Prime Leader*

Tom was stunned and so were Bud and Aaron who had come over to his side. Before Tom could say anything, his father was back on the radio. "Tom, we are leaving. Zimby is moving us out at one-G right now, and if anything happens we will do what is advisable to save our people. I'm sorry, I must think of the women and Chow first. I... wish it was otherwise."

"But, our space friends..." Tom protested.

"Tom," he continued in a sterner voice, "we did what we could for our space friends. I have the gut feeling they have been lying to us about a lot of things and we don't have time to figure out what it is." He sounded hurt at this deception. "I order you to leave with us, now! Don't argue, leave!" He was determined that Tom understood him and would obey.

As the young inventor looked at Bud for his reaction the heavens lit up with what looked like a gigantic red lighting ball speeding their way. Before he could do anything, it dissipated into nothingness and a green saucer-shaped ship materialized a few miles away. It looked like a larger

version of the vessel that the space friends had used to send infected animal samples for Tom to cure some time ago.

The *Challenger* was accelerating away and Tom hopped into the excavator control seat. “Bud, take flight control and head us out at three-Gs. We can handle that for a bit. Be prepared, ‘cause I’m taking the Egg with us. Get us moving!”

Aaron had just enough time to get into the second flight seat when the acceleration hit him hard and crushed him back into the cushions. Tom clenched his teeth together and kept on working. The *LuTE* device pitched into a high strumming tempo as it formed its lifting fields around the Egg and Bud headed out from the Moon. The tug of war began against the lunar gravity and the two connected vessels.

Tom had three VAP-generators on line for the excavator and Bud was using two. A pale purple ray shot out from the saucer and enveloped the Bio-Cache. It started to slip out of the grip of the excavator beam. Both boys added another generator to augment their power needs. Tom now had a firm grip on the Egg, but the *LuTE*'s speed was declining. Bud added the eighth and then the ninth generators.

They were still being pulled backwards and out into deep space. The repelatron lost their grip against the Moon and the Earth as they were pulled past the Earth and Moon. They had nothing to repel against now.

Bud, in a fit of combined anger and desperation, realigned the four repelatron side dishes toward the flying saucer and blasted away at full power. The saucer was hit with such a large and unexpected discharge that it was flung, tumbling wildly, out of their sight in seconds and they were left behind with the Egg still in their grasp.

Triumph cries of joy rang out in the control cabin but it was short lived. The enemy craft was back, this time it just flew in at high rate of speed, stopped, and once more the purple ray shot out and encircled the Bio-Cache. The vessel then accelerated away, ignoring the fact that the *LuTE* was being dragged along with it.

Once more Bud released a blast of the repelatron at it,

but this time they passed harmlessly around the saucer—or went right through it. “Crap,” was heard from Aaron’s lips as they were pushed back into their seats as they were forced into high acceleration by the flying saucer. Before they could recover they were doing over five-Gs and it was still climbing.

The boys could not even reach the control boards. They were pinned to their seats by the acceleration force. Even trying to raise a hand was not feasible. They could not shut down the gravitex to release their grip on the Egg.

Even trying to see out of the canopy was becoming impossible. Their vision was distorted and blurred. So Tom and the others could not see that the Egg and the *LuTE* were being drawn closer and closer together. With a loud bang and shake, the two objects collided. That was followed by a scraping noise, then a tilting of the *LuTE* to an odd angle and a final jarring stop. The Egg was now wedged between the front of the cube and the protruding magnetic donuts of the Megascope antenna.

They were passing ten-Gs when this happened, and no one noticed the collision. Aaron passed out shortly after that, followed by Tom, and then by Bud.

Even as the *Challenger* fled the vicinity of the Moon, everyone watched the encounter between the space friend’s ship and the *LuTE* on the monitor. Mr. Swift was frantically yelling into the communication unit for Tom to drop the Egg and flee!

Zimby Cox, being ex-Air Force, knew how to fight. He tried to aim a repelatron at the saucer but everything was happening too fast to get a bearing on it. He knew that his first obligation was to the people on board his ship and so could not turn around and join the fray.

With tears and sobs Mrs. Swift fell into her husband’s arms as the *LuTE* was dragged away at such a rate of speed that the human body could not possibly survive. Sandy and Phyllis were clinging to each other crying. Mr. and Mrs. P bowed their heads and held hands over Chow’s bed in the medical bay. The rest of the people were shocked into numbness.

Ken Horton's voice was demanding their attention over the radio. Mr. Swift turned it off with a flick of his hand and with his wife went to their daughter and their 'daughter of the heart', embraced them and walked out of the control room to find solace as a family.

Chow's prediction had come true!

\* \* \*

"Hell, why won't they answer?" Ken slammed his fist onto the communication console that was in the Megascope control spoke. He had been following Tom's raising of the Egg and saw everything that happened afterward. He was not receiving their radio signal for they had purposely turned down the wattage when they first reached lunar orbit so no one on Earth could hear what they were doing on the Moon. Turning around, he flipped on the Outpost intercom channel for the solar battery factory.

"Jack, listen, I don't care what it takes but I need your mirrors. Take down these coordinates and start aligning the mirrors toward it."

"But, Ken, the whole line..."

"Shut it down, now! You hear me! This is top priority! Sorry, Jack, but Tom Jr. is in trouble and I can't reach the *Challenger* by radio. I hoping to blind Zimby Cox with sunlight bounced off the mirrors and maybe, just maybe, he'll call us back."

"Sure, Ken, right on it. Do you want to send a Morse code message?"

"Yeah, a simple SOS if possible, if not, just keep flashing the coordinate area with sunlight from the mirrors. I'm trying to get a visual on the *Challenger* again. I'll update you when I can with fresh coordinates. Out!"

Ken knew the general direction the *Challenger* had taken to get away from the Moon. He began with a wide field of vision on the viewing screen and had the computer look for any movement within the field. He had it zeroed down after two tries.

With the new coordinates in hand he called Jack back and gave them to him. Within seconds, Ken could actually

see the flashing of sunlight hitting the ship.

“*Challenger* calling Outpost, Zimby here. What is your emergency? We are not able to be of much assistance at this time!” Zimby voice was halted and raw with emotions.

“Zimby, listen to me. I remotely shut down all the VAP-generators when I saw what was happening to the *LuTE*. The ship fell away from the Egg after about two minutes. They may still be alive if you can get to them fast enough.”

“Professor, go get the family,” Zimby shouted from the control station on the *Challenger*.

“On it, Zimby,” the Professor called out as he hurried to find the Swifts.

“Ken, give me the coordinates and then get Doc Simpson on the radio. I need to know how fast I can push this baby because of Chow.” Zimby was ready to get out of the ship and push it himself if it would help matters.

He could hear excited voices coming his way as he started to slowly accelerate the ship along its new course. Mr. Swift entered first and slipped into the copilot’s seat.

“Zimby, this is Doc Simpson. My reading show that Chow is still unconscious from the sedatives I had you give him and is doing well. I’m still receiving the telemetry signals. If you can keep the Gs to Earth normal he should be fine, I don’t recommend anything higher. I’ll let you know the moment things change. That’s the best I can advise. Anything else is up to you and God. Standing by until otherwise needed. Out.”

Zimby looked at Mr. Swift and could see in the man’s eyes that he was fighting with his own personal inner thoughts and fears at that moment. Tom’s and the other lives on the *LuTE* versus Chow’s. A known factor against an unknown one.

Mrs. Swift’s hands touched both of their shoulders and gave them a reassuring squeeze. She looked down at her husband as he looked into her face. “What are the chances that they are still alive, Tom? Remember that Charles’s is alive and his life is in our hands.” Her voice was soft.

“Mary, men have survived twenty Gs before. A few



skydivers have survived hitting the ground without their chute opening, and that's a very high G-rate of deceleration. So there still is a chance. A slim one, but still a chance."

"Then, Tom, what would Charles do? He's the one that has to live with *our* decisions." Her voice was low and determined.

"That is an easy one, Hon. Save Tom at all costs!"

"Am I being selfish, Tom?" her concern was heartfelt for Chow, but she needed her son more. "He is our son, but —"

"Zimby, increase acceleration to two Gs on my say so. Head for intercept with the *LuTE*. He turned on the intercom to the medical bay. "Boris and Patty, we're going to step up the acceleration to two G's. There's a chance that Tom and the others may be alive. We are going to find out, so leave Chow for now, get strapped into your beds and lie down and stay there. It should only last for a little while."

"But Chow—" began Mrs. P.

"Doc Simpson will monitor Chow and will let us know if he starts to show any signs of distress. I'll tell you when it's safe to get up. We will have a slowdown of two-Gs also. Even when you think the higher G's are over, don't rush getting up. That is especially important for you, Boris. Let me know when you're ready and call out if you feel any difficulty."

While Mr. Swift was talking, Zimby was feeding in the acceleration changes into the computer for it to work out the best course of action. In seconds it told them the needed information. If they accelerated for fifteen minutes and then decelerate for five at two Gs they should reach the *LuTE* in the fastest time and be at the same relative speed to them at the end of the flight. As soon as Boris called out their readiness and clicked off the intercom Zimby was pouring on the power. He had both the Moon and Earth to push against and the distant planet of Mars to be their brake.

They were decelerating for only a minute when Mr. Swift voice sounded throughout the ship. "I've found them on the long range radar, and we're closing in fast." He was piloting the ship. Zimby and the Professor were suited up

and waiting for the green light in the airlock to go out and examine the *LuTE* for signs of life. Mrs. Swift, Sandy and Phyllis occupied the other three seats at the controls, all holding hands.

Mrs. Swift had pleaded with her husband not to be one of the men to go over first. It was a sight that he should not have to see. Sandy and Phyllis, with tears in her eyes, joined in and begged him to stay. That was when Zimby and the Professor told him they would go first.

The *Challenger* stopped alongside the *LuTE*. With no lights in evidence, it looked dead and foreboding. The people in the *Challenger* watched nervously as the two men drifted towards the *LuTE*.

“Professor, we’ll have to make our way around to the left side of the Cube to the emergency airlock in the crew quarters,” Zimby informed him by radio as they reached the back main airlock and found it inoperable.

“Zimby! Professor!” Bud’s voice excitedly sounded into their helmet radios. “What the heck are you doing out here? You’re supposed to be taking Chow home to the doctors!”

“You’re alive!” Zimby exclaimed loudly. “You’re supposed to be dead. And the others?”

“Oh, they’re fiddling around with the extra spacesuits power packs trying to rig up enough battery power to reach the Outpost by radio. Someone has turned off our power supply for some unknown reason and the capacitors are drained of power.”

“Bud,” the shaky, emotionally filled voice of Mr. Swift broke in, “you better get Tom on the radio really fast. His mother is crying her eyes out and won’t breathe until she hears his voice.”

“Momsie,” Tom spoke a moment later using his favorite term of endearment for her. “I’m sorry we couldn’t call, but we’re all right. We just couldn’t radio out and let anyone know. Really,” he emphasized, “we’re all fine!” All he could hear was a reply of sobs. He could not tell if they were because she was glad they were alive or mad because they were alive.

“What happened?” asked Mr. Swift as he tried to

comfort his wife. “How did you survive that horrific acceleration?”

Tom could hear the hooting and hollering by Sandy and Phyllis as they danced around in the background and he laughed to himself. “Dad, to tell you the truth, we don’t know. We sort of remember being crushed by that tremendous acceleration and that’s about it. Everything else is a blank.”

“You didn’t see the *LuTE* or feel it crashing into the Egg?”

“Sorry, Dad, not a thing. By the way, who shut off our power?”

“You can thank Ken for that one. It seems only after he did, that you were released from the Egg’s grip and set adrift. So he may have been responsible in some way in saving you lives. And, he was the one that kept track of you with the Megascope.”

“Whatever he wants Dad, it’s his!” Tom was never so glad to have that man on his side.

“That, Son, is a foregone conclusion!”

“Great! Now, if you only get those two guys that are hanging around our emergency airlock to bring us an electrical cable so we can get some power over here we’ll then be able to send a radio signal to the VAP-generators. Then, I can then get my head out of this helmet and my two buddies out of my hair who are trying to listen in.”

In less than twenty minutes the line was attached and the *LuTE* was powered up once more. While Zimby and the Professor were out in space they looked for any possible damage to the antenna area and the face of the craft were the Egg crashed into them. They could not see any outward physical dents or scratches.

Bud and Aaron were just finishing checking the interior of the ship and Tom was doing the electronics tests when the Space Friend’s oscillator rang once more.

*Friends, relief to see that you have escaped unharmed. Sorry we could not be of more assistance than having the Bio-Cache pull your*

*ship in to protect you from the acceleration forces. The artificial intelligence in the craft is not fully functional. It has been corrupted by the Betrayer of the Covenant of Mothers.*

*If you wish your people to continue to survive you must come to me at our vessel in orbit around your planet called Jupiter. I, as the Prime Leader of our ship must defeat the Betrayer. I must go and do this in person.*

*Honor demands that it must be done in a hand-to-hand combat situation. As I stated before we have no wars. What I did not reveal is that all infractions of our laws are dealt with on a personal, one on one, level. This is too complicated at this time to go into any farther.*

*You must come to me and we shall then proceed to the abandoned Mars base were we are sure he will establish his empire.*

*Time, we do not have. You must act now to save your lives! For if he reestablishes the Mars base we are all doomed.*

*Prime Leader*

The people of both ships were flabbergasted. Not only had they just found out the space friends had an abandoned Mars base but their spacecraft and presumed new home was out near Jupiter. What else had they failed to tell them? How long have they really been in the Earth's solar system? More questions were asked than answered.

Tom and his father went into a conference. The first major question was: did they have a choice to continue helping the space friends? The answer to that could only be found by meeting them face-to-face.

As for the notion of defending Earth against one lone alien, that seemed so unrealistic that they never even contemplated it. Eight billion to one looked like good odds in Earth's favor. But, they had no idea of what power or weapons he might possess. Plus, given the recent dealings

with the green space disc...

The decision was made—they would go. It all came down to how long it would take the *LuTE* to reach the vicinity of Jupiter and *that* depended on how many Gs they could stand. Mr. Swift and Tom had a scheme already worked out months earlier, but never implemented, and this looked like a good time to try it. Tom could make the necessary rearrangement of equipment in a matter of hours with Bud and Aaron's help.

The hardest part was getting Mrs. Swift to let *her* boys go. She felt that God was not going to be so generous the second time around, and they still had Chow to worry about.

All this discussion took place over the radio between the two ships. Tom, rightly so, knew that if his mother actually could physically touch him or the other two there was no way she was going to let them go.

As it turned out, Tom had a trio of trump cards at his disposal. He big ear radioed to the *Challenger* for all to hear his plan to safeguard their lives on this new mission.

"First," Tom told them, "we pilot the *LuTE* but the power source is from the VAP-generators and that came from an outside source that they could not totally control."

"Next, we're going to stay in continuous radio contact using the big ear radio and personal micro-sized radio links hiding in our clothes. If anything goes wrong the power could be cut off and not returned until I authorize it."

"And finally, we'll not let anyone else onboard but the Prime Leader."

Mr. Swift, now caught up with this scheme, added to the list, "I'll get a crew of volunteers together to meet Tom at Mars. We could hide behind one of the two Martian moons if we get there first." Looking at his wife he added, "I'm even willing to break out the few remaining Electric Rifles that are in the vaults." He knew that he would not use them, but if that quelled the fear of someone near and dear to him he would make a show of it.

That whole planning discussion took less than an hour, and five minutes later the two ships were heading out in opposite directions.

Chow in the *Challenger*, was going back to Earth and the hospital. He was awake and alert and his vital signs were improving by the hour—at this rate he would probably not need to stay in for long.

For the crew of the *Life LuTE*, the long awaited meeting with the Space Friends—a face-to-face meeting that had been so hard to arrange—was now within reach.

## Chapter Sixteen: “Why, You’re a...”

Inventing was in Tom’s blood. But this time what he needed was already invented. He took four RepelaGrav light units out of storage and had Bud and Aaron constructed a sturdy upright metal frame so they could be mounted side by side in a vertical arrangement. The newly outfitted frame was then bolted to the floor several feet behind the four command chairs on the flight deck. Each chair had a RepelaGrav unit directly behind it.

Tom fiddled with the chairs so they could straighten out to form a flat platform but at the same time tilt upwards at a forty-five degree angle and still slide in close to the control panel so they could operate it.

The effects of the tremendous accelerations they would be subjected to had to be minimized. The newly arranged acceleration couches were just one part.

They had been ingesting the inert substance used for the RepelaGrav effect for over a week now. In that time it had saturated all their body organs and muscle tissues. The theory behind this experiment was that as the acceleration forces built up and the body was squeezed flat and blood circulation and breathing were in danger of stopping, the repelatron rays would keep the body in shape and working. Just how effective it would be was the question. It would definitely work on a few Gs of force but would it stand up to five or six or even ten?

The trip from Earth to Jupiter was slightly over 390 million miles because the planets were in a rare ‘in line’ configuration, and at a constant increase of velocity of one-G the turnaround point was seventy-one hours away. A total trip of six days! They didn’t have six days.

At four or five Gs the trip could be accomplished in two and a half to three days, but was not feasible for the humans on board. Four days would be needed with small intervals of one-G cruising to allow for eating, exercising and possibly for some normal sleep.

That was the goal set by Tom and agreed to by Bud and

Aaron. Yet all this depended on how well the RepelaGrav worked. If for some reason they were to attempt ten-Gs they could do the trip to Jupiter in less the forty-eight hours! At speeds like that the solar system was getting smaller all the time.

This was all academic if the *LuTE* could not achieve the necessary G-force acceleration. With the Moon and the Earth falling farther and farther away and Mars still before them their options were almost nonexistent for solid targets to focus the repelatrons on. But the *LuTE* still had one trick up her sleeve—the Gravitex unit. If it could lift a five hundred ton Egg off the Moon it could pull the *LuTE* forward to Jupiter at an ever-increasing speed.

Tom was feeling a combined sense of eagerness and anticipation, hoping they could succeed in helping their space friends. Everyone knew they were involved in something that was far beyond their experiences to date. Would it prove to be beyond their capabilities? To Tom, such things didn't matter much. If what the Prime Leader had said was true, then the team from Earth had to try.

Their first test of the new anti-G field went better than expected. At two-Gs the RepelaGrav field was strong enough that they were able to move around in the confined space between the seats. At five-Gs they could still stand and move around—carefully—and it was bearable. To help pass the time, Bud and Aaron played video games and talked to people on Earth using the big ear radio and video screen.

Bud accidentally dropped his gaming handset and it slid out of range of the RepelaGrav where it was instantly crushed against the back of the control room wall. This had a sobering effect on them and drove home the precarious situation they were in.

After a time, they slowly increased the speed and continued to be satisfied with the results. When they finally hit six-Gs Tom halted their increases and held it there. That high speed was one G over their agreed upon stopping point.

While the force itself felt no more than like two-Gs, they didn't dare to go any faster because they had no



knowledge of the medical repercussion they were putting their bodies through. For all they knew their organs could rupture because of the interaction of the two forces.

Tom set out a rule: If any of them felt any uneasiness they were to speak up immediately.

The RepelaGrav might have been working wonders for their overall well being, but even the soft body-forming reclining seat could not relieve the sore spots on their backsides or the boredom after three days of flight—even if it was to Jupiter. The only excitement they had was detecting three small meteors that headed toward them while they were in the asteroid debris field between Mars and Jupiter. Tom pointed a repelatron at them and gently pushed them out of their way.

He joined Bud and Aaron once or twice in their gaming and video networking but he spent most of his time considering two new ideas.

In the first one, he reconfigured the RepelaGrav setup in his mind, tying it to with a motion detection system or a mini-radar setup to allow people the freedom to move around the ship while under low-G acceleration.

The second one, and the one that took up most of his free time, Tom envisioned a radical type of space ship. He hoped that it could be the answer to making interplanetary flight a reality. With the space elevator concept proved by the *LuTE* and Tom's new ship design, the planets of the solar system would only be days away for all mankind's hopes and needs.

As they approached Jupiter's gravitational field of influence, Tom radioed the space friends and requesting coordinates to their base. Jupiter was a mini-solar system in itself. With over sixty-three objects in orbit around it, Tom had to be diligent in his piloting and course setting. That, he knew, started with understanding their destination up front.

With Bud's help, he piloted them through the fifty-five plus *Irregular* satellites first, and then flew an arcing course between Io and Ganymede, two of the four largest Galilean moons. Europa and Callisto were on the opposite side of the planet.

Thebe turned out to be their final destination. It was the fourth closest of the little moons of Jupiter's inner satellites and was located at the outer edge of a ring system that is also the nearest particle ring to the planet.

Aaron had already seen the gas giant's faint rings on various telescopes, but it was a shock to Bud. "I thought only Saturn had rings," he stated, a little confused.

Tom explained, "Our giant friend there has them as well, we just don't have a good angle to see them. It is a faint planetary ring system composed of three segments: an inner torus ring and two outer gossamer rings. That's right, isn't it, Aaron?"

"Yep, the main ring is probably made of material ejected from the satellites Adrastea and Metis as they traveled through it. In a similar way, the moons Amalthea and Thebe probably produced the two distinct components of the dusty gossamer ring. But Thebe travels at the very edge of the dust."

As they approached the fifty mile wide Thebe they could clearly see its irregular shape and reddish color. Its surface features included three large craters and mountains thousands of feet high. A strobing light was alternating between a high intensity blue and violet color in one of the larger craters and Tom headed toward it. About two miles out from the moon the sky and view around them took on a shimmering, flickering haze. When it stopped a few seconds later they did not recognize the moon in front of them.

The crater became a huge bowl full of multi-airlocks/hangars and landing pads. The complex had two extremely large hanger doors and several different size airlocks built right into the surface of the moon. A ridge of mountains overlooking the landing complex turned out to be a series of antenna like towers.

The shape of the moon had also changed from its irregular contour to a smooth round black polished ball. It seemed that a huge trick of light—or disguise—was well within the space beings' capabilities.

"Thebe was discovered in nineteen-seventy-nine by the Voyager mission," Tom informed Bud and Aaron. "Does

this mean that the space friends have been here since or before then?" Looking at his friends he could tell they did not know what to say to him. "I don't know what to think anymore. I hope Dad is getting all of this, but I can't take the chance of having him answering back. There is no telling what type of sophisticated instruments they have on that moonlet."

As they neared the landing base, one of the hanger doors slid open and Tom could see by the two rows of undulating lights from each side of the opening that he was to fly the *LuTE* right in. It was definitely large enough, and maneuvering would be easy—for all practical purposes there was no gravity on this little moon.

After the ship entered the hollowed out area, radar showed it to be over a mile deep, half mile wide and two thousand feet high. A round ball of pulsating blue light flew into their glide path and led them to one of the numerous half dome landing alcoves set into the wall. As far as they could tell all the others were all open and empty.

The moment they landed, twin solid-faceted panels slid into place closing off the alcove from the main hanger. Gravity increased and an Earth normal atmosphere was established. The very air seemed to glow with light. The bottom half of the dome-shaped wall of the enclosure was light green and the top was sky blue with small puffy clouds drifting over the highly faceted interior.

Three doors were visible from where they stood in the control room blister on top of the *LuTE*. The one on the right opened to darkness but a glow of light slowly brightened to daylight intensity. "Tom," Aaron softly spoke in wonderment, "I guess that's the way we're supposed to go."

"Gee, Tom," Bud added, "not even a one man band to greet us."

"You know guys, I have a bad feeling about something. I'm beginning to think this whole thing is kinda fishy! All they have ever told us was that Earth was harmful to them, and then they never could explain why. But look at the instrument readings. Gravity, atmosphere, temperature... they couldn't get more normal if we were on Earth and I

can't believe it's all for our benefit. Do you?" he asked them.

His two companions had no responds for him. As if by an unspoken agreement, the three headed down to the airlock. Tom was about to suggest they get into their spacesuits, just in case, but decided he needed to trust the Space Friends' intentions.

Tom finally said to them, "Let's go and get some answers to our questions." All three went willingly into the unknown tunnel.

The passage from the landing alcove ran for several hundred feet and did a couple of long switchbacks like you'd find in a blast shelter. Fifty feet wide and twenty feet high, it was totally featureless. The tunnel was made of muted gray stone that was smoothed and highly polished. It ended at a door that was just as wide and high as the passage.

They couldn't find a way to open the door. When Tom placed his hand on it, it felt warm and was slightly vibrating like it was waiting to do something. He motioned the others to touch it.

With a hissing sound of seals disengaging, the door started to slide toward the left. As it slowly passed them they could see that it was a solid two feet thick and there was another door immediately behind it. After the first door was totally open the second one slowly started to slide open in the opposite direction. No light was visible on the other side of the second door.

Bud looked at Tom and Aaron and with a half laugh whispered to them, "Is this to keep uninvited guests out or do they have a really big security problem?"

Tom replied, "We're invited guests so that can't be it! I suggest that we take a couple of steps back from the door and to the side. This tunnel was made for something big to travel through and I don't want to be standing in front of that second door when it finishes opening. That vibration in the door was coming from something very big."

When the door finished opening—and nothing came rushing out—the boys stepped into the entryway and were

immediately blinded by an intense white light. They held up the hands in front of their eyes trying to shield them from the dazzlingly beam.

A growling sounding command was heard and the light was immediately turned off. The tunnel's normal glow replaced it. Blinking the black spots before their eyes away they saw... "Well, it must be one of the space friends," Tom thought... standing before them.

In total amazement, and before he could stop himself, Bud gasped to the alien, "Why, you're a dinosaur!"

The alien answered back with a wide-mouthed grin set in a snout that showed dozens of long, sharp, white teeth. A mixed sound, part hiss and part roar, answered him back.

The alien stood twelve feet tall on two robust tree trunk-like legs that ended in three sharp clawed toes. A long thick tail gave him a tripod like stance. His back, sides and legs were a patchwork of light and dark green colors along with a muscular diffused orange shade of color on his chest and stomach.

There was not a stitch of clothing visible, but he did wear a wide utility belt around his waist and one running diagonally down around his shoulders to the waist belt like an ammo strap. There were no reproductive organs showing like in humans and other Earth animals. The skin looked dry and leathery.

His two round, wide red eyes were set below a highly-ridged forehead, and that was topped with a fine feathery bright orange crown. Two small holes acted as ears on the sides of his head.

He seemed as interested in the appearance of the Earthmen as they were in him. For a few moments nobody spoke as they looked each other over.

His arms were thin and short compared to his body but his three fingers were long with pointed, claw-like nails. He had one opposable digit on each hand, presumably thumbs, and they were unshielded.

The voice of the dinosaur shocked them out of their awe. It consisted of light roars, hisses, an occasional click and an actual spitting on the ground.

Less than a second after he stopped talking a translation, in English, came from a small device on his shoulder belt. "I am the Prime Leader, my name would be unpronounceable by you and your kind, and so is much of my language. Your tongues are too soft to make the correct sounds. I am a female, so address me accordingly and with dignity. The Betrayer is male," she actually spit on the ground again when 'male' was said in English. "My translator allows me to comprehend several of your languages without an outward rendition and so you will not hear a reverse interpretation of my speech."

All three immediately reset their perceptions about their host. None had anticipated that there would be a female in charge. A somewhat uppity female! Tom quickly realized that this was an Earthly issue and that they would need to be open to any possibilities.

"I am ready to go with you to the planet you call Mars to silence the Betrayer and take back what is rightly ours." Her round red eyes flicked from Tom to Bud and then to Aaron.

Tom took a step forward and bowed. He looked up at the alien's face and spoke, "Prime Leader, I am Tom Swift and it is an honor to meet you at last. These are my..."

Roars and growls cut him off. "Stop! We do not have time for this type of formalities. I *must* proceed to Mars at all possible speed. Once in space we can talk. I do not think you realize the seriousness of the situation. Any delay may mean the end of us all."

Tom bowed his head and stepped to the side and held his arm out pointing down the tunnel. A hiss sounded, the word 'Good' was heard and the Prime Leader marched down the tunnel at such a paced that the boys had to jog to keep up with her. The twin doors slid shut much quicker than they had opened as soon as they moved off sealing the inner world.

Bud tried to talk to Tom as they ran along but Tom signed language him to wait until later when they were alone in the ship. Both boys knew ASL (American Sign Language) because of their many sea and space voyages and it also came in handy when held captive by their foes.

Reaching the *LuTE* the alien stopped and waited for the three boys to catch up. Aaron was way behind the other, his chubbiness was slowing him down. When they all finally arrived, she spoke again. "If your ship is designed to hold only humans, I will not fit in your living spaces."

Tom described the largest available space within the *Lute*. She nodded.

"Yes, so if you will allow me the area of your cargo bay and its immediate vicinity I will be fine."

Tom led them to the back of the ship and pointed to the access hatch half way up the cube's backside. "When I designed this ship," he told the Prime Leader, "I had no intention of ever landing this vessel on a planet or a place with gravity again. We have no way of reaching it from the ground."

Had the alien been human, Tom would have sworn that a sneer formed on the dinosaur's face and she spoke rapidly out loud. No translation was heard but the three adventures felt a tingling sensation throughout their body and all four of them slowly drifted off the surface of the alcove and continued to rise to the height of the cargo airlock.

Tom reached out and punched in the code that opened the lock. Once open, they were moved to the inside and settled onto the floor. Without saying a word Tom closed the outer hatch and opened the large inner door. Before them was the catwalk where Chow had his heart attack on just four days ago!

Looking around the area that held the ship's inner workings and down to the first level the alien nodded her head in approval. "This will do," she hissed. Taking the largest device from her waist belt, she handed it to Tom after turning it on by pressing several spots on its surface. "This will negate the acceleration forces of up to fifteen Earth gravities. If this ship can accomplish that speed, please do so. Its sphere of influence is thirty of your feet in diameter."

Aaron found his voice in time to ask, "And, you?"

"I have my own personal protection and if you can talk to me from your control area I will try to tell you the true

nature of our being here in your time and space. Go, do not waste valuable time.” Tom once more bowed to her and walked back a few paces and turned and led Bud and Aaron away from her and to the safety of the control room.

The first thing Tom did on reaching the control cabin was to secure the alien device to the back of the RepelaGrav stand at floor level. He was hoping that the low backward position offered some interference to eavesdropping if it was capable of doing it.

He motioned Bud to take the control of the ship with Aaron as co-pilot while he took the excavator’s seat, turned on the secondary computer and started to type away.

As Bud powered up the ship the outside gravity provided by the dinosaurs disappeared and the alcove’s two doors slid open. The pulsating blue ball guided them back out of the moon base and for the next hour Bud skillfully maneuvered through and left the crowded skies of Jupiter and set a course towards Mars.



## Chapter Seventeen: Approaching Nastiness

Tom finished his computer work and reached over to the ship's intercom and turned it on. He called up a video inspection camera and zoomed in on the alien. "Prime Leader, we are on our way as I'm sure you can tell. We have discovered that this ship cannot go faster than eight-Gs even though I built her to withstand fifteen-Gs," he informed her.

"That is unacceptable. We cannot take over two and a half days to get to Mars, and so you must do something!" Even in translation it was a command.

"I have thought of that too, Madam, so..."

"No!" she roared back. "Prime Leader is the only correct address for me. Madam is to be used for the rest of my shipmates."

Bud opened his mouth to snap back at her but Tom shook his head 'no' and held out his hand, palm upwards, and raised his eyes to the sky, so Bud and Aaron knew not to say anything.

"Prime Leader, I have conceived of a way around this dilemma. I will point the repelatron drive units at Jupiter and the excavator at Mars that will increase our speed by five point five Gs. As the distance from Jupiter increases and the repelatrons decrease in strength the excavator will pick up the slack. At thirteen point five Gs we will be there in thirty-six hours. That is the best we can do."

"Humans, it will have to do. If I had my solar ship we would be there in two hours. I can expect nothing better from inferior beings. Do it, and do not disturb me until we are in orbit around Mars. I must prepare myself for the encounter that is to come."

Bud exclaimed, "But you told us that you would explain your true history to us!"

"Later, male!" she hissed, roared, and spat on the floor. Tom cut the intercom circuit, but left the video on to watch her. She sat in her tri-pod stance with the end of her tail swishing back and forth. Slowly the tail stopped and her eyes gradually half closed.

The *LuTE* steadily gained speed and the G-forces continued to mount. Tom took out three electronic game pads and set them up for a three-person game that needed the keypad to operate. He handed Bud and Aaron theirs and a message was waiting for them to read:

tom > do not talk / use pad only / we are in deep trouble / since the meteor crash at enterprises we have been lied to by them

bud > tom are they not the space friends

tom > yes they are / but not the same aliens we found on earth / they have incorporated that extraterrestrial landing into their cover story / I do believe that they are from earth and that they come from sixty-five million years ago / maybe time travel gone wrong

aaron > impossible to do tom / can we trust anything that she says

tom > we must act like we do / but when the time comes we must talk to the betrayer / he may have been out to help us and acted the only way he could / that bio-cache may contain a weapon of some kind meant to destroy us and he took it out of their reach and now we are helping a potential enemy to get it back

aaron > what if she is telling the truth about him

tom > when we get to mars we will find out one way or another

At turnaround they took time to eat and do a few other necessary things before resuming their high race to Mars and to a future that only looked grim.

Over many, many years, much had been written about the red planet, Mars, and most of it was proving to be untrue. No Martian super race lived there. No princess-carrying monsters waited for them. Only a bleak, cold, rock-laden surface waited for their arrival.

Except... a dinosaur of incredibly old age looked up at the sky and watched the tiny light that was the *LuTE* approaching. He knew that it was the human ship, his own instruments verified it, and that it was bringing the Prime

Leader to him. He wished he could convince the foolish humans what the Prime Leader had in store for them in the future. If only he had time to do it. Funny, he thought, time is what got them in this predicament in the first place.

The Betrayer turned away from the sky and went down the old crumbling passageway once more to his ship and to the Bio-Cache nestled next to it. He was still angry and frustrated. The cold night sky did not help his disposition, not after seeing that moving light so close—it should have been farther out. He understood Earth science, and that light—and the ship it represented—must be under the influence of the Prime Leader.

The resources of the old base were totally inadequate for his needs. The eons had reduced it all to mere rubble. The science used by his race to build the advance base on Mars was no more. Not a wire or a piece of plastic remained. Sixty-five million years had taken it all away.

The sun generator explosion on Phobos was the cause of two major catastrophes. The total destruction of Mars' fragile environment was the first thing blown away and so was their hoped of building upon and infusing it with new heat and more air.

The second one was the K–T extinction event, or as it was called by some humans, the Cretaceous–Paleogene (K–Pg) extinction event of his civilization on Mother Earth.

Phobos still existed but at a fraction of its original size and in a new lower, and dangerously faster orbit. Almost all the rest of the moon was consumed by the hydrogen fusion cascade eruption. Sadly, a part of it also had shot off into space to carry out its own destructive destiny on Earth.

The Bio-Cache was almost useless to him in its present state. Through the uncounted ages something had gone wrong with the repair nanobots programming and instead of repairing damage to the shell they kept adding to it, making it thicker and thicker. The entranceway was covered over in the process and it was going to take far too long before the extra coating was stripped away from the original shell.

He had to make his own personal preparation for the coming encounter with the Prime Leader. Certainly, he had

been a winner in the yearly event to become a male partner in his household when he was sixteen. Youth and the fear of death did wonders to your fighting skills. But that was ten years ago and the life of one of the house escorts did not call for fighting prowess, just the ability to please for hours on end.

He was counting on his stamina to triumph over the Prime Leader's initial burst of ferocity and strength. Time... there it was again, *time*, the end all, and be all of all things.

\* \* \*

"Prime Leader, we have arrived and are in orbit. What are your instructions?" Tom was acting meek and obedient, even though it was against his nature. He stood before her with his head bowed.

Her eyes flashed dark red and her body went into an alert posture. She relaxed after gazing around the area and finding no foe, just the human.

"Two of you will need to put on spacesuits and the other will bring this vessel to the coordinates I shall give you. Once there I will tell him where to land. The other two will come with me and bear witness to my triumphant battle over the Betrayer."

Tom moved slowly back to the control room. Which of his two friends was he to take with him to his possible death? Two suited figures were waiting for him—they had decided for him.

"Tom, it must be this way," Bud told him as Tom shook his head 'no' on their choice. "You were the one that said that you want to talk to the Betrayer first. This will give you the chance. Once we are on the ground we will delay her and give you time to find him and talk." Bud gripped his friend by the shoulders, hoping the contact would help.

"I said no!"

"Tom, listen to them," his father's voice came softly over their hidden radios. "Bud and Aaron are right. You'll all have a better chance to do what is needed and find out what we need to know if you stay behind."

"But—"

“We are only an hour out, so get the Prime Leader on Mars were she will be occupied with her retaliation on the Betrayer and not on you three.” Nothing else was said by his father.

Tom pulled his two friends closer and clasped their arms in a tight grip that he did not want to let go.

“We are ready, Prime Leader,” the tightly controlled voice of Bud spoke to her an hour later. They were fully outfitted and had their helmets on and sealed.

“Where’s the one called Tom Swift?” her rumbling voice asked over their radio and repeated a split second later from their suit’s outside mic. That answered that question; she was capable of monitoring their radio signals.

“I’m at the controls, Prime Leader. I am the best pilot and in consideration of your life I thought it best that I control the descent and final landing on this planet for the first time. We have never been here before so it’s all new to us.”

“Like all male (she spat) leaders, you take what you think are the safe way out and send others, instead of going yourself, if there is any sign of danger. Stay with your ship, I do not care. But remember I have your two companions with me, so do not do anything foolish. If you attempt to leave the planet I shall track you down in my recovered solar ship and you will pay dearly for your insolence.”

“I’m at your command, Prime Leader” Tom replied, biting his tongue so he would not spoil this setup. Bud and Aaron were doing their part and he had to do his.

“Then cease wasting my time and take me to the coordinates I gave you!”

She only had to tell Tom the location name that was on all Martian maps and he could have found it with a blindfold on. Arsia Mons, sits at the southernmost of three huge volcanoes (collectively known as Tharsis Montes) and is the only one south of the equator. The volcano is 270 miles in diameter, almost 12 miles high (more than 5.6 miles higher than the surrounding plains), and the massive summit caldera is 72 miles wide. But what made it stand out the most—and visible only as they approached

from a low angle—were the six possible cave entrances at its southern end.

The Prime Leader pointed one out to Tom from the handheld video screen map application that Bud had given her. “Jeanne” was the listed name of the designated cave opening she pointed out to him to land near. It sat at the far end of a small rift that ran alongside the hole.

As Tom flew the *LuTE* low over the hole, a strange bubbling yellow substance could be seen in its mouth. After he landed and before Bud opened the cargo bay hatch he asked the Prime Leader, “Don’t you need a spacesuit of some kind, or are you just going ‘commando’?” He chuckled to himself at his choice of words since she had no clothes on at all.

“I need not discuss this with you,” she hissed, “but I am fully armored for space and need no other outside equipment. We have achieved the ultimate spacesuit. Our own skin and body are modified with both bio-nano and robotic-nano technologies that work in harmony with each other and provide all that we need to survive. This is part of what is given to all solar explorers of my race. You cannot leave the home planet without being so altered no matter what your position is in the explorer force.”

Bud opened the outer cargo hatch and looked down to the ground far below. “It’s a bit of a drop,” he commented.

“Find a way down, you fools,” she hissed and roared at them, “or I shall throw both of you out. The battle mania is slowly taking control of my mind. We do not have much time left to find the Betrayer. If I lose my control totally I will turn on you instead—there is no escaping this now. It has advanced too far. It must run its course!”

Bud took a closer look at the Prime Leader and he could see the signs of tension in all her muscles and the rapid, violent swishing of her tail. Her eyes were also redder than before. Was that some kind of sweat on her brow and the side of her snout he could now see?

He quickly stepped to the side wall of the hatchway and pushed in a small button. Steel rods thirty inches long and ten inches apart popped out of the outside door frame and

ran all the way down to the bottom of the Cube where a chain ladder unraveled to ground level. He grabbed the top rung and started to descend to the ground. Aaron followed suit leaving the dinosaur to her own devices.

As his two feet touched the Martian soil he felt, more than heard, a heavy thump in the ground. The Prime Leader had jumped from the cargo bay. Her hand held some kind of device that crumbled into pieces as she squeezed it too tight. It must have been a gravity control unit but in her present state of mind she was unable to use it correctly.

“Drats, we almost had it made!” Aaron radioed to Bud.

“That way,” she pointed which way to go. “There is a tunnel that goes down to the installation we had started to build. Hurry or die now in *his* place!” They broke into a fast run and pried their flashlights on the path for it was covered with stones and cracks that crossed their way.

They could have easily missed the entrance if it wasn’t for the stone lintel falling off its two support beams and partially blocking their way.

“Down there!” roared the Prime Leader shoving them forward.

This passageway was in better shape than the rift, so they made better time. It always led downward and took several turns both left and right for no apparent reason. At times they passed heavily rusted areas of rubble. One test touch proved its condition as it crumbled into dust. It was the remains of some type of digging mechanism. Even in the cold, dry, Martian atmosphere, sixty-five million years destroyed the best of materials.

The farther they descended the wider the passage became until it formed a road with the ceiling arching high above them. To Bud it was obvious that they were traveling on the unfinished part of a vehicle route to the surface.

They came out of a long curve and found that the road split into two. The one on the right continued downward and the other one leveled out, disappearing in the distance. They could not see how far it continued.

“Downward!” she commanded, and so they went. After several hundred feet the tunnel broadened out both left and

right. They had to stop. They were at a cliff overhang that was part of the wall of a cavern that was miles across. They were hundreds of feet up and the air glowed with light that seemed to be coming from the substance that covered the hole in the center of the dome.

A vast city spread out before them. At least it seemed like a city, but everything was in ruin. Not a building remained standing. Piles of rubble and debris filled streets. Looking at the base of the dome wall nearby they saw the space friend's spaceship and the Egg near it. And to their great surprise the *LuTE* was there too.

Bud looked at Aaron and Aaron simply said, "Run, or we're dead!"



## Chapter Eighteen: The Wrath of God

Run they did, back up the tunnel hoping she wouldn't take the time to go after them. She still had a long way to go to find the Betrayer and her time was running out. Somehow in her befuddled state of mind she had made the wrong decision at what way to go at the rift. The pathway and entrance she wanted must have been farther along the way.

The roar that followed them up the tunnel was so excruciating it told of her pain. It was then that the boys realized that the air around them was carrying some of the sound and it just wasn't over their radios that they heard it but also from the mic on the outside of their spacesuits. They both stopped running and called up their helmet's heads-up display for the environment readings.

Surprisingly, nitrogen in the still too-thin atmosphere was up to 75%, oxygen 15%, carbon dioxide registered .8%, and the remainder was other gases. But the atmosphere pressure was up to 25 kilopascals. This was totally unheard of for Mars. In less than a week, the Betrayer, had started to re-establish the environment of the Martian dome to his own standards.

Nothing else was seen nor heard as the boys caught their breath. Bud, the better athlete, bent over with his hands on his knees drawing a few deep breaths, while Aaron—badly out of shape by comparison—slid to the ground where he panted and gasped for more than a minute. Bud straightened up after about fifteen seconds and waited for his companion to recover.

“Let's go back to the overlook,” Bud told Aaron as he got back up on his feet after resting for a few minutes, “and see if we can now follow the Prime Leader down to the ships. There must be a way down since she did not come after us. Tom may still need our help if he gets caught in the free-for-all that's about to happen.”

Trailing the dinosaur was not a hard thing to do. Two heavy footprints and an occasional depression where the tail pounded the ground marked her trail. The downward road was carved right out of the dome's outer wall. It switched

back only once as it made its way down. It took them ten minutes to traverse the way, thanks in part, to the lighter Martian gravity.

Before they got near the ships they noticed a frost line on the ground circling the area around the three vessels. As they stepped over it their suits registered an Earth-type atmosphere. More like being on a mountain top than at sea level, the air was cold, slightly moist and on the low side of oxygen, but breathable.

They stopped for a moment and Bud held out his hand where he thought the barrier was and stared intensely at it trying to see if there were micro-filaments holding the two atmospheres apart. Tom has used such a method to help hold the atmosphere on Nestria. He could detect nothing similar. By the time they jogged pass the *LuTE* they had their helmets open and just a little extra oxygen flowing in from the air tanks.

They could hear the roaring and snarling of the two dinosaurs fighting. The three ships formed a triangular space that was being used as the fight arena. Tom was on the opposite side from them and when he saw Bud and Aaron he started to make a mad dash around the perimeter toward his friends. He had his spacesuit on but his helmet was off, nowhere to be seen.

The dinosaurs were locked into grips that left only their tails free, and they were swinging them around and using them as whips on each other's heads, backs and legs leaving welts that were raw and bloody. The Betrayer was able to wrap the end of his tail around the leg of his opponent and pulled it out from under her. She hit the dirt with a force that shook the ground.

He tried to fall on her and to pin her down, but she rolled away fast, and as she did she thrust her tail upward and smashed it into his snout. Blood gushed out everywhere and made their bodies even more slippery than they were before.

They pulled away and with heaving chests charged each other again. This time the Betrayer stopped short and side stepped out of the way. As she rushed by he raked her left side from below her arm to her thigh. The three long deep

gashes reached down to her rib bones. She stumbled and roared out in anger. Pain was no longer a winning factor in the battle. Neither one could feel it anymore.

She snapped around and partially fell to the ground on one knee and the Betrayer, sensing victory, leapt into the air to smash her to the floor. But when he bounded off the ground the Prime Leader flipped onto her back thrusting her two extremely powerful legs, with talons fully extended, upward just below his chest plate and she sank her claws in as deep as she could.

As he continued to arc over her, she forced her talons through his stomach and out his groin, tearing his lower body wide open in six long gashes. By the time he hit the ground he was dead.

The three boys were mesmerized by the fight. They had never seen such ferocity in a battle before. Standing in front of the *LuTE* they didn't move as the Prime Leader rolled over to her knees and with a hand holding close her bleeding side got to her feet. She wavered for a moment and with a roar that filled the dome she declared herself the winner.

She turned toward the dead body and fumbled with a device on her belt that she finally got it out and pointed it at the corpse. A highly concentrated spray covered the body and in a few seconds it started to bubble and sour smelling fumes drifted their way. It stung their eyes and tears formed as if they were in tear gas. It dispersed in a few minutes and when they could see again, the Betrayer was gone. Only a slimy, oily residue was left.

Slowly her eyes focused onto the boys and a sneer was heard.

Aaron and Bud stepped back, but Tom was not watching her. He was watching the Egg. It was moving... no, not *moving*, it was splitting open in eight sections as if a giant was peeling an orange all at once starting at the top. The extra shell was coming off. It started slowly, but with every passing second it flowered open more and more, and at a certain point gravity took over and accelerated the process downward.

Tom looked at the Prime Leader and at one section of the peeling outer shell and then back at the dinosaur. He started to nudge his two friends over to the left in an outward circle. She turned slowly to follow their movement and now had her back fully to the Egg. She did not have the strength to do anything else at the moment. The battle mania was fading out... and then it was gone. Exhaustion and her bleeding side were taking their toll.

When the shell casing was about to slam into the ground and crush her under its tip, Tom yelled out a warning and pointed up behind her. She turned to look and could only see the huge section falling on her.

Tom, timing it just right, tackled her with all his might and manage to push her out from under the falling shell. It missed them by inches. They both felt the ground shake at it hit.

He rolled off of her as fast as he could and stood a few feet away looking at her. He held his gloved, clenched hands over his chest and with the right fist thumped his chest twice and then held out both hands to her. He continued to repeat the gesture all the time she regained her feet.

She walked over to the shell and tapped it with a claw and turning to face Tom, she repeated the gesture to him and when both set of hands were out stretched they walked to each other and awkwardly clasped their hands together.

The female victor was too dazed and injured to realize the pact she was entering into with the wily young inventor. A pact so old that it even preceded the female takeover of the dinosaurs.

“Tom!” his father’s voice rang out of their radio headset. “The *Challenger* team is here. We left the ship on the surface and came down through the dome’s hole on a donkey. We just got down here as you tackled that... huh... that really is a dinosaur. Bud wasn’t kidding, was he? Incredible. We just couldn’t visualize it by listening to your conversations over the big ear radio!”

“Hi, Dad,” Tom radioed back.

“It looks like there is a casualty. Is it safe for us to come

down to where you are?”

“Yes, Dad, please land next to us. I think we need to get the Prime Leader to her ship before she bleeds to death.”

It required all the men and all of their efforts to get the now stumbling dinosaur onto the floating platform. She pointed to a certain spot to land by and when she finally made it to the side of her ship and touched it, a section opened in the seamless hull. Stepping inside she shook off their helping hands and pushed them outside the ship. The door closed and they were left on their own for the next twenty-eight hours.

The rescue team settled in the lounge of the *LuTE* to wait for the return—or, as the Professor pointed out, the possible demise—of the Prime Leader. The craft’s crew passed out ‘heat and eat’ meals and cold drinks to their friends. Phil, Hank, Arv, Zimby and the Professor accompanied Mr. Swift as the rescue force. Harlan, who suffered from severe space sickness, inner ear pain and constant nausea, had to stay on Earth. After the meal Tom told them of his own little adventure and the story of the Betrayer.

“Once I was left alone I suited up and then lifted off the ground in the *LuTE*. By keeping low I made my way to the hole that the Prime Leader pointed out. The opening appeared to be smaller than the *LuTE* but I had to get in and the fizzy yellow goop didn’t look to inviting either. So I just lowered the ship into it hoping that the weight of the *LuTE* would crush my way through. Instead, the opening expanded until the ship slipped in and then it closed back up to the original size over the ship.”

“I didn’t see anything stuck to the *LuTE*, so it must have all remained up in the hole,” Mr. Swift observed.

“Yes. What a surprise I got on the other side. It felt so strange and foreboding looking down on the ruined city knowing that it must have had thousands of residents at one time and that they were long gone, just dust that can’t be traced to tell us who they once were.”

He turned to face his father. “Dad, did you feel the same way when you discovered that lost underground city in

South America?”

“Well, Tom, that was so long ago that it seems like another lifetime, but yes, it so unnerving and quiet that you imagined hearing people or footsteps even though you knew that there couldn’t be any sounds but your own.” His eyes took on a cloudy, faraway look that was lost as he shook his head and the memory out of it.

“Sorry, Dad, I didn’t mean to upset you.”

Mr. Swift smiled at his son and said, “It’s not upsetting, it’s just so unreal to me now.”

Tom nodded his head in partial understanding and continued on with his story. “As I was looking down, the Betrayer stepped out of the flying saucer and stood there looking up at me. So I landed and went out to meet him. He had a voice translator and a radio hooked up to it and told me that I no longer needed my helmet, so I took it off. We had a nice little conversation for an hour or so until a terrifying roar filled the air. The Prime Leader was announcing that she had arrived and was ready for blood... his blood.

“The betrayer tried to give me as much information as he could but there are still large gaps in his story. The best I could make out is that their society is Matriarchal in nature and that men are considered an inferior necessity. So inferior that there are only one male born to every seven females and they are raised in their own separated section in towns or cities.”

Bud shook his head and muttered, “Boy, I sure wouldn’t like that!”

Tom smiled briefly. “It is only after maturity and testing of some kind that they are let into society and by then only fifteen percent of them are in any condition to be useful. I don’t know what happens to the rest of them. Out of that small number only one percent are not sterilized and are treated as a household ‘Escort’ and personal slave. The dinosaurs are broken up into groups or clans that genetically have their own colored chest, stomach and head adornment. The colors of orange, red, blue, yellow and a small portion of white, which are universally accepted to all groups as

good omens, differentiate the major clans.”

“Was he able to tell you anything else about their way of life?” the Professor asked.

Tom shook his head. “That is all he had time to tell me about their lives. He wanted to spend more time telling me how and why they are here in our time. It seems that the scientist of their world, which *is* Earth by the way, were on the verge of interstellar space travel and were terraforming Mars to expand their civilization and to test their ability to change other planets to fit their own needs and wants.”

Seeing Bud’s eyes grow wide, he added, “Yes, they are our world’s dinosaurs. They’ve been trapped in a time field out beyond our solar system!”

He turned back to the rest of the group.

“They had developed ways to use hydrogen fission to power their starship and to even make an artificial sun to warm up Mars. The concept they used for star travel was unique in that they repurposed heavy, fifty miles diameter asteroids or little moonlets and accelerated them until they started to gain mass as they approached the speed of light. They had find a way to turn that additional mass into chromaton particles in such a way that time was close to being stopped as they moved forward in space. So light years only took days to travel in ship time.”

Only Mr. Swift and the Professor seemed to grasp the concept and appreciate it.

“The Prime Leader is the clan’s political representative of that starship’s mixed clans. She is there to stop any infighting between the groups. The Betrayer was their only male ‘escort’. The ship was manned—women’d—by only engineering and physics scientists. They were in the first and only ship built to test out their theory and it didn’t work exactly like they thought it would. They made a slight mathematical error in understanding what percentage they needed to start converting the mass buildup to chromatons. Instead of slowing time and keeping the ship moving forward in space, for both had to be moving in opposing quantities, they froze in time and space. To the outside world—the rest of their people—it looked like the star drive

worked and they were waiting for its return in a few months, not knowing that it would take sixty-five million years before the chromatons would weaken enough to allow the ship to fall back into regular time and space.”

Bud raised a hand and then pointed out the main view port at the other ship. “So, that dinosaur is sixty-five million years old *and* a time traveler?”

Tom, Mr. Swift and the Professor all nodded.

“Yeah, in a way she did travel in time, but not in the way we usually think about it,” Tom replied. “Meanwhile they continued to build their eight installations on Mars and constructed themselves a Martian Sun. Somehow they failed to detect the vein of ice in the middle of the moon they were converting to a miniature star. When they started it up all went well for a while until that vein of ice was super-heated and then consumed. The explosion of that water vapor and the release of all that extra hydrogen in the water caused their new sun to explode. The thin atmosphere was ripped from Mars by the force of the explosion and the resulting radiation sterilized and then killed all life, even down in the dome cities. A half a million intelligent beings were wiped out in less than a minute. And the ‘*Wrath of God*’ as the Earth dinosaurs called it came hurling out from Mars and destroyed their civilization when a part of the exploding moon hit the Yucatan Peninsula, in Mexico.

Zimby asked, “How long did it take for that chunk of Mars moon to reach Earth?”

Tom considered the matter for a moment. “They had a few months to prepare for their destruction and they did that by constructing the Bio-Cache and placing it in lunar orbit for the returning starship to find and use to rekindle their society.”

“Come on Tom,” Aaron spoke out, “surly they had the means to stop it?”

“Aaron, we’ll never know that answer.” Tom just shook his head. “Even the Prime Leader doesn’t know why it was allowed to happen. The only clue we have is that they did call it, *The Wrath of God*. Religious paranoia, political anarchy—you chose the reason—it was never stopped, end



of story.”

They sat in silence for a few minutes before Hank asked, “The Bio-Cache didn’t remain in orbit, though, did it?”

“No, it didn’t. The starship never showed up in real space until several months before they contacted us at Enterprises. How the Bio-Cache was buried on the Moon is unknown to them also, but they believe that probably it did it itself to protect its contents from the radiation and energy released from the meteor collision.”

“The Cache was controlled by a bio-intelligent/electronic hybrid computer system that had no equal. And I’m not sure what that consisted of.” Tom’s eyes suddenly went wide.

“Oh, I forgot to mention that the starship was built out near Jupiter so it would be out of most of the Sun’s gravity influence. That is how they know so much about what happened. The scientists and construction workers at Jupiter tried to tough it out until the starship came back, but after two years they gave up and committed suicide leaving the base to automatic computer control and repair. We won’t find the Jupiter base for it has been dismantled and absorbed into the starship along with the water filled moon of Thebe.”

“Now, Tom,” asked Bud, “where did the space friends on Earth part of the story come from?” He had seen their relics and knew that they really existed.

“Believe it or not they are what we were told. A failed colonization effort on our planet that happens to be the perfect story the dinosaurs needed to hide behind.”

“Why do they need a cover story, Tom?” Aaron asked.

“That is where the story becomes tricky again. The Betrayer had been the more truthful of the two when dealing with us. He was willing to live peacefully with us, where the Prime Leader really wants to take back the Earth, reset things to be as they were millennia ago and start over on our graves. But she can’t do it now.” His face took on a sly grin.

“Why is that, Son?” Mr. Swift inquired, seeing the look.

“The last thing the Betrayer told me concerns an ancient

law which bonds two enemies together. Keep in mind that they are a female-centric society and this even overrides their intolerance of males. If a mortal enemy saves the life of her foe at the risk of her own for no reason other than it was the *right* thing to do—and that is because it had nothing to do with the fight or combat in which they may be engaged in at the moment—they are considered twins. For them that means two bodies with one soul. That is something that rarely ever happens naturally in their lives, since they come from eggs, and is considered to be forever binding.”

“Was that what we all saw you do at the end of the fight?” Arv asked. “I mean, that hitting yourself and then grasping hands... uh claw and hand?”

In spite of the serious nature of the moment, Tom had to grin. “Yes. So the Prime Leader and I are one, and she can no longer endanger me or my family or my clan. I must do the same. You must remember that they are a clannish group and the color of their chest and head crown shows what group they belong to.”

Everyone nodded.

“My skin is whitish so all white people are considered off limits to harm. Because we are all over the planet she can’t do anything to any of us. By extension all Earth people are safe. But when I die, no matter how or when, all bets are off. What I have to do now is convince her that it’s best for all concerned that she takes the Bio-Cache and goes to another star system.”

They all looked at him like he was crazy.

“You see that *should* be easy enough to do. Since I saved her from the falling shell of the Bio-Cache, the whole thing became mine. If I give it to her so that she can save her family/clan I become the Prime Leader of the group in that she is subordinate to me. The only drawback to this is that to seal the deal I have to ‘engage’ with a male of her family group. On doing this our two clans become one.”

Bud burst out with laughter, understanding the implications. Tom just smiled at him and continued with his narrative. “So all I have to do is tell her to go and enjoy her

new life with her family.”

“Tom,” his father said in wonder, “it can’t be *that* easy?”

“Why not, Dad? Their culture is not like ours. Just be glad that being male does not have any bearing on this—because this ritual is so old it predates the female takeover of the planet—or we’d be in hot water for sure.”

They all had to laugh at that, since no female was in the crew this time, but Mr. Swift cautioned them all about carefully wording any report once they were back on Earth. “Especially to wives, girlfriends and reporters! As a matter of fact maybe we should keep this whole episode under wraps. Do we really want the world to know how close we came to an extraterrestrial war?”

They all looked at him, and silently agreed.

Zimby, Hank and Arv went to retrieve the *Challenger* and brought her into the dome. To kill time everyone else went exploring. The highlight of it was finding the air and heating machinery being used to regenerate the dome’s atmosphere.

Like the spaceship, they could not get into the machine that seemed to feature no visible entrance. By the feel of the trembling ground and the gigantic pipes poking out of it—and others that were found in several places along the dome walls—it would be blasting tons of air every minute that the was constantly being altered to a higher and better quality.

After a brief discussion with his father, Tom announced that the machine must be consuming soil from deep within Mars just like his own Atmosphere-Making machine on Nestria—the little moonlet had been moved into Earth orbit by the space friends’ months earlier—did. To be this close to a part of the dinosaur’s technology and still not be able to get at it was a disappointment to them all.

Tom secretly hoped that the aliens would depart Mars without dismantling the equipment or destroying the domed city.

At last, the door to the saucer opened and the Prime Leader came out. She walked with firm steps and not a mark showed on her side. Tom went to her and greeted her

solemnly and with head bowed. She shook her head 'no' in return.

"To my regret I must treat you as an equal and forget that you are male (she once again spat). This may not be too difficult to do since you are not of my race and you all look alike to us."

Tom laughed inwardly. Where had he heard that before?

He told her of what he wanted done and with a low hissing sound she replied. "I see the Betrayer has told you more than he should have. In my dazed state I did not realize what I was doing. I cannot break tradition or I become an ineffective leader. Therefore, Tom Swift, I will do as you say. With my solar ship in my possession once more and with the items he had stolen to disable our engines returned, and with the star drive systems restored, we can be ready to leave in six of your months. Will you refuse to give us the Bio-Cache until we are ready to leave? Can we have access to it so we can obtain some embryonic animals to restock our depleted meat herds?"

"May I ask you a question first?" Tom just wanted to check out an assumption he had concerning their eating preferences.

"Ask. It is your right!" Tom could tell she did not like that at all.

"Is your race carnivorous or do you eat vegetable matter too?"

"We prefer our meat alive, but fresh kill is acceptable." She stated without a second thought.

Tom chuckled out loud and answered her first question. "Prime Leader, you may take it with you now, if you wish. Your word is your bond and I know you won't break it. Before you leave our solar system I request that you let me know in advance so my family and I can see you off. Family, no matter how different in species, must see each other off in good will!"

"Earthman, I must be forgiven in my thinking, but for all of our differences we are in some things quite alike!"

"Yes we are, Prime Leader... Stop!" Tom insisted

noticing she was about to rebuke him. “You are and will remain the Prime Leader of your people. What has happened here is between us, if that’s acceptable with you?”

She bowed her head to him and said nothing more.

Tom waved to his father and Bud to come over. They were watching the exchange from a distance. After a greeting Mr. Swift inquired why she took the way they did in asking the Swift’s for help.

She blinked her eyes several times while she considered how to answer him. “When we came out of the space drive we did not know what happened to us. When the navigator finally made his report to the flight commander and also to me we were shocked by the findings. How do you tell your crewmembers that all they knew has been long lost and there was is no way of going back? We almost had a crew revolt right then and there. If it was not for the cooler heads of the commander and several of the scientists we would not have survived.”

“May I ask how you did it?” Tom inquired.

“They got us back to the Jupiter base and were able to restart some of the base’s functions. It was then that we learned of the Bio-Cache. When we searched for it we could not find it. It was while we were searching that we discovered the ‘*space friends*’ ship, as you call it, and what happened to them. We used the solar ship and visited your planet and what we found displeased us. A whole world being governed by males! (Once more she spat onto the ground) How could we trust a world full of...” she left it hanging there without finishing.

“So we made up that elaborate ruse. We gave you help when needed, we moved the moonlet into place to push you along on space explorations. And when our existing feed stock became ill we used you to help cure them. You must understand the ship was not completed when we set out to test the space drive. It was to have a complement of five thousand people not just twenty-five. We had no biologist with us, just two herdswomen. None of our stocks were complete, but I must ask you, why should it be? We were only to be gone a few months.”

“Did you intend to deceive us from the beginning, or were you just trying to survive?” Mr. Swift asked with narrowed eyes.

The Prime Leader stopped talking and looked at the three men, “We did what we had to do, and I would do it again if that was the only way to save my people!”

With no further words, she turned and walked back into her waiting space ship. They knew she would not reappear.

\* \* \*

“Skipper?” Bud asked as the *LuTE* followed the *Challenger* toward home. “Do you think we are finished with the whole space friends thing? I mean, do you think that the Prime Leader was telling you the truth and that she is heading for a new home? Forever?”

Tom considered the question for several minutes before standing up and placing a hand on his best friend’s shoulder. Giving it a small squeeze he replied, “I’d like to think so Bud, but forever is a pretty long chunk of time, even for time-traveling dinosaurs!”

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## Epilogue

Harlan glanced at the clock: it showed 8:37 p.m., six minutes past the last time he checked. He arched his back, wiggled his stiff shoulders and sighed as he reached for the last pile of reports. As he dropped them on the desk a small yellow note slipped out of the bottom file and flutter to the floor. He reached down to retrieve it and, by habit, read the note:

*Andrew, please cross-reference Clancy Cioe MacMurddy against any public records referring to Rufus Cioe and Rufus Cioe Jr. Get back to me if there is any connection, Phil Radnor.*

His interest piqued, he pulled the last file out and opened it. It contained two pages. The first was a copy of a birth certificate, and the second one had a name and an address on it.

The certificate was for MacMurddy, and as Harlan read the particulars his heart skipped a beat. Under the heading of Father the name listed was Rufus Cioe, age sixteen. Mother, Tess MacMurddy, age fifteen. Marital Status: Not Married. Harlan let out a low whistle. The second page with the address on it also had a small, cramped note written in the border: ‘this address is up to date today’. He now recalled why Andrew was no longer with them—he failed to follow through with many of his reports, and this appeared to be one of them.

Harlan picked up the phone and dialed a number. It was answered on the second ring. “Hoya, get the step-up van ready, we’re going hunting!”

\* \* \*

Three hours later a SWAT truck, three state police cars, and the Enterprises security truck pulled to a stop a quarter mile from Clancy’s hovel. Run down and way in the back woods it made an excellent hideaway.

Following a series of flash bang grenades, the SWAT team burst in the shack and the second, small building in the back. Clearing the one large room took all of three seconds.

The small building turned out to be the outhouse and a storage space. The only injury was the SWAT man who slipped and fell into the open waste pit. He was not immediately injured, but sprained an ankle climbing out of a stream where he tried to wash himself off.

Harlan stepped outside the cabin and joined Hoya an hour later. The air was hot, dry and a few clouds drifted past the Moon. As he looked up into the sky trying to find Mars, he turned to his junior assistant.

“What do I tell them, Hoya? That I made a mistake and their lives are in danger again?” He shook his head in disbelief. “We must have missed him by only a couple of hours. The coals in the stove are still warm. There is an empty gas can and the last of the chemicals he must have used to turn it into a paste. Whatever he’s planning to do, he’s going to set it on fire. Reparation for his own burns, I guess.”

“But, the DNA showed those were his remains,” Hoya protested.

Ames shook his head. “We ran across a lead that said he had a half brother. Damn! I was so sure that he had died. Let’s get back to the truck. I have lots of calls to make, men to wake up so we can double the guards, and people to warn.” Harlan was a miserable man.

\* \* \*

The zodiac bounced as it hit an unseen wave. The man in the stern scrambled once more to upright the four plastic wrapped cans before they spilled their contents. The boat seemed like a good idea at the time, but now he was reconsidering it. "Ah, hell," he thought to himself, "it's too late now!" The lake was choppy even though there was no wind. He never considered his placement in the boat as being the cause. The zodiac was too tiny to carry most of the passenger weight in the back. The smallest waves lifted the noise high into the air and it came slamming back down after it passed the crest.

He took another look at his phone’s GPS and noted that he was almost there. He could make out the land but no features. He turned off the high-powered outboard motor and, with its roar now gone, the lake fell into a complete



silence. As the boat slowed down he turned his attention to the little electric trawling motor, fitted on the back edge of the engine mounting board, and connected it to the high-capacity Swift solar battery. He could not see the irony through his veil of hatred.

With only a slap of water against the hull every once in awhile he made it to shore without another sound. It took him a little longer than he thought it would, but finally by taking off the big gas motor he was able to get the zodiac under some bushes. As for the outboard he let it stay in the two feet of water where it fell off the boat when he lost his grip on it.

\* \* \*

The air was still and not a sound was coming from the lake. The Swift expedition from Mars was due back tomorrow. Mrs. Pichincha was feeling restless and was trying to be still in bed and not move around so her husband would stay asleep.

He had recovered nicely from his gunshot wound but she still worried about him. He had returned to his job the other day and she felt that he was over doing it, trying to make up for lost time. But, he seemed happier outside working than he did sitting inside, so she didn't try to forbid it.

She was hot and finally could not take it anymore. It was way past midnight when she slipped out of bed and, with a slight sound of silk rubbing silk, stepped out the main door and sat on the porch swing she had installed herself a few days ago. It felt good not being in that stuffy bedroom even though it had all its windows opened. She slowly fell back to sleep as she rocked away to the sound of crickets.

\* \* \*

“Yes, here he comes again, the fool,” thought the man, dressed in black, now hiding behind one of the two large rhododendron bushes near the beginning of the walkway that lead from the parking area.

As the Swift's security man walked past, the hidden man stepped out behind him and hit him hard on the head with a blackjack. Catching him as he fell he dragged him between the two parked vehicles and then ran off over the

sand dunes to the left of the log cabin and to the rubber boat he had pulled up into some bushes.

He took out the four cellophane-wrapped cans of his homemade mixture from the boat and strapped on a utility belt containing the rest of his equipment. Smiling to himself, he felt a confidence that he hadn't felt in weeks. The first part of his master plan had come off without a hitch. The FBI, police and especially the Swift's believed him to be dead. His stepbrother had finally done a good turn for him. So what that he had to die like that—who cared?

His chest had healed, but was heavily scared—a warrior's tattoo, and a constant source of pain. To Cioe it made him more of a man.

They had burned him and he lived through it. So he would do the same to them and see what kind of courage they had with flames all around them. An eye for an eye...

Crawling under the cabin was not easy with four gasoline cans. There was lots of debris still left in the sand and it tripped him up a few times. Twigs that a healthy man would slide over were a source of stabbing agony. It was pitch black under the building and he dare not use a flashlight until he had to make the final connections of the wiring. He located the four pillars that he picked out days ago when no one was home.

He ripped the plastic from one of the cans and slowly applied the paste of gasoline, soap and other items that turned it thick and practically odorless to the post and floor joists. Tipping the can over, he spread it around and put an igniter in the can and its remaining paste. He unreeled a length of the wire from his belt, enough to get to the next post, and repeated the process three more times.

At the last post he realized he had enough wire left to reach outside the crawl space and could attached the timer in the moonlight and not need to turn on a light.

\* \* \*

A scrapping sound aroused her from her sleep. She sat up and listened. It came again, but from a different spot further out on the other side of the porch. She got up, stood for a moment, and slowly and quietly walked to the other side of the veranda and peeked over, thinking she would see

a raccoon raiding their garbage cans.

Nothing could be seen, and now the sound came from the back area of the house. Patty Pichincha was now determined to see that raccoon if it was the last thing she did that night! Making her way to the back of the porch she reached into the decorative storage hutch by the back door and took out an oversized flashlight.

Going down the stairs she stooped down to see under the cabin and turned it on. She screamed as a shadow turned into a man and he, in as much a surprise, tried to stand up before he was out from underneath the porch and whacked his head on a floor joist above him. He stumbled out as she backed up in surprise.

Flinging the flashlight at him she turned and ran between the two parked vehicles and tripped headlong over the body of the security man laying in the darkness.

Laughing at the futile attempt to escape he came after her.

“Hey you,” shouted Boris from the top of the stairs, “why don’t you take on a man your own size?”

Cioe immediately turned around to face his new threat.

“Ha! You think you can take me on, old man?” Cioe was feeling on top of the world. Adrenaline was rushing through his body—his pain was forgotten. He already had attacked two people, what was one more? He felt like Superman... maybe that snort of cocaine was finally hitting him. He took a step forward as Boris stepped down the stairs and froze as he heard a stern voice behind him.

“Cioe! Never leave an enemy behind you who is still alive.” As he turned and faced her, Patty shot him in the throat with the Taser that she had taken off the security man. Not once, but squeezing the trigger time and time again until Boris took the completely discharged weapon gently from her hands and carried her back to the cabin with her crying on his shoulder.

